



HARDWARE AND SUPPLY

**CONTRACTORS EQUIPMENT
SALES, RENTAL AND SERVICE**

CONCRETE ACCESSORIES

- **A SINGLE SOURCE**
- **ONE STOP SHOPPING**
- **SERVICE IS OUR BUSINESS**

WHARTON HARDWARE & SUPPLY CO., INC. – NJ

7724 N. Crescent Blvd.

Pennsauken, NJ 08110

NJ (856) 662-6935 • PA (215) 925-8800

WHARTON SUPPLY INC. OF VIRGINIA

7620 Backlick Rd.

Springfield, VA 22150

METRO (703) 569-6660 • VA (703) 455-6700

WHARTON FORM RENTALS – CLINTON, MD

8042 Old Alexandria Ferry Road

Clinton, MD 20735

MD (301) 877-8640

www.whartonhardware.com



Our Fleet is at your service.

Wharton has always been known for inventory and service. The 1000 pages that follow will give you a good idea of the extent of our inventory. We wanted to use this page to tell you about our fleet of delivery vehicles.

Wharton has over seventy trucks available for daily delivery to your office or jobsite. We also do regular inter-branch transfers of inventory between Virginia, Maryland and New Jersey. Like everything else we do, our delivery fleet is geared towards providing you, our customer, with the best service and value possible.

As you read this, **Wharton** trucks are on the road bringing tools, equipment and supplies to customers throughout the Mid Atlantic region. Find what you need in this catalog and we'll be on the road for you.





To our Valued Customers:

Thanks to all our customers, old and new, for your interest in Wharton Hardware, Wharton Supply of Virginia, Wharton Contractors Equipment and Wharton Form Rental.

Wharton has continued to grow since the publication of our last catalog. Most significant is our new seven-acre yard and 33,000 square foot warehouse location in Clinton, Maryland. This location houses our new concrete form rental division, Wharton Form. It also more than doubles the warehouse and yard space for our Virginia location, and has enabled Wharton to continue to grow in the Mid Atlantic concrete accessories market.

All of our locations have invested heavily in rental equipment, and we now have the largest fleet of personnel lifts we've ever had. We've updated our air compressors, power trowels, buggies, trench rollers, generators, light towers, pumps, demolition attachments, trenchers and mini excavators. We have also added new items, such as the Toro Dingo and Thomas Track loaders. Investing in our rental fleet has resulted in a younger fleet of top quality equipment. Our service and parts departments have also seen significant growth.

We have implemented new computer systems to improve customer service and inventory control. Our website traffic at whartonhardware.com has grown considerably, and we now correspond by e-mail with customers every day.

All of our investments and all of our daily efforts are geared towards fulfilling your needs, as customers, in a better and more efficient manner.

Thank you again for the opportunity to be of service.

Aldo Magistrelli
Chairman
The Wharton Group of Companies





HARDWARE & SUPPLY CO., INC.

NEW JERSEY



Outside Salesmen



Retail Counter



Drivers



Inventory Control



Receptionist



Inside Sales Personnel



President and Office Manager



Service Coordinator and Shop Office Manager



Mechanics





Master Mechanic



Yard Manager



Receiving Manager



Wire Rope Technician



Yard Personnel



Attorney – General Council



Treasurer



Bookkeeper



Vice President



Billing and Credit



Real Estate Manager



Accounts Payable





**SUPPLY, INC.
OF VIRGINIA**



General Manager



Office Manager



Credit



Inside Sales and Sales Manager



Billing



Receptionist



Retail Counter



Warehouse and Drivers



Tractor Trailer Driver



Tractor Trailer Driver



Yard Personnel



Outside Sales



Rentals, Parts and Service

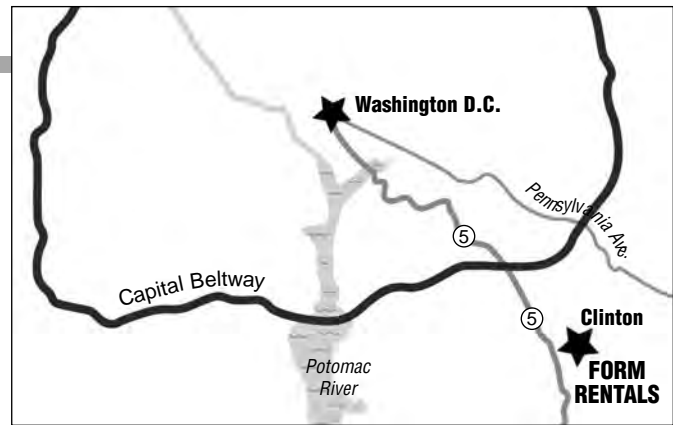


Mechanics





We are proud to announce the opening of our new warehouse and yard.



WHARTON FORM RENTALS — CLINTON, MARYLAND



Seven-Acre Yard



33,000 Square Foot Warehouse

Wharton is expanding in the concrete accessories market, and our new seven-acre yard and 33,000 square foot warehouse in Clinton, Maryland is enabling us to ship larger volumes of material than ever before.

Our experienced staff can fill your needs for Handset form rentals, form ties, slab bolster, foam insulation, column clamps, expansion joint, lumber, mesh, rebar, poly, bag products, tie wire and much more. We have a full time designer on our staff who can supply layout drawings of your concrete forming project as well as usage estimates for ties and other consumables.

Call 301-877-8640 today for more information about our concrete forming division.



Office Manager and Assistant



Designer – Concrete Forming



Drivers, Warehouse Personnel and General Manager



Hardware & Supply Co., Inc.
Supply, Inc. of Virginia
Form Rentals

NJ (856) 662-6935 • PA (215) 925-8800
Metro (703) 569-6660 • VA (703) 455-6700
Clinton, MD (301) 877-8640

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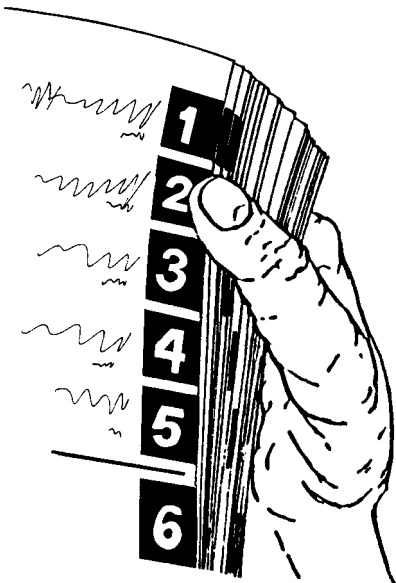
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Supply, Inc. of Virginia
Form Rentals

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Window Thermometer	736	Wood Rasp	769	Zip-Its	954
Windsock	277	Wood Replacement Handles	392	Zipwall	685
Wing Nut Test Plugs	850				

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WHARTON

CONTRACTORS EQUIPMENT CORP.

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Rental Equipment

(Complete List)

AIR COMPRESSORS

- 7 CFM Compressor (Gas)*
- 100 CFM Compressor (Gas)*
- 175 CFM Compressor (Gas)*
- New* 100 CFM Compressor (Diesel)*
- 175 CFM Compressor (Diesel)*
- 185 CFM Compressor (Diesel)*
- 250 CFM Compressor (Diesel)*
- 375 CFM Compressor (Diesel)*
- 425 CFM Compressor 150 PSI (Diesel)*
- 600 CFM Compressor (Diesel)*
- 750 CFM Compressor 140 PSI (Diesel)*
- New* 825 CFM Whisperized 150 PSI (Diesel)*
- 900 CFM Compressor (Diesel)*
- New* 900 CFM Whisperized Compressor (Diesel)*
- New* 1300 CFM Compressor 150 PSI (Diesel)*
- New* 1600 CFM Compressor (Diesel)*



AIR TOOLS & ACCESSORIES

- No. 1-2-3 Chipping Hammer
- 30 lb. Paving Breaker
- 60 lb. Paving Breaker
- 90 lb. Paving Breaker
- Rock Drill
- Air Tamper
- Chain Saw, Pneumatic
- 2-Man Pneumatic Chain Saw
- Demolition Hammer, Backhoe Mount*
- RB2 Demolition Hammer (MKT#5)*
- 1/2" Pneumatic Drill
- Wood Borer, 300 RPM
- 3/4" Impact Wrench
- 1" Impact Wrench
- Thor 125 Muffler
- E2 Extractor*
- E4 Extractor*



- No. 3 Pile Driving Hammer*
- No. 5 Pile Driving Hammer*
- No. 6 Pile Driving Hammer*
- No. 7 Pile Driving Hammer*
- No. 9 B3 Pile Driving Hammer*
- Rivet Buster
- 3" Sheathing Driver
- New* Air Spade
- Air Nailer
- Air Tugger (1/2-Ton Capacity)*†
- Air Tugger (1 1/2-Ton Capacity)*†
- Air Tugger (2-Ton Capacity)*†
- New* Felin Hacksaw
- 1/2" x 8' Leader Hose
- 1/2" x 50' Air Hose
- 3/4" x 50' Air Hose
- 2" x 50' Air Hose
- 2" Check Valve
- 2" Quick Action Valve and Lubricator
- 4-Way Manifold w/ 3/4" Valves
- 3/4" In Line Lubricator
- 150 lb. Sandblaster w/Accessories
- 300 lb. Sandblaster w/Accessories



GENERATORS

- 3000-3200 Watt
- 4500-5000 Watt
- 6000 Watt*
- New* 5000 Watt 180 Cycle 230 Volt
- New* 25 KW 110/220V (Single or three phase)*
- New* 80 KW 110/220/440 (Single or three phase)*
- New* 50 KW 110/220/440 (Single or three phase)*



WELDERS

- 225 Amp. Welder (5KW DC Gen.) w/lead & Grnd (Gas)*
- New* 250 Amp. 100% Duty*

* Hauling charges apply - towed equipment and equipment carried on hydraulic lift gate truck.
† 1000' of 5/16" or 250' of 5/8" WIRE ROPE NOT INCLUDED WITH RENTAL.

(Continued)

BRUSH CHIPPERS/ STUMP GRINDERS

- New* Bandit Chipper 6" (gas) 25 HP (Self Feed)*
- New* Bandit Chipper 12" (diesel) 90 HP (Self Feed)*
- New* Vermeer Stump Grinder*
- Chipper Shredder 3" Tow Behind (VA only)

LAWN & GARDEN EQUIPMENT

- Snapper 12" Aerator (VA only)
- Classon 19" Aerator (VA only)
- Classon 26" Aerator (VA only)
- Classon Sod Cutter (VA only)
- Classon Turf Rake Seeder (VA only)
- Log Splitter 25-Ton Vertical/Horizontal Tow Behind (VA only)
- Poly Drum Lawn Roller 24" (VA only)
- Husq. 32" Self Propelled Lawn Mower (VA only)
- Husq. Roto Tiller (VA only)
- Stihl MM55 Yard Tiller (VA only)
- Stihl F110 Edger (VA only)
- Stihl HT 101 Tree Pruner
- 11' Extendable (VA only)

PUMPS GASOLINE OPERATED

- 2" Trash
- 3" Trash
- 4" Trash*
- 6" Trash (Gas)*
- New* 6" Trash (Diesel)*
- 2" Diaphragm
- 3" Diaphragm
- 2½" Hi Pressure Pump
- 4" Jet Pump*
- New* Hydrostatic Test Pump



AIR OPERATED PUMPS

- 2" Double Diaphragm

ELECTRIC SUBMERSIBLE PUMPS

- 2" Electric (1 PH) (110V)
- 3" Electric (1 PH) (110-220V)
- New* 3" Electric (3 PH) (220V)
- Float Control Kit for 2"
- New* Hydrostatic Test Pump



HOSES

- 2" x 20' Suction
- 2½" x 20' Suction
- 3" x 20' Suction
- 4" x 20' Suction
- 6" x 20' Suction
- 2" x 50' Discharge
- 2½" x 50' Discharge
- 3" x 50' Discharge
- 4" x 50' Discharge
- 6" x 20' Discharge
- 6" x 50' Discharge

ASPHALT ROLLER

- New* 1½- to 3-Ton Ride-On Vibratory*
1½-Ton Ride-On*



TRENCHERS

- New* 6" x 36" Depth 4 WD*

TORO DINGO

- New* Loader w/Bucket*
- New* Attachments: Backhoe, Auger Head, Trencher
- New* Auger Bits: 6", 12", 18" or 24"
- New* Loader w/Tracks*

COMPACT EXCAVATOR

- New* Airman AX35*

FRONT END LOADER/BACKHOE

- New* Terramite T5C (Gas)

FRONT-END LOADER HYDRA-MAC (Diesel Powered)

- 20C Tip Cap 5000 lbs.*
- New* 1700D Tip Cap 3400 lbs.*

ALL TERRAIN FORK LIFTS

- New* Hydra Mac 20C, 3000 lb. Capacity*



ATTACHMENTS

- New* Backhoe with 12" Bucket 9' Depth*
- Pallet Forks
- New* Hydraulic Breaker (RAM) 700 ft.-lbs.*
- New* Auger
- New* 12" x 48" Auger Bit
- New* 18" x 48" Auger Bit
- New* 24" x 48" Auger Bit
- New* Extension 48"

COMPACTION EQUIPMENT

- Rammer (Jumping Jack)
- New* Rammer 4 Stroke
- Vibratory Plate (Dirt)
- Vibratory Plate (Asphalt)
- 7900 lb. Plate Compactor*
- 27" Rollers - 4400 lbs. of Compaction Force R-66*
- 30" Rollers - 6600 lbs. of Compaction Force R-77*
- 36" Rollers - 13,000 lbs. of Compaction Force R-90*
- SDR 1400 Ride-On Roller Deutz Diesel Engine 18,810 lbs. Compaction*
- SDR 1400 P Ride-On Roller Deutz Diesel Engine 19,530 lbs. Compaction*
- 30" Trench Roller/Pad Foot*
- New* 33" Double Drum Roller/pad foot manual (16,500 Ft.-lbs.)*
- New* 33" Double Drum Roller/pad foot Remote, Infra-Red (16,500 Ft.-lbs.)*



* Hauling charges apply – towed equipment and equipment carried on hydraulic lift gate truck.

(Continued)



- New* 33" Double Drum Roller/pad foot cable controlled (16,500 Ft.-lbs.)*
- New* 30" Bomag Roller - (Asphalt or Dirt) Articulating Smooth Drum*
- New* 32" Wacker Roller Articulated 15,400 lb. Remote*

PRESSURE WASHER

- 2500 PSI Cold Water
- 3000 PSI Cold Water
- New* 3000 PSI Hot Water
- In-line Chemical Injector
- New* Hydro Scrubber
- New* 4000 PSI Cold Water*



CONCRETE EQUIPMENT

- New* Soff Cut Saw
- Flat Saw 8 HP
- Flat Saw 18 HP 18" Self Propelled*
- Multi Purpose Saw 12" 2 Cycle
- New* Multi Purpose Saw 14" 2 Cycle
- Bartell SPS-8 Surface Prep Machine w/std. Case
- Bartell Edger Attachment
- Trowel 36" 4 Blade
- Trowel 46" 4 Blade
- Float Blades for 36"
- Float Blades for 46"
- Concrete Mixer 4 Cu. Ft.*
- Concrete Mixer 6 Cu. Ft.*
- Mortar Mixer 6 Cu. Ft.*
- Mortar Mixer 10 Cu. Ft.*
- Mortar Mixer 12 Cu. Ft. (Gear Driven)*
- Power Buggy - Walk Behind*
- Power Buggy - Ride-On*
- New* Power Buggy - Ride-On
- 16 Cu. Ft. Hyd. Dump*
- Floor Grinder (Gas)
- Floor Grinder (Elec)
- 110/220V 1.5 HP
- Ceiling Grinder (Gas & Elec.)
- 7' x 20' Heights*



HYDRAULIC CONCRETE CUTTING EQUIPMENT

- New* Partner Power Pac
- New* Partner 16" Cut Off Saw
- New* Partner Ring Saw †
- New* ICS Chain Saw 15" †
- New* Teel Cooling / Dust Control Water Pump (for Ring and Chain Saws)



CONCRETE VIBRATORS

- Flex Shaft Vibrator 2.4 HP Motor (All flexible shafts and heads are interchangeable to meet your needs.)
- Motor in Head Vibrator 115V 60 Cycle
- High Cycle Motor in Head 180 Cycle

- 14-4 Extension Cord, 50'
- 14-4 Extension Cord, 100'

CONCRETE BUCKETS

- ½-Yard General Purpose*
- 1-Yard General Purpose*
- 2-Yard Round*



COLUMN CLAMPS

- 36"
- 48"
- 60"
- Snap Tie Wedges

MASONRY SAWS

- 14" Brick Saw 5.5 HP (Gas)
- Tile Saw 1.5 PH (Elec.)
- Tile Saw Blade



AUGERS

- Power Head
- Auger Bits All sizes: 6" - 8" - 12"

LIFTING EQUIPMENT

- 1½-Ton Chain Hoist w/30' Lift Chain
- 2-Ton Chain Hoist w/15' or 30' Lift Chain
- 4-Ton Chain Hoist w/30' Lift Chain
- 6-Ton Chain Hoist w/15' Lift Chain
- 6-Ton Chain Hoist w/30' Lift Chain
- Pallet Truck (Hand) 5500 lb. Capacity
- New* Fork Lift 5000 lb. Capacity (Gas or Propane) Triple Mast*
- New* Telescopic Material Handlers I/R 642 6000 lb. Capacity - 42'*
- New* Telescopic Material Handlers I/R 843 8000 lb. Capacity - 43'*
- New* Material Bucket for 843



AERIAL LIFTS

- New* 20' 800 lb. Aerial Platform*
- 25' 800 lb. Aerial Platform*
- New* 14' 1000 lb. Scissor Lift - Gas*
- New* 19' 500 lb. Scissor Lift Narrow (29.75" Wide) w/Extended Platform, Up Right*
- New* 38' 300 lb. Bucket Lift*
- New* Genie Lift - 35' 350 lb. Capacity*



MATERIAL LIFTS

- New* Sumner Lift - 18' 750 lb. Capacity*
- New* Sumner Roust-A-Bout
- New* Drywall Lift
- Car Caddy Trailer (VA only)

UPRIGHT LIFTS/ ROUGH TERRAIN

- New* XRT33 Platform 33' 1000# Capacity*
- New* SL30 Platform 29.5' 1000# Capacity*

* Hauling charges apply – towed equipment and equipment carried on hydraulic lift gate truck.
 † Chain or Ring Blade can be rented or purchased.

(Continued)

- New* AB46RT Boom Platform Lift 46' 500 lb. Capacity*
- New* SB60 Boom Platform Lift 60' 500 lb. Capacity*
- New* AB62 Boom 62'*
- New* Z80 Boom 80'*

TENNANT RIDE-ON SWEEPERS

- New* Propane or Gas*



SPACE HEATERS

- 100,000 BTU Kerosene Fired*
- 160,000 BTU Kerosene Fired*
- 300,000 BTU Vented Kerosene Fired*
- 350,000 BTU Kerosene Fired*
- 450,000 BTU Vented Kerosene Fired*
- 650,000 BTU Kerosene Fired*

VENTILATING & VACS

- New* Blower, Gas
- New* Duct, 8" x 25'
- Giant Vac*
- Pedestal Fan 24"
- New* Shop Vac



TRASH CHUTES

- Trash Hopper 30"
- Trash Chute 30" x 4'
- New* Window Section

MOBILE LIGHTING EQUIPMENT

- Light Tower 14' (2) 1000 Watt Light (w/Gas Powered Generator)*
- Light Tower 30' (4) 1000 Watt Light (w/Diesel Powered Generator)
- Trailer Mounted 8 KW*
- Traffic Control Light - (Diesel)
- DL25FACH-D25 Light Board*
- New* Solar Arrow Board



DAVID WHITE LEVEL

- Electronic Level System
- Level Eye Detector
- Tripod and Height Adj. #1051 & #1052
- 7611 Rod

* Hauling charges apply – towed equipment and equipment carried on hydraulic lift gate truck.

ELECTRIC TOOLS

- Core Drill w/Pump and Pad
- Electric Hacksaw with Pipe Clamp
- Bosch 60 lb. Breaker
- Bosch Rotary Hammer
- Bosch Demo Hammer
- Hougen Magnetic Drill
- Rebar Bender
- Rebar Cutter
- 10-3 Extension Cord, 50'
- 10-3 Extension Cord, 100'



CHAIN SAW - GASOLINE

- Direct Drive w/16" or 24" Bar



STUD GUNS

- Ramset Model D-75

FLOOR EQUIPMENT

- Linoleum Roller 100 Lb. (VA Only)
- Rent-Link HT8 Floor Sander (VA Only)
- Rent-Link Disc Floor Sander (VA Only)
- Rent-Link HTF-2 Floor Sander Osci. (VA Only)
- Santana SX Carpet Blower (VA Only)
- Xpert Carpet Cleaner (VA Only)

DEMOLITION BALLS

- 3000 lbs.*
- 6000 lbs.*

UTILITY TRAILER

- New* 10,000 lb. Capacity
- New* 4,000 lb. Capacity
- Ball Hitch Adapter



SCAFFOLDING

MISC.

- Magnetic Roller (VA Only)
- Drywall Sander w/Vac. (VA Only)

ALL RENTAL EQUIPMENT IS FOR SALE AND WE WOULD APPRECIATE YOUR INQUIRIES.

WHARTON CONTRACTORS EQUIPMENT CORP.

RTE. 130 & UNION AVENUE, PENNSAUKEN, NJ 08110
 (856) 662-6935 / (215) 925-8800 / FAX: (856) 662-5397

WHARTON SUPPLY INC. OF VIRGINIA

7620 BACKLICK ROAD, SPRINGFIELD, VA 22150
 (703) 455-6700 / Metro: (703) 569-6660 / FAX: (703) 569-8299



**ALL RENTAL EQUIPMENT IS FOR SALE.
WE WOULD APPRECIATE YOUR INQUIRIES.**

TERMS AND CONDITIONS

- Any weekly rental carried on our regular delivery truck – **NO** hauling charges.
- Hauling charges will apply – Towed equipment and equipment carried on hydraulic lift gate truck.
- Hauling charges will apply to all emergency deliveries.
- Most rental rates are by: 8-hour day, 3-day week or 3-week month.
- All equipment with hour meters: Double shifts – 1½ times rate and Three shifts – 2 times rate.
- Prices subject to change without notice.
- There is no warranty implied or otherwise, that all equipment meets OSHA standards.
- All equipment will leave our premises clean and in working condition.
- Malfunctions of equipment must be reported to Wharton immediately.
- Any equipment returned uncleaned or damaged, not attributable to normal wear and tear will be backcharged to cover cost of repair or cleaning.
- Wharton's insurance does not cover rental equipment while in possession of lessee.
- Equipment is not to be used with Hazardous Waste or Hazardous Materials.

LARGE STOCKS OF SERVICE PARTS FOR IMMEDIATE DELIVERY

WE SERVICE WHAT WE SELL

WHARTON CONTRACTORS EQUIPMENT CORP.

**RTE. 130 & UNION AVENUE, PENNSAUKEN, NJ 08110
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*Air Compressors • Material Handlers
Air Circulators • Portable Heaters
Generators • Arc Welders
Welding Accessories
Trash/Diaphragm Pumps
Water/Submersible Pumps
Pressure Washers • Steam Cleaners
Traffic/Message Directors
Concrete Vibrators • Compaction Equipment • Screeds
Demolition Equipment
Power/Ride-On Trowels
Grout Pumps • Grinders • Chisel Scalers
Power Buggies • Light Towers • Hydraulic Tools
Concrete/Chain Saws • Drill Rigs
Tile/Air/Masonry/Cut-Off Saws
Trimmers • Pruners • Blowers • Cultivators
Aerial/Fork/Scissor Lifts
Booms • Aerial Platforms
Chippers • Trenchers • Augers
Skid/Track/Utility Loaders
Concrete Breakers
Tractors • Loaders • Backhoes
Blowers • Vacuums • Rollers
Concrete/Mortar Mixers
Hydrostatic Testing Equipment
Kettles • Melters • Engines
Heat Tape • Trash Chutes*

185 CFM to 250 CFM Portable Air Compressors



KEY FEATURES / BENEFITS

- 3-position, adjustable-height, hitch-pintle eye type for more hook-up options.
- Folding A-frame drawbar with safety chains and hooks provides easy hook-up to vehicle, stability while towing, and reduces needed space for transportation.
- Heavy-duty independent rubber-torsion suspension running gear with high ground clearance and 15" wheels for less shock transferred to internal components.
- Lockable side doors with pneumatic lift springs and no-rust aluminum hinges provide excellent access for servicing.
- Rear access panel for cleaning heat exchangers.
- Shock-mounted engine and compressor to absorb vibration and reduce noise.

AVAILABLE OPTIONS (FACTORY-INSTALLED)

- 4-in-1 combo gauge
 - Volt meter
 - Engine oil pressure
 - Engine coolant temperature
 - Discharge air temperature.
- 4.5kW intermittent duty (3.0kW continuous) generator; engine driven.
- 1,000 CCA battery.
- Additional service outlets.
- Air filter safety element (3-stage filtration).
- Amber roof light; revolving or strobe.
- Cold weather starting aid; less ether container.
- Electric or surge brakes (electric brakes standard on P250WJD).
- Extra 3/4" (19mm), 1/4 turn service valves on reel base.
- Filter kits.
- Fuel level gauge.
- Hose reel with 100' capacity for 3/4" (19mm) ID hose, single or double reel with OSHA valve(s), and 3/4" globe-type service valves.
- Hoses 50' (15.2m) or 100' (30.5m) either installed on reel or shipped loose.
- In-line oilers for tool lubrication.
- Padfoot instead of caster wheel.
- Rear bumper.
- Rear drop leg; requires optional rear bumper.
- Spark arrestor (functions as a rain cap) or rain cap.
- Tachometer.

MODEL	P185WJD	XP185WJD	P250WJD
COMPRESSOR — ROTARY SCREW / SINGLE-STAGE			
Free-air Delivery – cfm (m ³ /min)	185 (5.2)	185 (5.2)	250 (7.1)
Rated Operating Pressure – psig (bar)	100 (6.9)	125 (8.6)	100 (6.9)
Pressure Range – psig (bar)	80 – 125 (5.5 – 8.6)	80 – 150 (5.5 – 10.3)	80 – 125 (5.5 – 8.6)
Air Discharge Outlet NPT Size – in. (mm)	.75 (19.0)	.75 (19.0)	.75 (19.0)
Air Discharge Outlet Quantity	2	2	2
Fuel Tank Capacity – gal. (L)	27 (102)	27 (102)	29 (110)
Make	John Deere	John Deere	John Deere
Model	4024T	4045D	4045D
Number of Cylinders	4	4	4
Displacement – cu. in. (L)	149 (2.4)	275 (4.5)	275 (4.5)
Rated Speed – rpm	2,500	2,500	2,300
Idle Speed – rpm	1,700	1,700	1,700
BHP @ Rated Speed	66	80	78
Electrical	12 V	12 V	12 V
Overall Length – in. (mm)	137.7 (3498)	137.7 (3498)	137.7 (3498)
Overall Width – in. (mm)	68.5 (1739)	68.5 (1739)	68.5 (1739)
Overall Height – in. (mm); Add 3.47" (88mm) Exhaust Pipe	62.3 (1582)	62.3 (1582)	62.3 (1582)
Track Width – in. (mm)	59 (1499)	59 (1499)	59 (1499)
Tire Size	15"	15"	15"
Shipping Weight — No Fuel – lb. (kg)	2,045 (928)	2,310 (1048)	2,794 (1267)
Working Weight — w/ Fuel – lb. (kg)	2,246 (1019)	2,505 (1136)	2,996 (1359)
Overall Length – in. (mm)	87.91 (2233)	87.91 (2233)	87.91 (2233)
Overall Width – in. (mm)	49.63 (1261)	49.63 (1261)	49.63 (1261)
Overall Height – in. (mm); Add 3.47" (88mm) Exhaust Pipe	54.32 (1380)	54.32 (1380)	54.32 (1380)
Shipping Weight — No Fuel – lb. (kg)	1,820 (826)	2,085 (945)	2,570 (1166)
Working Weight — With Fuel – lb. (kg)	2,021 (917)	2,280 (1034)	2,770 (1257)

WARRANTY

1-year / 2,000-hour warranty on all components, except engines, tires and batteries, which carry the manufacturer's warranty.

AIREND

2-year / 4,000-hour warranty on airend, extended to 5-year / 10,000-hour warranty when original Ingersoll-Rand filters, fluids and parts are used at the prescribed intervals.

ENGINE

The John Deere engine is warranted for 2 years / 2,000 hours.

700 CFM to 1170 CFM Portable High Pressure Air Compressors

KEY FEATURES

- Central drains standard on all models with free-air delivery ranging from 1,070 to 1,170 cfm (30.3 to 33.1 m³/min).
- Electronic controller for significantly enhanced diagnostic capabilities and easy maintenance.
- Full electronic controls for optimum engine and compressor load precision.
- Large variety of running gear configurations as well as whispered or open-frame enclosures.
- Optional 5-year / 10,000-hour airend warranty when serviced with genuine Ingersoll-Rand parts and fluids.



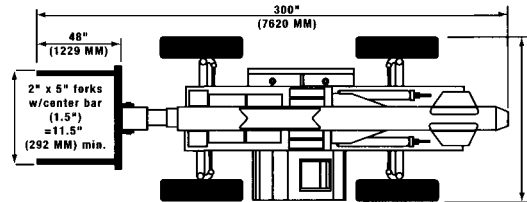
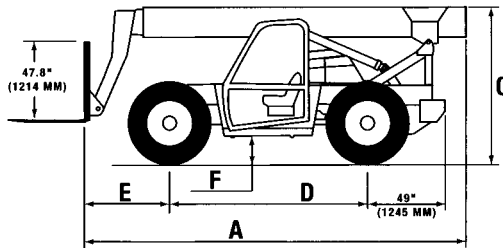
The optional IQ System™ provides the highest level of air quality. The patented technology reduces oil, dirt and water aerosol particles down from 0.01 parts per million to 0.01 microns.

All models can also be equipped with an after-cooler and water separator without the coalescing filters included in the IQ System. Both options provide an approach temperature of 20°F.



MODEL	XHP700WCAT TIER 2	XHP1070WCAT TIER 3	XHP1070SCAT TIER 3	XHP1170WCAT TIER 3	XHP1170SCAT TIER 3	XHP1170WCU TIER 3
Make	Caterpillar	Caterpillar	Caterpillar	Caterpillar	Caterpillar	Cummins
Model	C-9	C-15	C-15	C-15	C-15	QSX-15
Number of Cylinders	6	6	6	6	6	6
Displacement – cu. in. (L)	537 (8.8)	923 (15.1)	923 (15.1)	923 (15.1)	923 (15.1)	915 (15)
Rated Speed – rpm	1,800	1,800	1,800	1,800	1,800	1,800
Idle Speed – rpm	1,350	1,350	1,350	1,350	1,350	1,350
BHP @ Rated Speed – hp (kW)	275 (205)	475 (354)	475 (354)	540 (403)	540 (403)	560 (418)
Electrical; Batteries; CCA	24 V; (2) GR 31; 1,000	24 V; (2) 4D; 1,400	24 V; (2) 4D; 1,400	24 V; (2) 4D; 1,400	24 V; (2) 4D; 1,400	24 V; (2) 4D; 1,400
Engine Oil Capacity – gal (L)	8.5 (32)	8.5 (32)	8.5 (32)	8.5 (32)	8.5 (32)	12 (43.8)
Radiator Coolant Capacity – gal (L)	12.7 (48)	16 (60.6)	16 (60.6)	16 (60.6)	16 (60.6)	16 (60.6)
Fuel Tank Capacity – gal (L)	140 (530)	230 (874)	—	230 (874)	—	230 (874)
Free-air Delivery – cfm (m ³ /min)	700 (19.8)	1,070 (30.3)	1,070 (30.3)	1,170 (33.1)	1,170 (33.1)	1,170 (33.1)
Rated Operating Pressure – psig (bar)	300 (20.7)	350 (24.1)	350 (24.1)	350 (24.1)	350 (24.1)	350 (24.1)
Pressure Range – psig (bar)	80 – 300 (5.5 – 20.7)	80 – 350 (5.5 – 24.1)	80 – 350 (5.5 – 24.1)	80 – 350 (5.5 – 24.1)	80 – 350 (5.5 – 24.1)	80 – 350 (5.5 – 24.1)
Air Discharge Outlet NPT Size – in.	2	3	3	3	3	3
Air Discharge Outlet Quantity	1	1	1	1	1	1
Overall Length – in. (mm)	215 (5461)	290 (7366)	—	290 (7366)	—	290 (7366)
Overall Width – in. (mm)	79 (2007)	90 (2286)	—	90 (2286)	—	90 (2286)
Overall Height – in. (mm)	93 (2362)	101 (2565)	—	101 (2565)	—	101 (2565)
Track Width – in. (mm)	68.4 (1738)	71 (1803)	—	71 (1803)	—	71 (1803)
Tire Size	14.5	215 / 75R17.5	—	215 / 75R17.5	—	215 / 75R17.5
Shipping Weight — No Fuel – lb. (kg)	10,030 (4559)	16,420 (7464)	—	16,420 (7464)	—	16,690 (7586)
Working Weight — w/ Fuel – lb. (kg)	10,800 (4910)	17,850 (8114)	—	17,850 (8114)	—	18,300 (8319)
Overall Length – in. (mm)	148.6 (3775)	222.4 (5649)	231 (5867)	222.4 (5649)	231 (5867)	222.4 (5649)
Overall Width – in. (mm)	79 (2007)	90 (2286)	88 (2235)	90 (2286)	88 (2235)	90 (2286)
Overall Height (w/shock mounts) – in. (mm)	84.9 (2157)	87 (2210)	—	87 (2210)	—	87 (2210)
Shipping Weight — No Fuel – lb. (kg)	9,470 (4305)	14,800 (6727)	17,300 (7864)	14,800 (6727)	17,300 (7864)	15,240 (6927)
Working Weight — w/ Fuel – lb. (kg)	10,450 (4750)	16,400 (7455)	—	16,400 (7455)	—	18,300 (8318)

VR-843C Telescopic Material Handlers



43 ft. 1 in.
Maximum Lift Height

110 hp
EPA Tier II
Turbocharged
Diesel Engine

8,000 lb.
Rated Lift Capacity

MACHINE DIMENSIONS*

Overall Length (less forks) A	21' 0" (6401mm)
Overall Width B	8' 6" (2591mm)
Overall Height C	7' 11" (2413mm)
Wheelbase D	10' 8" (3251mm)
Drive Axle to Carriage Front E	4' 9" (1448mm)
Ground Clearance F	1' 4" (406mm)
Shipping Weight**	22,230 lbs. (10105kg)
Tread Width	7' 3" (2210mm)
Boom Extension	23' 6" (7163mm)
Max Forward Reach	28' 2" (8585mm)
Max Lift Height	43' 1" (13132mm)
Max Reach @ Max Lift Height	4' 4" (1321mm)
Practical Placement Height	41' 2" (12550mm)
Max Reach @ Practical Placement Height	7' 8" (2337mm)
Max Reach Below Grade w/ Standard Carriage	2' 10" (864mm)

TURNING RADIUS

To Outside of Tires	12' 3" (3683mm)
To Inside of Tires	7' 2" (2184mm)

PERFORMANCE

WITH STABILIZERS (OPTIONAL) DOWN	
Boom Retracted @ Max Height	8,000 lbs. (3636kg)
Capacity @ Max Height	8,000 lbs. (3636kg)
Capacity @ Max Reach	3,300 lbs. (1500kg)

WITHOUT (OPTIONAL) STABILIZERS	
Boom Retracted @ Max Height	8,000 lbs. (3636kg)
Capacity @ Max Height	6,000 lbs. (2727kg)
Capacity @ Max Reach	1,900 lbs. (864kg)

FRAME LEVELING	Right 11° / Left 11°
-----------------------	----------------------

BOOM

Boom Type	3-stage
Max Boom Angle	70°
Min Boom Angle	-6°
Telescope Extend Speed	15.7 seconds
Telescope Retract Speed	13.9 seconds
Boom Raise	10.6 seconds
Boom Lower	8.9 seconds
Carriage Rotation	113°

Make / Model	Cummins QSB4.5-30-T
Fuel / Cooling	Diesel / Liquid
SAE net hp	110 hp (82.1kW)
Fuel Tank Capacity	35 gal. (132 L)

Steering	2-wheel, 4-wheel or crab steering available controlled by steering wheel
Drive	All-wheel drive
Hydraulics	Boom lift, telescope, carriage rotate and auxiliary boom circuit controlled by single joystick. Optional stabilizers controlled by console switch.
Transmission	3-speed powershift with soft shift

*Vehicle dimensions with 24" (600mm) load center.

**Lightest machine — no attachment, air-filled tires and open ROPS.

STANDARD FEATURES

- Single joystick control
- Air cleaner restriction indicators
- Back-up alarm
- Boom angle indicator
- Cup holder
- Engine coolant heater
- Frame level indicator
- Horn and seat belt
- Lockable engine hood
- 12V power port
- Lockable battery cover
- Lockable fuel tank cap
- Lockable hydraulic tank cap
- Lockable toolbox
- Rear wiper/washer

OPTIONS / ACCESSORIES

- Air conditioning
- All-weather cab w/ heat
- Boom lights
- Dual joystick control
- Ether cold start
- Fenders
- Front and rear worklights
- Full-suspension seat
- Pintle hook
- Road lights
- Rotating beacon
- Single auxiliary hydraulics
- Specialty-tire options
- Stabilizers
- Turn signals, flashers, break lights
- Vandal protection

ATTACHMENTS*

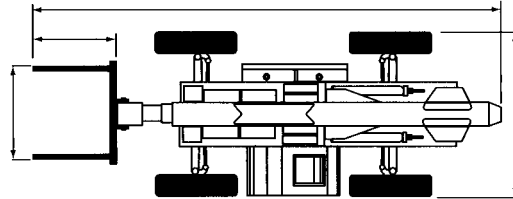
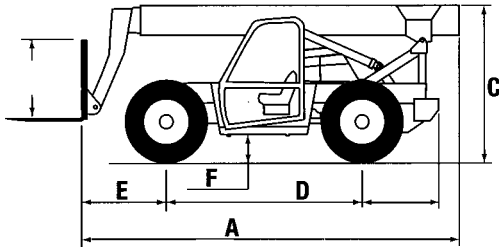
- Buckets
- Drywall handler
- Side-tilt carriages
- Swing carriages
- Truss boom
- Various width carriages

*Contact Wharton for additional attachment options.



Always read and understand the published rated load capacity for the material handler model you are operating and do not exceed it. Load ratings per ASME B56.6 — 1992.

VR-642C Telescopic Material Handlers



42 ft.
Maximum Lift Height

110 hp
EPA Tier II
Turbocharged
Diesel Engine

6,700 lb.
Rated Lift Capacity

MACHINE DIMENSIONS*

Overall Length (less forks) A	20' 3" (6172mm)
Overall Width B	8' 6" (2591mm)
Overall Height C	7' 11" (2413mm)
Wheelbase D	10' 0" (3048mm)
Drive Axle to Carriage Front E	4' 10" (1473mm)
Ground Clearance F	1' 4" (406mm)
Shipping Weight**	19,750 lbs. (8977kg)
Tread Width	7' 3" (2210mm)
Boom Extension	23' 6" (7163mm)
Max Forward Reach	26' 4" (8026mm)
Max Lift Height	42' 0" (12802mm)
Max Reach @ Max Lift Height	3' 0" (914mm)
Practical Placement Height	40' 1" (12217mm)
Max Reach @ Practical Placement Height	6' 3" (1905mm)
Max Reach Below Grade w/ Standard Carriage	2' 5" (737mm)

TURNING RADIUS

To Outside of Tires	11' 11" (3632mm)
To Inside of Tires	6' 5" (1956mm)

PERFORMANCE

Boom Retracted @ Max Height	6,700 lbs. (3045kg)
Capacity @ Max Height	6,000 lbs. (2727kg)
Capacity @ Max Reach	1,000 lbs. (454kg)

BOOM

Boom Type	3-stage
Max Boom Angle	70°
Min Boom Angle	-6°
Telescope Extend Speed	15.6 seconds
Telescope Retract Speed	13.9 seconds
Boom Raise	10.6 seconds
Boom Lower	8.9 seconds
Carriage Rotation	113°

Make / Model	Cummins QSB4.5-30-T
Fuel / Cooling	Diesel / Liquid
SAE net hp	110 hp (82.1kW)
Fuel Tank Capacity	35 gal. (132 L)

Steering	2-wheel, 4-wheel or crab steering available controlled by steering wheel
Drive	All-wheel drive
Hydraulics	Boom lift, telescope, carriage rotate and auxiliary boom circuit controlled by single joystick. Optional stabilizers controlled by console switch.
Transmission	3-speed powershift with soft shift

*Vehicle dimensions with 24" (600mm) load center.

**Lightest machine — no attachment, air-filled tires and open ROPS.

STANDARD FEATURES

- Single joystick control
- Air cleaner restriction indicators
- Back-up alarm
- Boom angle indicator
- Cup holder
- Engine coolant heater
- Frame level indicator

- Horn and seat belt
- Lockable engine hood
- 12V power port
- Lockable battery cover
- Lockable fuel tank cap
- Lockable hydraulic tank cap
- Lockable toolbox
- Rear wiper/washer

OPTIONS / ACCESSORIES

- Air conditioning
- All-weather cab w/ heat
- Boom lights
- Dual joystick control
- Ether cold start
- Fenders
- Front and rear worklights
- Full-suspension seat
- Pintle hook

- Road lights
- Rotating beacon
- Single auxiliary hydraulics
- Specialty-tire options
- Stabilizers
- Turn signals, flashers, break lights
- Vandal protection

ATTACHMENTS*

- Buckets
- Drywall handler
- Side-tilt carriages
- Swing carriages
- Truss boom
- Various width carriages

*Contact Wharton for additional attachment options.



Always read and understand the published rated load capacity for the material handler model you are operating and do not exceed it. Load ratings per ASME B56.6 — 1992.

BX20 series

Cushion Tire Lift Trucks
5,000 lbs. Capacity
Gas and LPG



**Available
for
Rental**

SPECIAL FEATURES

- ✓ The K21 and K25 industrial engines deliver exceptional power, emission control and reliable operation for enhanced productivity and fuel efficiency.
- ✓ Hydraulic suspension compartment (HSC) greatly reduces operator fatigue by isolating the compartment from engine and traveling vibrations.
- ✓ Swing-up engine bonnet and lift-out floor plate provide quick access for daily checks and maintenance.
- ✓ Open perforated steps and assist hand grip make entry and exit easier.
- ✓ Dash display provides easy to read information to the operator and maintenance personnel.

STANDARD EQUIPMENT

- Dash Display – Fuel, Water Temperature and Hour Meter Gauges
- Drawbar Pin
- Electronic Ignition; Anti-Restart Ignition Switch
- Engine Oil Pressure and Charge Warning Lamps
- Fully Hydrostatic Power Steering (FHPS)
- Headlights – OHG Mounted High Air Intake in OHG
- Horn
- “Komfort” Seat and Operator Restraint System with Lap Belts
- Load Backrest
- Overhead Guard

- 3-Way Valve
- Tilttable Steering Column
- Torque Converter Oil Cooler
- Turn Signal, Back-up, Stop and Tail Lights

OPTIONAL EQUIPMENT

- Additional Length Forks
- Attachments
- Auxiliary Hydraulic Valve
- Internal Hydraulic Hosing
- Warning Devices – Audible
- Warning Devices – Visual

TRUCK DATA

GENERAL	FG25ST-14	FG25SHT-14
Power Type	Gasoline	Gasoline
Operation Type	Sit-Down	Sit-Down
Capacity @ 24" (600mm) load center* lbs. (kg)	5,000 (2,270)	5,000 (2,270)
Load distance from center axle (2-stage mast) in. (mm)	17.0 (435)	17.0 (435)
Load distance from center axle (3-stage mast) in. (mm)	16.7 (425)	16.7 (425)
Wheelbase in. (mm)	55.1 (1,400)	55.1 (1,400)
WEIGHT		
Service weight (2-stage std. mast & forks) lbs. (kg)	8,180 (3,710)	8,180 (3,710)
TIRE		
Tire type	Cushion	Cushion
Tire size, front	21 x 7 x 15	21 x 7 x 15
Tire size, rear	16-1/4 x 5 x 11-1/4	16-1/4 x 5 x 11-1/4
Number of wheel, front / rear x = driven	2x / 2	2x / 2
Tread (center of tires), front/rear in. (mm)	34.6 (880)/35.4 (900)	34.6 (880)/35.4 (900)
DIMENSIONS		
Tilting angle, 2-stage (FV) masts, forward/backward deg.	6 / 10	6 / 10
Tilting angle, 3-stage (TFV) masts, forward/backward deg.	6 / 5	6 / 5
Mast height, lowered (2-stage std. mast) in. (mm)	85.5 (2,170)	85.5 (2,170)
Mast height, extended (2-stage std. mast)† in. (mm)	176.0 (4,470)	176.0 (4,470)
Maximum fork height (2-stage std. mast)** in. (mm)	128.0 (3,250)	128.0 (3,250)
Free lift height (2-stage std. mast) in. (mm)	5.5 (140)	5.5 (140)
Height overhead guard in. (mm)	78.7 (2,000)	78.7 (2,000)
Length to fork face (2-stage mast) in. (mm)	92.0 (2,340)	92.0 (2,340)
Length to fork face (3-stage mast) in. (mm)	91.7 (2,330)	91.7 (2,330)
Overall width, at drive tires in. (mm)	41.7 (1,060)	41.7 (1,060)
Forks, thickness x width x length in. (mm)	1.6x4.0x42.0 (40x100x1070)	1.6x4.0x42.0 (40x100x1070)
Carriage width / ITA Class in. (mm)	37.0 (940) / II	37.0 (940) / II
Ground clearance, under mast in. (mm)	5.5 (140)	5.5 (140)
Ground clearance, center of wheelbase in. (mm)	4.1 (105)	4.1 (105)
Right angle stacking aisle (2-stage mast)†† in. (mm)	94.6 (2,405)	94.6 (2,405)
Right angle stacking aisle (3-stage mast)†† in. (mm)	94.3 (2,395)	94.3 (2,395)
Turning radius, outside in. (mm)	77.6 (1,970)	77.6 (1,970)
PERFORMANCE		
Travel speed, forward, loaded / unloaded mph (km/h)	10.3 (16.5) / 10.3 (16.5)	10.3 (16.5) / 10.3 (16.5)
Lifting speed, loaded/unloaded (2-stage mast) fpm (mm/s)	120 (610) / 122 (620)	120 (610) / 122 (620)
Lifting speed, loaded/unloaded (3-stage mast) fpm (mm/s)	116 (590) / 118 (600)	116 (590) / 118 (600)
Lowering speed, loaded/unloaded (2-stage mast) fpm (mm/s)	98 (500) / 79 (400)	98 (500) / 79 (400)
Lowering speed, loaded / unloaded (3-stage mast) fpm (mm/s)	94 (480) / 77 (390)	94 (480) / 77 (390)
Maximum drawbar pull, loaded lbs. (kN)	4,410 (19.6)	5,510 (24.5)
Maximum gradeability, loaded / unloaded at 1 mph %	30 / 18	39 / 18
Service brake, operation / control	Foot / Hydraulic	Foot / Hydraulic
Parking brake, operation / control	Hand / Mechanical	Hand / Mechanical
Steering, type	Hydrostatic, Power	Hydrostatic, Power
DRIVE		
Battery voltage / capacity (20 hour rating) V/Ah	12 / 41	12 / 41
Engine model	K21	K25
Rated output (SAE Gross) HP (kW) @ rpm	60.1 (45) @ 2950	65.7 (49) @ 2900
Maximum torque (SAE Gross) lb.-ft. (Nm) @ rpm	115 (156) @ 1600	145 (197) @ 1600
No. of cylinder / displacement cu. in. (cm ³)	4 / 126 (2,065)	4 / 152 (2,490)
Cylinder bore x stroke in. (mm)	3.5 (89) x 3.3 (83)	3.5 (89) x 3.9 (100)
Fuel tank capacity U.S. gallons (liters)	10.6 (40)	10.6 (40)
OTHER		
Relief pressure, maximum psi (bar)	2,650 (181)	2,650 (181)
Hydraulic tank capacity U.S. gallons (liters)	9.5 (36)	9.5 (36)
Clutch	Torque Converter	Torque Converter
Transmission	Powershift	Powershift
Air cleaner type	Cyclone	Cyclone

NOTE: Most values shown in this publication are rounded. Therefore, direct conversion between metric and English or Imperial may be slightly different from those shown. The performance of machines is affected by the condition of the vehicle and how it is equipped as well as the nature and condition of the operating area. If these specifications are critical or if your needs exceed the specifications shown here, discuss the proposed application with your authorized dealer.

* Optional masts, attachments, load dimensions, tire options, tilt angles and higher lifting heights may result in derating of the capacity. Contact your authorized dealer.

** Other mast heights available. See MAST DATA chart for other standard mast heights. Contact your authorized dealer.

† Includes 48-inch (1,220mm) high load backrest. Contact your authorized dealer.

†† Add load length and clearance. Contact your authorized dealer.

PORTABLE COMPRESSORS

You can't lose. Our full line of portable rotary screw compressors, 125 to 1900 cfm, in standard, high pressure and utility models, are designed for total accessibility and reliability.

Bells and whistles. Large service doors can be padlocked, 0 to 100% capacity control, two-stage dry type air filters, curbside instrument panel, diagnostic shutdown indicator

system, protective shutdown switches and AWF all-weather fluid.

Have compressed air; will travel. All of our portable compressors can be towed on the highway. Mounting options include single-axle, tandem axle, four-wheel steerable and without running gear. Our portables are powered by Caterpillar® and John Deere® diesel engines.

Option up. Choices you have for customizing your compressor are: bolt-on light package, bumper, special paint, hose reels, spark arrester, cold weather starting aid, fuel level gauge, brakes, mechanical parking brakes, ball hitch, retractable pneumatic swivel third wheel and air filter maintenance indicator.



Model	Rated Pressure	Engine Make	Engine Type	Engine Model	Dimensions L x W x H (in.)		
					Tandem/Tri-Axle Mount	4-Wheel Mount	Less Running Gear
1900	100	Caterpillar	Diesel	C-15 ATAAC	240x88x92	244x88x101	179x88x83
1600H	150	Caterpillar	Diesel	C-15 ATAAC	240x88x92	244x88x101	179x88x83
1600	100	Caterpillar	Diesel	C-15 ATAAC	240x88x92	244x88x101	179x88x83
1450HH	200	Caterpillar	Diesel	C-15 ATAAC	240x88x92	244x88x101	179x88x83
1300H	150	Caterpillar	Diesel	C-15 ATAAC	238x88x92	244x88x101	179x88x83
1150XH	350	Caterpillar	Diesel	C-15 ATAAC	240x88x92	244x88x99	179x88x83
1050	100	Caterpillar	Diesel	C-9 ATAAC	191x87x83	204x87x89	131x87x72
900XHH	500	Caterpillar	Diesel	C-15 ATAAC	240x88x92	244x88x99	179x88x83
900XH	350	Caterpillar	Diesel	C-15 ATAAC	240x88x92	244x88x99	179x88x83
900H	150	Caterpillar	Diesel	C-9 ATAAC	191x87x83	204x87x89	131x87x72
900	100	Caterpillar	Diesel	C-9 ATAAC	191x87x83	204x87x89	131x87x72
825	125	Caterpillar	Diesel	C-9 ATAAC	191x87x83	204x87x89	131x87x72
750HH	175	Caterpillar	Diesel	C-9 ATAAC	191x87x83	204x87x89	131x87x72
750H	150	Caterpillar	Diesel	C-9 ATAAC	191x87x83	204x87x89	131x87x72
750	125	Caterpillar	Diesel	C-9 ATAAC	191x87x83	204x87x89	131x87x72
600H	150	Caterpillar	Diesel	C-9 ATAAC	191x87x83	204x87x89	131x87x72

Model	Rated Pressure	Engine Make	Engine Type	Engine Model	Dimensions L x W x H (in.)	
					2-Wheel	Less Running Gear
425	100	John Deere / Caterpillar	Diesel	4045HF275 / 3054CDITAAC	151x78.9x68.5	95.7x58.2x57.5
375H	150	John Deere / Caterpillar	Diesel	4045HF275 / 3054CDITAAC	151x78.9x68.5	95.7x58.2x57.5
375	100	John Deere / Caterpillar	Diesel	4045TF275 / 3054C	151x78.9x68.5	95.7x58.2x57.5
300HH	200	John Deere	Diesel	4045HF275	151x78.9x68.5	95.7x58.2x57.5
260	100	Caterpillar / John Deere	Diesel	3044CT / 5030T	143.3x65.4x59.9	85.1x47.5x49.0
210H	150	Caterpillar / John Deere	Diesel	3044CT / 5030T	143.3x65.4x59.9	85.1x47.5x49.0
185	100	Perkins / CAT / John Deere	Diesel	404C-22T / 3024T / 4024T	130.8x59.2x53.8	69.5x40.9x41.7
160H	150	John Deere	Diesel	4024T	130.8x59.2x53.8	69.5x40.9x41.7
130	100	Perkins / CAT / John Deere	Diesel	404C-22T / 3024T / 4024T	130.8x59.2x53.8	69.5x40.9x41.7
125	100	Perkins / CAT / John Deere	Diesel	404C-22T / 3024T / 4024T	130.8x59.2x53.8	69.5x40.9x41.7
49 HP	100	John Deere	Diesel	4024T	130.8x59.2x53.8	69.5x40.9x41.7

185 PORTABLE AIR COMPRESSOR

Designed for Total Accessibility and Reliability

- Compact/Lightweight Design
- Rotary Screw Compressor
- Clam Shell Canopy
- Independent Rubber Torsion Suspension
- Wheel Bearing Grease Fittings
- Curbside Instrument Panel
- SSAM—Shutdown System and Annunciation Module
- Rocker Type Start Switch
- Idle Warm-up Switch
- Glow Plug Starting Aid
- Galvanneal Sheet Metal
- Composite Material End Caps
- Durable Powder Coat Finished
- Fuel/Water Separator
- Rear Bumper
- Recessed Tail Lights
- AWF Compressor Fluid
- Pneumatic Inlet Valve
- 0 to 100% Capacity Control
- Adjustable Height Hitch
- Heated Controls
- Color-coded Control Lines
- Discharge Air Check Valve



SULLAIR'S OPTIONS ALLOW YOU TO CUSTOMIZE THE COMPRESSOR TO MEET YOUR SPECIFIC REQUIREMENTS WITHOUT PAYING FOR ITEMS YOU DO NOT NEED.

- | | | | |
|-----------------------------|---|--|-----------------------------------|
| Special paint | Tachometer | Block heater | Air filter safety elements |
| Hose reels, single and dual | Brakes (Recommended where required by law.) | Ball hitch | Air filter maintenance indicators |
| Fuel level gauge | Mechanical parking brakes | Retractable pneumatic swivel third wheel | Low fuel shutdown |
| Gauge package | | | |

SPECIFICATIONS, WEIGHTS AND DIMENSIONS – SULLAIR 185 PORTABLE COMPRESSOR

Delivery @ Rated Pressure	Rated Pressure psig bar	Pressure Range psig bar	Designated Model	Weight (wet) lbs. kg	Weight (dry) lbs. kg	Length (drawbar) in. mm	Length (canopy) in. mm	Width in. mm	Height in. mm	Track Width in. mm	Tire Size (load range)
185 cfm 87 L/S 5.2 m ³ /min	100 7	80–125 5.5–8.5	2-Wheel	2130 966	1990 903	130.8 3322	69.5 1765	59.2 1504	53.8 1368	50.9 1294	ST 175/80D 13
			Less Running Gear	1885 855	1745 792	– –	69.5 1765	40.9 1040	41.7 1060	– –	– –
Engine Make	Engine Type	Engine Model	Displacement cu. in. cc	Cylinders	Bore and Stroke in. mm	Rated Speed rpm	Rated Power hp kW				
Perkins	Diesel	404c-22T	134 2196	4	3.30x3.94 84x100	2800	60 44.7				
CAT	Diesel	3024T	134 2196	4	3.30x3.94 84x100	2800	60 44.7				
John Deere	Diesel	4024T	149 2442	4	3.39x4.13 86x105	2800	60 44.7				



K15A-8P



G8HGA-30P



W11HGB-SM

Single and Two Stage Wheeled Portable

FEATURES

- Heavy-duty single or two stage cast iron compressor pump – Made in Somerset, PA USA.
- Splash lubricated.
- Finned intercooler (two stage only).
- Belt driven with a large flywheel for extra cooling and easier start-up.
- Each unit is filled with Jenny Ultimate Blue Compressor Pump Oil.
- Directional air shroud for reduced pump temperatures.
- Totally enclosed heavy-duty belt guard.
- 8- & 15-gallon tanks are low profile, powder coated twin tank receivers.
- 17- and 30-gallon tanks are powder coated and ASME certified.
- Convenient lifting handles.
- Anti-vibration feet.
- Pneumatic tire(s).
- Protectively mounted fittings.
- Manual tank drain(s).
- Large canister intake filter / replaceable filter elements.
- Special unloading valves assist motor/engine starting.
- Stainless steel braided discharge hose.
- Tank gauge.
- Regulator and outlet pressure gauge.
- Pressure relief safety valve.
- Designed, tested and proven to meet the demands of the construction and rental industry.

ELECTRIC MOTOR

- Single Stage - Constant run control set at 105-125 PSI.
- Two Stage - Constant run control set at 145-175 PSI.
- High quality pilot valve.
- Industrial/Commercial grade UL Listed electric motor.
- Thermal overload motor protection.
- 6 ft. power cord.

Single Stage

Model	Pump	HP	Tank Gallon	Power Supply	CFM@ 100 PSI	CFM@ 125 PSI
K1A-8P	K	1	8	115 or 230 Volt 1 Phase	4.2	4.0
K1A-15P	K	1	15		4.2	4.0
K1A-17P	K	1	17		4.2	4.0
K1A-30P	K	1	30		4.2	4.0
K15A-8P	K	1.5	8		6.5	6.2
K15A-15P	K	1.5	15		6.5	6.2
K15A-17P	K	1.5	17		6.5	6.2
K15A-30P	K	1.5	30		6.5	6.2
K2A-8P	K	2	8		8.4	8.0
K2A-15P	K	2	15		8.4	8.0
K2A-17P	K	2	17	8.4	8.0	
K2A-30P	K	2	30	8.4	8.0	
G3A-8P	G	3	8	230 Volt 1 Phase	13.8	13.5
G3A-15P	G	3	15		13.8	13.5
G3A-17P	G	3	17		13.8	13.5
G3A-30P	G	3	30		13.8	13.5
G5A-8P	G	5	8		18.3	17.8
G5A-15P	G	5	15		18.3	17.8
G5A-17P	G	5	17		18.3	17.8
G5A30P	G	5	30		18.3	17.8
J5A-30P	J	5	30		19.4	19.0

Two Stage

Model	Pump	HP	Tank Gallon	Power Supply	CFM@ 100 PSI	CFM@ 175 PSI
GT5B-8P2	GT	5	8	230V 1 Phase	15.5	15.2
GT5B-15P2	GT	5	15		15.5	15.2
GT5B-17P	GT	5	17		15.5	15.2
GT5B-30P	GT	5	30		15.5	15.2
W5B-30P	W	5	30		18.1	17.9

OPTIONS

- Start-Stop control.
- Dual control.
- Dual voltage switch.
- On-Off switch.
- Two-wheel option (8 & 15 gal. models).
- Oil sight glass.
- Air line filter.
- Lubricator.
- Other pressures available.

GASOLINE ENGINE

- Single Stage - Constant run control set at 105-125 PSI.
- Two Stage - Constant run control set at 145-175 PSI.
- High quality pilot valve.
- Pneumatic throttle idle control.
- Honda GX Series OHV Engine.

Single Stage

Model	Pump	HP	Tank Gallon	Drive	CFM@ 100 PSI	CFM@ 125 PSI
K5HGA-8P	K	5.5	8	Honda GX	8.9	8.6
K5HGA-15P	K	5.5	15		8.9	8.6
K5HGA-17P	K	5.5	17		8.9	8.6
K5HGA-30P	K	5.5	30	Gasoline Recoil Start	8.9	8.6
G8HGA-8P	G	8	8		16.2	15.6
G8HGA-15P	G	8	15		16.2	15.6
G8HGA-17P	G	8	17		16.2	15.6
G8HGA-30P	G	8	30		16.2	15.6
J11HGA-30P	J	11	30	21.3	20.9	

Two Stage

Model	Pump	HP	Tank Gallon	Drive	CFM@ 100 PSI	CFM@ 175 PSI
GT8HGB-8P2	GT	8	8	Honda GX	15.7	15.4
GT8HGB-15P	GT	8	15		15.7	15.4
GT8HGB-17P	GT	8	17		15.7	15.4
GT8HGB-30P	GT	8	30	Gasoline Recoil Start	15.7	15.4
W11HGB-30P	W	11	30		21.0	17.6

OPTIONS – Two-wheel option (8 & 15 gal. models)

- Oil sight glass ■ Air line filter ■ Lubricator ■ Electric start
- Other engine options and pressures available.

Skid Mount and Portable Trailer Compressor

FEATURES

- Heavy-duty single or two stage cast iron compressor pump – Made in Somerset, PA USA.
- Splash lubricated.
- Belt driven with a large flywheel for extra cooling and easier start-up.
- Finned intercooler (two stage only).
- Centrifugal unloader (two stage only).
- Filled with Jenny Ultimate Blue Compressor Pump Oil.
- Directional air shroud for reduced pump temperatures.
- Totally enclosed heavy-duty belt guard.
- Directional air shroud for reduced pump temperatures.
- Powder coated ASME certified tanks and receivers.
- Protectively mounted fittings.
- Manual tank drain(s).
- Large canister intake filter / replaceable filter elements.
- Special unloading valves assist in engine starting.
- Stainless steel braided discharge hose.
- Tank gauge.
- Regulator and outlet pressure gauge.
- Pressure relief safety valve.
- Constant run control - Single stage set at 105-125 PSI Two stage set at 145-175 PSI.
- Pneumatic throttle idle control.
- Honda GX Series OHV Engine.
- Designed, tested and proven to meet the demands of the construction and rental industry.

SKID MOUNT Single Stage

Model	Pump	HP	Tank Gallon	Drive	CFM@ 100 PSI	CFM@ 125 PSI
GC8HGA-SM	GC	8	30	Recoil	16.4	16.0
J11HGA-SM	J	11	30	Electric	21.3	20.9
SKID MOUNT Two Stage						100 PSI 175 PSI
W11HGB-SM	W	11	30	Electric	21.0	17.6
U18HGB-SM	U	18	30	Start	41.0	34.7

TRAILER Two Stage

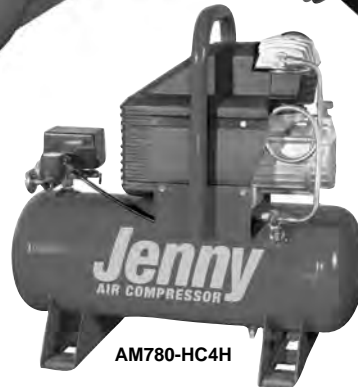
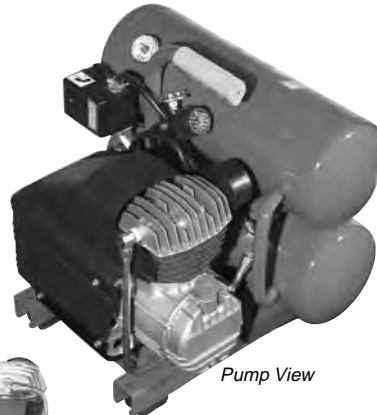
Model	Pump	HP	Tank Gallon	Drive	CFM@ 100 PSI	CFM@ 175 PSI
W11HGB-PT	W	11	30	Electric	21.0	17.6
U18HGB-PT	U	18	30	Start	41.0	34.7



Hand Carry Portable Air Compressors

FEATURES

- Lightweight, compact and extremely portable.
- Single stage, direct coupled, oil lubricated pump.
- Cast iron cylinder for extended pump life.
- Aluminum head for better heat dissipation.
- Each unit is filled with Jenny Synthetic Blue Compressor Pump Oil.
- Canister inlet filter with replaceable filter elements.
- Forced ventilation cooling system.
- Powder coated heavy-duty steel tank and frame assembly.
- Protectively mounted fittings.
- Anti-vibration feet.
- Air line regulator and two gauges for line and tank pressure.
- Pressure relief safety valve.
- Manual tank drain(s).
- Special unloading valves to assist in motor/engine starting.



Electric Units

- Start/Stop pressure switch control set at 105-125 PSI.
- On/Off Switch.
- Thermal overload motor protection with manual reset.
- 6-foot power cord.

Gasoline Engine

- High quality pilot valve.
- Pneumatic throttle idle control.
- Constant run control set at 105-125 PSI.
- Recoil start Honda GX Series OHV Engine.

Model	HP	Tank Gallon	Drive	CFM@ 100 PSI	CFM@ 125 PSI
Electric Units					
AM780-HC2	2	1.5	115 Volt	4.1	3.6
AM780-HC4V	2	4	115 Volt	4.1	3.6
AM780-HC4H	2	4	115 Volt	4.1	3.6
AM780-HC6V	2	6	115 Volt	4.1	3.6
Gasoline Engine					
AM840-4HG-HC4V	4	4	Gas/Honda	4.7	4.4

Heavy-Duty Pedestal Fan – MACH30



- High performance industrial grade fan.
- Fan head (motor, blade, guard) ships in one box.
- Pedestal pole and base (2430PB) ship in one box.
- 1/3 HP, 2-speed, totally enclosed, permanently lubricated permanent split capacitor, ball bearing motor.
- Pull chain switch.
- 12' long 3-conductor SJT type cord.
- Coated steel blades.
- Double locking chrome plated guard.
- Fan head tilt: pedestal - 10° down and 28° up; wall mount - 40° down or 0° up.
- Column adjustment: 48-7/8" - 74-5/8".
- 27" diameter steel dome pedestal base.
- Column/base connection: 5 carriage bolts.

Mounting Options



Industrial Non-Oscillating Air Circulator



- Two versions: Assembled fan head (motor, blade, guard) units ship in two cartons - fan head and mount; Unassembled uni-pack all components (motor, blade, guard) packed in one UPS air carton.
- 1/4 HP, 1Ø, 2-speed. 115 volt, totally enclosed, permanently lubricated permanent split capacitor, ball bearing motor. (220V, 1Ø motor also available.)
- Pull chain switch.
- 3-conductor SJT type cord.
- Coated steel blades.
- Double locking, chrome plated guards.
- Fan head tilt: pedestal - 10° down or 28° up; wall mount - 40° down or 0° up.
- Column adjustment: 48-7/8" - 74-5/8".
- 27" diameter steel dome pedestal base.
- Column/base connection: 5 carriage bolts.
- 1-year limited warranty.

Direct Drive Portable Blowers MVB30D, MVB36D



- These fans are designed to move large volumes of air efficiently and economically for people or machine cooling. Fans use a single phase, totally enclosed, ball bearing, permanently lubricated, direct drive motor, and ship completely assembled with grounded plug, cord and switch.
- Sturdy steel housing.
- 2 large rubber wheels.
- 2 handles for easy movement.
- 10' grounded cord.

Industrial Belt Drive Portable Blowers IHD36B, IHD42B, IHD48B



- These extra heavy-duty industrial fans are rugged 20-gauge steel with additional motor mount supports for rental, construction and other abusive applications. Ships completely assembled.
- ODP motor.
- Sturdy steel housing.
- 2 large rubber wheels.
- 2 handles for easy movement.
- 10' grounded cord.

LASKO
Innovators in Home Comfort

BOX FAN

20" Box Fan – Model 3733

- 3 whisper-quiet speeds.
- Slim-line model is perfect for smaller spaces.
- 21-5/8" L x 4-9/16" W x 20-1/2" H.
- 9.8 lbs.
- Energy-efficient, high volume air movement.
- Lightweight design for portability.
- U.L. Listed.
- 1-year warranty.



WRAP-ON Co., Inc.

PIPE HEATING CABLE



Wrap-On introduced the first pipe heating cable to the market in the early 1940's.

Wrap-On's Pipe Heating Cable prevents frozen water pipes. Working in conjunction with Underwriters Laboratories (UL), this revolutionary design was granted the industry's first listing for the newly created category, "Residential/Mobile Home Pipe Heating Cables for Metal or Rigid Plastic Pipe." They are made for use on residential or mobile home water supply pipes. Designed for indoor use, as well as outdoors in weather protected areas, Pipe Heating Cables protect pipes to temperatures as low as -50°F when properly installed and insulated.

KEROSENE/DIESEL FORCED-AIR HEATERS with Built-In Thermostat

• The choice for all types of industrial, commercial and agricultural applications.

B55CT — 55,000 Btu
• Heats up to 1,280 sq. ft.



B55CT

B115DT — 115,000 Btu
• Heats up to 2,700 sq. ft.



B115DT

B155DT — 155,000 Btu
• Heats up to 3,600 sq. ft.

B165DT — 165,000 Btu
• Heats up to 3,900 sq. ft.

M125AT — 125,000 Btu
• Heats 2,900 sq. ft.

HIGH PRESSURE KEROSENE FORCED-AIR HEATERS
• Rugged heater consistently delivers big heat even in extremely cold temperatures.

B350D — 350,000 Btu
• Heats 8,225 sq. ft.



B600D

B600D — 600,000 Btu
• Heats 14,100 sq. ft.

PROPANE/LP FORCED-AIR HEATERS

• For light commercial applications and small construction sites.

BLP55V — 30,000-55,000 Btu
• Heats 1,265 sq. ft.



BLP125V

BLP125V — 75,000-125,000 Btu
• Heats 2,900 sq. ft.

BLP170VT — 125,000-170,000 Btu
with Built-In Thermostat
• Heats 4,000 sq. ft.



BLP170VT

BLP375AT — 225,000-375,000 Btu
with Built-In Thermostat
• Heats 5,300 to 8,800 sq. ft.

PROPANE/LP CONVECTION HEATERS

• Great for worker comfort, curing concrete, masonry freeze protection, drying paint, dry walling and large construction projects.

TC102 — 15 to 25,000 Btu
• Heats up to 600 sq. ft.

TC200VA — 75,000/200,000 Btu
• Heats 1,750 to 4,700 sq. ft.

TC102



TC113



TC200VA

TC113 — 40 to 80,000 Btu
• Heats 1,900 sq. ft.

PROPANE TANK INFRA-RED HEATERS

• Ideal for outdoor projects, hunting, camping, auto/farm repairs and emergency uses.



TT15



TT30

TT30 — 10-30,000 Btu
• 6 Heat Settings.
• Uses 20-100 lb. Propane Tank.
• Each head swivels 180° and operates independently.
• Piezo Ignition.
• Includes Regulator.
• No Electricity Required.

TT15 — 5/10/15,000 Btu
• 3 Heat Settings.
• Uses 4-30 lb. Propane Tank.
• Matchlight Ignition.
• Includes Regulator.
• No Electricity Required.

PROPANE HEATERS

• Perfect for temporary heating of warehouses, construction sites, garages, shop areas, machine sheds and more.



“Hot Box” CH-220 — 200,000 BTU/hr
• Comes complete with 18 PSI regulator and push button ignition.
• Unique and efficient design forces heat downward to keep the work area warmer.
• Heavy gauge steel construction – BUILT TO LAST!
• Stackable for convenient storage
• Low profile prevents tipping.
• Full safety features.



When Quiet Counts, Count on **Honda!** Honda means QUIET!

SUPER QUIET INVERTER GENERATORS

Honda's advanced inverter technology makes these generators extremely lightweight, portable and fuel-efficient. Honda's Inverter Technology creates "clean" or stable power – making these generators ideal for sensitive electronic equipment. And since they are totally enclosed, they are incredibly quiet. All models are EPA and CARB compliant.



EU1000i

- 1000 Watts (8.3 A) of Honda Inverter 120V AC power.
- Super quiet – 53 to 59 dB(A).
- Super lightweight (less than 29 lbs.).
- EcoThrottle™ – Runs up to 8.3 hours on 0.6 gal. of fuel.
- 12V - 8A CD output.
- Advanced Inverter technology provides reliable power to computers and other sensitive equipment.
- Parallel with other EU1000i for additional power.
- Oil Alert®, Overload Alarm and EcoThrottle™.
- Power for fans, TVs, lights and small power tools and appliances.



EU2000i

- 2000 Watts (16.3 A) of Honda Inverter 120V AC power.
- Super quiet – 53 to 59 dB(A).
- Super lightweight (less than 47 lbs.).
- EcoThrottle™ – Runs up to 15 hours on 1 gal. of fuel.
- Advanced Inverter technology provides reliable power to computers and other sensitive equipment.
- 12V - 8.0A CD output.
- Parallel with other EU2000i for additional power.
- Oil Alert®, Overload Alarm and EcoThrottle™.
- Power for microwaves, refrigerators, hair dryers and small AC units.



EU3000i

- 3000 Watts (25 A) of Honda Inverter 120V AC power.
- Super quiet – 49 to 58 dB(A).
- Super lightweight (less than 29 lbs.).
- EcoThrottle™ – Runs up to 20 hours on 3.4 gal. of fuel.
- Convenient electric starting.
- Advanced Inverter technology provides reliable power to computers and other sensitive equipment.
- 12V - 12A CD output.
- Oil Alert®, Overload Alarm and EcoThrottle™.
- Power for RVs including 13,500 BTU AC and basic home backup power.

SUPER QUIET AVR GENERATORS

These totally enclosed generators offer incredibly quiet operation and the reliability of Honda commercial grade OHV engines and automatic regulated 120/240 power for continuous stable power. Additional standard features include wheel kits, automatic idle and the peace of mind that comes from owning a Honda.



EX4500

- 4500 Watts (37.5/18.3 A) 120/240V.
- Fully enclosed for super quiet operation.
- Honda 11hp commercial OHV engine.
- Automatic idle.
- Voltage selector switch – 120/240V operation.
- Automatic voltage regulated power output.
- Electric start (includes battery).
- Standard 4-wheel transport kit.
- Protected by Honda Oil Alert®.



EX5500

- 5500 Watts (45.8/22.9 A) 120/240V of automatic regulated power.
- Super quiet – 65 dB(A).
- Honda 12hp commercial OHC engine.
- 2-wheel kit and lift hood standard.
- Voltage selector switch – 120/240V operation.
- Electric start.
- Automatic idle control.
- Protected by Honda Oil Alert®.

For optimum performance and safety, we recommend you read the Owner's Manual before operating your Honda Power Equipment. Connection of generators to house power requires transfer device to avoid possible injury to power company personnel. Consult a qualified electrician.

DELUXE GENERATORS

EM Series Deluxe generators range from 3,800 to 6,500 watts and offer a wide variety of enhanced functions for home back-up and general purpose situations. All Honda generator models are EPA and CARB compliant.



EX3800SX

- 3800 Watts (31.6/15.8 A) 120/240V of automatic regulated power.
- Honda 8hp commercial OHV engine.
- Voltage selector switch – 120/240V operation.
- Easy access control panel.
- Reinforced standing legs.
- Wide handle for easy transport.
- Standard electric start (optional battery).
- 2-wheel kit standard.
- Runs about 20.8 hours at 50% load (6.6 gal.).
- Automatic idle.
- Simultaneous AC/DC use (auto battery charging).
- Special muffler for quieter operation.
- Full frame protection.
- Protected by Honda Oil Alert®.



EM5000i

- 5000 Watts (41.7/20.8 A) 120/240V of Honda Inverter power.
- Honda 11hp commercial OHV engine.
- Standard electric start with remote start capability.
- i-Monitor LCD display for performance monitoring and service diagnosis.
- Voltage selector switch – 120/240V operation.
- EcoThrottle™ for load dependent operation and maximum fuel efficiency.
- Operates up to 15.2 hrs. at 25% load (4.5 gal.).
- Full frame protection.
- Special muffler and sound dampening for quieter operation (62 dB at 25% load 68 dB rated).
- 2-wheel kit standard.
- Durable and convenient folding handle.
- Protected by Honda Oil Alert®.



EM5000SX

- 5000 Watts (41.7/20.8 A) 120/240V of automatic regulated power.
- Honda 11hp OHV commercial-grade engine.
- Operates 12.5 hours at 50% load (6.6 gal.).
- Easy access control panel.
- Reinforced standing legs.
- Wide handle for easy transport.
- Voltage selector switch – 120/240V operation.
- Standard electric start (optional battery).
- 2-wheel kit standard.
- Simultaneous AC/DC use (auto battery charging).
- Special muffler for quieter operation.
- Automatic idle.
- Full frame protection.
- Electronic ignition.
- Protected by Honda Oil Alert®.



EM6000GP

- 6000 Watts (50/25 A) 120/240V propane generator.
- Honda 11hp OHV LPG engine.
- Voltage switch selector – 120/240V operation.
- Convenient electric start (battery not included).
- 2-wheel transport kit is standard.
- Automatic idle.
- Automatic Voltage Regulator.
- Protected by Honda Oil Alert®.



EM6500SX

- 6500 Watts (54.1/27.1 A) 120/240V of automatic regulated power.
- Honda 13hp commercial OHV engine.
- Operates 11.1 hours at 50% load (6.6 gal.).
- Voltage selector switch – 120/240V operation.
- Automatic idle.
- Special muffler for quieter operation.
- Electric start (optional battery and tray kit).
- Simultaneous AC/DC use (auto battery charging).
- Full frame protection.
- 2-wheel kit and lift hood standard.
- Protected by Honda Oil Alert®.



EM7000i

- 7000 Watts (45.8/22.9 A) 120/240V Honda Inverter power.
- Honda 13hp commercial OHV engine.
- Electric start with remote start capability.
- i-Monitor LCD display for performance monitoring and service diagnosis.
- Voltage selector switch – 120/240V operation.
- EcoThrottle™ for load dependent operation and maximum fuel efficiency.
- Operates up to 14 hours at 25% load (4.5 gal.).
- Full frame protection.
- Special muffler and sound dampening.
- 2-wheel kit standard.
- Durable and convenient folding handle.
- Protected by Honda Oil Alert®.

For optimum performance and safety, we recommend you read the Owner's Manual before operating your Honda Power Equipment. Connection of generators to house power requires transfer device to avoid possible injury to power company personnel. Consult a qualified electrician.

ECONOMY GENERATORS

Honda's Economy Power Generators are a reliable source of "no frills" portable power. The Honda EG-generators all use a legendary Honda OHV commercial grade engine and are housed within a protective tube frame. The EN-generators are designed for homeowner use and feature Honda's GC series Premium Residential OHC engine for easy starting and economical operation. All Honda power generator models are EPA and CARB compliant.



EG2500

- 2500 Watts (20.8 A) 120V AC.
- Honda 5.5hp OHC engine.
- Electronic ignition.
- Operates 4.2 hours at 50% load (1 gal.).
- Low profile, full frame protection.
- 12V DC charging (8.3 amps).
- Protected by Honda Oil Alert®.



EG3500

- 3500 Watts (29.2/14.6 A) 120/240V of automatic regulated power.
- Honda 8hp OHV commercial-grade engine.
- Operates 5.1 hrs. at 50% load (1.6 gal.).
- Voltage selector switch – 120/240V operation.
- Steel frame protection.
- Protected by Honda Oil Alert®.



EG5000

- 5000 Watts (41.7/20.8 A) 120/240V of automatic regulated power.
- Honda 11hp OHV commercial-grade engine.
- Operates 3.6 hours at 50% load (1.9 gal.).
- Electronic ignition.
- Voltage selector switch – 120/240V operation.
- Steel frame protection.
- Protected by Honda Oil Alert®.



EN2500

- 2500 Watts (20.8 A) 120V AC.
- Honda 5hp OHC engine.
- 7 hours operation per tank.
- Low profile, full frame housing.
- Designed for homeowner use.
- Protected by Honda Oil Alert®.

For optimum performance and safety, we recommend you read the Owner's Manual before operating your Honda Power Equipment. Connection of generators to house power requires transfer device to avoid possible injury to power company personnel. Consult a qualified electrician.

Wharton Hardware *repairs portable generators*
in our shops in
Pennsauken, New Jersey and Springfield, Virginia.

We also stock *filters* and *replacement parts* for
Honda Pumps and Generators.

INDUSTRIAL GENERATORS

Honda's legendary industrial generators have earned a reputation in the construction and rental industries for their incredibly rugged reliability. All EB series Honda generators come standard with full G.F.C.I. circuit protection for regulated jobsites. All models are EPA and CARB compliant.



EB3000

- 3000 Watts (31.6/15.8 A) 120/240V AC of automatic generator power.
- Honda-Exclusive CycloConverter™ technology.
- Super lightweight (only 68 lbs.).
- Super quiet.
- Easy-Start Honda 6.5hp commercial OHV engine.
- Operates 9.3 hours at 50% load (2.7 gal.).
- All circuit – G.F.C.I. protected.
- 12V DC charging.
- Full frame protection.
- Protected by Honda Oil Alert®.



EB3800

- 3800 Watts (31.6/15.8 A) 120/240V of automatic regulated power.
- Honda 8hp commercial OHV engine.
- Runs about 20.8 hours at 50% load (6.6 gal.).
- 2 duplex outlets for easy connection of multiple tools.
- Tough one-piece welded frame.
- Rugged protection bars.
- Voltage selector switch – 120/240V operation.
- Automatic idle.
- All circuit – G.F.C.I. protected.
- Full frame protection.
- Special muffler for quieter operation.
- 2-wheel kit and lift hook standard.



EB5000

- 5000 Watts (41.7/20.8 A) 120/240V of automatic regulated power.
- Honda 8hp commercial OHV engine.
- Runs about 12.5 hours at 50% load (6.6 gal.).
- 2 duplex outlets for easy connection of multiple tools.
- Tough one-piece welded frame.
- Rugged protection bars.
- Voltage selector switch – 120/240V operation.
- Automatic idle.
- All circuit – G.F.C.I. protected.
- Full frame protection.
- Special muffler for quieter operation.
- 2-wheel kit and lift hook standard.



EB500i

- 5000 Watts (41.7/20.8 A) 120/240V of automatic regulated power.
- Honda 11hp OHV commercial-grade engine.
- i-Monitor LCD display for performance monitoring and service diagnosis.
- Voltage selector switch – 120/240V operation.
- EcoThrottle™ for load dependent operation and maximum fuel efficiency.
- Operates up to 15.2 hours at 25% load (4.5 gal.).
- All circuit – G.F.C.I. protected.
- Full frame protection.
- Special muffler and sound dampening for quieter operation (62 dB at 25% load 68 dB at rated).
- 2-wheel kit and lift hook standard.
- Durable and convenient folding handle.
- Protected by Honda Oil Alert®.

For optimum performance and safety, we recommend you read the Owner's Manual before operating your Honda Power Equipment. Connection of generators to house power requires transfer device to avoid possible injury to power company personnel. Consult a qualified electrician.



EB6500

- 6500 Watts (54.1/27.1 A) 120/240V AC of automatic regulated power.
- Honda 13hp commercial OHV engine.
- Operates 11.1 hours at 50% load (6.6 gal.).
- Voltage selector switch – 120/240V operation.
- Automatic idle.
- Special muffler for quieter operation.
- All circuit – G.F.C.I. protected.
- Full frame protection.
- 2-wheel kit and lift hook standard.
- Protected by Honda Oil Alert®.



EB7000i

- 6500 Watts (54.1/27.1 A) 120/240V of inverter power.
- Honda 13hp OHV commercial-grade engine.
- i-Monitor LCD readout for performance monitoring and service diagnosis.
- Voltage selector switch – 120/240V operation.
- EcoThrottle™ for load dependent operation and maximum fuel efficiency.
- Operates up to 14 hours at 25% load (4.5 gal.).
- All circuit – G.F.C.I. protected / Full frame protection.
- Special muffler and sound dampening for quieter operation (63 dB at 25% load 69 dB at rated).
- 2-wheel kit and lift hook standard.
- Durable and convenient folding handle.
- Protected by Honda Oil Alert®.



EB11000

- 11,000 Watts (87.5/43.8 A) 120/240V of automatic regulated power.
- Honda 20hp OHV twin-cylinder engine.
- Operates 7.5 hours at 50% load (6.9 gal.).
- G.F.C.I. duplex receptacles.
- Automatic idle.
- Protected by Honda Oil Alert®.
- Full frame protection.
- Optional 2-wheel transport kit available.
- Special muffler for quieter operation.



ES6500

- 6500 Watts (54.1/27.1 A) 120/240V of automatic regulated power.
- Honda 12hp OHV twin-cylinder, liquid-cooled engine.
- Standard electric start / Automatic idle.
- 2-wheel kit and lift hook standard.
- Runs about 6.9 hours at 50% load (4.4 gal.).
- Overheat sensor / Special muffler for quieter operation.
- Full frame protection / Protected by Honda Oil Alert®.



WELDER GENERATORS

Honda's legendary industrial generators have earned a reputation in the construction and rental industries for their incredibly rugged reliability. This model, in particular, is specifically designed for welding.

EW171

- Portable welder/generator.
- Honda 11hp OHV commercial-grade engine.
- 170 amp welding/4000 watts (33.3 A) AC generator power.
- Special muffler for quiet operation.
- 2-wheel transport and hanger kit standard.
- Full frame protection.
- Protected by Honda Oil Alert®.

For optimum performance and safety, we recommend you read the Owner's Manual before operating your Honda Power Equipment. Connection of generators to house power requires transfer device to avoid possible injury to power company personnel. Consult a qualified electrician.



PORTABLE GENERATORS



Shown with optional wheel kit



STANDARD FEATURES

- Heavy-duty rectangular roll cage.
- Recessed control panel.
- More GFCI-rated service receptacles than any other portable generator.
- Electromagnetic main circuit breaker starts heavy loads.
- Thermal breakers protect tools.

HIGH MOTOR-STARTING CAPABILITY

- Brushless generator end stays cooler.
- Unique split 4-coil winding on stator.
- Excellent voltage stability.
- Full 120V or 240V power when you need it.

DESIGNED FOR LONG LIFE

- Highest-class insulation of all non-military units.
- Automatic idle control reduces engine wear.
- All-steel construction.

HIGH STARTING POWER AT WORK OR PLAY

MMD Equipment portable generators are built using only the highest quality and most dependable components, including your choice of a reliable Honda gasoline engine or a rugged Yanmar diesel engine. They feature a heavy-duty brushless generator end that provides the highest motor starting capabilities and voltage stability in the industry – which helps make MMD Equipment portable generators the preferred power source.

NGK-4300H

Voltage	120V and 240V
Maximum Output	4,300W
Maximum Amps	35.8 amps
Rated Output	3,800W
Rated Amps	31.7 amps
Start System	Recoil
Auto Idle	Yes
Engine/Horsepower	Honda Gasoline/8.0 hp
Tank	4.5 gal.
Run Time	8.5 hrs.
Weight	150 lbs.

NDK-6000YE

Voltage	120V and 240V
Maximum Output	6,000W
Maximum Amps	50 amps
Rated Output	5,000W
Rated Amps	41.7 amps
Start System	Recoil/Electric
Auto Idle	N/A
Engine/Horsepower	Yanmar Diesel/10.0 hp
Tank	3.4 gal.
Run Time	6 hrs.
Weight	236 lbs.

NGK-6000H

Voltage	120V and 240V
Maximum Output	6,000W
Maximum Amps	50 amps
Rated Output	5,000W
Rated Amps	41.7 amps
Start System	Recoil/Electric
Auto Idle	Yes
Engine/Horsepower	Honda Gasoline/11.0 hp
Tank	4.5 gal.
Run Time	5.6 hrs.
Weight	176 lbs.

Gen-Pac Generators

FEATURES

- Cost efficient power to meet your needs in a less sound critical enclosure.
- Prime output ratings from 15 kVA single phase to 25 kVA three phase.
- High water temperature, low oil pressure shutdown.
- Easy-to-read analog control panel with single phase and three phase connections standard.
- Large 30-gallon (114L) tank provides run time up to 60 hours. An additional 50 gallon (189L) dual tank system is also available.
- Easy-to-tow trailer with 3,500 lb. (1,588kg) capacity axle and 2" (5.1cm) ball hitch with bolt-on fenders and 15" (38cm) tires.
- Outrigger option allows you to raise the unit off the ground and remove tires, making it less vulnerable to theft.



SPECIFICATIONS

MODEL		T15G	T25G
Power Capability – Prime			
kVA (kilovolt-amps)		15	25
kW (kilowatts)		12	20
1 Phase Amp Ratings	220V	68	76
	240V	63	69
3 Phase Amp Ratings	208V	Not Available	69
	220V	Not Available	66
	240V	Not Available	60
	440V	Not Available	33
	480V	Not Available	30
Power Capability – Standby			
kVA (kilovolt-amps)		17	30
kW (kilowatts)		14	24
1 Phase Amp Ratings	120V	141	250
	220V	77	136
	240V	70	125
3 Phase Amp Ratings**	208V	Available as Option	83
	220V	Available as Option	79
	240V	Available as Option	72
	440V	Available as Option	40
	480V	Available as Option	36
Max Motor Starting*	hp	8	12
	kW	6	9
Diesel Engine			
Manufacturer		Kubota	Isuzu
Model		V1505-EBG1	4LE2PV02
Cylinders		4	4
Air Intake (aspiration)		Natural	Natural
Cooling System		Std. Rad.	Std. Rad.
Fuel Consumption @ Full Load - Gal./Hr.		1.2	1.5
Run Time @ Full Load - Hrs.		25	20
Unit Weight			
Unit Weight	Dry (lb.)	1468	1654
	Full (lb.)	1685	1871

*Maximum motor size is based on 35% voltage dip at 480 VAC 3 phase 60Hz with a code G motor.

**3 Phase, 480 volts available hardwired or when voltage selector switch option is chosen.



SUPER QUIET Generators

FEATURES

- Prime output ratings from 25 kVA to 279 kVA.
- Quiet operation: 68 dba or less at 23 ft. (7m).
- High water temperature, low oil pressure, overspeed and safety shutdown.
- Spin-on diesel water separator effectively handles filtration.
- Engine control panel comes with full analog gauge package on all models, including digital Tier 2.
- Engine control module includes remote start capability on all models.
- Solid state electronic governor results in stable engine response to load changes.
- Environmentally friendly fuel base serves as solid foundation and stores over 24 hours of fuel capacity. Designed to keep oil, antifreeze and other spills inside the unit.
- 3-position voltage selector switch allows unit to provide 480 and 240 volt three phase and 240 volt single phase.



- DOT approved and serialized trailers.
- Hydraulic brakes, full light package, bolt on fenders and heavy-duty side-mount jacks are standard.

SPECIFICATIONS

MODEL		T25	T45	T50-P	T50-J	T70-P	T70-J	T80
POWER CAPABILITY – PRIME								
kVA (kilovolt-amps)		25	45	48	49	68	72	81
kW (kilowatts)		20	36	36	39	54	58	65
3 Phase Amp Ratings	208V	69	125	125	136	189	200	225
	240V	60	108	108	118	164	173	195
	480V	30	54	54	59	82	87	97
POWER CAPABILITY – STANDBY								
kVA (kilovolt-amps)		30	50	50	54	75	79	90
kW (kilowatts)		24	40	40	43	60	63	72
3 Phase Amp Ratings	208V	83	139	139	150	208	219	250
	240V	72	120	120	130	180	190	217
	480V	36	60	60	65	90	95	108
Max Motor Starting*	Hp	12	27	27	27	38	38	49
	kW	9	20	20	20	28	28	37
SKVA		70	165	165	165	230	230	290
DIESEL ENGINE								
Manufacturer		Isuzu	Isuzu	Perkins	John Deere	Perkins	John Deere	John Deere
Model		4LE2PV01	4JG1TPV	1104C-44G1	4045DF270	1104C-44TG	4045TF270	4045TF275
Cylinders		4	4	4	4	4	4	4
Air Intake (aspiration)		Natural	Turbo	Natural	Natural	Turbo	Turbo	Turbo
Cooling System		Std. Rad.	Std. Rad.	Std. Rad.	Std. Rad.	Std. Rad.	Std. Rad.	Std. Rad.
Fuel Capacity (gal.)		64	64	80	80	118	118	118
Run Time (75% Load)		53	29	33	31	36	33	28
SKID MOUNT								
Dimensions (L x W x H - in.)		84x39x51	84x39x51	88x40x53	88x40x53	110x44x60	110x44x60	110x44x60
Weight Dry (lbs.)		2,200	2,500	3,069	3,069	4,157	4,157	4,157
Weight Full (lbs.)		2,677	2,967	3,637	3,637	4,995	4,995	4,995
TRAILER MOUNT								
Dimensions (L x W x H - in.)		137x66x68	137x66x68	129x68x73	129x68x73	177x72x77	177x72x77	177x72x77
Weight Dry (lbs.)		2,675	2,975	4,185	4,185	4,980	4,980	4,980
Weight Full (lbs.)		3,152	3,442	4,745	4,745	5,806	5,806	5,806
MISCELLANEOUS								
dBA @ 23 ft.		64	64	64	64	65	65	65
Controller Type		Analog	Analog	Analog	Analog	Analog	Analog	Digital

*Maximum motor size is based on 35% voltage dip at 480 VAC 3 phase 60Hz with a code G motor.

Big Blue[®] 251D

250 Ampere, DC, Constant Current
Diesel Engine Driven Welding Generator

A compact, rugged, diesel-powered welding generator, the Big Blue™ 251D is designed primarily for Shielded Metal Arc (Stick) Welding. Its simple, rugged design is perfect for use in caustic environments or where scheduled preventative maintenance is difficult.

A Deutz 3-cycle, air- and oil-cooled compact industrial diesel engine smoothly powers this modern unit. Its compact size enables it to be placed across the box of a pickup truck, including many smaller truck models.

Auxiliary power while welding is an important feature, and this product produces 3 KW/KVA at 120 VAC while welding. For extra auxiliary power while not welding, an optional 10 KVA 3-phase auxiliary power kit is available and easily reconnectable to 7.5 KVA single-phase.

FEATURES

- Separate welding ranges with fine adjustment in each range.
- Ample open-circuit voltage for easy arc starts.
- 3 KVA auxiliary power while welding from 2 – 120 VAC duplex receptacles.
- Circuit breaker protected auxiliary power receptacles.
- Running hour meter.
- Simple design and rugged construction for reliable performance anywhere.
- Low fuel consumption.
- Compact, low-profile design.
- Quiet manifold-type muffler.
- Environmental protection provides internal anti-corrosion protection.
- Miller's True Blue[®] Warranty:
2 Years—parts and labor. Note: Engines are warranted separately by the engine manufacturer.

ENGINE SPECIFICATIONS

Engine: Deutz F3L 1011 state-of-the-art, air- and oil-cooled 3-cylinder industrial diesel engine.

Horsepower: 29 @ 1850 RPM.

Speed: Weld and auxiliary power 1800 RPM.

Capacities: Fuel 11 gal. (42 L), oil 6 qts. (5.5 L) or 6.5 qts. (6 L) with filter change.

Electrical: 12 Volt starter with 55 Amp alternator. Battery is Group 45, 520 cold cranking amp performance.



Available for RENTAL and PURCHASE

ENGINE FEATURES

Reliable Deutz industrial air-cooled diesel engines have been field proven in Miller welders for over two decades.

- Deutz pioneered modular engine design with high parts commonality means efficient parts management and reduced parts cost.
- Integrated cooling system uses engine oil and air to “double cool” the engine. All the advantages of air cooling—none of the disadvantages of water-cooling.
- Direct fuel injection system (DI) provides low fuel consumption, clean exhaust and easy starts.
- Individual fuel injection assemblies (pumps, lines and injectors). This Deutz innovation streamlines parts management and reduces injection system parts costs.
- Excellent governing and torque characteristics give instant and positive load pickup at arc initiation.
- Extended service intervals lower service cost while increasing productivity. Superior design and “double cooling” enable 750-hour oil changes and give 6000 hours or more of service before overhaul.
- Quiet operation is a product of state-of-the-art design.
- Compact engine profile is a product of extensive customer oriented development and makes possible our compact case design.
- 2-year North American engine warranty.

The Big Blue[®] 251D is the right choice for:

- Rental yards.
- Petrochemical plants.
- Mines/Quarries.
- Remote locations.
- International contractors.
- International markets.
- Offshore repair.
- Large contractors.
- Chemical plants.
- Offshore fabrication.
- Pipe and structural fabrication.
- Marine repair.

Toughest Welder...Case Closed.

Bobcat™ 225

CC/CV, AC/DC Engine-Driven Welder/AC Generator

The industry standard for reliability and performance.

- High-impact protective armor with covers.
- Accu-Rated™ 10,000 watts of generator power.
- Ten-degree skewed rotor.
- 12-gallon fuel capacity.
- 50 - 210 amp range and multi-process capabilities.



Accu-Rated®—Not Inflated Generator Power

Strongest Power

10,000 watts of the cleanest, truly useable generator power that is Accu-Rated™, not inflated. Delivers peak power for a minimum of 30 seconds for maximum generator loads (like plasma cutting, Millermatics and motor starting).

Smooth Power—Not Spike Power

Ten-degree skewed-rotor design optimizes generator performance for 10,000 watts of smoother power—not spike power found in other brands.

Large Fuel Capacity

Larger 12-gallon fuel tank for an extra four hours of welding and generator power. And, its exclusive Smart Fuel Tank is designed to minimize the chance of back splash when refueling.

High-impact Protective Armor

Super-tough XENYO® protective armor with covers provides high impact resistance in all temperatures. Receptacle and output stud covers meet and exceed OSHA, CSA and CE requirements for jobsite safety.

Multiple Process Capabilities

Only Miller provides multiple process capabilities—AC and DC welding on both of its Bobcats—so you don't have to limit yourself.

The Bobcat 225 is the right choice for:

- Maintenance and repair.
- Farm and ranch.
- Fabrication and structural steel.
- Stand-alone generator.

Q&A:

Do you need strong generator power?

Solution: Miller machines deliver 10,000 Accu-Rated™ watts of the cleanest, truly useable peak generator power. Miller's Accu-Rated, not inflated, standard of measuring generator power guarantees delivery of all the power its machine promises.

Do you work in harsh conditions?

Solution: The Bobcat 225 is tested and rated in the most extreme conditions—104°F, nearly 20° hotter than its competitors. And its new XENYO® protective armor with receptacle and output stud covers make the Bobcat virtually indestructible.

Do you want to reduce re-fueling time on the job?

Solution: The Bobcat now has more fuel capacity! The new 12-gallon tank can keep the generator running for 14 hours with a 4000-watt generator load. And, the exclusive Smart Fuel Tank is designed to minimize the chance of back splash when refueling.

Miller provides the strongest, and most reliable, welding and generator power...Case Closed.

Toughest Welder...Case Closed.

Bobcat™ 250

CC/CV, AC/DC Engine-Driven Welder/AC Generator

The industry standard for reliability and performance.

- Fully enclosed case with protective armor.
- Accu-Rated™ 10,000 watts of generator power.
- 1/3 less noise.
- 12-gallon fuel capacity.
- 40 - 250 amp range and multi-process capabilities.

Fully Enclosed Case with Protective Armor

Fully enclosed case protects the engine and internal welding components. Plus, exclusive XENOY® protective armor with receptacle and output stud covers provides a virtually indestructible barrier from damage with high impact resistance in all temperatures.

Strongest Power

10,000 watts of the cleanest, truly useable generator power that is Accu-Rated™, not inflated. Delivers peak power for a minimum of 30 seconds for maximum generator loads (like plasma cutting, Millermetics and motor starting).

Smooth Power—Not Spike Power

Ten-degree skewed-rotor design optimizes generator performance for 10,000 watts of smoother power—not spike power found in other brands.

Most Quiet

Fully enclosed case decreases sound levels by 1/3 over previous models and is more worker-friendly. Quietest welder in its class and quieter than most engine drives in the industry!

Large Fuel Capacity

Larger 12-gallon fuel tank for an extra four hours of welding and generator power. And, its exclusive Smart Fuel Tank is designed to minimize the chance of back splash when refueling.

Better Welds

Tri-Cor™ Technology is a re-designed stabilizer with added iron core for smoother weld output, improved performance and decreased spatter with 7018 electrodes. All without sacrificing the already excellent performance with 6010 electrodes.

The Bobcat 250 is the right choice for:

- Maintenance and repair.
- Farm and ranch.
- Fabrication and structural steel.
- Stand-alone generator.



Accu-Rated®—Not Inflated Generator Power

Q&A:

Do you need strong generator power?

Solution: Miller machines deliver 10,000 Accu-Rated™ watts of the cleanest, truly useable peak generator power. Miller's Accu-Rated, not inflated, standard of measuring generator power guarantees delivery of all the power its machine promises.

Do you require rugged reliability from your welding equipment?

Solution: The Bobcat 250 is rated #1 in reliability in the industry. The enclosed case design and XENOY® protective armor with receptacle and output stud covers make it virtually indestructible.

Do you want to reduce re-fueling time on the job?

Solution: The Bobcat now has more fuel capacity! The 12-gallon tank can keep the generator running for 14 hours with a 4000-watt generator load. And, the exclusive Smart Fuel Tank is designed to minimize the chance of back splash when refueling.

Miller provides the strongest, and most reliable, welding and generator power...Case Closed.



WELDING ACCESSORIES

Ground Clamps

Double-Lok ground clamps have forged copper alloy conductors with large contact areas, high clamping pressure and long levered handles for easy jaw opening. The cable jacket is held securely inside the conductor body with a cable bar for improved holding ability and longer cable life. They have fully insulated pivots and springs.

MODEL GC-2

- 200 Amperes.
- 1-1/4 in. Jaw capacity.
- No. 4 through 1/0 Cable capacity.
- Weight: 16 oz.



0702-0001

MODEL GC-3

- 300 Amperes.
- 1-5/8 in. Jaw capacity.
- 1/0 and 2/0 Cable capacity.
- Weight: 23 oz.



0702-0002

MODEL GC-5

- 500 Amperes.
- 2 in. Jaw capacity.
- 3/0 and 4/0 Cable capacity.
- Weight: 34 oz.



0702-0003

Features:

- Large dome screw cable connector for near unbreakable connection.
- Long-lever, finger-grip contoured handle for easy jaw opening.
- Engineered serrations cut through mill scale and rust.
- Extra-large contact areas (1 sq. inch min.) for greater conductivity.

Electrode Holders

Heavy-duty copper or aluminum alloy models with large dome cable screw connectors for high conductivity and improved cable connections.

MODEL JH-1

- 250 Amperes.
- 3/16 in. Electrode capacity.
- No. 4 through 1/0 Cable cap.
- 50% Duty Cycle Rating.*
- Copper Alloy. • Weight: 12 oz.



0700-0011

MODEL JH-2

- 200 Amperes.
- 5/32 in. Electrode capacity.
- No. 4 through 1/0 Cable cap.
- 45% Duty Cycle Rating.*
- Aluminum Alloy. • Weight: 10 oz.



0700-0022

MODEL AW-C

- 300 Amperes.
- 1/4 in. Electrode capacity.
- No. 4 through 2/0 Cable cap.
- 50% Duty Cycle Rating.*
- Copper Alloy. • Weight: 19 oz.



0700-0012

MODEL A-W

- 300 Amperes.
- 1/4 in. Electrode capacity.
- No. 3 through 2/0 Cable cap.
- 45% Duty Cycle Rating.*
- Aluminum Alloy. • Weight: 14 oz.



0700-0019

MODEL J-4

- 400 Amperes.
- 1/4 in. Electrode capacity.
- No. 2 through 1/0 Cable cap.
- 60% Duty Cycle Rating.*
- Weight: 16 oz.
- Head is @ 45° angle.
- Handle adjusts to electrode sizes.



0700-0034

MODEL A3-S

- 500 Amperes.
- 3/8 in. Electrode capacity.
- 2/0 through 4/0 Cable cap.
- 60% Duty Cycle Rating.*
- Copper Alloy.
- Weight: 30 oz.



0700-0016

*Duty Cycle Rating is the maximum percentage of arc time (out of any 10-minute period) that a holder should be expected to perform comfortably.

Features:

- Integrated slots for convenient angled holding.
- Large dome screw cable connector for near unbreakable connection.
- Fully insulated pivots and springs for maximum dielectric integrity.
- Copper wrap to ensure maximum conductivity.
- Integral grooves allow for efficient heat dissipation.
- Extended handle with integral ribs that act as a cable support system, eliminating play, reducing wear.

Cable Connectors

UNI-TRIK® Uni-Trik cable connectors are completely insulated, with no exposed metal, and have large, dome-nose cable screws to ensure a virtually unbreakable, high conductivity connection. Uni-Trik connector halves are compatible with halves of certain other connector makes.

MODEL UB-1-BP

- For cables No. 4 - No. 1.



0704-0200

MODEL UB-3-BP

- For cables 1/0 - 3/0.



0704-0210

MODEL UB-4-BP

- For cables 3/0 - 4/0.



0704-0213

QUIK-TRIK® Top-of-the-line Quik-Trik connector halves have Morse-tapered sections that are drawn together with a cam and locking bar for maximum conductivity. They are available with semi-rigid insulators, or with flexible insulators, and tapered ends that cover the cable jacket and lock out moisture, oil and dirt.

MODEL QNB-2-BP

- For cables 1/0 and 2/0.



0704-0001

MODEL QNB-4-BP

- For cables 3/0 - 4/0.



0704-0002

MODEL QB-2-BP

- For cables 1/0 - 2/0.



0704-0004

Features:

- Large dome-nose screw for high conductivity connection.
- Insulator locking screw for secure fit.
- Cam and locking bar drawn together for virtually unbreakable connection.



PUMPS, TRASH AND DIAPHRAGM



DEPENDABLE HEAVY-DUTY PERFORMANCE IN A LIGHTWEIGHT, PORTABLE PACKAGE.

Need to move a lot of water fast? Count on pumps from MMD Equipment. They're designed for a long life of consistent performance – even in the toughest environments. From the internal wear parts to the Honda engines, our pumps are built with durable, high-quality components that last ... and that means less maintenance and lower costs.

STANDARD FEATURES

- Reliable Honda engine.
- Automatic low oil shutdown.
- Electronic ignition.
- Rubber vibration isolators.
- Heavy-duty steel roll cage (Trash pumps).
- Long-life mechanical seal.
- Wheel kits and lifting hook kits available.



STAINLESS STEEL WEAR SYSTEM

- Hi-chrome cast impeller.
- Replaceable stainless steel wear plate.
- Extends pump life.

MODULAR PUMP DESIGN

- Self-priming, cast aluminum pump heads.
- Easy-open removable pump covers.
- Easy-to-replace nipples and flanges.
- Oversized cover flanges and extra-thick O-rings.



NPH-2T Trash Pump

Suction & Del. Dia.	2 x 2 in.
Solid Size	1 in.
Max. Delivery	11,900 gph
Suction Lift	26 ft.
Max. Head	90 ft.
Engine/Horsepower	Honda GX-160/5.5 hp
Fuel Type	Gas/Unmixed
Fuel Capacity	.95 gal.
Fuel Consumption	.29 gph
Low Oil Sensor	Yes
Dimensions	22 x 17 x 16 in.
Weight	79 lbs.

NPH-3T Trash Pump

Suction & Del. Dia.	3 x 3 in.
Solid Size	1.5 in.
Max. Delivery	21,600 gph
Suction Lift	26 ft.
Max. Head	96 ft.
Engine/Horsepower	Honda GX-240/8 hp
Fuel Type	Gas/Unmixed
Fuel Capacity	1.59 gal.
Fuel Consumption	.5 gph
Low Oil Sensor	Yes
Dimensions	26.7 x 19 x 24.2 in.
Weight	130 lbs.

N-300H Diaphragm Pump

Suction & Del. Dia.	3 x 3 in.
Solid Size	1.5 in.
Max. Delivery	5,100 gph
Suction Lift	25 ft.
Max. Head	50 ft.
Engine/Horsepower	Honda GX-120/4 hp
Fuel Type	Gas/Unmixed
Fuel Capacity	.66 gal.
Fuel Consumption	.29 gph
Low Oil Sensor	Yes
Dimensions	39.5 x 30 x 24 in.
Weight	145 lbs.



Honda Water Pumps offer a level of uncompromising performance to a wide variety of water transfer applications. Designed for easy starting, priming and dependable service, used throughout the world for over 20 years, Honda water pumps have earned a reputation for unsurpassed reliability and performance.

Honda construction pumps (trash and diaphragm) have been relied on by the construction and rental industry. De-watering pumps are designed for the transfer of clear water and high pressure pumps offer high pressure with lower flow. All pumps are protected by Honda Oil Alert®.



WT20

- Heavy-duty 2" construction **Trash Pump**.
- Easy-start Honda 5.5hp OHV commercial engine.
- 187 gal./min. capacity.
- Solid handling capability up to 13/16".
- Easy, quick clean-out port.
- Easy-service wear plate.
- 2-year residential, 2-year commercial engine and 3-month pump component warranty.



WT30

- Heavy-duty 3" construction **Trash Pump**.
- Easy-start Honda 8hp OHV commercial engine.
- Full frame protection.
- 319 gal./min. capacity.
- Solid handling capability up to 1-1/16".
- Easy, quick clean-out port.
- 2-year residential, 2-year commercial engine and 3-month pump component warranty.



WT40

- Heavy-duty 4" construction **Trash Pump**.
- Easy-start Honda 11hp OHV commercial engine.
- Full frame protection.
- 433 gal./min. capacity.
- Solid handling capability up to 1-1/16".
- Easy, quick clean-out port.
- 2-year residential, 2-year commercial engine and 3-month pump component warranty.



WB20

- **De-Watering Pump** with Honda's OHV engine.
- Cast iron impeller and volute.
- Abrasion-resistant silicone carbide seal.
- 2" suction/discharge ports.
- Heavy-duty full frame protection.
- Pumps up to 152 gal./min.
- Lightweight aluminum pump case.
- Rubber mounts minimize vibration.
- 2-year residential, 1-year commercial warranty.



WB30

- **De-Watering Pump** with Honda's OHV engine.
- Cast iron impeller and volute.
- Abrasion-resistant silicone carbide seal.
- 3" suction/discharge ports.
- Heavy-duty full frame protection.
- Pumps up to 275 gal./min.
- Lightweight aluminum pump case.
- Rubber mounts minimize vibration.
- 2-year residential, 1-year commercial warranty.



WDP20

- Dry, self-priming 2" **Diaphragm Pump**.
- Easy-start Honda 4hp OHV commercial engine.
- Pumps up to 60 gal./min.
- Special "Rock Channel" prevents case damage.
- Spring protected connecting rod.
- Perfect when low volume, dry run capability is required.



WH20

- Honda overhead valve engine.
- High output, **High Pressure Pump**.
- 61psi max.
- 2" ports.
- Maximum capacity of 134 gal./min.
- 2-year residential, 2-year commercial engine and 3-month pump component warranty.



WSP33

- 1/3 HP electric **Submersible Pump**.
- Automatic starting.
- Stainless steel case.
- Non-mercury auto float switch.
- Built-in thermal auto reset.
- 20-foot heavy-duty, 115V cord.
- 1-year residential, 1-year commercial warranty.

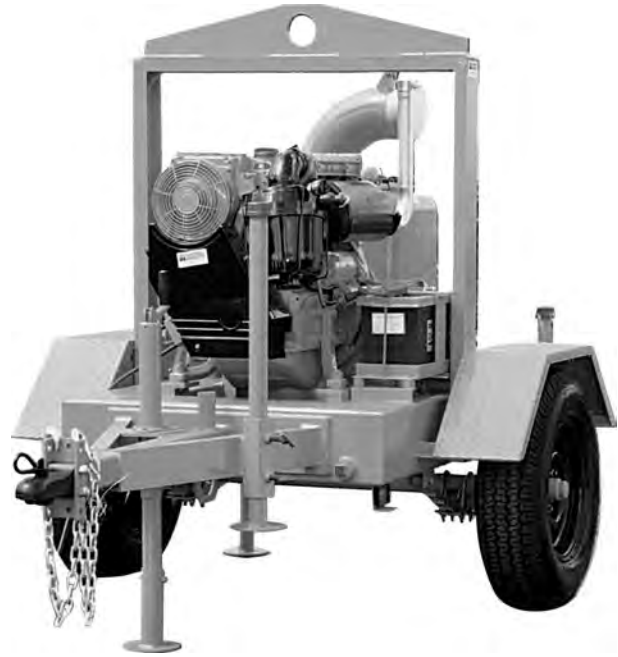
For optimum performance and safety, we recommend you read the Owner's Manual before operating your Honda Power Equipment.

EPT HEAVY-DUTY TRAILER MOUNTED
Trailer Mounted Trash Pumps for Tough Jobs

Dewatering to sewage, clean water to 3-inch solids—our trash pumps do it all.

EPT2-100DD and EPT2-150DD Features

- Heavy-duty Deutz diesel engine with electric start and 40 U.S. gallon fuel tank provides a minimum of 24 hours run time per tank.
- Pass 3" solids (EPT2-150DD) or 2" solids (EPT2-100DD) with non-clog, wear resistant ductile iron impeller on 304 stainless steel shaft sleeve.
- Oil and abrasion resistant, rubber-lined front and rear wear plates.
- Long-life grease lubricated tungsten carbide mechanical seals (optional oil lubricated seals available).
- Heavy-duty DOT road trailer with 15" 6-ply tires and 2" ball hitch (optional pintle hitch available).



	EPT2-100DD 4" Heavy-duty Trash Pump	EPT2-150DD 6" Heavy-duty Trash Pump	EPT3-150YD 6" Heavy-duty Trash Pump
FLUID			
Max. Capacity (GPM)	666	1400	1300
Max. Capacity (GPH)	40000	84000	78000
Max. Head (ft.)	94	86	120
Max. Solids Diameter (in.)	2	3	3
PUMP			
Impeller Type	Semi-Open	Semi-Open	Semi-Open
Impeller (Diaphragm) Material	Ductile Iron	Ductile Iron	Ductile Iron
Volute Casting Material	Cast Iron	Cast Iron	Cast Iron
Wear Plate Material	Rubber Lined Cast Iron	Rubber Lined Cast Iron	(Integral part of volute)
Pump Casting Material	Cast Iron	Cast Iron	Cast Iron
Shaft Seal	Tungsten Carbide Mechanical Seal	Tungsten Carbide Mechanical Seal	Carbon/Chrome Mechanical Seal
Seal Lubricant	Grease (Oil optional)	Grease (Oil optional)	Grease
Discharge Connection	4" NPT Coupling	6" NPT Coupling	6" NPT Coupling
Suction Connection	4" NPT Coupling	6" NPT Coupling	6" NPT Coupling
ENGINE			
Brand	DEUTZ	DEUTZ	YANMAR
Model	F2L1011	F3L1011	3TNV88
Type	Air/Oil Cooled, 4-Cycle, Two Cylinder with Temperature/Oil Sensor	Air/Oil Cooled, 4-Cycle, Three Cylinder with Temperature/Oil Sensor	Air/Oil Cooled, 4-Cycle, Three Cylinder with Temperature/Oil Sensor
Output (hp)	24.5 hp	36 hp	30 hp
RPM	2800	2800	3000
Fuel	Diesel	Diesel	Diesel
Fuel Tank Capacity (US Gal.)	40	40	40
Continuous Run Time Per Tank (Hr.)	24	24	24
Starting Method	Electric, 12V	Electric, 12V	Electric, 12V
DIMENSION			
Shipping Dimensions			
Length (in.)	100	100	111
Width (in.)	63-1/2	63-1/2	60
Height (in.)	59	59	69
Shipping Weight (lbs.)	1800	2100	1750

LB GENERAL DEWATERING PUMPS

Compact and Powerful

Powerful pumps built with durable materials in an easy handling design. Top discharge provides maximum motor cooling efficiency allowing continuous duty operation at low water levels and extended dry-run capability.



LB-480/LB2-400* Features

- Synthetic rubber wear parts and semi-vortex impeller for maximum durability.
- V-ring system protects the shaft seal from abrasives.
- Easy disassembly with one 12mm box/socket wrench.
- Vertical or horizontal discharge.
- Patented oil lifter extends shaft seal life up to 10 times.

Optional Accessories

- TS-301 Float Switch for automatic operation.

***LB2-400 Available for RENTAL or PURCHASE**



LB3-750/LB2-750* Features

- Designed to fit an 8" pipe.
- Up to 60' shut off head.
- Lightweight, compact design.
- Available in 220V single-phase for lower amperage draw and longer cable extensions.

Optional Accessories

- Float switch for automatic operation TS-302 for 110V, TS-303 for 220V.
- 3-inch NPT coupling available

***LB2-750 Available for RENTAL or PURCHASE**

Model LB-480A automatic submersible pump handles like the non-automatic version in every aspect of construction site usage requiring a tough and durable pump.



LB-480A/LB2-400A* Features

- No control panel or float switches required.
- Handles like the non-automatic pump - no special installation procedures.
- Requires very small space to operate - only 8-3/4" diameter.
- Urethane, Semi Vortex Impeller and Wear Plates for maximum durability and maintaining pump performance.
- Double Inside Mechanical Seal with SiC faces provides the longest operational life.
- Oil Lifter provides lubrication of the seal faces. (Patent Pending)
- V-Ring Seal Protector protects mechanical seal from abrasive particles.

Technical Features of EL-1 Relay Unit

- Sensitive electrodes detect water to start pump operation even when foreign materials are present.
- Internal timer eliminates chattering operation in rough water to extend motor life.
- Relay sensor completely molded in resin and covered by rubber case for protection against rough handling.
- Jobsite tested for more than 30,000 on-off cycles without failure or damage.

***LB2-400A Available for RENTAL or PURCHASE**

HS SAND/SOLIDS TRASH PUMP

Pump sand, solids and debris with minimal wear, clogging.

HS2.4S-62 Features

- Built-in shaft mounted agitator suspends solids.
- Urethane Semi Vortex Impeller for maximum durability and maintaining pump performance.
- Double inside mechanical seal with SiC faces provides the longest operational life.
- Oil Lifter provides lubrication of the seal faces. (Patent Pending)
- V-Ring Seal Protector protects mechanical seal from abrasive particles.



Optional Accessories

- TS-301 Float Switch for automatic operation.
- Vertical Discharge Coupling.
- Residue Kit for 0.4 inch pump down.

NK HEAVY-DUTY, HIGH HEAD PUMP

Capable of handling abrasive materials with minimal wear.

NK2-15 Features

- Terminal board for voltage reconnect (NK2-15 only).
- Semi Vortex Impeller and Synthetic Rubber Wear Plates for maximum durability and maintaining pump performance.
- Double Inside Mechanical Seal with SiC faces provides the longest operational life.
- Oil Lifter provides lubrication of the seal faces. (Patent Pending)
- V-Ring Seal protector protects mechanical seal from abrasive particles.



Optional Accessories

- TS-303 Float Switch for automatic operation (220V only).
- Sand kit to suspend solids and prevent clogging.
- 2-inch NPT coupling available.

ELECTRIC SUBMERSIBLE SPECIFICATIONS


	HS2.4S-62 Sand/Solids	LB-480 Wear Resistant	LB-480A Automatic Operation	LB3-750 High Head	NK2-15 Wear Resistant High Head
FLUID					
Max. Capacity (GPM)	53	62.4	62.4	73	111
Max. Head (ft.)	39	39.5	39.5	60	69
Solids Dia. (in.)	3/8	1/4	1/4	1/4	1/3
PUMP					
Impeller Type	Semi-Vortex	Semi-Vortex	Semi-Vortex	Semi-Open	Semi-Vortex
Impeller Material	Urethane Rubber	Urethane Rubber	Urethane Rubber	Ductile Iron Casting	Ductile Iron Casting
Casting Material	Grey Iron Casting	Ethylene Propylene Rubber	Ethylene Propylene Rubber	Grey Iron Casting	Ethylene Propylene Rubber
Wear Plate Material	(Integral part of casing)	Urethane Rubber	Urethane Rubber	Stainless Steel	(Integral part of casing)
Shaft Seal - Type / Material	Double inside mechanical seal with Silicon Carbide on Silicon Carbide faces on lower seals and Carbon on Ceramic faces on upper seals.				Silicon Carbide on Silicon Carbide faces on upper and lower seals.
Seal Lubricant - Type	SAE 10W/20W or Turbine Oil (ISO VG32)				
Seal Lubricant - Amount, oz.	5.4	6.1	6.1	7.1	9.1
Seal Protection	V-Ring & Oil Lifter	V-Ring & Oil Lifter	V-Ring & Oil Lifter	Lip Seal	V-Ring & Oil Lifter
Discharge Connection	2" NPT Coupling	2" NPT Coupling	2" NPT Coupling	2" NPT Coupling	3" NPT Coupling
MOTOR					
Motor Output (hp)	1/2 hp	2/3 hp	2/3 hp	1 hp	2 hp
Phase	Single Phase	Single Phase	Single Phase	Single Phase	Single Phase
Voltage	110V	110V	110V	110V or 220V	110V or 220V
Amperage - Rated Current	5.4	6.1	6.1	11.5 - 110V 6.5 - 220V	23.0 - 110V 11.5 - 220V
Amperage - Starting Current	12.5	12.5	12.5	43.0 - 110V 25.5 - 220V	136 - 110V 68.0 - 220V
Type	Continuous duty, Air filled, 3600 RPM, 60 Hz				
Bearings	Double shielded, Permanently lubricated, High-temp C3 with B-10 life of 60,000 hours.				Double shielded, Permanently lubricated
Insulation Class	B	E	E	E	B
Motor Protector (Built-in)	Miniature Protector	Miniature Protector	Miniature Protector	Circle Thermal Protector	Circle Thermal Protector
Plug Configuration (Nema)	5-15P	5-15P	5-15P	5-15P (110V) No Plug (220V)	No Plug
Cable - Conductors x AWG	3C x 16 AWG	3C x 16 AWG	3C x 16 AWG	3C x 14 AWG	3C x 12 AWG
Std. Cable Length	20 feet	32 feet	32 feet	50 feet	32 feet
Max. Cable Length	70 feet	62 feet	62 feet	53 ft. - 110V 187 ft. - 220V	46 ft. - 110V 185 ft. - 220V
Min. Generator Cap. (Watts)	1300	1300	1300	3300	6000
Optional Float Switch	TS-301	TS-301	n/a	TS-302 (110V) TS-303 (220V)	TS-303 (220V operation only)
DIMENSION					
Max. Diameter (in.)	10-1/16	7-3/8	8-3/4	7-5/16	9-7/16
Max. Height (in.)	12-15/16	11-3/16	11-3/16	16-1/4	24-1/2
Continuous Running Water Level (in.)	3-1/2	2	4-1/2	3-1/8	3-1/4
Pump Weight (lbs.)	25	21	22	35	63.5
Shipping Weight (lbs.)	30	28	30	43	81

WATER WIZARD[®] SUBMERSIBLE PUMPS – 5 S E R I E S

Permanently Lubricated Utility Pumps



Little Giant's most versatile portable utility pumps with oil-filled motor and epoxy coated cast aluminum housing. For commercial, industrial and home applications including statuary fountains, water displays, air conditioners, machine tool coolants and many other applications where liquid must be transferred or recirculated. Pumps down to 1/8". These 1200 GPH pumps feature a 1" FNPT discharge with garden hose adaptor, 26.3' shut-off head capability and screened inlet.

5-MSP

Head	Flow
1' (0.3m)	1200 gph (4542.5 lph)
3' (0.9m)	1170 gph (4428.9 lph)
5' (1.5m)	1100 gph (4164.0 lph)
10' (3.0m)	1000 gph (3785.4 lph)
20' (6.1m)	520 gph (1968.4 lph)

5-MSPR

Head	Flow
1' (0.3m)	1200 gph (4542.5 lph)
3' (0.9m)	1170 gph (4428.9 lph)
5' (1.5m)	1100 gph (4164.0 lph)
10' (3.0m)	1000 gph (3785.4 lph)
15' (4.6m)	840 gph (3179.7 lph)



Motor	1/6 HP Shaded Pole
Maximum flow rate	1200 gph @1'
Maximum head	26.3'
Intermittent liquid temp. to	120°F
Discharge	1" FNPT
Housing	Epoxy coated cast aluminum
Volute	Nylon
Impeller	Nylon
Shaft Seal	Viton [®]
Shaft	Stainless Steel
Operation	Manual

Electrical (5-MSP)

505000	115V, 60Hz, 5 amps, 10' power cord
505086	115V, 60Hz, 5 amps, 10' power cord
505176	115V, 60Hz, 5 amps, 18' power cord
505025	115V, 60Hz, 5 amps, 25' power cord
505500	127V, 60Hz, 5.8 amps, 10' power cord
505501	127V, 60Hz, 5.8 amps, 18' power cord
505202	230V, 60Hz, 2.5 amps, 12' power cord (w/o plug)

Electrical (5-MSPR)

505486	115V, 60Hz, 5 amps, 10' power cord (Black Pump)
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Automatic/Manual submersible utility pumps with oil-filled motor and epoxy coated cast aluminum housing. For commercial, industrial and home applications where liquid must be transferred or recirculated. Pumps down to 1/8" in manual mode operation. These 1200 GPH pumps feature a 1" FNPT discharge with garden hose adaptor, 26.3' shut-off head capability and screened inlet.



5-ASP-FS

Head	Flow
1' (0.3m)	1200 gph (4542.5 lph)
3' (0.9m)	1170 gph (4428.9 lph)
5' (1.5m)	1100 gph (4164.0 lph)
15' (4.6m)	840 gph (3179.7 lph)
20' (6.1m)	520 gph (1968.4 lph)

5-ASP and 5-ASP-LL

Head	Flow
1' (0.3m)	1200 gph (4542.5 lph)
3' (0.9m)	1170 gph (4428.9 lph)
5' (1.5m)	1100 gph (4164.0 lph)
10' (3.0m)	1000 gph (3785.4 lph)
15' (4.6m)	840 gph (3179.7 lph)



Motor	1/6 HP Shaded Pole
Maximum flow rate	1200 gph @1'
Maximum head	26.3'
Intermittent liquid temp. to	120°F
Discharge	1" FNPT
Housing	Epoxy coated cast aluminum
Volute	Nylon
Impeller	Nylon
Shaft Seal	Viton [®]
Shaft	Stainless Steel

Operation

505300 (5-ASP)	Manual or Automatic
505350 (5-ASP-LL)	Manual or Automatic
505400 (5-ASP-FS)	Automatic

Activator

505300	RS-5 Piggyback diaphragm switch
505350	RS-5-LL Piggyback diaphragm switch
505400	Integral float switch

Switch on

505300	6" - 9"
505350	2" - 3"
505400	11"

Switch off

	1" - 4"
	1/2" - 1-1/2"
	3"

Electrical (5-ASP)

505300	115V, 60Hz, 5 amps, 10' power cord
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Electrical (5-ASP-LL)

505350	115V, 60Hz, 5 amps, 18' power cord
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Electrical (5-ASP-FS)

505400	115V, 60Hz, 5 amps, 10' power cord
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PRESSURE WASHERS / STEAM CLEANERS

Unleash the **POWER** and **PERFORMANCE** of a Shark

SGP-XL Series

Hot Water Pressure Washer

- Gasoline Powered
- Diesel or Fuel Oil Heated
- Direct Drive Pump

The SGP-XL is Shark's answer to meet the demand for versatility and portability in a hot water pressure washer. Mounted on an extra-durable 1¼-inch steel chassis and protected by a rugged steel roll cage, the SGP-XL is easy to move in all terrain with its four 13-inch tubed pneumatic tires. All four SGP-XL models feature the ever-reliable Honda (9-13 HP) engines with low-noise muffler and 2-year warranty. The SGP-XL also has a tri-plunger, oil-bath Shark pump with an enviable 7-year warranty and a cold-rolled hot water coil. Two of the models come with electric start and all deliver cleaning power between 3000 and 3500 PSI.

Available with **STEAM CLEANING** option.



BR Series

Cold Water Pressure Washer

- Gasoline Powered
- Belt Drive Pump
- Roll Cage Design

The BR is the heaviest-duty workhorse of the Shark cold water family with cleaning power of up to 5000 PSI. Six models are powered by a variety of industrial-grade engines, including Honda and Vanguard, and all feature a tri-plunger, oil-bath, belt-drive Shark pump with an unmatched warranty, EZ start valve and an extra rugged roll cage made of 1¼-inch steel tubing, protected by an epoxy, powder coat finish and a limited lifetime warranty. The BR is also unique with 13-inch tubed pneumatic tires for easy maneuvering in all terrain, and variable pressure wand for convenience in altering the pressure with the twist of a handle. There is no other cold water pressure washer that offers so much in cleaning effectiveness.



DG Series

Cold Water Pressure Washer

- Gasoline Powered
- Direct Drive Pump
- Portable

The DG is a gasoline-powered direct-drive, cold water pressure washer with the cleaning power of up to 3.8 GPM and 3500 PSI. Six of the seven models feature industrial-grade Honda engines. Most also feature a tri-plunger, oil-bath Shark pump with a 7-year warranty and EZ start valve for convenience in pull starting the engine. DG models have a hose-and-gun rack, high-pressure hose rated for up to 4500 PSI, detergent injector and 10-inch tubed pneumatic tires for easy maneuvering in all terrain. All DG models are ETL certified to the rigid UL-1776 pressure washer safety standards. Ideal for marinas and boats, cars and trucks, home siding, plant maintenance, decks, gutters, driveways and fences.



MODEL	PSI	GPM	PUMP DRIVE	PUMP RPM	ENGINE HP	START	BURNER	BTU	DIESEL TANK	GAS TANK
SGP-303037	3000	3.0	Direct	3400	Honda 9	Recoil	12V DC	280,000	6 gal.	1.5 gal.
SGP-353037	3000	3.5	Direct	3400	Honda 11	Recoil	12V DC	326,000	6 gal.	1.5 gal.
SGP-353037E	3000	3.5	Direct	3400	Honda 11	Electric*	12V DC	326,000	6 gal.	1.5 gal.
SGP-403537E	3500	3.5	Direct	3400	Honda 13	Electric*	12V DC	326,000	6 gal.	1.5 gal.

*Battery not included

MODEL	PSI	GPM	PUMP DRIVE	PUMP RPM	ENGINE	ENGINE HP	ENGINE RPM	START	DIMENSIONS
BR-442537	2500	4.4	Belt	1340	Honda	13	3400	Recoil	42"L x 26"W x 30"H
BR-353237	3200	3.5	Belt	1090	Honda	13	3400	Recoil	42"L x 26"W x 30"H
BR-373537	3500	3.7	Belt	1150	Honda	13	3400	Recoil	42"L x 26"W x 30"H
BR-304037	4000	3.0	Belt	1150	Honda	13	3400	Recoil	46"L x 30"W x 36"H
BR-404027*	4000	4.0	Belt	1450	Vanguard	16	3400	Recoil	46"L x 30"W x 36"H
BR-455037E*	5000	4.5	Belt	1480	Honda	24	3400	Electric‡	46"L x 30"W x 36"H

*Tandem-axle model ‡Battery not included

MODEL	PSI	GPM	PUMP DRIVE	PUMP	PUMP RPM	ENGINE	ENGINE HP	ENGINE RPM	DIMENSIONS
DG-212328	2300	2.1	Direct	Faip/Vertical	3400	Quantum	6.0	3400	35"Lx21"Wx24"H
DG-232336	2300	2.3	Direct	Comet/Axial	3400	Honda	5.0	3400	35"Lx21"Wx24"H
DG-232437	2400	2.3	Direct	Shark/Triplex	3400	Honda	5.5	3400	35"Lx21"Wx24"H
DG-252737	2700	2.5	Direct	Shark/Triplex	3400	Honda	6.5	3400	35"Lx21"Wx24"H
DG-303037	3000	3.0	Direct	Shark/Triplex	3400	Honda	9.0	3400	35"Lx21"Wx24"H
DG-353237	3200	3.5	Direct	Shark/Triplex	3400	Honda	13	3400	35"Lx21"Wx24"H
DG-383537	3500	3.8	Direct	Shark/Triplex	3400	Honda	13	3400	35"Lx21"Wx24"H

In Stock Item



Hardware & Supply Co., Inc.
Supply, Inc. of Virginia
Form Rentals

NJ (856) 662-6935 • PA (215) 925-8800
Metro (703) 569-6660 • VA (703) 455-6700
Clinton, MD (301) 877-8640



PRESSURE WASHER

“WATER SHOTGUN”



“portable gasoline belt drive cold water cleaning systems”

Water Shotgun Industrial Contractor Series				
Model	Operating Pressure	Production Volume	Horsepower	
WS 1500 GHS	1500 PSI	3.4 GPM	5.5 HP	
WS 2500 GHS*	2500 PSI	4.4 GPM	11 HP	
WS 3035 GHS	3000 PSI	3.5 GPM	11 HP	
WS 4040 GVS-ES	4000 PSI	4.0 GPM	16 HP	
WS 5040 CHSS-ES	5000 PSI	4.0 GPM	20 HP	

***Also available for Rental**

Built to work all day, day after day, and provide dependable and reliable service.





Mi-T-M® CORPORATION

PRESSURE WASHERS

WORK PRO™ is the pressure washer of choice when the job requires serious results.

GASOLINE SERIES



 Certified to UL-1776 Standards

WP-2400-3MHB

Additional Features:

- Honda, Briggs Intek, or Subaru engines with low oil protection.
- Direct drive triplex axial piston pump.
- Brass and stainless steel unloader.
- Thermal relief valve pump protection.
- Adjustable pressure.
- Built-in low pressure detergent injection.
- In-line water strainer.
- Powder coated steel base plate.
- Solid steel axle.
- Pneumatic tires.
- Hose wrap and quick release gun/wand holder.
- Rubber isolators.
- Professional grade insulated trigger gun with safety lock-off.
- 36-inch lance.
- 3/8-inch x 25-foot wire braided non-marking pressure hose.
- Quick connect nozzles (15 degrees, 25 degrees, detergent).
- 1-year limited warranty.

WORK PRO™ gasoline pressure washer is designed with many quality features found in the Mi-T-M industrial product line. Mi-T-M offers an entire line of optional accessories to make cleaning jobs quick and easy.

Model	WP-2400-3MHB	WP-2400-3MBB	WP-2403-3MRB	WP-2403-3MHB	WP-2700-3MHB	WP-2700-3MBB
PSI	2400	2400	2400	2400	2700	2700
GPM	2.3	2.3	2.3	2.3	2.3	2.4
H.P.	5.0	6.5	6.0	5.5	6.0	6.5
Engine	Honda OHC	Intek OHV	Subaru OHC/OHV	Honda OHV	Honda OHC	Intek OHV
Drive	Direct	Direct	Direct	Direct	Direct	Direct
Net Wt.	80 lbs.	80 lbs.	80 lbs.	80 lbs.	85 lbs.	85 lbs.
Ship Wt.	100 lbs.	100 lbs.	100 lbs.	100 lbs.	105 lbs.	105 lbs.
Unit Dim. (LxWxH)	30"x21"x26"	30"x21"x26"	30"x21"x26"	30"x21"x26"	30"x21"x26"	30"x21"x26"

Model	WP-2703-3MRB	WP-2703-3MHB	WP-3003-0MRB	WP-3003-0MHB	WP-3003-0MVB
PSI	2700	2700	3000	3000	3000
GPM	2.4	2.4	3.0	3.0	3.0
H.P.	7.0	6.5	9.0	9.0	9.0
Engine	Subaru OHC/OHV	Honda OHV	Subaru OHC/OHV	Honda OHV	Vanguard OHV
Drive	Direct	Direct	Direct	Direct	Direct
Net Wt.	85 lbs.	85 lbs.	121 lbs.	121 lbs.	121 lbs.
Ship Wt.	105 lbs.	105 lbs.	171 lbs.	171 lbs.	171 lbs.
Unit Dim. (LxWxH)	30"x21"x26"	30"x21"x26"	35"x22.5"x26"	35"x22.5"x26"	35"x22.5"x26"



Hardware & Supply Co., Inc.
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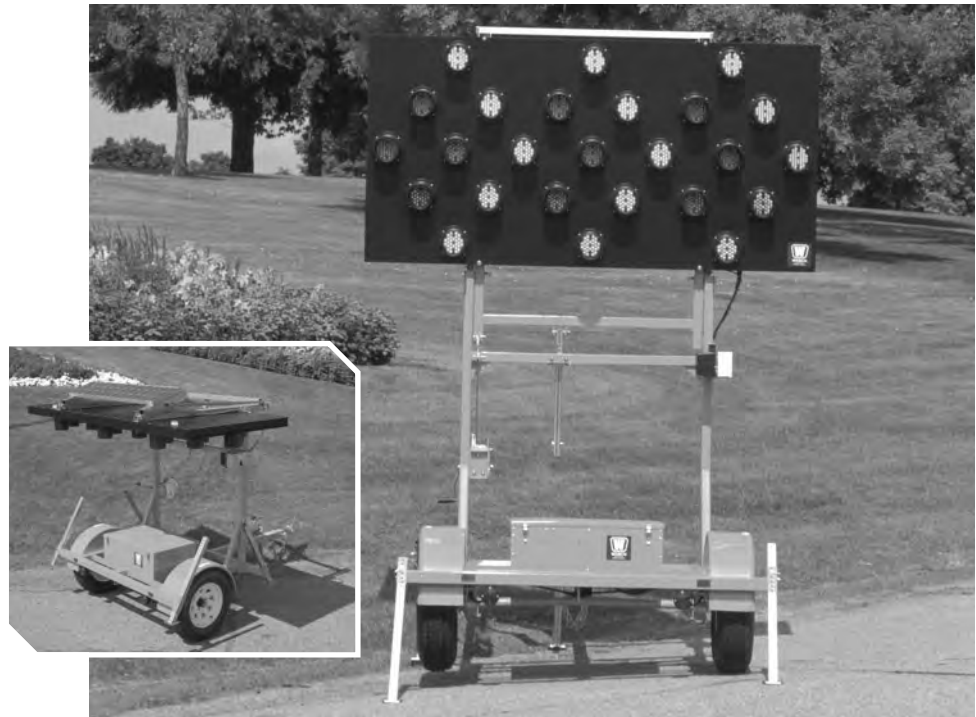
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Metro (703) 569-6660 • VA (703) 455-6700
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Solar Traffic Director™

- Environmentally safe operation.
- Easy to operate and maintain.
- Models available to ensure dependability in any geographical location.
- New technology lowers maintenance costs and increases energy efficiency.
- Controller located safely away from battery box.
- 15-light models have 7 arrow functions.
- 25-light models have 12 arrow functions.
- Meets MUTCD specifications.
- Lockable battery and control box.
- MIG welded tubular steel frame: 2.5" sq.
- Heavy-duty steel fenders with inner splash guard.
- Removable towbar with standard 2" ball coupler provides for greater theft protection and more economical shipping.
- 15" tires.

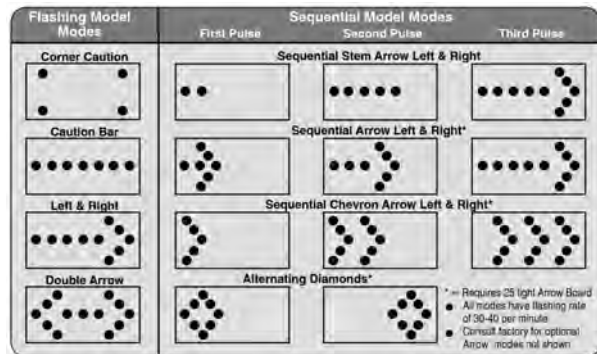
SPECIAL FEATURES

- Powder coated paint.
- Control box with slam latch lid and rear cable protection cover.
- Re-designed steel battery box for greater longevity.
- Reduced power consumption.
- Optional auto lock stabilizer pins.



CONTROLLER SPECIAL FEATURES

- Positive drive voltage system (voltage to lamps only when they flash).
- Many arrow models to choose from:
 - 15-light models have 5 or 7 arrow functions.
 - 25-light models have 12 arrow functions.
- Lockable weather resistant aluminum box.
- Resettable dual circuit breakers.
- Low voltage disconnect with indicator.
- Low voltage warning indicator (N/A on diesel and vehicle units).
- Solar panel voltage regulator with indicator not available on diesel and vehicle units.
- Automatic and manual dimming functions.
- Reverse polarity protection.
- Optional arrow pattern display.



STANDARD TRAILER CONSTRUCTION

- Axle assembly with leaf springs: 2000 lbs. capacity.
- Tires: 15" automotive.
- Heavy-duty winch with safety brake – one person can raise arrow board.
- Single locking device to hold arrow board in place while in operation or travel modes.
- Optional ring or combo ball/pintle hitches available.
- Optional auto locking pins for stabilizer legs.

SPECIFICATIONS

Solar Traffic Director™

Model No.	Solar Panel(s) Wattage	Battery Bank Capacity (AMP-HR)	No. of Lamps	No. of Arrow Modes
WTSP55-LSA	50/55	450	15	7
WTSP55-LSAC	50/55	450	25	12
WTSP75-LSA	70/80	450	15	7
WTSP75-LSAC	70/80	450	25	12
WTSP110-LSA	100/110	450	15	7
WTSP110-LSAC	100/110	450	25	12
WTSP150-LSA	150/165	450	15	7
WTSP1150-LSAC	150/165	450	25	12

Vehicle Mounted Skid Traffic Director™

WS1SB8-LSA	50/55	450	15	7
WS1SB8-LSAC	50/55	450	25	12
WSSP55-LSA	50/55	450	15	7
WSSP55-LSAC	50/55	450	25	12
WSSP75-LSA	70/80	450	15	7
WSSP75-LSAC	70/80	450	25	12

Vehicle Mounted Traffic Director™

Vehicle Mounted Arrow Sign Board Models

Model No.	Sealed Beam	LED	No. of Lamps	Board Size	No. of Arrow Modes
WFB4-A		WFB4-LA-03	13	24 x 48	5
WFB5-A		WFB5-LA-03	15	30 x 60	5
WFB6-A		WFB6-LA-03	15	36 x 72	5
WB8-A		WB8-LA-03	15	48 x 96	5
WFB5-SA		WFB5-LSA-03	15	30 x 60	7
WFB6-SA		WFB6-LSA-03	15	36 x 72	7
WB8-SA		WB8-LSA-03	15	48 x 96	7
WFB5-SAC		WFB5-LSAC-03	25	30 x 60	12
WFB6-SAC		WFB6-LSAC-03	25	36 x 72	12
WB8-SAC		WB8-LSAC-03	25	48 x 96	12

Arrow Shaped Plastic 14-Light Arrow Sign Boards

Model No.	No. of Lamps	Arrow Size	No. of Arrow Modes
WFBA-14	14	28.5" x 50"	5
WFB6-14LP (low profile w/actuator)	14	28.5" x 50"	5
WSBA-14	14	28.5" x 50"	5

**Full Matrix
Message Director™**

- Optical lenses and sunshades for increased visibility.
- Multiple alphanumeric fonts make your message clearer than ever.
- Self contained on board computer, no laptop required.
- New technology lowers maintenance costs.
- Designed to withstand wind gusts up to 98 mph with optional extended outriggers.
- Easy to replace letter modules.
- Automatically centers each line of text.
- Locking control box and battery box.
- Under 3,000 lbs. towed by most trucks.

SPECIAL FEATURES

- NTCIP software standard.
- AASHTO (NTPEP) tested.
- Central control available.

COMMON STANDARD FEATURES

Standard computer control console

- Easiest programming in industry, laminated manual on door.
- Password protected.
- IBM compatible 104 detachable keyboard reduces replacement costs.
- Low battery voltage warning frame before system disconnect.
- Console comes standard with internal clock and schedule programming.
- Three-point locking device keeps out vandals.

Standard battery and charging system

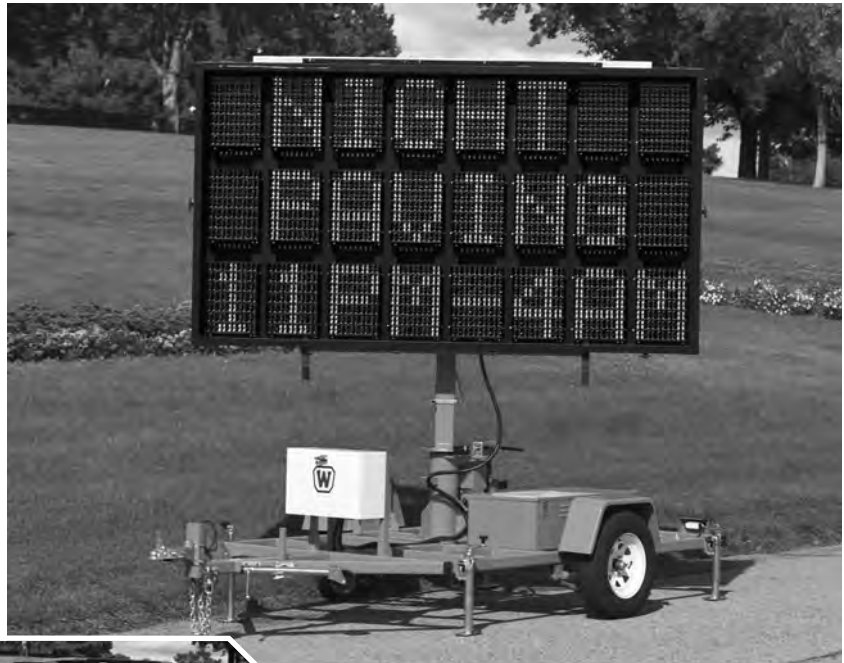
- Operates from 12 volt DC power.
- Less weight – Our 6 volt batteries are 66 lbs. per battery compared to a 130 lb. 8D battery; one person can swap batteries with less risk of lifting injury.
- Unit includes a battery charger with a forced air cooling fan that operates with the battery box lid closed and locked.
- Computer automatically shuts down solar panels when battery bank reaches a fully charged state.
- Our lockable, vented steel battery box is riveted and powder coated.
- Our unique system allows you to change batteries with solar panels and our on-board charger at the same time.

DIMENSIONS AND WEIGHTS

- Length with Hitch: 190" (483cm)
- Cabinet Size: 130" (330cm) L x 74.5" (189cm) H x 12" (30.5cm) D
- Trailer Frame Width: 95" (241cm)
- Operating Height: 160" (406cm)
- Traveling Height: 107" (272cm)
- Approximate Weight: 2640 lb. (1193kg)
- A-frame drawbar with adjustable height standard 2" ball coupler (pintle or combo optional)
- Tower lifts to 7 ft. height (bottom of sign)
- OPTIONAL: Outrigger Stance: 126"W (320cm) by 120"L (305cm)

STANDARD TRAILER CONSTRUCTION

- Heavy-duty MIG welded steel tubing construction.
- Heavy-duty locking disk brake holds the message sign at any desired position.
- Riveted aluminum message sign cabinet powder coated flat black, with cooling fans.
- Axle assembly with leaf springs: 3500 lb. capacity.
- Tires: 15", bolt-on steel fenders.
- Four corner swiveling jacks.
- Powder coated, oven baked durable finish.
- Telescoping/rotating tower, hydraulic or hand winch available.



Model No.

Tower Type
Board Type
Character Rows x Number
Approximate Legibility

WTMMB-SLL(A)04

Hydraulic, 360° Rotation
Matrix Variable Fonts & Graphics
Min. 4 Lines x 12 / Max. 1 Line x 6
600 ft. - 3200 ft. (183m - 976m)

Model No.

Tower Type
Board Type
Character Rows x Number
Approximate Legibility

WTMMB-SLL(B)04

Hand Winch, 360° Rotation
Matrix Variable Fonts & Graphics
Min. 4 Lines x 12 / Max. 1 Line x 6
600 ft. - 3200 ft. (183m - 976m)

**LegiBrite Series
Vehicle Mounted Message Director™**

- Quick message switch.
- Heavy-duty mounting brackets.
- Cooling fan for extended product life.
- Bold arrows.



Model No. WVMB2x8-10

2 Lines of 8 (10") Characters

Model No. WVMB3x8-10

3 Lines of 8 (10") Characters

Model No. WVMB3x8-12

3 Lines of 8 (12") Characters



Vibra Strike I

The original Vibra Strike single handle vibratory screed, better known as the **Vibra Strike I**, shown fitted with **Lindley Incorporated's original F1 Pan Style Float**. This is the float that started it all. Back by popular demand, this float is the choice of many original Vibra Strike owners when the time comes to replace their aging equipment.



Vibra Strike Rattler

The Rattler is a self-contained, gas powered, concrete vibrator that is simple to operate, even for the single worker. By integrating the powerful yet compact Robin engine, the Rattler eliminates the need for bulky backpacks, restrictive straps and dedicated power sources. The result is an efficient and affordable vibrator that can strike when and where you need it.

Vibra Strike II

The top-of-the line in power screeding. The Vibra Strike II is just as quick and versatile as the original, and with the 4-stroke engine this is a power screed that delivers performance. Think of it as a Vibra Strike I with an attitude. Shown fitted with **Lindley Incorporated's 2 in 1 float**, the mark again is raised with respect to portable, easy to use screeding equipment. The new one-piece design eliminates over 60 nuts, bolts, studs, washers, tensioning rods and brackets. By reducing this many parts from the float, overall functionality is greatly improved. The unique geometric shape of the float allows it to be used as both a float and curl edge. A one-piece extruded magnesium shape means fewer parts and easy cleanup.



Northrock Backpack Vibrator System

- Two-cycle, 50cc, 2-1/2 hp gas engine.
- Lightweight yet powerful. Provides easy access to remote areas.
- Quick connect/disconnect system allows for assembly/disassembly in seconds.
- The engine swivels 260° for either right- or left-hand side operation for maximum flexibility and minimum fatigue.
- An ergonomically designed frame with strategically positioned motor mount isolate vibration from the operator.
- Vibration frequency – 10,000 vpm.



Backpack #25A1

Power Units – Electric

- Three electric units from 1-1/2, 2 and 3 hp. motor size is selected to maintain an in-material working frequency of about 10,000 vpm under load.
- UL/cUL Listed.
- High strength cast aluminum housing.
- Rugged shock absorbing frame.
- Easy access to all serviceable parts.



Pro 2+

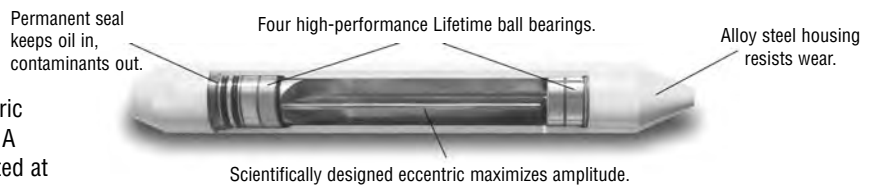
Flexible Shafts

Northrock offers a choice of standard heavy-duty shafts for better pokeability and light-duty pencil shafts for better flexibility, in lengths from 1' up to 30' in convenient increments. Lengths up to 60' are available via a simple shaft connector.



Vibrator Heads

A high level of centrifugal force and amplitude are created by rotating Northrock's unique eccentric weights within the head at the desired frequency. A special oil bath system keeps the weights lubricated at all times. All heads are sealed at the factory and are maintenance free. Built for the busy contractor and a wide range of tough rental applications, they are designed for reliability and durability over extended periods of time.



VIBRATOR HEAD SPECIFICATIONS				
Head Diameter & Length inches / mm	Centrifugal Force pounds / N	Amplitude to side at tip inches / mm	Radius of Influence inches / mm	Capacity y ² /hr. m ² /hr.
3/4 x 12	112	.070	4	4
19 x 305	498	1.78	102	3.64
1 x 13	183	.075	5	6
25 x 330	820	1.91	127	5.46
1-1/4 x 13	430	.080	7	8
32 x 330	1,913	2.03	178	7.28
1-1/2 x 14	760	.090	14	12
38 x 356	3,380	2.29	356	10.92
1-3/4 x 14	1100	.110	18	24
44 x 356	4,893	2.79	457	21.84
2 x 14	1450	.130	22	35
51 x 356	6,450	3.30	559	31.85



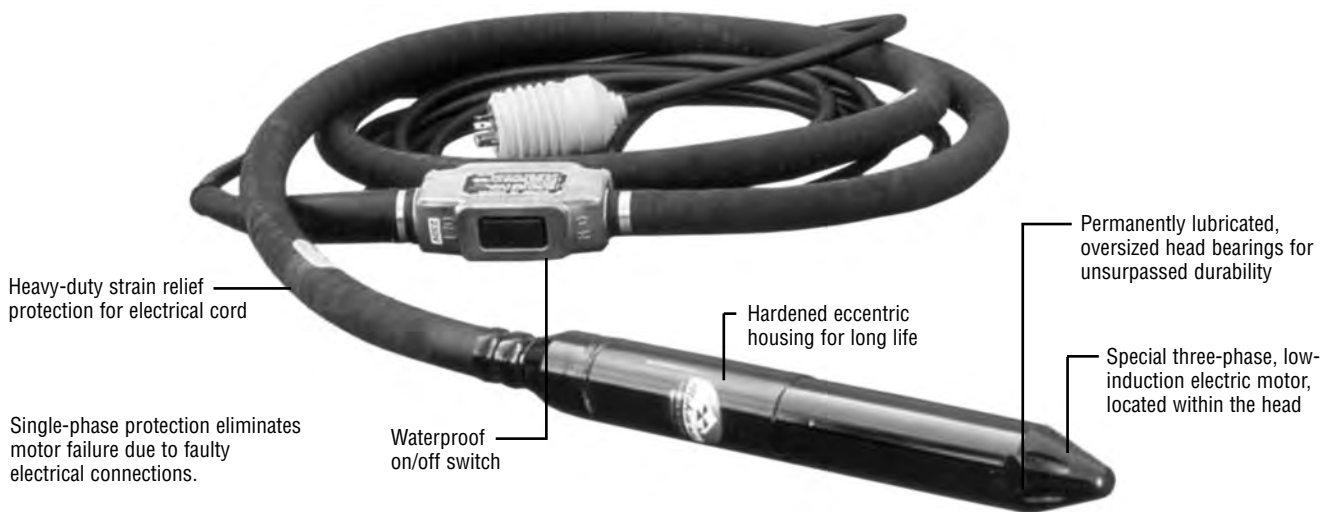
Special Heads – A short 4-1/2" head is available for slabs, tilt-up and other select precast work. Coated heads from 1-1/2" to 2-3/4" diameter are available to protect epoxy-coated rebar. Soft tips are available to protect expensive forms.

High-Cycle Concrete Vibrators

Multiquip's High-Cycle Vibrators are designed for use in low-slump concrete where consistent power is needed to liquify and move a stiff mix into corners and around rebar, or for any job where extended length vibrators are required.

High-cycle vibrators (180 Hz) use a special three-phase, low-induction electric motor, located within the vibrating head. This close coupling translates into high efficiency—Mikasa High-Cycle Vibrators retain at least 95% of their power under load. Productivity is maximized due to the high centrifugal force and high frequency of the units.

Our high-cycle vibrators feature low-amperage draw electric motors for unparalleled efficiency. Three FXA 50 or two FXA 60 units can be simultaneously operated by Multiquip's GDP-5000 60/180 cycle generator.



FXA-50 model incorporates a 2" diameter head and delivers 714 lbs. of centrifugal force. Perfect for general purpose applications including cast-in-place pipeline, tilt-up walls and narrow columns.

FXA-60 model has a 2-3/8" diameter head and delivers 1,600 lbs. of centrifugal force for the highest production jobs. Ideal for large pours, especially where very low slump concrete is used. Typical applications include large retaining walls, bridge decks and columns.

MIKASA HIGH-CYCLE CONCRETE VIBRATORS

Model	Head Diameter	Head Length	Hose Length	Cord Length	Amps	Centrifugal Force	VPM	Weight
FXA-50A-4	2"	16-1/2"	13.1 ft.	33 ft.	2	714 lbs.	10,800	36 lbs.
FXA-50A-6	2"	16-1/2"	20.0 ft.	33 ft.	2	714 lbs.	10,800	55 lbs.
FXA-60A-4	2-3/8"	19-1/4"	13.1 ft.	33 ft.	4.5	1,600 lbs.	10,800	42 lbs.
FXA-60A-6	2-3/8"	19-1/4"	20.0 ft.	33 ft.	4.5	1,600 lbs.	10,800	65 lbs.

HIGH-CYCLE EXTENSION CORDS

Model	Description	Hz	Cord Gauge	Length	Weight
180EC50	High-cycle Extension Cord	180	12-Gauge	50 ft.	13 lbs.
180EC100	High-cycle Extension Cord	180	12-Gauge	100 ft.	25 lbs.

It must say “OZTEC” to be the industry’s best concrete vibrator . . .

Mounted on very comfortable frames, Oztec backpacks allow operators incredible maneuverability around the job. Utilizing rugged and dependable Honda gasoline engines, coupled to our “speed up” transmission, vibrator heads develop 12,000vpm and never drop below 10,500vpm ... even in low slump concrete.

Two Powerful Oztec Backpack Models:



BP-31

Features a 1½ HP, 4 stroke Honda Engine



BP-50

Features a 2½ HP, 4 stroke Honda Engine

CALL US FOR ALL YOUR CONCRETE VIBRATING NEEDS.

Porto-Screed

One-Man Vibration Screeding Strikes Off a Stiffer Mix

Cuts handwork. Cuts cost.

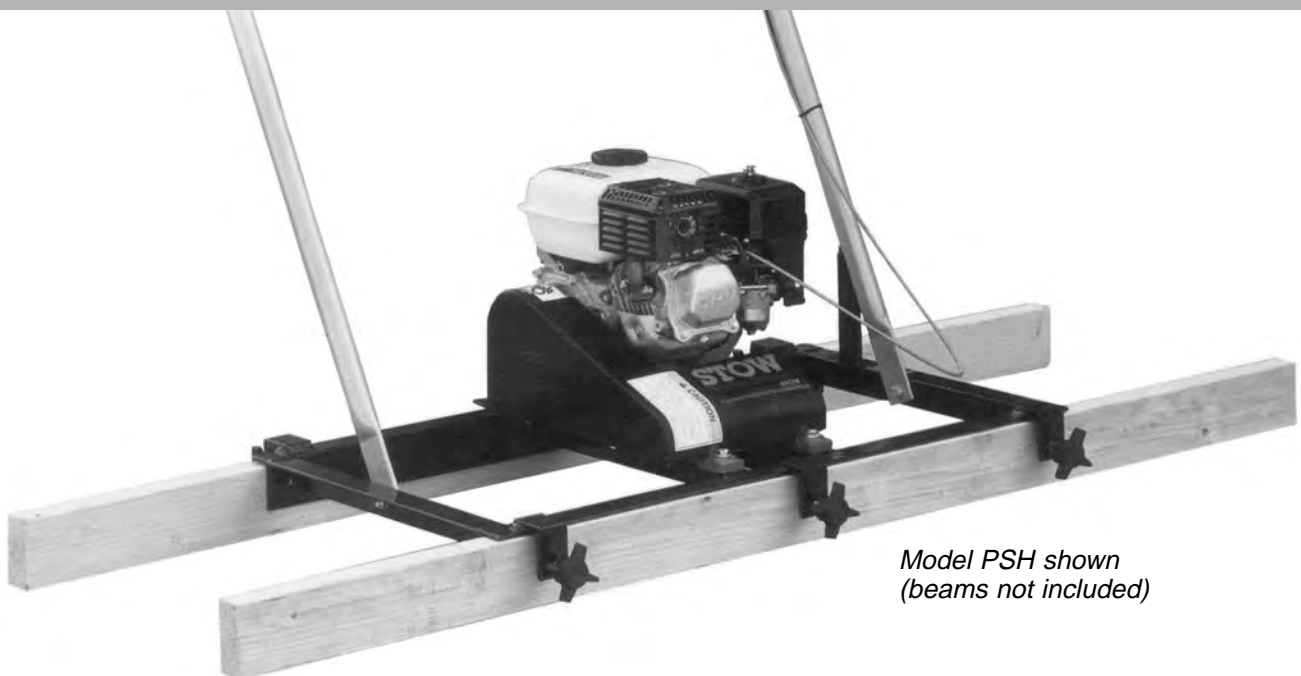
Stow's Porto-Screed saves time and money on countless jobs, small and large. Its vibrating action takes the backache out of screeding, making it a simple, one-man job.

Stow Porto-Screeds are available with a 4.0 HP Honda engine, delivering 4,300 vibrations per minute. Rubber mounts effectively isolate the operator from vibration. The unit is lightweight too, at just 75 pounds.

Top vibrating speed and amplitude let you pour and strike-off a stiffer mix. The vibrating action brings fine aggregate to the surface without the bother and scars of "sawing," getting you off the pour quicker.

Porto-Screeds are designed to take twin beam lengths of 2 x 4's up to 16 feet.

- **Rugged, reliable 4.0 HP Honda Engine**
- **Totally enclosed belt guard** provides a safe work environment.
- **Rugged all steel frame** takes the punishment of daily site work and constant vibration.
- **Recoil starter and centrifugal clutch** make starting and running faster and easier.
- **Weighs only 75 pounds**, making it easy for one man to carry and operate.
- **Finger-tip throttle control** provides fast, easy power selection.
- **Rubber vibration dampeners** minimize vibration feedback.
- **Twin beam construction** clamps onto 2 x 4's up to 16 feet long.



*Model PSH shown
(beams not included)*

HIGH FREQUENCY VIBRATORY SCREEDS



Lightweight aluminum/magnesium frame now fabricated of anodized corrosion resistant material provides exceptional strength and durability.

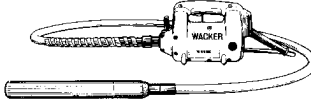
Features

- High frequency vibrations distributed evenly across entire aluminum screed length to produce smooth, uniform surfaces quickly and easily.
- Capable of consolidating and condensing concrete with slumps of less than 2" with 12,000 vibrations per minute to perform 25% faster than competitive screeds on either high or low slump concrete.
- Powered by highly efficient Honda gasoline engines that burn less than 1 gallon (3.785 L) in an 8-hour day.
- Vibrations are distributed through a rotating shaft that oscillates inside durable bearing housings.
- Use with any forms – metal, wood, screed pipe or concrete block. Capable of checker-boarding from adjacent concrete surfaces.
- Turnbuckles located along entire length make it easy to adjust for crowns, valleys or flat surfaces. Adjustments can be made up to 1/4" per foot and jam nuts lock it firmly in place to meet demanding "F" floor specifications.
- Options include self-advancing feature; single- or double-hand winches; and end, invert and bridge parapet adapters.

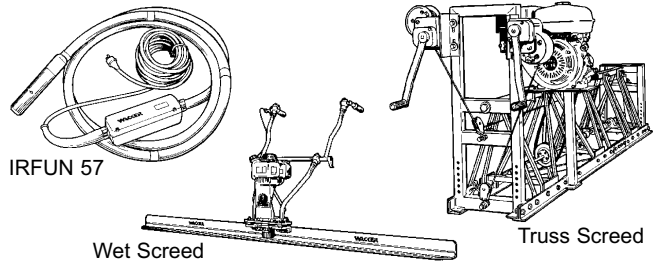
Specifications and Dimensions

Screed Type	Height	Width	Shipping Weight	Engine	Best Application
Standard	13.5 in. (34.1cm)	12.125 in. (30.8cm)	10 ft. Base 91 lbs. (41kg) 2 ft. 5 in. section 27 lbs. (12kg) 5 ft. section 46 lbs. (21kg) 10 ft. section 85 lbs. (39kg) Motor with mount 53 lbs. (24kg)	5.5 hp Honda	Intended for spans up to 40 ft. (12.2m)
Super	19.5 in. (49.5cm)	14.625 in. (37.1cm)	10 ft. Base 106 lbs. (48.1kg) 2 ft. 5 in. section 31 lbs. (14kg) 5 ft. section 55 lbs. (25kg) 10 ft. section 100 lbs. (45kg) Motor with mount 78 lbs. (35.4kg)	8 hp Honda	Intended for spans up to 70 ft. (21.3m)

Vibrators: flex-shaft & motor-in-head

Heads					Motors 115 V AC				
Model	Oper. Weight (lb.)	Dia. (in.)	Capacity yd ³ /h	Comp. Dia. (in.)	Model	Oper. Weight (lb.)	HP	Amps	RPM
H25	2.6	1	8	16	M1000	12	1.3	9	15500
H25S	1.8	1	4	14	M2000	13	2.3	15	17500
H35	4.6	1-3/8	12	24	M3000	18	3.1	20	16500
H35S	3.6	1-3/8	9.8	22	Gasoline Motors				
H45	7.1	1-3/4	18	30	A3000	70	4		1000
H45S	5.6	1-3/4	15.8	28	A5000	77	5.5		1000
H55	10.8	2-1/4	29	40	S Series Shafts				
H65	13.4	2-1/2	39	48	Model	Oper. Wt. (lb.)	Lgth. (ft.)	O.D. (in.)	
Rubber-Coated Heads					SM0-S	5	1.5	1	
Model	(lb.)	Dia. (in.)	yd ³ /h	(in.)	SM1-S	7	3	1	
HR48	6	1-7/8	18	22	SM3-S	15	10	1	
HR65	8.5	2-1/2	22	28	SM4-S	19	13	1	
HR70	11	2-3/4	35	36	SM5-S	23	16.5	1	
HR70S	6	2-3/4	15	30	SM7-S	31	23	1	
HMS 					SM9-S	39	30	1	
					E Series Shafts				
					Model	Oper. Wt. (lb.)	Lgth. (ft.)	O.D. (in.)	
					SM1-E	3	3.0	0.84	
					SM2-E	5	6.5	0.84	
SM4-E	10	13.0	0.84						

Model	Oper. Wt. (lb.)	Dia. (in.)	Comp. Dia. (in.)	VPM	Volts	HZ	Amp
IRFUN 38	31.1	1-1/2	20	12000	115	200	6
IRFUN 45	34	1-3/4	24	12000	115	200	8
IRFUN 57	43.7	2-1/4	33	12000	115	200	12
IREN 57	35.7	2-1/4	27.5	10800	240	180	3.1
IREN 65	50	2-1/2	39	10800	240	180	4.4



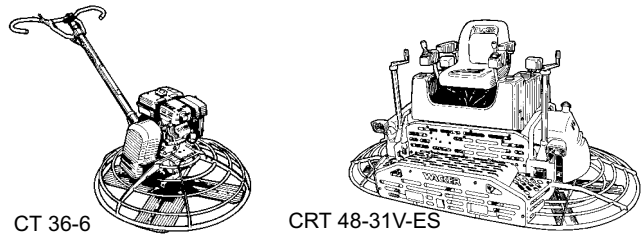
Screeds: wet & truss

Power Section	Displacement cm ³	HP	Weight (lb.)				
P 31A	31.0	1.5	32				
Blade Models	Length (ft. or m)	Width (in.)	Weight (lb.)	Blade Models	Length (ft. or m)	Width (in.)	Weight (lbs.)
SB 4F	4.0	4.88	7.6	SBW 4F	4.0	6.50	8.4
SB 15M	1.5m	4.88	9.5	SBW 15M	1.5m	6.50	10.3
SB 6F	6.0	4.88	11.4	SBW 6F	6.0	6.50	12.0
SB 20M	2.0m	4.88	12.4	SBW 20M	2.0m	6.50	13.6
SB 8F	8.0	4.88	15.2	SBW 8F	8.0	6.50	16.8
SB 10F	10.0	4.88	19	SBW 10F	10.0	6.50	21.0
SB 12F	12	4.88	22.8	SBW 12F	12	6.50	25.2
SB 14F	14	4.88	28.5	SBW 14F	14	6.50	29.4
SB 16F	16	4.88	30.4	SBW 16F	16	6.50	33.6

Power Section	Length (ft.)	HP	Center Section	Length (ft.)	End Section	Length (ft.)
HP 50	5.0	5.5	HC 25	2.5	HE 25	2.5
HP 100	10.0	5.5	HC 50	5.0	HE 50	5.0
HPG 50	5.0	8	HC 100	10.0	HE 100	10.0
HPG 100	10.0	8				

Trowels: walk-behind & ride-on

Model	Oper. Wt. (lb.)	Trowel Dia. (in.)	No. Blades	HP	Speed Range (rpm)	Pitch*
CT 36-5A / with twist pitch	183	36	4	5.5	60-125	0-30
CT 36-6 / with twist pitch	183	36	4	6	60-125	0-30
CT 48-8A / with twist pitch	234	48	4	8	60-125	0-30
CT 48-9 / with twist pitch	227	18	4	9	60-125	0-30
CT 30 ADT	158	30	4	4	60-100	0-15
CT 30 AGT-E	164	30	4	5.5	125-165	0-15
CT 36 ADP/ADP-E	167	36	4	5.5	60-100	0-15
CT 36 AGP	198	36	4	8	125-165	0-15
CT 36 AGT	198	36	4	8	125-165	0-15
CT 36 AVT/AVP	205	36	4	8	20-170	0-15
CT 48 ADP	231	48	4	8	60-100	0-15
CT 48 AGP	245	48	4	11	125-165	0-15
CT 48 AGT	245	48	4	11	125-165	0-15
CT 48 AVT/AVP	265	48	4	11	20-170	0-15

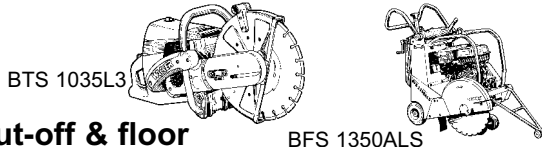


Model	Oper. Wt. (lb.)	Troweling Width (in.)	HP	Troweling Area (ft. ²)	Speed Range (rpm)	Pitch*
CRT 36-24A / E	855	77/80	24	19/22	35-150	0-25
CRT 48-31V / E	1165	97/99	31	32/24	25-150	0-25
CRT 48-31V-ES / E	1165	97/99	31	32/24	25-150	0-25

Saws: cut-off & floor

Model	Oper. Wt. (lb.)	Displ. (cu. in.)	Cutting Depth	Peripheral Speed (ft./min.)	Blade Speed (rpm)	Blade Dia. (in.)	Arbor Size
BTS 930L3	22	3.9	3.8	13,500	4300	11.8	20mm
BTS 935L3	22.5	3.9	4.8	15,750	4300	13.8	1"
BTS 1030L3	22	4.5	3.8	13,500	4300	11.8	20mm
BTS 1035L3	22.5	4.5	4.8	15,750	4300	13.8	1"

Model	Oper. Wt. (lb.)	HP	Cutting Depth	Max Peripheral Speed (ft./min.)	Blade Speed (rpm)	Blade Dia. (in.)	Arbor Size
BFS 1350AL	300	13	7.4	230	2670	14-20	1"
BFS 1350ALS	337	13	7.4	230	2670	14-20	1"

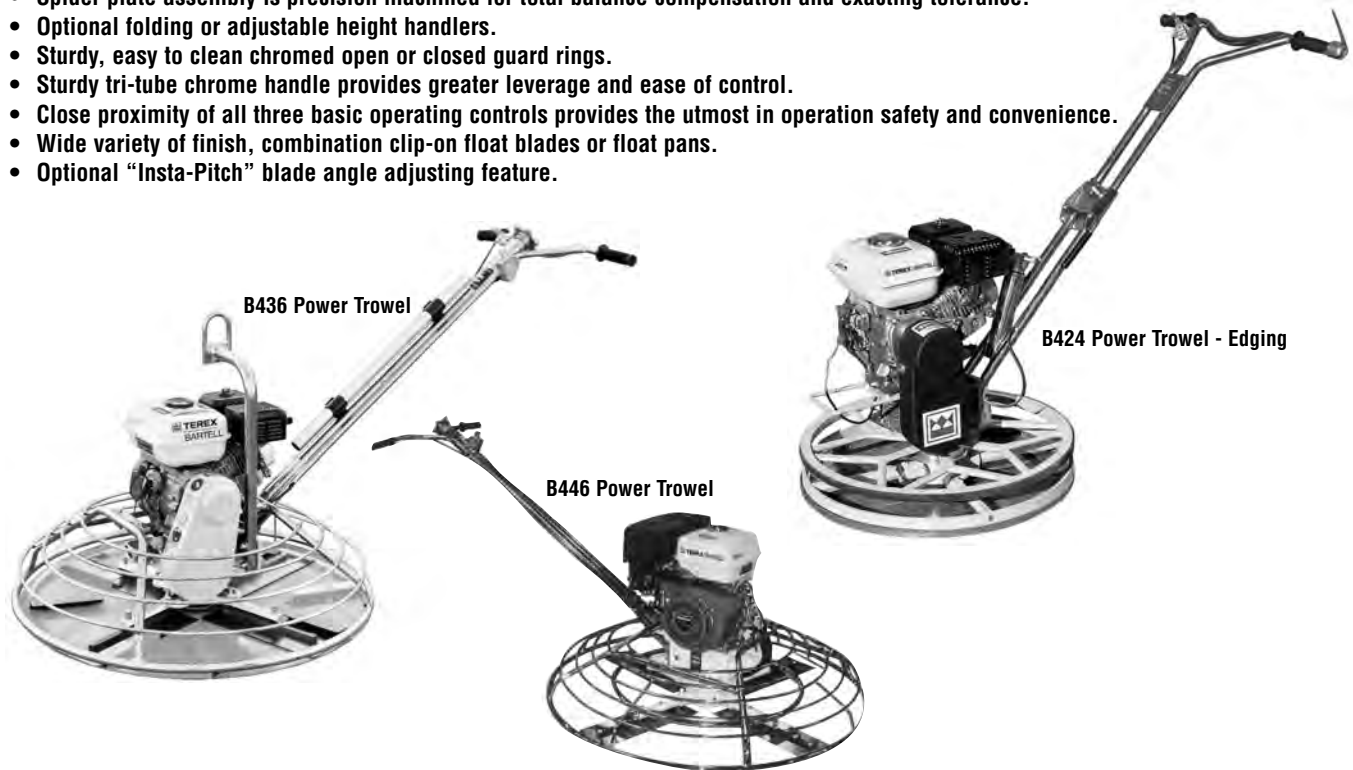


Rotary hammers/breakers

Model	Oper. Wt. (lb.)	HP	Blows/min.	Drill (rpm)	Shank Size Hex x Lgth (in.)	Power Source
EH9 BL	22	n/a	1950	none	3/4 x 3-1/4	115V, 13A
EH9 BLM	23.5	n/a	1900	none	SDS Max	115V, 13A
EHB 11BL	24	n/a	1000-2600	100-275	3/4 x 3-1/4	115V, 13A
EHB 11BLS	24	n/a	1000-2600	100-275	Spline Drive	115V, 13A
EHB 11BLM	25	n/a	1000-2600	100-275	SDS Max	115V, 13A
EH 27	57	2	1050	none	1-1/8 x 6	115V, 15A
BH 23	50	4	1350	none	1-1/8 x 6	2-cycle WM 80

TEREX Bartell Power Trowels are available in a variety of models and sizes and come with your choice of power supply. They are ideal for normal finishing and floating requirements. Designed and built to machine tool tolerances, precision in-house machining improves performance. Models are available in 24", 30", 36", 40" and 46" widths. Special application Power Trowels include a 24" Mini-Edger, 36" Slow Drive Epoxy Trowel and 24" Vibratory Float Disc.

- Precision engineered heavy-duty gearboxes have up to 2-year warranty.
- Spider plate assembly is precision machined for total balance compensation and exacting tolerance.
- Optional folding or adjustable height handlers.
- Sturdy, easy to clean chromed open or closed guard rings.
- Sturdy tri-tube chrome handle provides greater leverage and ease of control.
- Close proximity of all three basic operating controls provides the utmost in operation safety and convenience.
- Wide variety of finish, combination clip-on float blades or float pans.
- Optional "Insta-Pitch" blade angle adjusting feature.



Specifications							
Model	Path	Power Source (gas options)	Float Blade Size	Finish Trowel Size	Combination Blade Size	Pans Floats	Operating Weight
B424	24" (60cm)	4 hp Honda OHV 4 hp Robin OHV	n/a	4.75" x 9" (12 x 23cm)	n/a	24" (60cm)	up to 110 lb. (50kg)
B430	30" (75cm)	5.5 hp Honda OHV 6 hp Robin OHV	10" x 11" (25 x 28cm)	6" x 10.5" (15 x 26cm)	6" x 10" (15 x 25cm)	30" (76cm)	up to 145 lb. (66kg)
B436	36" (90cm)	5.5 hp Honda OHV 6 hp Robin OHV 9 hp Honda OHV 9 hp Robin OHV	10" x 14" (25 x 36cm)	6" x 14" (15 x 36cm)	8" x 14" (20 x 36cm)	38-1/2" (98cm)	up to 165 lb. (75kg)
B440	40" (100cm)	5.5 hp Honda OHV 6 hp Robin OHV 9 hp Honda OHV 9 hp Robin OHV	10" x 14" (25 x 36cm)	6" x 14" (15 x 36cm)	8" x 14" (20 x 36cm)	38-1/2" (98cm)	up to 175 lb. (80kg)
B446	46" (120cm)	9 hp Honda OHV 9 hp Robin OHV 11 hp Honda OHV 13 hp Honda OHV	10" x 18" (25 x 46cm)	6" x 18" (15 x 46cm)	8" x 18" (20 x 46cm)	48-1/2" (123cm)	up to 245 lb. (110kg)
BD24V	24" (60cm)	9 hp Honda OHV 9 hp Robin OHV	n/a	n/a	n/a	n/a	up to 220 lb. (100kg)
B436SD Epoxy Trowel	36" (90cm)	5 hp Gast8 AM (air motor) 5.5 hp Honda OHV 6 hp Robin OHV	10" x 14" (25 x 36cm)	6" x 14" (15 x 36cm)	8" x 14" (20 x 36cm)	n/a	up to 155 lb. (70kg)

RIDE-ON POWER TROWELS



TS74 Overlapper
68 in. (173cm) path



TS78 Non-Overlapper
74 in. (188cm) path



HS90 Overlapper / LP95 Non-Overlapper
89.25 in. (226cm) / 92.25 in. (234.3cm) path



TS96 Non-Overlapper
96 in. (244cm) path



LD98 Non-Overlapper
96 in. (244cm) path



TS100-H Non-Overlapper
97 in. (246cm) path

Options

- Variable speed clutch or fixed ratio clutch to produce range of travel speeds up to 700 ft. (213m) per minute.
- Retardant spray system.
- Large choice of power sources.
- Oil-lubricated spider plates.
- Splash guards.

Features

- Overlapping (for finishing applications) or non-overlapping (for floating/panning applications) machines for best productivity.
- Paths from 65" to 97" (173 to 246cm).
- Powered by air cooled or liquid cooled engines.
- Reliable, heavy-duty gearboxes provide longer gearbox life and lower maintenance.
- Superior maneuverability with immediate and responsive steering. TS100-H has hydraulically-assisted power steering with joystick controls.
- U-joint couplings deliver reliable drive shaft torque.
- Flip-up rings for easy blade change and maintenance.
- Seat adjuster, hourmeter and lights standard.
- Heavy-duty, grease-lubricated spider plate assembly.

Specifications

Model	Path	Power Source (gas options)	Float Blade Size	Finish Trowel Size	Combination Blade Size	Float Pans	Operating Weight
TS65 Overlapping model	65 in. (165cm)	13 hp Honda 16 hp B&S Vanguard	10 in. x 9 in. (25 x 23cm)	6 in. x 14 in. (15 x 36cm)	8 in. x 14 in. (20 x 36cm)	n/a	468 lbs. (213kg)
TS74 Overlapping model	68 in. (173cm)	18 hp B&S Vanguard	10 in. x 14 in. (25 x 36cm)	6 in. x 14 in. (15 x 36cm)	8 in. x 14 in. (20 x 36cm)	n/a	492 lbs. (223kg)
TS78 Non-Overlapping model	74 in. (188cm)	20 hp Honda 24 hp Honda 25 hp Kohler OHV 20/22 hp Robin	10 in. x 14 in. (25 x 36cm)	6 in. x 14 in. (15 x 36cm)	8 in. x 14 in. (20 x 36cm)	36.5 in. (93cm)	Up to 620 lbs. (282kg)
TS88 Overlapping model	84 in. (213cm)	24 hp Honda 25 hp Kohler OHV	10 in. x 18 in. (25 x 46cm)	6 in. x 18 in. (15 x 46cm)	8 in. x 18 in. (20 x 46cm)	n/a	Up to 635 lbs. (289kg)
HS90 Overlapping model	90 in. (229cm)	24 hp Honda 25/27 hp Kohler OHV	10 in. x 18 in. (25 x 46cm)	6 in. x 18 in. (15 x 46cm)	8 in. x 18 in. (20 x 46cm)	38.5 in. (98cm)	Up to 985 lbs. (289kg)
LP95 Non-Overlapping model	92 in. (234cm)	35 hp B&S Vanguard	10 in. x 18 in. (25 x 46cm)	6 in. x 18 in. (15 x 46cm)	8 in. x 18 in. (20 x 46cm)	45.75 in. (116cm)	Up to 970 lbs. (441kg)
TS96 Non-Overlapping model	96 in. (244cm)	24 hp Honda 25/27 hp Kohler OHV	10 in. x 18 in. (25 x 46cm)	6 in. x 18 in. (15 x 46cm)	8 in. x 18 in. (20 x 46cm)	45.75 in. (116cm)	Up to 975 lbs. (450kg)
LD98 Non-Overlapping model	96 in. (244cm)	35 hp Ruggerini Diesel air cooled	10 in. x 18 in. (25 x 46cm)	6 in. x 18 in. (15 x 46cm)	8 in. x 18 in. (20 x 46cm)	45.75 in. (116cm)	Up to 1,250 lbs. (570kg)
TS100-H Non-Overlapping model	97 in. (246cm)	38 hp Kubota Diesel liquid cooled	10 in. x 18 in. (25 x 46cm)	6 in. x 18 in. (15 x 46cm)	8 in. x 18 in. (20 x 46cm)	45.75 in. (116cm)	Up to 1,450 lbs. (659kg)
Hydraulically assisted power steering with joystick controls.		Heavy-duty spider plate / heavy 1.5 in. (3.8cm) trowel arms. Max finish blades – .092 in. thick trowel steel					

Multiquip's Whiteman Power Trowels

continue to be the number one choice of the concrete industry. With over 60 years of manufacturing experience, no other power trowel can match our quality, reliability or performance. A complete range of trowels is available with operating widths ranging from 24" to 48" and rotor speeds up to 180 rpm. Each trowel is tested as it comes off the assembly line to ensure every machine meets our quality standards.



	Model	Blades	Ring Dia. in. (cm)	Power Source	Rotor rpm	Oper. Wt. lbs. (kg)	Ship Wt. lbs. (kg)
Standard Walk-Behind Trowels							
C-Series	CA-4-4H	4	24 (61)	Honda GX-120	70-130	125 (57)	145 (66)
M-Series	M-4-6R	4	30 (76)	6 HP Robin	60-125	141 (64)	181 (82)
	M-4-5H	4	30 (76)	5.5 HP Honda	60-125	143 (65)	183 (83)
J-Series	JA-4-6R	4	36 (90)	Honda, Robin, or Briggs and Stratton	60-100	150 (68)	170 (77)
	JA-4-5H	4	36 (90)	Honda, Robin, or Briggs and Stratton	60-100	150 (68)	170 (77)
	J-4-2E	4	36 (90)	2-HP 115/ 230V 60 Hz 1Ph	60-125	146 (66)	186 (84)
B-Series	BA-4-8R	4	48 (122)	11 HP Honda	65-140	295 (134)	355 (161)
	BA-4-8H	4	48 (122)	11 HP Honda	65-140	295 (134)	355 (161)
High-Performance Walk-Behind Trowels							
HPLA-Series	HPLA-36-4-8H	4	36 (90)	8 HP Robin, Honda	55-118	166 (75)	206 (93)
	HPLA-46-4-11H	4	46 (117)	11 HP Honda	50-108	245 (111)	310 (141)
HPHA Series	HPHA-36-4-8H	4	36 (90)	8 HP Robin, Honda	75-155	166 (75)	206 (93)
	HPHA-46-4-11H	4	46 (117)	11 HP Honda	65-140	250 (113)	310 (141)
HDA Series	HDA-48-4-11H	4	48 (122)	11 HP Honda	65-140	295 (134)	355 (161)
	HDA-48-4-13H	4	48 (122)	13 HP Honda	35-180	315 (143)	365 (166)
Walk-Behind Epoxy Trowels							
E-Series	E-4-1EV	4	36 (90)	1 HP 115V 60 Hz 1 Ph	30-62	112 (51)	152 (69)
	E-4-5H	4	36 (90)	5.5 HP Honda	27-62	127 (58)	167 (76)



POWER TROWELS VIBRATORY SCREED



Multiquip's Whiteman Hydrostatic and Mechanical Ride-On Power Trowels



	Model	Engine	Engine Cooling	HP	Blades Per Rotor	Rotor rpm	Path Width in. (cm)	Fuel Tank Capacity gal. (ltr)	Run Time gal./hr.	L x W x H in. (cm)	Operating Weight lbs. (kg)	Wheel Kit	
HYDROSTATIC	<i>Twin 60" Non-Overlapping</i>												
	STX-55J-6	John Deere Turbo Diesel	Liquid	55	6	10-130	117 (297)	11 (42)	2.81	125 x 65 x 57 (318 x 165 x 145)	2270 (1030)	EMR3	
	<i>Twin 48" Non-Overlapping</i>												
	HTX-44K-5	Kubota Turbo Diesel	Liquid	44	5	10-160	92 (233)	11 (42)	2.36	95 x 48 x 57 (241 x 122 x 145)	1855 (841)	EMR3	
MECHANICAL	<i>Twin 48" Non-Overlapping</i>												
	HHN-34TVD-TCSL5	Vanguard Turbo	Liquid	34	5	40-160	91 (231)	4.4 (17)	2	95 x 48 x 46 (241 x 122 x 117)	1180 (535)	EMR2	
	HHN-31V-TCSL5	Vanguard	Liquid	31	5	40-160	91 (231)	5 (19)	2.4	95 x 48 x 46 (241 x 122 x 117)	1120 (508)	EMR2 or EMR3*	
	<i>Twin 48" Overlapping</i>												
	HTO-31V-TCSL5	Vanguard	Liquid	31	5	145	88 (224)	5 (19)	2.4	93 x 50 x 46 (236 x 127 x 117)	1052 (477)	EMR2	
	HTO-24N-TCSL	Onan	Air	24	4	144	88 (224)	4.4 (17)	2.1	93 x 50 x 46 (236 x 127 x 117)	745 (338)	EMR1	
	<i>Twin 48" Non-Overlapping</i>												
	HTN-24N-TCSL	Onan	Air	24	4	120	91 (231)	4.4 (17)	2.1	95 x 48 x 46 (241 x 122 x 117)	750 (340)	EMR1	
	HTN-27K-TCSL	Kohler	Air	27	4	135	91 (231)	4.4 (17)	2	95 x 48 x 46 (241 x 122 x 117)	780 (354)	EMR1	
	HTN-28K-TCSL	Kohler	Air	28	4	135	91 (231)	4.4 (17)	2	95 x 48 x 46 (241 x 122 x 117)	800 (363)	EMR1	
	<i>Twin 36" Overlapping</i>												
JTO-20H-TCSL	Honda	Air	20	4	138	69 (175)	2.2 (8)	1.68	71 x 39 x 46 (180 x 99 x 117)	440 (200)	EMR1		
<i>Twin 36" Non-Overlapping</i>													
JWN-24H-TCSL	Honda	Air	24	4	36-180	75 (191)	2.2 (8)	1.71	77 x 39 x 48 (196 x 99 x 122)	685 (209)	EMR1		
JTN-20H-TCSL	Honda	Air	20	4	138	75 (191)	2.2 (8)	1.68	77 x 39 x 46 (196 x 99 x 117)	460 (209)	EMR1		

*For current production units only. May not adapt to older models.

Multiquip's Whiteman WSH-Series Vibratory Truss Screed –

The power screed that's designed to meet today's tougher standards for flatter floors.

Available in either air-powered or engine-driven configurations, this truss screed provides consistently dependable performance. Its steel construction resists rough handling while striking off slabs with depths up to 11 inches.



Air-Powered Screed Specifications

Air-Powered Screed Sections	
WS-HA-20	2 ft. (.6m) section, 2 vibrators
WS-HA-25	2.5 ft. (.76m) section, 4 vibrators
WS-HA-50	5 ft. (1.5m) section, 4 vibrators
WS-HA-75	7.5 ft. (2.2m) section, 6 vibrators
WS-HA-100	10 ft. (3m) section, 8 vibrators
Air Powered Screed Accessories	
WS-HA-H	End handle set (2 ea.) includes air controller & lubricator
WS-HA-EXT-6"	End handle set (2 ea.) with 6" (15cm) extensions
WS-HA-EXT-12"	End handle set (2 ea.) with 12" (30cm) extensions
WS-HA-EXT-18"	End handle set (2 ea.) with 18" (46cm) extensions
WS-HW	Hand winch set (2 ea.)
WS-HA-IC	Invert crown kit
WS-H-RB	Reinforcement bracket
WS-KIT-AEB	Adjustable end bracket
WS-KIT-AEBR	Adjustable end bracket with rollers

Engine-Driven Screed Specifications

Engine-Driven Screed Sections	
WS-HE-20	2 ft. (.6m) section
WS-HE-25	2.5 ft. (.76m) section
WS-HE-50	5 ft. (1.5m) section
WS-HE-75	7.5 ft. (2.2m) section
WS-HE-100	10 ft. (3m) section
Engine-Driven Screed Accessories	
WS-HE-H	End handle set (2 ea.)
WS-HE-EXT-6"	End handle set (2 ea.) with 6" (15cm) extensions
WS-HE-EXT-12"	End handle set (2 ea.) with 12" (30cm) extensions
WS-HE-EXT-18"	End handle set (2 ea.) with 18" (46cm) extensions
WS-HW	Hand winch set (2 ea.)
WS-HE-SPW (L)	Self-propelled winch (left side) mounted on 2.5 ft. (.76m) section
WS-HE-SPW (R)	Self-propelled winch (right side) mounted on 2.5 ft. (.76m) section
WS-HE-KIT-FC	Flex coupler kit
WS-HE-KIT-UJ	Universal joint kit
WS-HE-IC	Invert/crown kit
WS-H-RB	Reinforcement bracket
WS-HE-KIT8H	8-HP Honda engine & mounting kit*
WS-HE-KIT11H	11-HP Honda engine & mounting kit*
WS-KIT-AEB	Adjustable end bracket
WS-KIT-AEBR	Adjustable end bracket with rollers

*Also available mounted on 5 ft. (1.5m) truss sections



Poly Pro PATENT PENDING **Steel Reinforced Plastic Trowel Blade**

The WAGMAN Poly Pro steel reinforced plastic trowel blade eliminates the risk of leaving burnish marks on light colored or light reflective concrete. The steel backing adds rigidity to the plastic, provides a harder finish and allows the blade to be used on ride-on power trowels.



- Plastic blades proven to last as long, if not longer, than steel blades.
- Specially formulated abrasion-resistant plastic.
- Stiffer than previous plastic blades.
- Provides a hard finish.
- Can be used on ride-on trowels.
- Available in finish and combination blade styles.

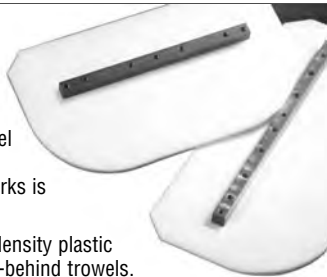
You won't find a better trowel blade or a more complete line.

- Wagman **torque flex steel** is specially formulated to provide the most wear-resistant high-performance power trowel blade available. We give you more options with three different performance levels for a variety of needs.
- Wagman **rivets are precisely sized** and pressed to securely attach the mounting bracket to the blade, preventing separation.
- Wagman's wide variety of **mounting brackets** are made on a state-of-the-art bar system that gives consistent hole spacing, countersinks and taps every time.
- **Holes are tapped** with unparalleled precision to provide the best possible fit to any power trowel.
- Wagman uses precision dies to punch blades with straight edges that are free of burrs. Wagman blades wear more evenly and the **burr-free edges** are easy to handle.
- Through field testing, Wagman has determined the **precise degree of bend** for maximum performance.



PLASTIC BLADES **Finish Floors Burnish-Mark Free!**

The DPRO & UHMW blades are combination-style plastic power trowel blades made to float and finish any application where leaving burnish marks is a concern.



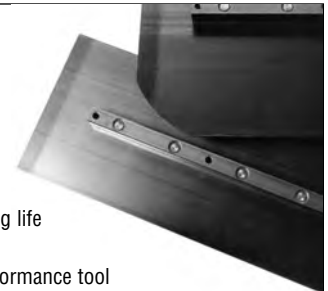
DPRO blades are made from a high-density plastic and can be used on ride-on and walk-behind trowels.

UHMW blades are designed for use on walk-behind power trowels.

- Specially formulated abrasion-resistant plastic.
- Blade life comparable to steel blades.
- Provides a hard, polished finish.
- Available to fit most popular power trowels.

GOLD PRO® **PURE PERFORMANCE** **Blade for Ride-On Trowels**

The WAGMAN Gold Pro® is a blade built tough to meet the punishing demands of ride-on power trowels or any other application where long lasting life is required.



Constructed from extra thick high-performance tool steel, it is the longest lasting steel blade available.

Since the Gold Pro Blade® is made from a heavier weight steel and tends to be a bit more stiff, Wagman suggests that the Gold Pro Blade® be used primarily on riding trowel machines.

- High chrome and carbon content increases abrasion resistance.
- Field tested and proven to provide 25% to 50% longer life than most silver trowel blades.
- Available in finish and combo blade styles only.



BLUE XL® MAXIMUM VALUE **For Power Trowels**

The WAGMAN Blue XL® blade was designed to provide a perfect balance between longer blade life and maximum operating smoothness with the versatility to be used on both ride-on and walk-behind power trowels.



The Blue XL is thicker than ordinary blades and, combined with its ability to flex slightly, performance is improved and blade life prolonged.

- **MAXIMUM VALUE** for walk-behind and ride-on power trowels.
- Proven record in delivering 15% to 25% longer life than standard silver blades.
- Available in finish and combination blade types only.



ORIGINAL SILVER **The INDUSTRY STANDARD** **Power Trowel Blade**

The WAGMAN Original Silver blade was developed using ASW 80 CR2 Torque Flex Steel™, the longest lasting proprietary alloy tool steel available.



Wagman's heavy-duty construction makes it one of the most consistent wearing and longest lasting blades available

- For use on walk-behind and ride-on power trowels.
- Silver polished blade gives maximum flex to ensure a smooth, chatter-free finish.
- Available in finish and combination blade types.

Handy-Grout™

When the job is too small to justify sending out an engine-powered grouting rig or the jobsite is hard to reach with full-size equipment, just carry in a **Handy-Grout™** and start pumping!

A pressure grouting original, the Handy-Grout line of grout pumps by Airplaco offers a versatile grouting solution to suit your job requirements. Three models are available, including hand-operated, air-powered and self-priming positive piston pumps. The **Handy-Grout** line of grout pumps is the contractors' choice for durability, efficiency and portability. Put it to work for you.



HANDY-GROUT HG-5

- Simple to transport
- Easy to operate and maintain
- Fits in tight spaces
- Positive displacement piston
- Hose assembly – 1"x10'
- Straight pipe nozzle
- Pumps directly from bucket

Specifications: Handy-Grout HG-5	
Max. Production Capacity	12 cu. ft./hr. (90 gallons)
Line Pressure	0 to 100 psi plus
Material Hopper	Used with bucket of material
Power Source	Manual
Approx. Weight	63 lb.
Overall Dimensions	7"W x 17"L x 28"H

"This is the best thing since sliced bread!"

- R. W. (White's Equipment)

"For us it's great. It works great for us because we're dealing with such tight spaces."

- W.M. (PCL)



HANDY-GROUT HG-9

- Lightweight design
- Polyurethane hopper
- Cast assembly
- In-line discharge pressure gauge
- Self-priming horizontal manifold
- Hose assembly – 1"x10'
- Straight pipe nozzle

Specifications: Handy-Grout HG-9	
Max. Production Capacity	15 cu. ft./hr. (112 gallons)
Line Pressure	0 to 100 psi plus
Material Hopper	5 gal (19L)
Power Source	Manual
Approx. Weight	53 lb.
Overall Dimensions	16"W x 24"L x 26"H



HANDY-GROUT HGA-50

- Low maintenance
- User-friendly controls
- Adjustable pressure
- Variable volume
- In-line discharge pressure gauge
- Positive displacement piston pump
- Quick disconnect hose adaptor

Specifications: Handy-Grout HGA-50	
Max. Production Capacity	50 cu. ft./hr. (374 gallons)
Line Pressure	0 to 100 psi plus
Material Hopper	8 gal (30L)
Power Source	Compressed air 6-19 cfm @110 psi for max. rate
Approx. Weight	115 lb.
Overall Dimensions	13"W x 55"L x 26"H

Choose your **Handy-Grout™**

Model	Light Weight	Durable Design	Hand-Operated	Hopper	Self-Priming	Cast Assembly	Air-Powered	Adjustable Controls	Pressure Gauge	Warranty	Ships UPS
HG-5	•	•	•							•	•
HG-9	•	•	•	•	•	•			•	•	•
HGA-50	•	•		•	•		•	•	•	•	

Applications

Machine base grouting, mud-jacking, door bucks, void filling, piling encasements, underlayment/topping, post tensioning, rock/soil anchors, precast tunnel joints, waterproofing, pipe jacking slurry, tunnel liners, pre-cast tilt-up panels, T-joints, concrete planks, traffic dividers, mining applications and more!

Performance is relative to cycle rate, mix characteristics, line size and distance. Max output, line pressure and distance cannot be achieved simultaneously. We reserve the right to amend these specifications at any time.

2EC-2GC – Dual-Disc Grinder

Features:

- 22" working width.
- Gas, electric and propane power options available.
- Includes 2 multi-accessory discs, which accept Dyma-Serts, Strip-Serts and all other grinder accessories.
- Counter-rotating discs prevent machine from pulling side to side and give operator greater control.
- 6 grinding accessories required per loading.

Ideal for:

- Large or small areas.
- Light grinding or cleaning of concrete surfaces.
- Leveling uneven joints.
- Removing mastics, thin-set, high spots, epoxies and urethanes.
- Lightly texturing slippery concrete surfaces.



Dual-Disc Grinder will grind approximately 350-500 sq. ft./hr. at 1/32" with EDCO Dyma-Serts.



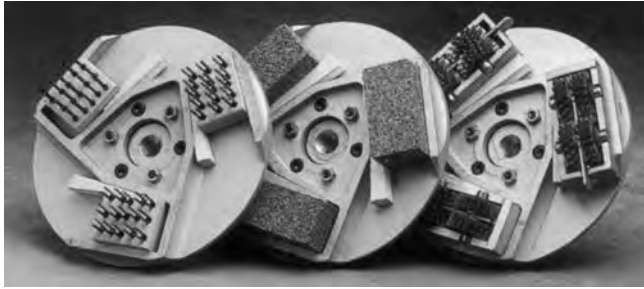
2-EC



2-GC

Model	SKU	Power Options	Weight	Length	Width	Height
2-EC	50800	3 HP Electric 1O-60Hz 230 VAC	225 lbs.	44.5" (113cm)	27" (69cm)	44" (112cm)
2-EC	51300	2 HP Electric 1O-50Hz 230 VAC	225 lbs.	44.5" (113cm)	27" (69cm)	44" (112cm)
2-EC	50100	1.5 HP Electric 1O-60Hz 115/230 VAC	225 lbs.	44.5" (113cm)	27" (69cm)	44" (112cm)
2-GC	51400	11 HP Gasoline Honda	225 lbs.	44.5" (113cm)	27" (69cm)	44" (112cm)
2-GC	51800	5.5 HP Gasoline Honda	225 lbs.	44.5" (113cm)	27" (69cm)	44" (112cm)
2-GCP	54800	11 HP Propane Honda w/ 115V Starter Kit	275 lbs.	44.5" (113cm)	27" (69cm)	44" (112cm)

EDCO Grinders – Proven in over 40 years of use. Accept no substitute!



Dyma-Serts™ (patented)

Dyma-Serts are diamond segments welded to a backing plate to improve grinding speed and remove tough coatings.

Dyma-Serts grind 5 times faster than grinding stones and last longer – up to 30,000 square feet (2,800 sq. m.) of grinding action. Dyma-Serts can be used for wet or dry grinding.



Ideal for:

- Smoothing rough surfaces or trowel marks.
- Grinding or polishing terrazzo.
- Repairing surface damage to concrete slabs.
- Removing urethane or epoxy thincoats.
- Grinding sharp aggregates such as flint and granite.
- Removing surface imperfections from epoxy mortars.
- Leveling high spots.
- Removing thin mastics and thin-set.

DYMA-SERT MATRICES

For Concrete		For Terrazzo	
EG-1X	General purpose	EG-60X	60 grit
EG-2X	Abrasive concrete	EG-80X	80 grit
EG-3X	Epoxy mortars	EG-120X	120 grit

Strip-Serts™

Strip-Serts are carbide-tipped blocks designed to clean floors without grinding into the concrete.

- Replaceable, multi-sided tungsten carbide edge can be rotated for maximum use.
- Cleans the surface without damage to concrete floor.



Ideal for:

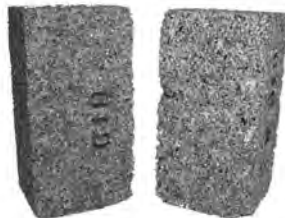
- Removing mastics, paints, resins, tar, fiberglass, rubber, ice and industrial buildups.

Grinding Stones

Various grits for coarse or fine polishing.

Ideal for:

- Removing trowel marks.
- Removing rain spots.
- Leveling high joints less than 1/16" high.
- Removing excess concrete.
- Smoothing rough finishes.
- Grinding and polishing terrazzo and marble.



Scarifier Assemblies

Hi-carbon steel cutter assemblies in steel case.

- Standard cutters last 3 to 6 hours.
- Heavy-duty cutters last 8 to 12 hours.

Ideal for:

- Breaking up hard surfaced deposits of oil-dri, fiberglass, grout or plaster.
- Removing concrete buildup.
- Leveling brick or wood block floors.
- Initial grinding of rough, broom-finished concrete.
- Preparing surfaces for overlayers.
- Tile floors.
- Texturing slippery floors.



Surfacer Disc Assembly

The Surfacer Disc assembly is easily assembled for heavy-duty surface build-up removal. The cutter wheels can be positioned to meet removal needs.

Ideal for:

- Removal of industrial build-ups, tar, rubber, fiberglass, grout or plaster.
- Roughening concrete.
- Grinding asphalt.



Wire Brushes

Wire Brushes are flat steel strips mounted in wooden blocks.

Ideal for:

- Removing deposits of grease, wax, ink or food products.
- Breaking up rubber-backed carpeting.



Silabide Pads

(requires additional pad retainer)

Ideal for:

- Scrubbing of concrete, stone, metal, brick, wood and tile floors.



Optional Weight Tray Available for Dual-Disc Grinder

SURFACE GRINDERS

Features

- Available with air, gas or electric power supply.
- Lightweight for easy maneuverability.
- Fine cutting depth adjustment.
- Hexagonal drive-shaft and sealed bearings for longer life.
- Convenient engine stop switch.
- Tri-tube handle for strength, front carry bar eases transport.
- Isolation mounts ease operator vibration.
- Dust control outlet.



Specifications

Model	Standard Cutting Width	Working Depth (per pass)	Power Supply	Operating Weight	Shipping Weight
SP8-G	up to 8 in. (203mm)	up to 1/6 in. (1.6mm)	6 hp OHV B&S Vanguard 5.5 hp OHV Honda	approx. 135 lbs. (61kg)	approx. 150 lbs. (68kg)
SP8-E	up to 8 in. (203mm)	up to 1/16 in. (1.6mm)	2 hp 110/220V Leeson Motor 3 hp 220V Leeson Motor	approx. 150 lbs. (68kg)	approx. 165 lbs. (75kg)
SP8-A	up to 8 in. (203mm)	up to 1/16 in. (1.6mm)	5 hp Gast 8 90 CFM at 90 PSI	135 lbs. (61kg)	150 lbs. (68kg)



Interchangeable Cutting Tools Offer Versatility for a Variety of Applications

HARDENED STEEL CUTTERS in several configurations are useful for a variety of light to medium tasks including cleaning, smoothing and removal of thin mil paint.

TUNGSTEN-CARBIDE TIPPED CUTTERS are effective for medium to heavy-duty tasks such as concrete grinding and thick mil coating removal.

TUNGSTEN-CARBIDE MILLING FLAILS are designed for special tasks such as milling removal of thermo, elastomeric and soft asphalt based coatings.

Chisel Scalars are air-powered hand tools that use a rapid, hammering action to increase production on jobs that would ordinarily require manual scrapers. Various accessories are available for Chisel Scalars, enabling contractors to easily remove tile, grout, ice, fiberglass, concrete, asphalt, roofing shingles or hardened deposits. Minimum air is needed for operation — only 6-8 CFM at 90 PSI — or 12-15 CFM at 90 PSI. EDCO's straight or ergonomic Chisel Scalars come in various lengths, from 2 to 5 feet long, and in heavy-duty steel or lightweight aluminum to help contractors work horizontal or vertical surfaces, or in tight spaces.

ALR-2, ALR-4 and ALR-5

Features:

- Quick-change, hardened steel tool chuck accepts dozens of accessories.
- Available in heavy-duty steel or lightweight aluminum.
- Requires only 6-8 CFM at 90 PSI.

ALR-5 Ergo

Features:

- Ergonomic design lets operator stand upright eliminating backaches.
- High-strength tubular handle and soft foam hand grips for operator comfort.
- Quick-change, hardened steel tool chuck accepts dozens of accessories.
- Available in heavy-duty steel or lightweight aluminum.
- Requires only 6-8 CFM at 90 PSI.

The Big Stick™

Features:

- High-strength tubular handle and soft foam hand grips for operator comfort.
- Extra large piston for harder hitting action.
- Quick-change, hardened steel tool chuck accepts Big Stick accessories.
- Big Stick available in heavy-duty steel or lightweight aluminum.
- Requires 12-15 CFM at 90 PSI.

The Big Stick

EDCO Chisel Scalars Will

Remove:

- Vinyl tiles
- Ceramic tiles
- Carpeting
- Shingles
- Roofing materials
- Fireproofing
- Rubber coatings
- Waterproofing
- Linoleum
- Quarry tiles
- Insulation
- Asbestos
- Mastics
- Paint build-ups
- Ice

Chip Away:

- Concrete
- Asphalt
- Grout
- Caulking
- Corrosion
- Slag
- Scale
- Ice

Scrape Deposit of:

- Oil-dri
- Concrete droppings
- Food residues
- Glue
- Grease
- Tar

Air-Powered EDCO Chisel Scalars eliminate hammers, chisels and hand labor!

Specifications

Model	SKU	Length	Weight with Steel Tool	Weight with Aluminum Tool
ALR-2	C10309	28.5" (72cm)	9 lbs (4kg)	7.5 lbs (3.4kg)
ALR-4	C10308	50" (127cm)	12.5 lbs (5.7kg)	8.5 lbs (3.9kg)
ALR-5	C10301	60" (153cm)	16 lbs (7.3kg)	9 lbs (4.1kg)
ALR-5 Ergo	C10342	71" (180cm)	18.5 lbs (8.4kg)	N/A
The Big Stick	27100	56.5" (144cm)	24.5 lbs (11.1kg)	N/A

HYDRAULIC POWER BUGGIES



PB-16

Features

- Simultaneous dump and hydrostatic drive capability allows for feathering of load in forward and reverse.
- Operator's platform and control system allow for comfortable and convenient operation of the unit.
- Two models, 16 ft.³ (453 L) and 21 ft.³ (595 L) capacities.
- Power supplied through heavy-duty hydraulic pump and two high efficiency drive motors.
- Excellent traction and control with heavy-duty welded chassis.
- Industry's largest and highest efficiency wheel motors allow higher speeds and more reliable braking.
- Simple, clean control panel.
- Foot operated dump lever allows operator to keep both hands on steering handle at all times.
- Foot actuated operating and parking brake.

Specifications and Dimensions

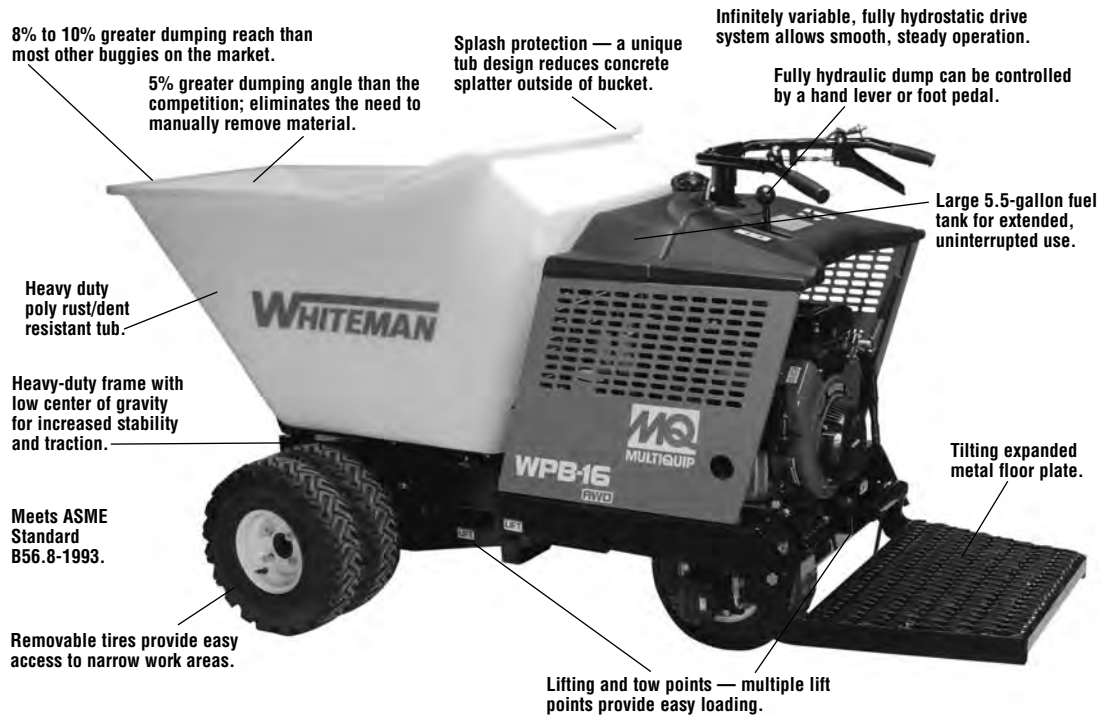
Model	PB-16	PB-21
Wheelbase	43 in. (109.2cm)	43 in. (109.2cm)
Overall length	103 in. (261.6cm)	101.5 in. (257.8cm)
Overall width	Single Wheels 35.5 in. (90.2cm) Dual Wheels 43.5 in. (110.5cm)	45.25 in. (114.9cm) 45.25 in. (114.9cm)
Overall height	53 in. (134.6cm)	52 in. (132.1cm)
Maximum load	2,500 lbs. (1,136kg)	3,200 lbs. (1,455kg)
Capacity	16 ft. ³ (453 L)	21 ft. ³ (595 L)
Discharge height	3.5 in. (127cm)	4.75 in. (152.4cm)
Hydraulic oil – Exxon Nuto #H68	11.5 qt. (11.0 L)	11.5 qt. (11.0 L)
Speed	7.25 mph (11.67km/h) at 4,000 rpm	7.25 mph (11.67km/h) at 4,000 rpm
Drive	Hydrostatic	Hydrostatic
Brakes	Hydraulically controlled	Hydraulically controlled
Parking brake	Mechanical	Mechanical
Dump	Variable hydraulic	Variable hydraulic
Engine	13 hp (9.7kW) Honda	18 hp (13.4kW) B&S
Drive tires	5.70 x 8 x 19	5.70 x 8 x 19
Steering tires	4.80 x 8 x 16	4.80 x 8 x 16
Operating weight	1,260 lbs. (571.5kg)	1,480 lbs. (671.3kg)
Shipping weight	1,360 lbs. (616.9kg)	1,585 lbs. (718.9kg)



The Innovative Whiteman Series WBH-16

Whiteman concrete and material handling Power Buggies from Multiquip are the newest, most advanced buggies available on the market.

In addition to concrete spreading and spot pouring, the versatile 16-cubic-foot units are designed for landscaping applications, material sub-base distribution, jobsite cleanup and material transport.



	RECOIL START	ELECTRIC AND RECOIL START	ALL WHEEL DRIVE
Model (with Standard Tires)	WBH-16	WBH-16E	WBH-16EAWD
Model (with Foam-Filled Tires)	WBH-16F	WBH-16EF	WBH-16EAWDF
Wheelbase (in.)	44		
Length (in.)	103		
Single-Wheel Width (in.)	30.75		
Height (in.)	51		
Weight (lb.)	1135	1140	1205
Max. Load – Dual Wheels (lb.)	2500		
Max. Load – Single Wheels (lb.)	1000		
Capacity (cu. ft.)	16		
Engine	Honda 13 HP	Honda 13 HP	Vanguard 18 HP
Starting System	Recoil	Recoil and Electric	Recoil and Electric
Fuel Capacity (gal.)	5.5		
Running Time (hrs.)	8		
Travel Speed (mph)	7.25	7.25	7.25 5.3 (Traction Assist) 6.3 (All Wheel Drive)
Bucket Type	Polyethylene		



RL4000 Standard Duty Light Tower

FEATURES

- Dual self-braking winch design for fast and easy tower erection and extension.
- 30 ft. (9.1m) light tower height at full extension for excellent illumination at long distances.
- 360° tower rotation to provide pin-point light positioning at your work site.
- 4,000 Watts of light – enough to illuminate 7-1/2 acres.
- Quiet 71 dBA sound levels at 23 feet (7m).
- Excellent fuel economy providing up to 60 hours of run time per tank of fuel.
- Maintenance-friendly electrical assemblies make troubleshooting, service and repair a breeze.
- 3-cylinder diesel engine powers a brushless self regulated type generator.
- Centerpoint lifting bracket and fork lift pockets make transport easy.
- Compact design allows up to 10 units per truck load.
- Engine protection includes high water temperature and low oil pressure shutdowns.
- Cabinet is protected with a durable, fade resistant, polyester powder coat finish.
- DOT approved and serialized trailers.
- Hydraulic brakes, full light package, bolt on fenders and heavy-duty side-mount jacks are standard.



SPECIFICATIONS & DIMENSIONS

MODEL	TEREX	TEREX AMIDA		
	RL4000	LT7000	AL4000		AL5000
Lamps	Metal Halide 4 x 1,000 W	Metal Halide 4 x 1,000 W	Metal Halide 4 x 1,000 W	Metal Halide 4 x 1,000 W
Generator	Brushless 60 Hz, 6.0 kW	Brushless 60 Hz, 8.0 kW	Brushless 60 Hz, 6.0 kW	Brushless 60 Hz, 8.0 kW
Engine	Kubota diesel 10.5 hp	Kubota diesel 13.6 hp	Kubota diesel 10.5 hp	Kubota diesel 13.6 hp
Fuel capacity	30 gal. (114 L)	30 gal. (114 L)	30 gal. (114 L)	30 gal. (114 L)
Overall length, travel position w/fixtures and tongue	171 in. (435cm)	184 in. (467cm)	179 in. (455cm)	183 in. (465cm)
Overall length, tower vertical w/tongue and jacks	123 in. (312cm)	116 in. (295cm)	124 in. (315cm)	130 in. (330cm)
Overall height, floodlighting position	30 ft. (9.1m)	30 ft. (9.1m)	30 ft. (9.1m)	30 ft. (9.1m)
Overall height, travel position	70 in. (177cm)	74 in. (188cm)	68 in. (173cm)	69 in. (175cm)
Overall width, with fenders	54 in. (137cm)	80 in. (203cm)	62 in. (156cm)	81 in. (204cm)
Overall width, outriggers pulled out	131 in. (334cm)	108 in. (274cm)	105 in. (267cm)	123 in. (313cm)
Wheel size	13 in. (33cm)	15 in. (38cm)	15 in. (38cm)	15 in. (38cm)
Axle rating	2,000 lbs. (907kg)	3,500 lbs. (1,588kg)	3,500 lbs. (1,588kg)	3,500 lbs. (1,588kg)
Tongue weight travel position	130 lbs. (59kg)	130 lbs. (59kg)	100 lbs. (45kg)	220 lbs. (100kg)
Total weight, no fuel	1,760 lbs. (798kg)	3,075 lbs. (1,397kg)	2,050 lbs. (930kg)	2,425 lbs. (1,101kg)



HydraCutter C150™

Specifications

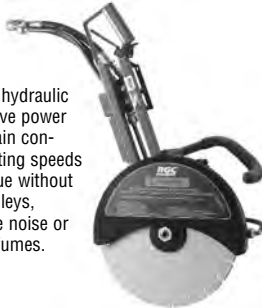
Model	C150™ w/15" Bar	C150™ w/20" Bar
Cutting Depth	15" (38.1 cm)	20" (50.8 cm)
Bar Size (approx.)	22-1/4" x 4" (55.9 cm x 10.2 cm)	26-1/2" x 4" (66.5 cm x 10.2 cm)
Flow	8 gpm (30 lpm)	8 gpm (30 lpm)
Pressure Range	2000-2500 psi (138-172 bar)	2000-2500 psi (138-172 bar)
Water Flow	3 gpm (11.4 lpm)	3 gpm (11.4 lpm)
Water Pressure (recmd.)	80-100 psi (4-5 bar)	80-100 psi (4-5 bar)

The original concrete cutting chain saw with years of proven performance



This rugged, versatile tool cuts clean, fast, precise, and straight through concrete, reinforced concrete, masonry stone and other aggregates.

Employs hydraulic direct drive power to maintain constant cutting speeds and torque without belts, pulleys, excessive noise or exhaust fumes.



HydraSaws

Specifications

Model	S14	S16	S20	S24
Blade Size	14" (35.5 cm)	16" (40.6 cm)	20" (50.8 cm)	24" (61 cm)
Cutting Depth	5-1/4" (13.3 cm)	6" (15.2 cm)	7-1/2" (19 cm)	9-1/2" (24 cm)
Blade Speed (max.)	4100 rpm	2750 rpm	1830 rpm	1455 rpm
Flow (max.)	5-8 gpm (20-30 lpm)	5-8 gpm (20-30 lpm)	5-8 gpm (20-30 lpm)	5-8 gpm (20-30 lpm)
Oil Pressure Range	2000-2500 psi (138-172 bar)	2000-2500 psi (138-172 bar)	2000-2500 psi (138-172 bar)	2000-2500 psi (138-172 bar)
Weight	28 lbs. (12.7 kg)	39 lbs. (17.7 kg)	52 lbs. (23.6 kg)	54 lbs. (24.5 kg)

Use **HydraCart** (with Ballast Box) or **SawCart** (Light Duty) cart for precise control for continuous, straight cutting in roadways, driveways, sidewalks and warehouse floors.



RGC® hydraulic Breakers provide greater impact force and a higher performance to weight ratio than the competitions'.

HydraBreakers

Specifications

Model	HB27	HB37E	HB47E	HB70E	HB89E
Weight Class	30 lb.	40 lb.	50 lb.	70 lb.	90 lb.
Weight	35 lbs. (15.9 kg)	51.6 lbs. (23.4 kg)	56.4 lbs. (25.6 kg)	69.4 lbs. (31.5 kg)	84.9 lbs. (38.5 kg)
Length (w/o steel)	24.5" (622 mm)	25" (635 mm)	28.7" (729 mm)	29" (738 mm)	30" (762 mm)
Steel Size Standard	7/8" x 3-1/4" 22 x 82.5 mm	1" x 4-1/4" 25 x 108 mm	1" x 4-1/4" 25 x 108 mm	1-1/4" x 6" 32 x 152 mm	1-1/4" x 6" 32 x 152 mm
Steel Size Optional	N/A	1-1/8" x 6" 28 x 152 mm	1-1/8" x 6" 28 x 152 mm	1-1/4" x 6-1/4" 32 x 160 mm	1-1/4" x 6-1/4" 32 x 160 mm
Impacts per Minute	2400	1600	1450	1270	1500
Impact Force	18.5 ft.-lbs. (25 J)	47.9 ft.-lbs. (65 J)	63 ft.-lbs. (85 J)	81 ft.-lbs. (110 J)	118 ft.-lbs. (160 J)
Maximum Flow	5 gpm (20 lpm)	5 gpm (20 lpm)	5 gpm (20 lpm)	5 gpm (20 lpm)*	8 gpm (30 lpm)
Pressure	2000 psi (138 bar)	2000 psi (138 bar)	2000 psi (138 bar)	2000 psi (138 bar)	2000 psi (138 bar)
Max. Back Pressure	145 psi (10 bar)	145 psi (10 bar)	215 psi (15 bar)	215 psi (15 bar)	215 psi (15 bar)

*Consult factory for 8 gpm flow option.

HydraPaks – Electric or Gasoline



The HydraPak is a powerful, portable hydraulic power unit that operates more efficiently and with less noise than other types of power systems. Take it with you to any jobsite in the back of your pickup or van, and use it to power all of your hydraulic tools.

Specifications – Electric HydraPaks

Model	HE1058	HE1010
Motor	10 hp Baldor	10 hp Baldor
Voltage	208-230V	208-230V
Current	30A	30A
Phase	3	3
Motor Starter	Optional	Yes
Flow	5 or 8 gpm (20 or 30 lpm)	0-10 gpm (0-38 lpm)
Pressure (maximum)	2250 psi (155 bar)	1750 psi (120 bar) 2000 psi (138 bar) 2500 psi (172 bar)
Weight	358 lbs. (163 kg)	375 lbs. (170 kg)
Hourmeter	Yes	Yes

Specifications – Gasoline HydraPaks

Model	HH1358	HV1658	HV1855	HV1858	HV1810	HV1810XL	HV2312
Engine	Honda 13 hp	B&S 16 hp Vanguard V-Twin	B&S 18 hp Vanguard V-Twin w/Auto Idle	B&S 18 hp Vanguard V-Twin w/Auto Idle	B&S 18 hp Vanguard V-Twin w/Auto Idle	B&S 18 hp Vanguard V-Twin w/Auto Idle	B&S 23 hp Vanguard V-Twin
Fuel Capacity	7 qt. (6.5 ltr)	9 qt. (8.6 ltr)	9 qt. (8.6 ltr)	9 qt. (8.6 ltr)	9 qt. (8.6 ltr)	9 qt. (8.6 ltr)	6 gal. (22.7 ltr)
Flow	5 or 8 gpm (20 or 30 lpm)	5 or 8 gpm (20 or 30 lpm)	5 gpm - runs 2 tools (20 lpm)	5 or 8 gpm (20 or 30 lpm)	0-10 gpm (0-38 lpm)	0-10 gpm (0-38 lpm)	10 Settings from 0-12 gpm (0-45 lpm)
Pressure (maximum)	2250 psi (155 bar)	2250 psi (155 bar)	2250 psi (155 bar)	2250 psi (155 bar)	1750 psi (120 bar) 2000 psi (138 bar) 2500 psi (172 bar)	1750 psi (120 bar) 2000 psi (138 bar) 2500 psi (172 bar)	2000 psi (138 bar) 2500 psi (172 bar)
Weight	240 lbs. (109 kg)	310 lbs. (141 kg)	315 lbs. (143 kg)	310 lbs. (141 kg)	319 lbs. (145 kg)	336 lbs. (152 kg)	350 lbs. (159 kg)
Hourmeter	Yes	Yes	Yes	Yes	Yes	Yes	Yes

The 853PRO Series Hydraulic Saws



High Performance for the Pro Cutter

ICS® developed the high-performance 853PRO Series Hydraulic Concrete Cutting Chainsaws for the Professional Concrete Cutter. This series of professional saws is built tough to stand up to everyday use in the harsh environment of concrete cutting. Get the unique versatility of a genuine ICS® concrete cutting chainsaw, including the ability to cut small mechanical openings and deep plunge cuts. You can cut up to 24 inches with our longest professional guide bar and you can cut to within .087" from a wall with the 853PRO-F Flush-cut Saw. Available in 8 gpm and 12 gpm.

Advantages and Uses

- Fast, efficient and versatile.
- Cuts mechanical openings quickly and perfectly.
- Narrow, straight plunge cuts up to 24 inches deep.
- Perfect square corners.
- Safe, reliable and easy to maintain.
- Chain tensioning system is guaranteed for the life of the saw.
- Low cost of operation.

Features

- Safety operating trigger prevents accidental starting.
- Automatic water valve integrated with hydraulic trigger provides water on demand.
- Built-in WallWalker® provides leverage advantage to make cutting easier.
- Modular design for easy service.
- Ergonomic rear handle allows multiple hand positions.
- Tough industrial finish on die-cast aluminum body for long lasting durability.

Specifications:

Weight

- With 15-inch bar and chain: 27.3 lbs. (12.4kg)
- With 19-inch bar and chain: 28.0 lbs. (12.7kg)
- With 24-inch bar and chain: 29.0 lbs. (13.2kg)

Available Bar Lengths

- 11 inches (28cm)
- 15 inches (38cm)
- 19 inches (48cm)
- 24 inches (61cm)

853PRO

Operating Speeds

5700 rpm
4900 sfm

Torque

95 in.-lbs.

Horsepower

11 hp

Hydraulic Supply*

8 gpm
(30 liters/min.)
2500 psi
(172.5 bar)

853PRO Plus

Operating Speeds

5500 rpm
4600 sfm

Torque

150 in.-lbs.

Horsepower

15 hp

Vibration Level

8 meters/second² (front handle) 8 meters/second² (front handle)

*For fixed-flow hydraulic systems producing more than 8 gpm (30 liters/min.), use ICS® Model 70350 Flow Adapter Valve.

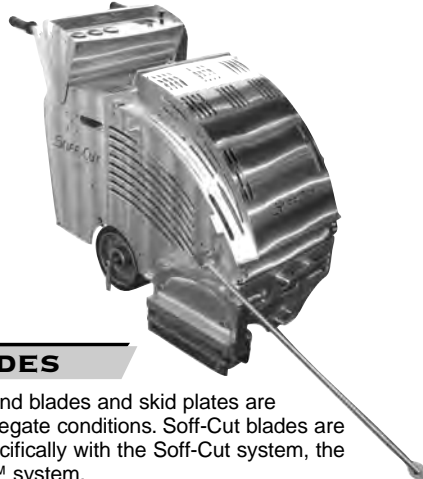


MODEL X-2500

The X-2500 self-propelled dry cutting gas saw has a low noise, enclosed design and is ideal for medium to heavy-duty commercial, industrial and paving applications. The X-2500 is designed for versatility, ease of use and high production capabilities. Three blade widths can be used, allowing for different joint widths and crack control simultaneously. Features include a 13.0 hp engine, halogen lighting system, electric remote key start and a cyclone air cleaner to increase engine longevity.

RECOMMENDED USAGE

Medium to Heavy-Duty:
Highways, Runways, Commercial,
Industrial, Overlays



EXCEL SERIES BLADES

Soff-Cut color coded patented diamond blades and skid plates are designed and tested to meet all aggregate conditions. Soff-Cut blades are top quality and designed to work specifically with the Soff-Cut system, the only true patented Ultra Early Entry™ system.



BLADE SIZES CUTTING DEPTH

Standard Blade

9" x .100" (229mm x 2.54mm)	5/8" to 1" (15.9 - 25.4mm)
10" x .100" (254mm x 2.54mm)	1-1/8" to 1-1/2" (28.6 - 38.1mm)

S-Blade

10" x .250" (254mm x 6.35mm)	1-1/8" to 1-1/2" (28.6 - 38.1mm)
10" x .380" (254mm x 9.65mm)	1-1/8" to 1-1/2" (28.6 - 38.1mm)

FLINT	CHERT	TRAP-ROCK	QUARTZ	GRANITE	LIMESTONE
5' - 6" BLADES					
				XL6-5000 (Yellow)	
				XL5, 5.5-5000 (Yellow)	
				XL6-3000 (Red)	
				XL5, 5.5-3000 (Red)	
				XL6-2000 (Green)	

FLINT	CHERT	TRAP-ROCK	QUARTZ	GRANITE	LIMESTONE
8' - 14" BLADES					
				XL-6000 (Black)	
				XL-5000 (Yellow)	
				XL-4000 (Orange)	
				XL-3000 (Red)	
				XL-2000 (Green)	
				XL-1000 (Purple)	

SKID PLATE REPLACEMENT

It is very important to always change the patented anti-ravel Skid Plate with each new Soff-Cut blade or chipping and spalling of the joint will result. The spacing between the blade and Skid Plate becomes greater as the blade cuts the concrete. Use only Soff-Cut products to ensure proper performance.



By Soff-Cut

High Speed Dry Cut Blades

For hand saws and walk behind saws up to 20 hp

Series	Size	Specification
Value (.250 DD Laser Segmented) General Purpose Application	12 x 110	PE-DCHL10
	12 x 125	PE-DCHL10
	14 x 110	PE DCHL10
	14 x 125	PE DCHL10
Premium (.350 DD Turbo Segmented) General Purpose Application	12 x 125	PE-DCHM30
	14 x 125	PE-DCHM30
Supreme (.250 DD Laser Segmented) General Purpose Application	12 x 110	PE-DCHH50
	14 x 110	PE-DCHH50
	14 x 125	PE-DCHH50



By Soff-Cut

Wet Cut Blades

For walk behind saws 20 hp and below

Description	Size	Specification
Cured Concrete Blades (.250" Diamond Depth)	12 x 110	PE-WCFL
	12 x 125	PE-WCFL
	14 x 125	PE-WCFL
	APPLICATION CHART	
	Hard Aggregate	PE-WCFL10
	Medium Aggregate	PE-WCFL30
Soft Aggregate	PE-WCFL50	
Asphalt Blades (.250" Diamond Depth) Undercut Protection: Drop Segment	14 x 140	PE-WCFL
	16 x 125	PE-WCFL
	16 x 140	PE-WCFL
	18 x 125	PE-WCFL
	18 x 140	PE-WCFL
	20 x 125	PE-WCFL
	20 x 140	PE-WCFL
	12 x 125	PE-WAFL90
	14 x 125	PE-WAFL90
	14 x 140	PE-WAFL90
Green/Asphalt Overlay Blades (.250" Diamond Depth) Undercut Protection: Vertical Inserts	16 x 125	PE-WAFL90
	16 x 140	PE-WAFL90
	18 x 125	PE-WAFL90
	18 x 140	PE-WAFL90
Green/Asphalt Overlay Blades (.250" Diamond Depth) Undercut Protection: Vertical Inserts	12 x 125	PEWGFL70
	14 x 125	PEWGFL70



CC1000 GREEN CONCRETE SAW

Go to Pages
796-802 to
see our
full line of
Diamond
bits and
blades.

The ultra light saw that cuts decorative and green concrete joints.

Center cut design – Better tracking into an existing cut and easier to keep the cut straight

Quick, easy and lightweight (90 lbs.)

Power transmission to blade drive is via 2 molded notch 3VX premium belts – for better cutting performance and longer belt life.

Cyclone air cleaner for increased engine longevity

Front and rear pointers

1" arbor with greaseable bearings

Adjustable blade alignment

1/8-inch steel frame

Dust diverter keeps saw line visible

Cutting depth up to 2-1/4" with 8-inch blade

Upcut design for a cleaner cut

CC1000 Green Concrete Saw					
Model No.	Engine Type	P/N	Cat. No.	Blade Capacity	Uncrated Wt.**
CC1055H	5.5 HP Honda	5800551	46851	8"	90 lbs.
CC1025E	2.5 HP Electric 1PH - 110V/230V	5800552	47104	8"	90 lbs.

**Add 30 lbs. for crated weight.

CC1000 Specifications

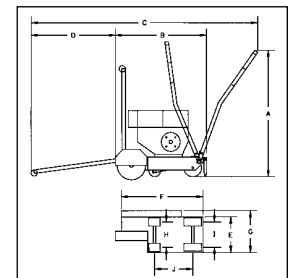
Maximum Depth of Cut:	2-1/4"
Blade Shaft RPM:	6,100
Blade Shaft Diameter:	1"
Arbor Size:	1" Diameter
Front Wheels:	3" x 2" x 3/4"
Rear Wheels:	5" x 2" x 3/4"

Heavy Duty Orange Blades for Green Concrete

	GCS100H Soft Bond	GCS200H Medium Bond	GCS300H Hard Bond
SIZE	Cat. No.	Cat. No.	Cat. No.
8" x .100 x 1	44486	44487	44488
8" x .125 x 1	44489	44490	44491
8" x .250 x 1	44492	44493	44494

CC1000 Dimensions

A	Saw Height	34-1/2"
B	Min. Length, Pointer Up	26-1/2"
C	Max. Length, Pointer Down	56"
D	Pointer Extension	18"
E	Frame Width	10"
F	Frame Length	23-1/2"
G	Saw Width	14-1/2"
H	Front Axle Center Length	6-1/2"
I	Rear Axle Center Length	7"
J	Wheel Base Length	11"
	Blade Shaft Max. Height	4-7/8"





CC1300XL SERIES CONCRETE SAW

The Portable Concrete Saw Built Extra Tough



**CC1313HSXL
with 13 HP
Honda engine**

Extra sturdy handles adjustable to 4 positions for precise control. Doesn't rattle like other adjustable handles.

Available with Honda gas engine or with optional 5 HP electric motor (1 or 3 phase).

Available as an optional 10 HP electric saw with 20" blade capacity (on an extended frame).

Left or right hand sawing.

Through rear axle for added strength.

6-5/8" maximum cutting depth with 18" blade guard.

Solid, sealed self aligning blade shaft ball bearings.

Go to Pages 796-802 to see our full line of Diamond bits and blades.

CC1300XL Push Saws with Hand Wheel Screw Feed Raise and Lower System

Model No.	Engine Type	P/N-14" Model	Cat. No. 14"	P/N-18" Model	Cat. No. 18"	Uncrated Wt.**
CC1309HS-XL	9 HP Honda	5800575	75066	5800579	75070	225 lbs.
CC1313HS-XL	13 HP Honda	5800576	75067	5800571	69995	250 lbs.
CC1305E1-XL	5 HP Lincoln - 1 PH Electric	5800577	75068	5800580	75071	210 lbs.
CC1305E3-XL	5 HP Lincoln - 3 PH Electric	5800578	75069	5800581	75072	215 lbs.
CC1310E3-20-XL	10 HP - 3 PH 460V Electric with switchbox and 20" Guard	P/N. - 20" Gd. 5800589	Cat. No. 20" Gd. 85970	---	---	215 lbs.

**Add 40 lbs. for crated weight.

CC1300XL Options

Description	P/N	Cat. No.
Water Tank Kit* (5 gallon)	6048213	75206
Extra Blade Guard 14"	6048010	47056
Extra Blade Guard 18"	6048012	02614
Catalytic Muffler 13 HP Honda	2501567	78637
Extended Blade Shaft Kit for up to 1" Spacing	6048107	48388

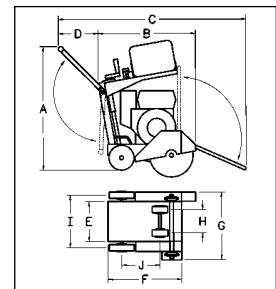
*For dust suppression when dry cutting only. Water tank kit not available on electric saw models.

CC1300XL Specifications

Maximum Depth of Cut with 14" Blade:	4-5/8"
Maximum Depth of Cut with 18" Blade:	6-5/8"
Maximum Depth of Cut with 20" Blade:	7-5/8"
Blade Shaft RPM:	2,600
Blade Shaft Diameter:	1-1/4"
Arbor Size:	1" Dia. with Single Drive Pin

CC1300XL Dimensions

A	Saw Height	40"
B	Min. Length, Pointer Up, Hdl. Down	31-1/4"
C	Max. Length, Pointer Down, Hdl. Up	60"
D	Handle Extension	13-1/2"
E	Frame Width	12-3/4"
F	Frame Length	23-5/8"
G	Saw Width	22-3/4"
H	Front Axle Center Length	7-1/2"
I	Rear Axle Center Length	16-3/4"
J	Wheel Base Length	12-5/8"
	Blade Shaft Max. Height	10-1/2"





CONCRETE SAW



CC2500 SERIES CONCRETE SAW

Go to Pages
796-802 to
see our
full line of
Diamond
bits and
blades.

Delivers the Power of a Large Saw with the Compactness and Economy of a Small One!

Economical screw feed raise and lower mechanism standard or with optional power raise/lower assembly

Positive gear drive to rear axle via Eaton hydrostatic transmission

Now offered with hydraulic raise/lower on all models

Maximum cutting depth 10-3/8" with 26" guard

2-position tilt handle bars

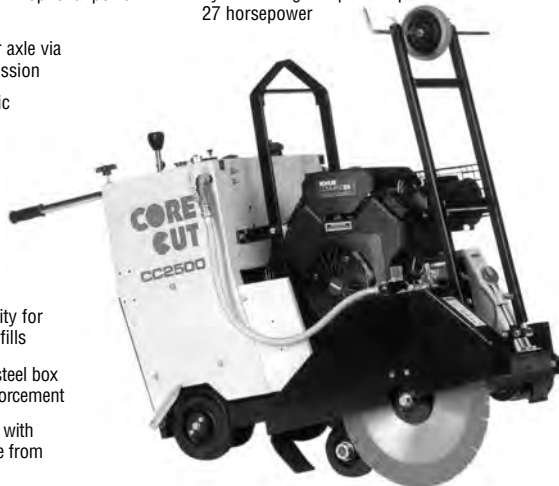
Choice of 14", 20" or 26" slip-on blade guards

Large 5-Gallon fuel capacity for longer sawing between refills

Rigid high strength 3/16" steel box frame with heavy bar reinforcement

1-1/2" diameter bladeshaft with bearings that are greasable from the top of the frame

Variety of gas, diesel, electric or hydraulic engine options up to 27 horsepower



CC2500 Specifications

Maximum Depth of Cut: 10-3/8"
Maximum Shaft Diameter: 1-1/2"
Arbor Diameter: 1" with single drive pin
Blade Shaft Bearings: Self-aligning pillow block ball
Blade Shaft Drive: 4 belt through 25 HP, 5 belt for 27 HP
Blade Mounting: Right or left
Blade Raise and Lower: Precision ACME screw feed standard, power raise/lower assembly optional
Blade Coolant: Dual multi-spray tubes
Blade Guard Attachment: Slip-on
Front Wheel Dimensions: 6" x 2" x 1"
Rear Wheel Dimensions: 8" x 2" x 1"
Handle Bars: Tilt
Transmission: Eaton Model 6
Drive Speed: 0-130 feet per minute
Fuel Capacity: 5 gallons
Electric Start: Standard
Tach/Hour Meter: Standard
Low Oil Alert: Standard
Cutting Depth Indicator: Standard
Quick Disconnect Blade Flanges: Standard
Frame Lift: Standard

CC2500 Saws

Model No.	Engine Type	P/N	Cat. No.	Blade Capacity	Uncrated Wt. *
CC2515E-14	15 HP Leeson Electric**	5800400	48413	14"	700 lbs.
CC2515E-20	15 HP Leeson Electric**	5800401	48022	20"	710 lbs.
CC2515E-26	15 HP Leeson Electric**	5800402	48414	26"	720 lbs.
CC2520H-14	20 HP Honda ♦	5800406	48418	14"	600 lbs.
CC2520H-20	20 HP Honda ♦	5800407	47164	20"	610 lbs.
CC2520H-26	20 HP Honda ♦	5800408	48419	26"	620 lbs.
CC2524H-14	24 HP Honda ♦	5800492	48423	14"	590 lbs.
CC2524H-20	24 HP Honda ♦	5800493	48424	20"	600 lbs.
CC2524H-26	24 HP Honda ♦	5800494	48425	26"	600 lbs.
CC2525HY-14	25 HP Hydraulic †	5800489	48426	14"	600 lbs.
CC2525HY-20	25 HP Hydraulic †	5800490	48427	20"	600 lbs.
CC2525HY-26	25 HP Hydraulic †	5800491	48428	26"	600 lbs.
CC2527KC-14	27 HP Kohler Command ♦	5800597	79036	14"	600 lbs.
CC2527KC-20	27 HP Kohler Command ♦	5800598	79037	20"	610 lbs.
CC2527KC-26	27 HP Kohler Command ♦	5800599	78816	26"	620 lbs.

**Specify 230V or 460V. 575V motors available upon request. 50 cycle motors also available (includes motor switch box).
♦Includes remote cyclone air cleaner. †Requires 25 GPM @ 2500 PSI maximum input flow.

*Add 70 lbs. for crated weight.

CC2500 Options

Description	Part No.	Cat. No.
Water Safety Switch*	6047932	47451
Water Pump (electric)*	6047933	48432
Spot Light*	6047934	48433
Electric Raise/Lower Assy. for Gas/Diesel Saw	6047967	48002
Electric Raise/Lower Assy. for Electric Saw**	6047970	47467
Electric Raise/Lower Assy. for Hydraulic Saw**	6047980	52974
Hydraulic Raise/Lower Assy. for Gas/Diesel Saw	6047997	78817
Hydraulic Raise/Lower Assy. for Electric Saw**	6047998	79041
Hydraulic Raise/Lower Assy. for Hydraulic Saw**	6047999	79042
Extended Blade Shaft Kit for:		
Spacing Blades 3/4" to 1-1/2"	6011185	48434
Spacing Blades 1-1/2" to 2-1/4"	6011186	48141
Catalytic Muffler for 20 HP Honda Engine	2501566	77694
Extra Slip-On Blade Guards:		
14" Capacity	6010070	02395
20" Capacity	6010072	02397
26" Capacity	6010074	02398

*Not available on models CC2515E or models CC2525HY without Power Raise/Lower Assembly.
**Includes battery and alternator.

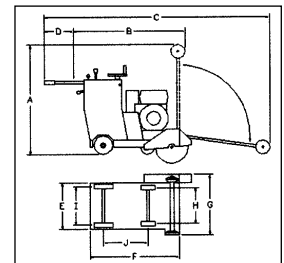
Cutting Depth Chart

Blade Diameter	14"	20"	26"
Cutting Depth	4-3/8"	7-3/8"	10-3/8"

CC2500 Dimensions

A Saw Height	47-1/2"
B Min. Length, Pointer Up, Hdl. In	47-1/2"
C Max. Length, Pointer Down, Hdl. Out	107-1/2"
D Handle Extension	24"
E Frame Width	20"
F Frame Length	38"
G Saw Width	26-1/2"
H Front Axle Center Length	15-1/2"
I Rear Axle Center Length	17-3/4"
J Wheel Base Length	20"
Blade Shaft Max. Height	14-1/2"

Crated Saw Dimensions: 52"L x 34"W x 55"H



Hardware & Supply Co., Inc.
Supply, Inc. of Virginia
Form Rentals

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Metro (703) 569-6660 • VA (703) 455-6700
Clinton, MD (301) 877-8640



DIAMOND CORE RIGS

Go to Page
796 to
see our
full line of
Diamond
core bits.

M-1 Drill Rig

Our Best Selling Core Rig

- ◆ 1" to 10" bit capacity (14" with one spacer).
- ◆ Dual switch/outlet control panel and amp meter.
- ◆ Slide handle permits drilling in tight areas.
- ◆ Streamlined base and carriage.
- ◆ 2-1/2" square column with black oxidized finish.
- ◆ Quick changeover from vacuum to anchor base.
- ◆ 6" wheels for better mobility.



M-2 Drill Rig

The #1 Pro Rig In America

- ◆ Dual switch/outlet control panel & amp meter.
- ◆ 4-spoke handle.
- ◆ Chrome plated 2-7/8" square mast.
- ◆ Quick changeover from vacuum to anchor base.
- ◆ 10" bit capacity (up to 36" with spacers and a hydraulic motor and pillow block).
- ◆ 6" wheels for better mobility.



M-3 Star Rig

Light Weight And Economical

- ◆ Single switch/outlet control panel & amp meter.
- ◆ Slide handle permits drilling in tight areas.
- ◆ Mast swivels 360° in combination base.
- ◆ 1-1/2" square mast.
- ◆ 1/2" to 6" bit capacity.
- ◆ Compact size for hard-to-access location drilling.

M-4 Rig

3-Speed, Very Powerful And Just 35 lbs.

- ◆ 6" bit capacity (3" handheld).
- ◆ Converts to hand held drill motor in seconds.
- ◆ Combination Stand quickly angles to 45 degrees.
- ◆ 3-speed hand held drill motors with overload clutches are available with choice of 110V electric, 220V electric, air or hydraulic power.
- ◆ Mast can rotate 360 degrees on swivel stand.
- ◆ Reversible slide handle (use on left side or right side of rig).
- ◆ High strength, hard anodized, 1-1/2" x 2" aluminum column.
- ◆ 4 adjustable slide bearings provide superior carriage rigidity.
- ◆ Carriage Lock.



M-5 Drill Rig

Our Best Selling Core Rig

- ◆ The most lightweight rig of any in its class (combo stand, wheel kit and switch box weighs just 52 lbs.).
- ◆ 12-inch bit capacity (up to 36" with spacers and hydraulic motor and power pack).
- ◆ Easy quick-disconnect motor mount.
- ◆ Angle drilling up to 45°.
- ◆ Easily adjustable slide bearings.
- ◆ Columns available up to 60".
- ◆ Quick release vacuum button.
- ◆ Extruded all aluminum lightweight column built with strength and hard anodized for wear.
- ◆ Double column support for increased stability.
- ◆ Positive carriage lock.
- ◆ 4-spoke sliding handle (can be used on either side).
- ◆ Available with choice of electric, hydraulic or air motors.
- ◆ Convenient easy carrying handle (ceiling jack available).
- ◆ Very affordably priced!



Electric Motor

WEKA DK12

- ◆ Hand held and portable.
- ◆ 14 Amp.
- ◆ 580 / 1400 / 2900 rpm.
- ◆ Part No. 4244017.



Combi Series Saws for Tile, Stone, Marble and Granite

21st Century Saws – Designed for the most demanding jobs, saws from IMER USA are built for accuracy and longevity. Today's tile and stone pieces have expanded in size all the way up to 24" and beyond. Because of this many conventional push tray saws have seen their performance capabilities challenged or exceeded, leaving a lot of contractors scratching their heads and struggling. The answer for many of those contractors across the country has been to invest in one of our saws.

200

- 8" blade capacity.
- 3/4 hp 110v sealed motor.
- 17.5" of cutting length.
- Head tilts to 45 degrees for miter cuts.



250 V2

- 10" blade capacity.
- Weighs only 85 lbs.
- Pivoting head for plunge cuts.
- 1.5 hp 110v 14 amp fully enclosed motor.
- 30" rip cutting length, at 90 or 45 degrees.
- Accuracy to 1/32".
- Head tilts to 45 degrees for precise miter cuts.
- Diagonal cuts on 20" x 20" tiles or stones.



1000

- 14" blade capacity.
- 3 hp single phase 220v belt drive motor.
- 40" cutting length, accuracy to 1/32".
- Cutting head tilts to 45 degrees.
- Plunge cuts up to 4-3/4".



3000

- 14" blade with automated head travel.
- 4 hp single phase 220v belt drive motor.
- 10-foot (3M) cutting length, accuracy to 1/24".
- Cutting head tilts to 45 degrees.
- With forklift tubes built into the CC3000, it can be easily loaded and taken to the jobsite!



Advanced Sawing Technology



Stainless Steel Cutting Surface – All the tile and stone saws feature a stainless steel cutting surface. Stainless steel eliminates most wear and corrosion, and is also extremely strong. Load up our saws with big pieces of granite or 24" x 24" pavers. Don't worry, they are built to take it!



Water Pumps – Constant water flow is guaranteed with our continuous duty rated water pumps. Pump life is further enhanced by IMER's unique pump sump design—all the pumps are submerged in a specially designed sump area, thereby only pumping the cleanest water.



Water Pan – IMER's water pans are made from special thermal plastic materials, making them completely corrosion proof. This type of plastic can survive extreme heat or cold, while also taking the assorted lumps and bumps that exist on every jobsite.



45 Degree Cuts – No accessory kit needed! All IMER saws tilt to 45 degrees for the absolute best in accuracy and production volume. IMER's Short Cut 14" is the only masonry saw on the market that has this feature.



Accuracy – To accurately cut tile or stone requires a rigid and precise system to guide a diamond blade through the material. Our competitors place the material on a tray and roll it through the blade; it's been this way for years and years.



Construction – When metal arrives at our factory it is shaped, welded, painted and assembled into the finest machines in the world. IMER has the ability to design, test, fabricate and assemble these sawing machines all under one roof. Compare an IMER saw to its competitors. Which product

has the fit, finish and construction integrity that makes you want to own it?



- Cutting asphalt or concrete • Utility work • Patch work
- Curb cutting • Demolition • Street repair • Sensor installation

Why you should use a Sawtec Air Powered Saw

Sawtec® air powered saws are environmentally friendly alternatives to gasoline powered saws. They cut to depths of up to 8", depending on model. Air saws offer many advantages:

- **Less maintenance** than comparable gas saws—no gas lines or carburetors to clog. Less maintenance translates directly to reduced expenses and less down time.
- **Lighter weight, easier to handle**, yet still rugged and dependable.
- **Fewer pollutants**—gas exhaust fumes are eliminated.
- **Convenient** for contractors, public works departments, rental companies and others who commonly use air powered tools.
- 3,300 RPM saws feature **unique gear box designs** that provide increased power and torque, resulting in improved production and cutting depth.
- 5,250 RPM saws feature **direct drive motors** with no belts, pulleys or chains to break or drain horsepower.

Always wear respirator protection, appropriate for the application, as specified by OSHA regulations and your employer. Never operate or maintain equipment before reading and understanding the instructions for operation and maintenance. Obey all safety signs and instructions while operating or maintaining equipment.

AIR POWERED WALK-BEHIND SAWS

Sawtec® walk-behind, air powered saws are dependable saws for cutting concrete and asphalt. Saws cut 4" or 8" deep, depending on model. Sawtec saws are designed for use with diamond blades only.

- Low maintenance design.
- Lighter weight than comparable gas saws.
- Oiler included for quick check of fluid level.
- Use indoors or outdoors—no gas exhaust pollutants.
- Cuts dry or wet. Built-in adapter for water hose connection to suppress dust. Water tank kit available for self contained water supply when cutting wet.
- FS-60 saw uses a direct drive motor with no belts, pulleys or chains to break or drain power.
- FS-150 air motor features a unique gear box design for increased power and torque.



Specifications

	FS-60	FS-150
Production Capacity: (Concrete or Asphalt)	10' - 12' a minute at 1" depth*	10' - 12' a minute at 1" depth*
Power Source:	Direct drive air motor	Air motor with gear box
RPM:	5,250	3,300
Operating Requirements:	90 cfm @ 100 psi	90 cfm @ 100 psi
Maximum Cutting Depth:	4"	8"
Diameter Blades Used:	12" - 14"	12" - 20"
Maximum Blade Width:	0.250"	0.250"
Whip Hose (Air Hose):	3/4" hose, 1/2" NPT, 6' long	3/4" hose, 1/2" NPT, 6' long
Oiler:	#5-PF, 1/2" NPT	#5-PF, 1/2" NPT
Dimensions (L x W x H)**:	41" x 16" x 30 - 39.5"	55" x 16" x 30 - 39.5"
Weight:	86 lb.	106 lb.

* Production rates may differ due to job variations. Figures are provided as guidelines and are not guarantees of performance.

** Length is measured from front of base to end of handle.

AIR POWERED HAND-HELD SAWS

Sawtec® hand-held, air powered saws are portable tools for cutting concrete, pipe and asphalt. Saws cut to depths of 3" to 7", depending on model. Sawtec saws are designed for use with diamond blades only.

- Cuts dry or wet.
- Low maintenance, lightweight design.
- Oiler for quick check of fluid level.
- No gas engine emissions—great for pile cutting and below grade applications.
- Ideally suited for utility work, cutting trenches or areas affected by water; no belts to slip or motor problems as with gas saws.
- Built-in adapter for water hose connection to suppress dust.
- Hand-held saws can be used with a dolly to convert into a walk-behind saw.



• Pipe cutting • Demolition • Breaking out concrete and asphalt • Pile cutting • Bridge repair • Sidewalk repair



Specifications

	HS-50	HS-100	HS-125	HS-150
Production Capacity: (Concrete or Asphalt)	10' - 12' a minute at 1" depth*	10' - 12' a minute at 1" depth*	10' - 12' a minute at 1" depth*	10' - 12' a minute at 1" depth*
Power Source:	Direct drive air motor	Direct drive air motor	Air motor with gear box	Air motor with gear box
RPM:	5,250	5,250	3,300	3,300
Operating Requirements:	90 cfm @ 100 psi	90 cfm @ 100 psi	90 cfm @ 100 psi	90 cfm @ 100 psi
Maximum Cutting Depth:	3"	4"	4"	7"
Diameter Blades Used:	12"	12" - 14"	12" - 14"	12" - 18"
Maximum Blade Width:	0.125"	0.125"	0.250"	0.250"
Whip Hose (Air Hose):	3/4" hose, 1/2" NPT, 6' long	3/4" hose, 1/2" NPT, 6' long	3/4" hose, 1/2" NPT, 6' long	3/4" hose, 1/2" NPT, 6' long
Oiler:	#5-PF, 1/2" NPT	#5-PF, 1/2" NPT	#5-PF, 1/2" NPT	#5-PF, 1/2" NPT
Dimensions (L x W x H)**:	24" x 11" x 12"	25" x 11" x 12"	27" x 12.5" x 13"	29" x 12.5" x 13"
Weight:	20 lb.	22 lb.	26 lb.	28 lb.

* Production rates may differ due to job variations. Figures are provided as guidelines and are not guarantees of performance.

** Length is measured from front of base to end of handle.

Always wear respirator protection, appropriate for the application, as specified by OSHA regulations and your employer. Never operate or maintain equipment before reading and understanding the instructions for operation and maintenance. Obey all safety signs and instructions while operating or maintaining equipment.



CC500M SERIES MASONRY SAW

Many Operating and Convenience Features in a Variety of Power Options

CC555M-H Gas Powered Saw

(Shown with optional stand)

- ◆ Gas or electric power
- ◆ Stay level guard
- ◆ Removable head
- ◆ Open throat cutting
- ◆ Legs standard on all saws
- ◆ Side carrying handles
- ◆ Easy, safe access to depth control lock



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see our
full line of
Diamond
bits and
blades.

CC500M Masonry Saws*

Model No.	Power Source	P/N	Cat. No.	Wt. ♦
CC515M-E1	1.5 HP Baldor-115/230V Electric**	5800373	46892	194 lbs.
CC525M-E1	2.5 HP Baldor-115/230V Electric**	5800375	46901	196 lbs.
CC530M-E1	3.0 HP Baldor-1PH-230-50HZ Electric	5800424	47294	205 lbs.
CC555M-H	5.5 HP Honda	5800376	47036	172 lbs.

*Water pump is standard on all models.

♦Add 25 lbs. for crated weight.

**All electric motors are single phase.

CC500M Specifications

Maximum Depth of Cut: 5"
Maximum Shaft Diameter: 7/8"
Arbor Diameter: 1"
Blade Shaft Bearings: Flange block ball bearings
Blade Shaft Drive: 2 belt
Blade Mounting: Right (electric), Left (gas)
Blade Raise and Lower: Counterbalanced, spring tensioned head pivots on (2) 7/8" flange block bearings
Blade Coolant: Dual spray tubes, pump fed (electric motors) garden hose connection gas units
Air Filter: 3 stage Cyclone (gasoline models only)
Fuel Capacity: 1 Gallon
High Temperature Shut-Off: Standard (electric models only)
Starter: Recoil on gasoline models, capacitor on electric models

CC500M Dimensions

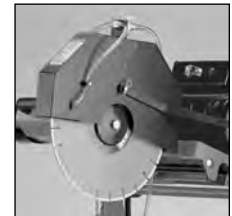
A Saw Length	34"
B Saw Width	24-3/4"
C Saw Height	32-7/8"
D Stand Height	27"
E Total Height	58-3/8"
F Arbor Height Over Cart	15-3/8"
G Cart Travel	20-3/4"

Dimensions are with electric motor with cutting head raised to maximum height.

Standard Features



For ease of transport, we've made CC500M saw head removal simple – just pull two locking pins and lift off head. We put our cutting depth adjustment on the side of the frame so you don't have to reach around or go behind the saw.



The CC500M stay-level blade guard provides the operator with safety and convenience while sawing. Our pivot mechanism resists slurry build-up, which could affect pivoting performance.

Our 5.5 HP Honda gas engine features a Cyclone Air Cleaner which protects the engine from dust and foreign material.



Masonry electric saws have dual run and start capacitors for minimal amp draw at start up. Our high torque motors use a premium starter capacitor box with a sealed manual thermal overload reset. Our 2.5 HP motor is the largest dual voltage motor in its class. We outfitted our motor with a convenient front facing voltage switch and a side mounted water pump outlet.

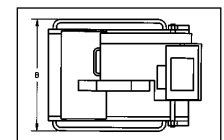
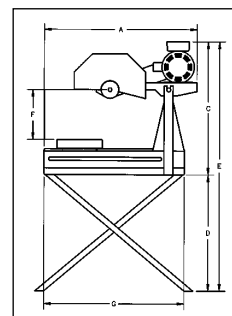
Amp draw: 1.5 HP – 13.4 amps @ 115V
2.5 HP – 21.0 amps @ 115V



We enclosed the blade shaft and bearings in a slurry and dust free compartment to ensure long bearing life. The blade shaft cover plate allows easy access for greasing bearings. Our flange block bearings make bearing replacement easy without the need for a hydraulic press or other special tools.

Masonry Saw Options

Description	Part No.	Cat. No.
Folding Stand	2500839	46870
Folding Stand Upgrade*	6030042	46893
Stand and Wheel Kit	6030040	48547
Cord 50' 12GA 115V 20A Twist to 15A Straight	4699100	47884
Cord 100' 12GA 115V 20A Twist to 15A Straight	4699101	48548





CORE CUT TILE SAWS

Go to Pages
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see our
full line of
Diamond
bits and
blades.

Feature Loaded Tile Saws that Deliver Power, Performance and Reliability

CC400T

- ◆ 4-1/2" Portable Wet Tile/Masonry Saw.
- ◆ 1/2 HP carbon brush motor.
- ◆ Operates with masonry, turbo or segmented blades.
- ◆ Maximum 1-1/2" cutting depth and 45° miter cuts.
- ◆ Blade Shaft installed with water sealed protection to insure durability.



Accessory Kit Included
(Comes with plastic carrying case)

CC700T

- ◆ 7" blade capacity.
- ◆ 3/4 HP high torque motor that runs very quietly.
- ◆ Rip cut up to 17", Diagonal cut to 12°.
- ◆ Motor is protected from water and cutting spray beneath the removable water tray.
- ◆ Convenient carrying handles.
- ◆ Saw weighs only 72 lbs.
- ◆ Automatic thermal overload protection prevents power surges and overheating.
- ◆ Blade guard fully opens for quick and easy blade replacement.
- ◆ Replaceable Liquid Cooled Bearing Housing prevents ball bearings from overheating.



CC600T

- ◆ Lightweight (43 lbs.) portable version of CC700T Saw.
- ◆ 6" - 7" blade capacity.
- ◆ 1-1/2 HP carbon brush motor provides 6000 RPM on the blade shaft.
- ◆ Rip cut up to 17", Diagonal cut to 12°.
- ◆ Water pump provides high output for blade protection.
- ◆ Automatic Thermal Overload Protection prevents power surges and overheating.
- ◆ Water tray is easy to install and remove.
- ◆ Liquid Cooled Bearing Housing extends bladeshaft bearing life.
- ◆ Comes with 45° and 90° Rig Guide and Miter Block.



CC800T

- ◆ 9-1/4" blade capacity.
- ◆ Powerful 1-1/2 HP motor.
- ◆ Rip cut up to 18", Diagonal cut to 12°.
- ◆ Adjustable guide rails for easy saw alignment.
- ◆ Cutting head pivots easily for 45° miter cutting.
- ◆ Solid steel frame.
- ◆ Convenient carrying handles.
- ◆ Automatic thermal overload protection prevents power surges and overheating.
- ◆ Durable high fiber ABS water tray is easy to install and remove.
- ◆ Replaceable Liquid Cooled Bearing Housing extends bladeshaft bearing life.



CC900TE and CC900T

- ◆ CC900TE is the lightweight (98 lbs.) portable version of the CC900T saw.
- ◆ 10" blade capacity.
- ◆ 1-1/2 HP high torque motor.
- ◆ Rip cut up to 20", Diagonal cut to 14°.
- ◆ Convenient carrying handles.
- ◆ Plastic water tray (CC900TE) or stainless steel water tray (CC900T) can be easily removed for cleaning.
- ◆ Replaceable Liquid Cooled Bearing Housing extends bladeshaft bearing life.
- ◆ Solid steel frame.
- ◆ Blade guard with brush for additional blade cooling protection and overspray.



CC1000T

- ◆ Time saving, powerful 10" saw for cutting large pieces of tile, marble, granite, stone and masonry.
- ◆ 10" blade capacity.
- ◆ 1-1/2 HP high torque motor.
- ◆ Rip cut up to 24", Diagonal cut to 18°.
- ◆ Convenient carrying handles.
- ◆ Removable stainless steel water tray.
- ◆ Replaceable Liquid Cooled Bearing Housing extends bladeshaft bearing life.
- ◆ Solid steel frame.
- ◆ Blade Guard with Brush for additional blade cooling protection and overspray.
- ◆ Optional folding stand and wheel kit available.



Tile Saw Specifications

Model No.	CC400T	CC600T	CC700T	CC800T	CC900TE	CC900T	CC1000T
Diamond Products Part No.	5800557	5800558	5800554	5800555	5800559	5800556	5800572
Diamond Products Catalog No.	65018	65019	56912	56913	65020	56914	72483
Blade Capacity	4-1/2"	7"	7"	9-1/4"	10"	10"	10"
Motor	1/2 HP	3/4 HP	3/4 HP	1-1/2 HP	1-1/2 HP	1-1/2 HP	1-1/2 HP
Amps	15	15	15	15	15	15	15
Cycle	115V/60Hz	115V/60Hz	115V/60Hz	115V/60Hz	115V/60Hz	115V/60Hz	115V/60Hz
Phase	1	1	1	1	1	1	1
Arbor Diameter	20mm	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
Maximum Depth of Cut	1-1/4"	1-3/4"	1-3/4"	3-1/4"	3-1/2"	3-3/4"	3-3/4"
Maximum Diagonal Cut	----	12"	12"	12"	14"	14"	18"
Maximum Rip Cut	----	17"	17"	18"	20"	20"	24"
Weight	6-1/2 lbs.	43 lbs.	72 lbs.	95 lbs.	98 lbs.	111 lbs.	115 lbs.
Dimensions (LxWxH) (inches)	9 x 9 x 7	33 x 20 x 16	39 x 24 x 24	38 x 20 x 19-1/2	39 x 24 x 24	39 x 24 x 24	43 x 26 x 24

Tile Saw Accessories - Part No. (Cat. No.)

Model No.	CC600T	CC700T	CC800T	CC900TE	CC900T	CC1000T
Folding Stand with Workbench	6043000 (57687)	6043000 (57687)	6043000 (57687)	----	----	----
Folding Stand with Wheel Kit	----	----	----	6043003 (57690)	6043003 (57690)	6043003 (57690)
Adjustable Angle Guard	6043001 (57688)	6043001 (57688)	6043001 (57688)	6043004 (57691)	6043004 (57691)	----
Tile Blade Sharpening Block	----	SS1000 (48960)	----	----	----	----
Side Extension Cutting Table	----	----	----	6043006 (57693)	6043006 (57693)	----

STIHL Cutquik® Cut-Off Machines

When you think of concrete, metal, asphalt, masonry, stone and ductile iron, you think tough. And when these are the kinds of materials you're dealing with, you'd better think about a STIHL Cutquik® cut-off machine. Construction sites, demolition work or rescue operations – whenever the going gets rough – STIHL Cutquik® cut-off machines provide all the power and portability needed for fast, easy cutting.

TS 400 *#1 selling STIHL cut-off machine worldwide*



The TS 400 is a trusted performer from the number one name in cut-off machines worldwide. Features of the TS 400 are extremely long running times, a reduction in service intervals plus outstanding cutting performance. Available with either a 12" or 14" cutting wheel, the TS 400 offers many features that are exclusive to STIHL, including semi-automatic belt tensioner and the ElastoStart™ shock-absorbing starter handle.

The TS 400 has an exceptional power-to-weight ratio combined with a high-performance torque curve. The unit also features an innovative 3-stage, multi-element, air filter system designed to maximize engine life. The TS 400 has excellent balance and long-life durability.

The new X2 Air Filtration System, standard on the STIHL TS 700 and TS 800, revolutionizes the cut-off machine industry with twice the filter life of former systems and maintains STIHL's incredible 99.96% cleaning efficiency.

TS 700 *With the X2 Long Term Filtration System*



The TS 700 is lightweight, well balanced and features a brand new 5 point, dual element vibration control system for exceptional operator comfort. Loaded with innovative features like the semi-automatic belt tensioner, the TS 700 is the right choice for demanding professionals.

TS 460 *Compact powerful unit for heavy-duty work*



The TS 460 has excellent power-to-weight ratio. This unit also offers vibration dampening, an enclosed starter recoil system, a multi-stage air filter and a compact, ergonomic top handle design. This machine uses a 14" cutting wheel.

TS 760 *STIHL's most powerful cut-off machine in 14" and 16" versions*



STIHL's most powerful cut-off machine. Designed for cart use and heavy-duty applications which require greater engine power. The EASYSTART® system with decompression valve and 3-stage air filter is standard. Available with 16" wheel for deeper cuts.

TS 800 *With the X2 Long Term Filtration System*



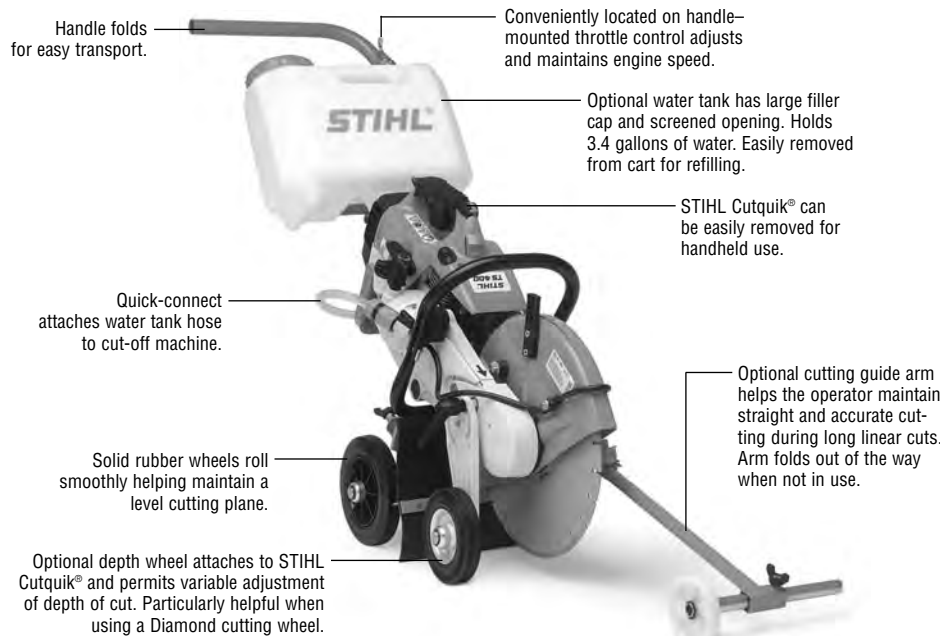
Just like the TS 700, the new TS 800 with the X2 long term filtration system is designed for extended cutting service. This machine does the job of other large walk-behind machines with a deep cutting 16" wheel.

IMPORTANT INFORMATION: Improper use of any power tool may cause serious or fatal injury. Read, understand and follow carefully the operating and safety instructions in your owner's manual before using these products.

	TS 400	TS 460	TS 700	TS 760	TS 800
Displacement	64.1cc (3.91 cu. in.)	72.4cc (4.42 cu. in.)	98.5cc (6.0 cu. in.)	111cc (6.77 cu.in.)	98.5cc (6.0 cu. in.)
Engine Power	3.2kW (4.4 bhp)	3.5kW (4.75 bhp)	5.0kW (6.7 bhp)	4.8kW (6.5 bhp)	5.0kW (6.7 bhp)
Weight					
With 12" wheel guard:	9.45kg (20.8 lbs.)				
With 14" wheel guard:	9.8kg (21.6 lbs.)	10.65kg (23.5 lbs.)	11.9kg (26.2 lbs.)	13.7kg (30.2 lbs.)	13.2kg (28.7 lbs.)
With 16" wheel guard:				15.4kg (34 lbs.)	
Fuel Capacity	740cc (25 oz.)	960cc (33.4 oz.)	1200cc (40.6 oz.)	1200cc (40.5 oz.)	1200cc (40.5 oz.)
Engine Speed	9,700 rpm (Elec. gov)	9,500 rpm (Elec. gov)	9,800 rpm (Elec. gov)	9,200 rpm (14") 8,400 rpm (16") (Elec. gov)	9,000 rpm (Elec. gov)
Maximum Spindle Speed	5,350 rpm (12" or 14")	5,350 rpm (14")	5,350 rpm (14")	5,350 rpm (14") 4,600 rpm (16")	4,600 rpm (16")
Arbor Size	20mm	20mm	20mm	20mm	20mm
Wheel Size	300mm (12"), 350mm (14")	350mm (14")	350mm (14")	350mm (14") 400mm (16")	400mm (16")

STIHL Cutquik® Cart

Particularly useful where long, straight cuts have to be made, such as cutting expansion joints in road surfaces or squaring off edges in asphalt. Cart attachment kits available for STIHL Cutquik® models TS 400, TS 460 and TS 760 only.



STIHL Cutquik® Cart for TS 700 & TS 800

Specially designed for matched cutting performance with the TS 700 and new TS 800. This cart offers improved handling and cutting performance with a forward weight orientation. This cart comes fully assembled and has a toolless quick connect system.



Other Cut-Off Saw Accessories

Water Tank

Optional water tank mounts on cart. Holds 3.4 gallons. Easily removed for refilling.

Depth Wheel

Attaches to STIHL Cutquik® cut-off machine cart and permits variable adjustment consistent depth of cut. Particularly helpful when using Diamond cutting wheel.

Wheel Kit

Mounts directly to most STIHL Cutquiks to help you guide the cut.

Cutting Guide

Attaches to cart. Very useful for guiding long straight cuts. Folds out of the way when not needed or in tight areas.

Pressurized Water Tank

Provides water flow for wet-cutting attachments when pressurized water hose is not available.

Carrying Case

Heavy-duty metal case has special compartments to hold TS 400 STIHL Cutquik® cut-off machines, cutting wheels and various accessories. The case has large handles and venting louvers. (Not for TS 700)

WARNING! Improper use of any power tool may cause serious or fatal injury. Read, understand and follow carefully the operating and safety instructions in your owner's manual before using these products.

WARNING! Do not use carbide tipped, wood cutting or circular saw blades. They can cause severe personal injury from reactive forces, blade contact or thrown tips.



Every year, STIHL produces high-quality power tools and accessories for professionals and others around the world. But we will forever be known as our first and most famous creation: the chain saw. Rightly so, Andreas Stihl has been called the “father of the chain saw.” STIHL advancements and innovations throughout the decades made our chain saw the number one selling brand worldwide, and they remain so today offering more models of chain saws than any other brand. The people who trust our chain saws every day on the job rely on the toughness, durability and lightweight, ergonomic design we build into every machine. Chain saws that start and run and don't stop until you're done. If this sounds like the type of quality you demand, then you're ready for a STIHL.

MS 260 Chain Saw

A lightweight, professional saw ideal for limbing, thinning and other applications



This professional grade chain saw has an excellent power-to-weight ratio and an improved air filter system. Other user-friendly features include side-access chain tensioner, IntelliCarb™ compensating carburetor, view-through fuel tank and toolless fuel and oil caps.

MS 390 Chain Saw

Our top model of mid-range saws with more power than the MS 290 and MS 310, with the same weight



This mid-size saw now offers a decompression valve for easier starts and a combination of performance features that make each job go a little faster. The inboard-mounted clutch housing and chain brake are shielded from dirt for longer life. It also includes the STIHL oil-saving Ematic™ system, IntelliCarb™ compensating carburetor, side-access chain tensioner, toolless fuel and oil caps.

MS 440 STIHL Magnum™ Chain Saw

Designed for the professional, with a high power-to-weight ratio



One of the world's largest-selling professional saws. Powerful, all-around model for felling and bucking, the MS 400's smooth contours also make it a great limbing saw. IntelliCarb™ lets you cut longer between filter cleanings, and the decompression valve ensures quicker starts. Wrap-handle version (R) also available.

MS 880 STIHL Magnum™ Chain Saw

Maximum power for the most demanding cutting conditions



Our most powerful professional saw. Precision-balanced to provide excellent handling and reliability under the most strenuous cutting conditions. Other features include a lightweight flywheel and a dry, easy-to-maintain air filter. Includes decompression valve for easier starting. Wrap handle version (R) also available.

	MS 260	MS 390	MS 440	MS 880
Displacement	50.2cc (3.06 cu. in.)	64.1cc (3.9 cu. in.)	70.7cc (4.3 cu. in.)	121.6cc (7.42 cu. in.)
Engine Power	2.4kW (3.2 bhp)	3.2kW (4.3 bhp)	4.0kW (5.4 bhp)	6.4kW (8.6 bhp)
Powerhead Weight	4.8kg (10.6 lbs.)	5.9kg (13.0 lbs.)	6.3kg (13.9 lbs.)	10.1kg (22.3 lbs.)
Fuel Capacity	460cc (15.6 oz.)	560cc (18.9 oz.)	780cc (26.4 oz.)	1300cc (44 oz.)
Chain Oil Capacity	290cc (9.8 oz.)	330cc (11.2 oz.)	275cc (9.3 oz.)	700cc (23.7 oz.)
OILOMATIC® Chain	.325" RM2 or .325" RMC3 3/8" RM2 or 3/8" RSC3	3/8" RM2 or 3/8" RSC3	3/8" RM2 or 3/8" RSC3	404" RM2 3/8" RM2 or 3/8" RSC3
Guide Bars Available	40 to 50cm (16" to 20") STIHL ROLLOMATIC®	40 to 63cm (16" to 25") STIHL ROLLOMATIC®	40 to 80cm (16" to 32") STIHL ROLLOMATIC®	43 to 150cm (17" to 59") STIHL ROLLOMATIC®

STIHL recommends:

- MS-260 – #3634 (26 RMC3-67) OILOMATIC® saw chain and 16" 3003-000-6813 Ematic™ guide bar combination.
- MS-390 – #3624 (33 RSC3-72) OILOMATIC® saw chain and 20" 3003-000-8921 Ematic™ guide bar combination.
- MS-440 – #3624 (33 RSC3-72) OILOMATIC® saw chain and 20" 3003-000-8921 Ematic™ guide bar combination.
- MS-880 – #3626 (36 RSC3-75) OILOMATIC® saw chain and 21" 3002-000-9123 Ematic™ guide bar combination.



Carrying / Storage Case – Unique, removable bar scabbard has built-in tool holders to carry tools to the cutting site. Fits MS 170 to MS 460 M with 20" bar. Replacement latches and scabbard are available.



Complete Filing Kit – Includes file guide, depth gauge, round file, flat file and two file handles in tool pouch. Kits available for the following chain types: STIHL PICCO™ Mini; 1/4" pitch chain; .325" pitch chain; 3/8" pitch chain; .404" pitch chain.



STIHL offers a full line of guide bars for all types of use, from 12" for specialized limbing operations with small saws, through 59". These bars are offered in different designs.



Sprocket noses are replaceable on STIHL ROLLOMATIC® ES Super guide bars. Unlike some guide bars, the sprocket nose is anchored by three rivets instead of one.

Call us for information on Chains, Guide Bars, Sprockets and other replacements parts.

Protective Apparel

Whether you're a professional or just an occasional power equipment user, STIHL has you covered, literally. Our Pro Mark™ line offers a great selection of head-to-toe protective gear, clothing and accessories. You'll find comfortable, lightweight, UL® classified chain saw protective pants, leggings and chaps with Engtex® cut-retardant material sewn in. And, while most brands require dry cleaning, STIHL shirts, pants and chaps can be machine-washed and dried. STIHL Pro Mark™ UL classified products comply with OSHA regulations for chain saw operations.

STIHL Construction Hard Hat System



STIHL® ProPack

Convenient landscaper 4-pair crew pack. Bonus pair included featuring smoke lens.



Chain Saw Protective Apron Chaps

Rugged, yet comfortable apron-style chaps. Waist size expands from 30" to 42". Deep cargo pocket on front. Available with 6 or 9 layers of cut-retardant Engtex® material in three lengths: 32", 36", 40".



Chain Saw Protective Wrap-Around Chaps

Features 6 or 9 layers of lower leg, wrap-around, cut-retardant protection. Waist size expands from 30" to 42". Available with 6 or 9 layers in 36" length. Available with 6 layers in 40" length.



FS 250 R Trimmer & FS 250 Brushcutter



More power for the professional user to make each job a little easier. Included are the STIHL IntelliCarb™ compensating carburetor and a solid steel drive shaft.

HT 100 Pole Pruner



Powered by the patented STIHL 4-MIX® engine, this fixed-length pole pruner is ideal for trimming and pruning trees. Features the STIHL exclusive EASYSTART® system.

HT 101 Telescoping Pole Pruner



Ideal for hard-to-reach places, the HT 101's adjustable shaft telescopes to 11.5'. Side-mount chain adjusters are standard equipment. Other features include fuel primer for quick and easy starting.

PP 900 STIHL Pole Pruner Set



The ideal tools for demanding, high-volume tree work. Durable extended fiberglass poles with 12' reach and a pruning capacity of 1-1/4" diameter. Replacement parts are available. The PS 70 blade or PS 80 saw assembly can be used for larger trimming. Extra extension pole purchase allows maximum working reach of 18'.

HL 100 (135°) Hedge Trimmer



STIHL's fixed angle and articulating extended length hedge trimmers offer more torque and power than previous models. The emissions compliant 4-MIX® engine has long running times and makes quick work of hard-to-reach hedge trimming jobs.

MM 55 STIHL YARD BOSS®



Lightweight, powerful and versatile are just a few of the words that describe this new yard care system from STIHL. Using a universal power train, this machine easily changes from a cultivator to other useful tools. This is a must-have for around home.

HS 80 Hedge Trimmer



The HS 80 is a versatile, double-sided trimmer designed for professional cutters. EASYSTART® system with ElastoStart™ shock-absorbing handle and fuel pump primer is standard. 180° swivel rear handle makes vertical trimming easier. Available in both 24" and 30" configurations.

BR 500 Backpack Blower



New low sound blower – only 65 dB(A) – powered by the patented STIHL 4-MIX® engine. Built with more power and greater fuel efficiency so that you can work faster and longer.

BR 550 Backpack Blower



Powered by the patented STIHL 4-MIX® engine, it's a great value with excellent blowing power. The new rounded design means fewer corners to get snagged in shrubs, and in the truck or trailer.



COMMERCIAL BACKPACK BLOWERS

WINDMILL commercial blowers generate the most powerful airblast with KAWASAKI commercial engines. Since 1954 Vandermolen has designed powerful and innovative, high quality, 2-cycle backpack and wheeled power blowers for the commercial user.

	542BTx	850BTx	960BTx
Engine	Kawasaki, Air Cooled, 2-Cycle, C.A.R.B./EPA Compliant		
Displacement	40.2 cc	48.7 cc	59.2 cc
Idle/ Max. RPM	2500/ 7500	3200/ 7800	2500/ 7500
Ignition	Electronic	Electronic	Electronic
Starter	Automatic Recoil	Automatic Recoil	Automatic Recoil
Carburetor	Walbro Diaphragm w/Primer for Quick Starting		
Fuel	50:1 Gasoline/Oil Mix	50:1 Gasoline/Oil Mix	50:1 Gasoline/Oil Mix
Fuel Tank	.42 Gal. (1.6 L) Translucent	.53 Gal. (2 L) Translucent	.58 Gal. (2.2 L) Translucent
Running Time	1.5 hr. @ Full Throttle	1.5 hr. @ Full Throttle	1.5 hr. @ Full Throttle
Air Volume	590 CFM	750 CFM	860 CFM
Air Speed	250 MPH	225 MPH	225 MPH
Muffler	Quiet Low Tone	Quiet Low Tone	Quiet Low Tone
Noise Level	70 Db(a)	70 Db(a)	>72 Db(a)
Air Filter	Oversize	Oversize	Oversize
Blow Pipes	Interlocking (3)	Interlocking (3)	Interlocking (3)
Throttle Lever	Pistol Grip w/ On-Off Switch and Throttle Lock		
Dimensions (No Hose/Pipes)	11-5/8"x16-1/2"x17-1/4"	13-3/4"x17-1/2"x17-3/4"	11-5/8"x17-1/4"x17-1/4"
Back Support	Ergonomic w/Waist Strap	Ergonomic w/Waist Strap	Ergonomic w/Waist Strap
Dry Weight	19 lbs. (with Pipes)	19-1/4 lbs. (with Pipes)	21-3/4 lbs. (with Pipes)
Ship Weight	22 lbs.	22 lbs.	24 lbs.

542BTx ▲

◀ 960BTx

HEDGE CLIPPERS



▲ F1848Cr

WINDMILL hedge clippers have the power to cut your hedges quickly and cleanly with KAWASAKI commercial 2-cycle engines featuring dependable hard chrome cylinders for long trouble-free life. The special alloy steel blades are CHROME PLATED to give you up to 5 times longer cutting periods between sharpening. The sap that accumulates on regular black steel blades is easy to clean off the chrome plated blades. These feature-packed, easy handling hedge clippers are your answer to tough, stubborn hedges ... and you can forget about lugging that extension cord around the yard.

	F1848Cr
Engine	Kawasaki C.A.R.B./EPA Compliant
CC	18.4
Fuel Tank	17 fl. oz. (500ml) Translucent
Carburetor	Walbro Diaphragm w/Primer for Quick Starting
Ignition	Electronic
Blade Size/Type	24" Double Sided Chromed
Blade Movement	Dual Reciprocating
Anti-Vibe	Rubber Shocks at Engine Handle
Gear Case	HD Cams & Gears
Lubrication	Zerk Fitting at Gear Case
Controls	Throttle Lock, Finger Trigger On/Off Slide Switch All on Rear Safety Handle
Dimensions	40"L x 8-3/4"W x 8 1/4"H
Dry Weight	10 3/4 lbs.

K650 CUT-N-BREAK (gas)

Easy to handle and efficient cutter with twin blade



Engine Air-cooled, 2-stroke engine
 Displacement 71 cc
 Power 4.8 hp (3.5kW)
 Weight, without twin blades 19.3 lbs. (8.8kg)
 Weight, including twin blades 22.3 lbs. (10.1kg)
Cutting equipment, blade:
 Diameter 9" (230mm)
 Maximum cutting depth 16" (400mm)

K750 (gas)

More efficient cutting with Dual Charge Engine technology



Engine Air-cooled, 2-cycle engine
 Displacement 74 cc
 Power 5.0 hp (3.7kW)
 Weight, without fuel or blade 12" – 20.7 lbs. (9.4kg), 14" – 21.4 lbs. (9.7kg)
 Vibration front/rear handle according to EN 1454 12" – 3.3/4.7 m/s², 14" – 3.1/4.9 m/s²
Cutting equipment, blade:
 Diameter 12" (300mm), 14" (350mm)
 Cutting depth 4" approx. (100mm), 5" approx. (125mm)

K950 ACTIVE (gas)

The best power-to-weight ratio on the market



Engine Air-cooled, 2-cycle engine
 Displacement 94 cc
 Power 6.1 hp (4.5kW)
 Weight, without fuel or blade 14" – 22.9 lbs. (10.3kg)
 16" – 24.7 lbs. (11.2kg)
Cutting equipment, blade:
 Diameter 14" (350mm), 16" (400mm)
 Cutting depth 5" approx. (125mm), 6" approx. (145mm)

K950 RING (gas)

Gasoline powered saw with double the cutting depth



Engine Air-cooled, 2-cycle engine
 Displacement 94 cc
 Power 6.1 hp (4.5kW)
 Weight, without fuel or blade 28.8 lbs. (13.1kg)
Cutting equipment, blade:
 Diameter 14" (350mm)
 Maximum cutting depth 10" (260mm)

K950 CHAIN (gas)

Concrete chain saw with unique versatility



Engine Air-cooled, 2-stroke engine
 Displacement 94 cc
 Power 6.2 hp (4.5kW)
 Weight, without bar and chain 20.7 lbs. (9.4kg)
 Bar length 14" (350mm)
 Cutting depth 15" (390mm) Straight Cut

K950 RESCUE (gas)

The world's most efficient rescue saw



Engine Air-cooled 2-cycle engine
 Displacement 94 cc
 Power 6.1 hp (4.5kW)
 Weight, without fuel, blade and strap 22.9 lbs. (10.4kg)
Cutting equipment, blade:
 Diameter 12" (300mm), 14" (350mm)
 Cutting depth 4" approx. (100mm), 5" approx. (125mm)

K1250 ACTIVE (gas)

The king of power cutters



Engine Air-cooled, 2-cycle engine
 Displacement 119 cc
 Power 7.8 hp (5.8kW)
 Weight, without fuel or blade 14" – 29.5 lbs. (13.6kg)
 16" – 31.5 lbs. (14.4kg)
Cutting equipment, blade:
 Diameter 14" (350mm), 16" (400mm)
 Cutting depth 5" approx. (125mm), 6" approx. (145mm)

K1250 RAIL (gas)

The world's strongest gasoline powered rail cutter



Engine Air-cooled, 2-cycle engine
 Displacement 119 cc
 Power 7.8 hp (5.8kW)
 Weight, without RA10 16" – 32.2 lbs. (14.6kg)
 Weight, with RA10 16" – 46.7 lbs. (21.2kg)
Cutting equipment, blade:
 Diameter 16" (400mm)
 Cutting depth 6" approx. (145mm)

K3000 ELECTRIC / K3000 SPRAY (electric)

The handiest, most powerful saw on the market



Motor 120 V
 Rated power 1800 W (120 V)
 Weight K3000 Electric without blade, incl. 8' cord (2.4m) 12" – 19.4 lbs. (8.8kg), 14" – 20.7 lbs. (9.4kg)
 Weight K3000 Spray without blade, incl. 8' cord (2.4m) 14" – 20.7 (9.4kg)
 Weight Backpack 10.1 lbs. (4.6kg)
 Tank 1 Gallon (4 liter)
Cutting equipment, blade:
 Diameter 12" (300mm), 14" (350mm)
 Cutting depth 4" approx. (100mm), 5" approx. (125mm)

K3600 MK II (hydraulic)



10" cutting depth with a 14" blade

Engine Hydraulic-gear motor
 Maximum pressure-flow rate 2500 psi – 10 gpm (140 bar – 4 L/min.)
 Weight, without blade 17.8 lbs. (8.1kg)
Cutting equipment, blade:
 Diameter 14" (350mm)
 Cutting depth 10" (260mm)

K2500 (hydraulic)

Unsurpassed power and ergonomics



Engine Hydraulic-gear motor
 Maximum pressure-flow rate 2500 psi – 10 gpm (140 bar – 4 L/min.)
 Weight, without blade 18.3 lbs. (8.3kg)
Cutting equipment, blade:
 Diameter 16" (400mm)
 Cutting depth 6" (145mm)

K2500 RAIL (hydraulic)



Unsurpassed power and ergonomics

Engine Hydraulic-gear motor
 Maximum pressure-flow rate 2500 psi / 10 gpm (140 bar – 40 L/min.)
 Weight without blade 19 lbs. (8.6kg)
 Weight without blade, incl. RA10 31.9 lbs. (14.5kg)
Cutting equipment, blade:
 Diameter 16" (400mm)
 Cutting depth 6" approx. (145mm)

K40 (air)

The air powered saw with 5" cutting depth



Motor Air motor
 Air requirements 100 cfm, 2.8–3.5 m³/min.
 Maximum air pressure 120 psi, 7 bar
 Weight, without hose, blade 21.6 lbs. (9.8kg)
Cutting equipment, blade:
 Diameter 14" (350mm)
 Cutting depth 5" approx. (125mm)
Comes with 8' whip hose and in-line oiler.

HP40 MARK II (gas)



Gas powered hydraulic power pack with high capacity

Flow rates 5, 8, 10 gpm (20, 30 or 40 L/min.)
 Maximum pressure 2000 psi (140 bar)
 Gasoline engine 16 hp (12kW)
 Hydraulic oil 2.9 gal / 10.9 liter
 Weight incl. 30 ft. (9.1m) hose 220 lbs. (100kg)
Supplied with HTMA flat-face standard couplings and 30 ft. hose.

Common spare parts.

AIR FILTERS	Description	Product number
K750	Foam	506 36 71-01
	Paper	544 18 16-01
K650 / K700 Active / K650 Cut-n-Break	Foam	506 22 63-01
	Paper	506 22 42-01
K950 Active	Foam	506 23 19-01
	Paper	506 23 18-01
K1250 Active	Foam	506 26 87-01
	Paper	506 23 18-01

HOLDER, BEARING	Product number
K650 Cut-n-Break	544 10 57-01

BELTS	Product number
K750	506 29 67-02
K650 / K700 Active	506 27 67-41
K650 / K700 Active III	506 37 27-06
K650 Cut-n-Break	506 34 74-07
K950 Active 12" / 14"	506 37 27-03
K950 Active 16"	506 37 27-04
K1250 Active	506 37 27-07
K950 Ring	506 29 67-01

ARBOR BUSHINGS	Product number
1 inch (25.4mm) Std. on Partner Saws	506 37 96-25
20mm	506 37 96-20
7/8 inch (22.2mm)	506 37 96-22
With Partner's "easy to change" arbor bushings, you can accommodate other Manufacturer's blades.	

The world's most extensive saw range

Partner has the world's most extensive range of hand-held concrete saws. The product line includes several different power sources – gasoline, hydraulic, compressed air and electric. You will always find the right machine to handle each task in the most effective way. These tables easily compare features of the various power cutters.

GASOLINE POWERED SAWS	K650 CUT-N-BREAK	K750	K950 ACTIVE	K950 RING	K950 CHAIN	K950 RESCUE	K1250 ACTIVE	K1250 RAIL
Active Air Filtration™	yes	yes	yes	yes	yes	yes	yes	yes
SmartCarb™	yes	yes	yes	yes	yes	yes	yes	yes
DuraStarter™	yes	yes	yes	yes	yes	yes	no	no
EasyStart®	yes	yes	yes	yes	yes	yes	yes	yes
Sealed transmission	yes	yes	yes	yes	no	yes	yes	yes
Reversible cutting arm	no	yes	yes	no	no	yes	yes	yes
Fuel indicator in the tank	yes	yes	no	no	no	no	no	no
Automatic lubricated clutch bearing	yes	yes	yes	yes	yes	yes	yes	yes
Easily adjustable blade guard	no	yes	yes	no	no	yes	yes	yes
Water kit	no	yes	yes	yes	yes	no	yes	no
Replaceable arbor bushing	no	yes	yes	no	no	yes	yes	yes
Dual charge technology	no	yes	no	no	no	no	no	no
Noise reduction muffler	no	yes	no	no	no	no	no	no
Anti-vibration system	yes	yes	yes	yes	yes	yes	yes	yes

HYDRAULIC POWERED SAWS	K3600 MK II	K2500	K2500 RAIL
Off-center drive	yes	no	no
Adjustable front handle	yes	no	no
Automatic water valve	yes	no	no
Blade brake	no	yes	yes
Trigger control	no	yes	yes
Reversible cutting arm	no	yes	yes
Water kit	no	yes	yes
Replaceable arbor bushing	no	yes	yes

ELECTRIC POWERED SAWS	K3000 ELECTRIC	K3000 SPRAY
Overload protection	yes	yes
Forward rotation	yes	yes
Simplified blade replacement	yes	yes
Vacuum outlet (12")	yes	yes
Replaceable arbor bushing	yes	yes
Backpack	no	10.1 lbs.
Tank	no	1 gallon

AIR POWERED SAW	K40
Automatic mist lubrication	yes
Reversible cutting arm	yes
Water head kit	yes
Replaceable arbor bushing	yes

Active Air Filtration™ on all Active Saws



Three independent filter systems extend service intervals and reduce maintenance costs.

Step One: Centrifugal force from the fly-wheel removes up to 80% of the dust from the engine air intake.
Step Two: Remaining dust is trapped very effectively by an oil-saturated foam filter.
Step Three: Paper filter is used primarily as a backup and an extra safeguard to keep dust out of the engine.

More Partner Features



DuraStarter™ – The patented enclosed starter mechanism is dust protected for added life (not available on the K1250).



Decompression Valve – The decompression valve minimizes the amount of effort necessary to start the engine.



SmartCarb™ – SmartCarb maintains proper fuel/air ratio despite filter condition which allows the saw to run at full power longer.



Easy View – A window in the gas tank makes checking the fuel level effortless.

Cutting experts of the world



UNIVERSAL CRANE AND AERIAL LIFT

Universal Crane Personnel Aerial Lift (Telescoping Boom)



Standard Features:

- Trailer frame with 3000 lbs. (1362kg) single axle.
- P205-75R14 radial tires.
- 2" (50.8mm) ball coupler.
- 6-volt, 250 amp/hr, deep cycle batteries.
- Built-in 30-amp charger with automatic shut-off.
- Fiberglass bucket (gravity leveled, hydraulically dampened) with body harness and lanyard.
- Effective 360° coverage.
- Emergency controls at bucket and base.
- Removable bucket for crane conversion.

Options:

- 25 ft. (7.62m) truck power cord assembly.
- Trailer power cord assembly.
- Crane load lifting bail and holder.
- Surge brakes.
- Pintle hitch.
- Leveling safety switch.
- Spare tire carrier.

Specifications:

- Working Height - Max:
 Personnel Lift: 36' (11.00m)
 Universal Crane: 31' (9.45m)
 Platform Height - Max: 30' (9.14m)

- Reach from Center of Rotation - Max:

Personnel Lift: 24' (7.32m)
 Universal Crane: 21' (6.40m)
 Outrigger Spread: 11'-1" (3.38m)
 Stowed Travel Height: 6'-6" (1.98m)
 Stowed Travel Width: 6'-4" (1.93m)
 Stowed Travel Length: 22' (6.71m)
 Rated Load Capacity: 300 lbs. (136kg)
 Crane Capacity: 500 lbs. (227kg)
 Rotation: 360° Coverage
 Shipping Weight: 2950 lbs. (1340kg)
 Normal Operating Pressure: 700 psi (4.83 MPa)
 Tongue Weight: 140 lbs. (64kg)



EASY TO SET UP

Tow your UniLift 538 to the worksite and unhitch. The UniLift 538 frees you from dedicating a vehicle to your aerial lift and eliminates costly vehicle tie-up. Inside or outside, the UniLift 538 is everything and more you'd expect from any personnel lift in its class. That's why the UniLift 538 is the benchmark for the towable lift industry.

Getting your UniLift 538 ready for work is simple. Setting the outriggers takes only minutes. Even on rough terrain, superior stability is provided by the 32 degree outriggers. Interlocked safety switches assure that all four outriggers are properly extended and set.

EASY TO OPERATE

Dual controls allow the UniLift to be operated from either the pedestal or bucket. A safety belt with a three-foot lanyard is supplied as standard equipment. A handy tool tray is attached to the front of the bucket, giving the operator quick and convenient tool access.

EASY TO ADAPT

The UniLift 538 is designed to be both a highly productive personnel lift and a boom crane in one . . . without sacrificing performance in either area. Simply remove the bucket and attach your lifting bale. The UniLift 538 can lift up to 500 pounds to a 24-foot height, or up to 300 pounds to a 31-foot height.

One person can quickly convert the UniLift 538 from a personnel lift into a boom crane. Unlock the single safety pin, remove the bucket and attach a cable. It's that easy. The UniLift features a fiberglass bucket that is gravity leveled, hydraulically dampened, and is secured by a positive lock pin.

EASY TO MAINTAIN

The UniLift 538 is more than a useful brute. It's a beautiful example of design simplicity and the ease of maintenance which it provides. And, it's backed by a 12-month limited warranty. All hydraulic components and service areas are easily accessible . . . even in the field.

It is powered by two 6-volt deep-cycle batteries that last from 8 to 10 hours in normal service. It uses a 12v/30 amp built-in charger to recharge the batteries. Just plug it into any 110 volt outlet. The UniLift 538 can even be operated while the batteries are charging – without damaging the charger.

By simply removing the inspection cover, you have instant access to the electrical components, batteries and rotation mechanisms. Everything is designed with ease of maintenance in mind.

EASY TO MOVE

The UniLift 538 is economical, self-contained and easily towed by a variety of vehicles. Its pneumatic tires and lightweight design make it easy to move – even on unpaved surfaces. You can depend on the UniLift 538 to safely get into those hard-to-reach places. When stowed, the UniLift 538's width is only 76 inches, allowing it to be easily maneuvered around obstacles and down aisles.



SELF-PROPELLED SCISSOR LIFTS

Great Additional Workspace

Scissor lifts are ideal for jobs requiring large work deck space and when you are working with heavy materials.



GS-2632

Power and Performance

The powerful 4WD machines have positive traction control that is ideal for increasing productivity in demanding outdoor worksites.



Quiet Convenience

Genie's Electric Scissors generate low noise levels, allowing operation in quiet work environments.



GS-1930

GS-1530

Working Height 21 ft. (6.6m)
Platform Height 15 ft. (4.6m)
Lift Capacity 600 lbs. (272kg)
Power DC
Weight (ANSI/CSA)* 2,575 lbs. (1,168kg)

GS-1930 IN STOCK

Working Height 25 ft. (7.8m)
Platform Height 19 ft. (5.8m)
Lift Capacity 500 lbs. (227kg)
Power DC
Weight (ANSI/CSA)* 2,702 lbs. (1,226kg)

GS-2032

Working Height 26 ft. (8.1m)
Platform Height 20 ft. (6.1m)
Lift Capacity 800 lbs. (363kg)
Power DC
Weight (ANSI/CSA)* 3,574 lbs. (1,621kg)

GS-2632 IN STOCK

Working Height 32 ft. (9.9m)
Platform Height 26 ft. (7.9m)
Lift Capacity 500 lbs. (227kg)
Power DC
Weight (ANSI/CSA)* 4,413 lbs. (2,002kg)

GS-2046

Working Height 26 ft. (8.1m)
Platform Height 20 ft. (6.1m)
Lift Capacity 1,200 lbs. (545kg)
Power DC
Weight (ANSI/CSA)* 3,977 lbs. (1,804kg)

GS-2646

Working Height 32 ft. (9.92m)
Platform Height 26 ft. (7.9m)
Lift Capacity 1,000 lbs. (454kg)
Power DC
Weight (ANSI/CSA)* 4,312 lbs. (1,956kg)

GS-3246

Working Height 38 ft. (11.8m)
Platform Height 32 ft. (9.8m)
Lift Capacity 700 lbs. (318kg)
Power DC
Weight (ANSI/CSA)* 5,211 lbs. (2,364kg)

GS-2668 DC

Working Height 32 ft. (9.9m)
Platform Height 26 ft. (7.9m)
Lift Capacity 1,250 lbs. (567kg)
Power DC
Weight* 6,405 lbs. (2,905kg)

GS-3268 DC

Working Height 38 ft. (11.78m)
Platform Height 32 ft. (9.8m)
Lift Capacity 1,000 lbs. (454kg)
Power DC
Weight* 8,010 lbs. (3,633kg)

GS-2668 RT

Working Height 32 ft. (9.9m)
Platform Height 26 ft. (7.9m)
Lift Capacity 1,250 lbs. (567kg)
Power Gas/LPG or Diesel
Weight* 6,373 lbs. (2,891kg)

GS-3268 RT

Working Height 38 ft. (11.8m)
Platform Height 32 ft. (9.8m)
Lift Capacity 1,000 lbs. (454kg)
Power Gas/LPG or Diesel
Weight* 8,008 lbs. (3,632kg)

GS-3384 RT

Working Height 39 ft. (12.1m)
Platform Height 33 ft. (10.1m)
Lift Capacity 2,500 lbs. (1,134kg)
Power Gas/LPG or Diesel
Weight* 12,005 lbs. (5,445kg)

GS-3390 RT

Working Height 39 ft. (12.1m)
Platform Height 33 ft. (10.1m)
Lift Capacity 2,500 lbs. (1,134kg)
Power Gas/LPG or Diesel
Weight* 12,085 lbs. (5,482kg)

GS-4390 RT

Working Height 49 ft. (15.1m)
Platform Height 43 ft. (13.1m)
Lift Capacity 1,500 lbs. (680kg)
Power Gas/LPG or Diesel
Weight* 13,086 lbs. (5,936kg)

GS-5390 RT

Working Height 59 ft. (18.2m)
Platform Height 53 ft. (16.2m)
Lift Capacity 1,500 lbs. (680kg)
Power Gas/LPG or Diesel
Weight* 16,616 lbs. (7,537kg)

*Weight will vary depending on options and/or country standards.

TRAILER MOUNTED Z-BOOMS

Extremely Versatile and Easy to Use

- An excellent value in high reach equipment. The hydraulic outriggers and automatic machine leveling provide quick, efficient setup.
- A favorite with contractors and rental yards. The TZ-50 has an industry-leading working range and an optional hybrid DC/gas engine.

- The TZ-34/20 is lightweight and easy to maneuver, position and store. It meets the challenges of the working environment.



TZ-50/30



TMZ-50/30

TZ-34/20

Working Height	40 ft. (12.36m)
Platform Height	34 ft. (10.36m)
Horizontal Reach	18 ft. 4 in. (5.59m)
Lift Capacity	500 lbs. (227kg)
Power	DC
Weight*	3,155 lbs. (1,431kg)

TMZ-50/30 IN STOCK

Working Height	56 ft. (17.07m)
Platform Height	50 ft. (15.24m)
Horizontal Reach	30 ft. (9.14m)
Lift Capacity	500 lbs. (227kg)
Power	Gas/Diesel
Weight (ANSI/CSA)*	4,600 lbs. (2,087kg)

TZ-50/30

Working Height	55 ft. 6 in. (17.9m)
Platform Height	49 ft. 6 in. (15.09m)
Horizontal Reach	29 ft. 2 in. (8.89m)
Lift Capacity	500 lbs. (227kg)
Power	DC, Hybrid DC/Gas
Weight*	4,400 lbs. (1,996kg)

*Weight will vary depending on options and/or country standards.

AERIAL WORK PLATFORMS / RUNABOUTS



AWP-30S

Industry-Leading Design and Performance

Genie is the world leader in lifts, smart blue lifts to be exact. Genie manufactures the most advanced, high-end-valued lift equipment in the industry.

Genie aerial work platforms are designed and built to provide our customers with products that add value to the workplace. Sound, innovative designs provide increased safety, flexibility and productivity on the job.

Genie's AWP™, IWP™, DPL™ and Runabout™ offer advanced convenience to workers at a lower cost. Their lightweight, compact designs, maneuverability and transportability make these products easy to use. They are the economical solution for all of your access needs.

AWP / 20, 25, 30, 36, 40 (AWP-30S IN STOCK)

Working Height	26 ft. 1 in. – 46 ft. 3 in. (8.1m – 14.3m)
Platform Height	20 ft. 1 in. – 40 ft. 3 in. (6.1m – 12.3m)
Lift Capacity	300 – 350 lbs. (136kg – 159kg)
Power	AC, DC or Air Motor (30 only)
Weight*	660 lbs. – 1,181 lbs. (299kg – 535kg)

IWP / 20, 25, 30

Working Height	26 ft. 5 in. – 35 ft. 6 in. (8.22m – 11m)
Platform Height	20 ft. 5 in. – 29 ft. 6 in. (6.22m – 9m)
Lift Capacity	300 – 350 lbs. (136kg – 159kg)
Power	AC or DC
Weight*	1,028 lbs. – 1,728 lbs. (466kg – 784kg)

DPL / 25, 30, 35

Working Height	31 ft. 4 in. – 40 ft. 9 in. (9.7m – 12.6m)
Platform Height	25 ft. 4 in. – 34 ft. 9 in. (7.7m – 10.6m)
Lift Capacity	600 – 750 lbs. (272kg – 340kg)
Power	AC or DC
Weight*	1,375 lbs. – 1,650 lbs. (624kg – 748kg)

GR / 12, 15, 20

Working Height	17 ft. 5 in. – 25 ft. 11 in. (5.48m – 8.07m)
Platform Height	11 ft. 5 in. – 19 ft. 11 in. (3.48m – 6.07m)
Lift Capacity	350 – 500 lbs. (159kg – 227kg)
Power	DC
Weight*	1,581 lbs. – 2,451 lbs. (717kg – 1,111kg)

*Weight will vary depending on options and/or country standards.

The Genie Aerial Work Platform AWP™ can safely lift one person to working heights of up to 46 ft. (14.0m). Easily maneuverable, offers durability and the convenience of quick setup and operation.

The Genie Industrial Work Platform IWP™ utilizes a revolutionary design to provide stable working heights of up to 36 ft. (11.14m) without outriggers. Outreach and power wheel assist options available.

The Genie Dual Personnel Lift DPL™ elevates one or two people to working heights of up to 41 ft. 9 in. (12.4m). AC, DC power options available.

The Genie Runabout™ offers a compact and lightweight self-propelled aerial work platform. The narrow width of 29.5 in. (75cm) to 31.5 in. (80cm) and low unit weight allow it to fit in most passenger elevators.

SELF-PROPELLED ARTICULATING BOOMS

Up, Out and Over

The Articulating Booms provide the ultimate in lifting and working versatility with up, out and over positioning. You can get into spots that were never possible before with a Z™ Boom.

Worksite Performance

Rough Terrain models have powerful engines with optional 2WD or 4WD, 2- or 4-wheel steer and terrain tracking oscillating axles that get you where you need to be quickly and smoothly.

Tight Maneuverability

The Electric Boom line includes many narrow models for accessing confined work areas and driving through standard doorways.

Environmentally Friendly

The Electric models can be used freely where quiet, emission free operation is required.



Z-80/60



Z-60/30



Z-34/22N

Z-30/20N

Working Height	36 ft. (11.14m)
Horizontal Reach	21 ft. 5 in. (6.53m)
Up & Over Clearance	12 ft. 8 in. (3.86m)
Lift Capacity	500 lbs. (227kg)
Power	DC
Weight*	14,170 lbs. (6,427kg)

Z-30/20N RJ

Working Height	35 ft. 2 in. (10.89m)
Horizontal Reach	20 ft. 6 in. (6.25m)
Up & Over Clearance	12 ft. 8 in. (3.86m)
Lift Capacity	500 lbs. (227kg)
Power	DC
Weight*	14,220 lbs. (6,450kg)

Bi-Energy and

Z-34/22 DC

Working Height	40 ft. 6 in. (12.52m)
Horizontal Reach	22 ft. 3 in. (6.78m)
Up & Over Clearance	15 ft. (4.6m)
Lift Capacity	500 lbs. (227kg)
Power	DC or Bi-Energy
Weight*	11,000 – 12,000 lbs. (4,990 – 5,443kg)

Z-34/22N IN STOCK

Working Height	40 ft. 6 in. (12.52m)
Horizontal Reach	22 ft. 3 in. (6.78m)
Up & Over Clearance	15 ft. 3 in. (4.65m)
Lift Capacity	500 lbs. (227kg)
Power	DC
Weight*	11,400 lbs. (5,171kg)

Z-34/22 IC (2WD)

Working Height	40 ft. 6 in. (12.52m)
Horizontal Reach	22 ft. 3 in. (6.78m)
Up & Over Clearance	15 ft. (4.6m)
Lift Capacity	500 lbs. (227kg)
Power	Gas/LPG or Diesel
Weight*	10,150 lbs. (4,604kg)

Z-34/22 IC (4WD)

Working Height	40 ft. 6 in. (12.52m)
Horizontal Reach	22 ft. 3 in. (6.78m)
Up & Over Clearance	15 ft. 1 in. (4.6m)
Lift Capacity	500 lbs. (227kg)
Power	Gas/LPG or Diesel
Weight*	10,150 lbs. (4,604kg)

Z-45/22 (4WD) IN STOCK

Working Height	51 ft. (16m)
Horizontal Reach	25 ft. 1 in. (7.65m)
Up & Over Clearance	24 ft. 2 in. (7.37m)
Lift Capacity	500 lbs. (227kg)
Power	Gas/LPG or Diesel
Weight*	14,500 lbs. (6,572kg)

Bi-Energy and

Z-45/25 DC

Working Height	51 ft. 6 in. (15.87m)
Horizontal Reach	25 ft. (7.62m)
Up & Over Clearance	23 ft. 2 in. (7.06m)
Lift Capacity	500 lbs. (227kg)
Power	DC or Bi-Energy
Weight*	16,100 lbs. (7,303kg)

Bi-Energy and

Z-45/25J DC

Working Height	51 ft. 8 in. (15.92m)
Horizontal Reach	25 ft. 1 in. (7.65m)
Up & Over Clearance	23 ft. 11 in. (7.29m)
Lift Capacity	500 lbs. (227kg)
Power	DC or Bi-Energy
Weight*	16,300 lbs. (7,384kg)

Z-45/25 IC Narrow

Working Height	51 ft. 6 in. (15.87m)
Horizontal Reach	25 ft. (7.62m)
Up & Over Clearance	23 ft. 2 in. (7.06m)
Lift Capacity	500 lbs. (227kg)
Power	Gas/LPG or Diesel
Weight*	16,600 lbs. (7,532kg)

Z-45/25J IC Narrow

Working Height	51 ft. 8 in. (15.92m)
Horizontal Reach	25 ft. 1 in. (7.65m)
Up & Over Clearance	23 ft. 11 in. (7.29m)
Lift Capacity	500 lbs. (227kg)
Power	Gas/LPG or Diesel
Weight*	16,800 lbs. (7,620kg)

Z-45/25 RT

Working Height	51 ft. 9 in. (15.94m)
Horizontal Reach	25 ft. (7.62m)
Up & Over Clearance	23 ft. 6 in. (7.16m)
Lift Capacity	500 lbs. (227kg)
Power	Gas/LPG or Diesel
Weight*	13,875 lbs. (6,294kg)

Z-45/25J RT

Working Height	52 ft. (16.02m)
Horizontal Reach	25 ft. 1 in. (7.65m)
Up & Over Clearance	24 ft. 2 in. (7.37m)
Lift Capacity	500 lbs. (227kg)
Power	Gas/LPG or Diesel
Weight*	14,500 lbs. (6,572kg)

Z-60/34 IN STOCK

Working Height	66 ft. 4 in. (20.39m)
Horizontal Reach	34 ft. (10.36m)
Up & Over Clearance	27 ft. (8.2m)
Lift Capacity	500 lbs. (227kg)
Power	Gas/LPG or Diesel
Weight*	22,520 lbs. (10,215kg)

Z-80/60 IN STOCK

Working Height	86 ft. (26.4m)
Horizontal Reach	60 ft. (18.3m)
Up & Over Clearance	29 ft. (8.8m)
Lift Capacity	500 lbs. (227kg)
Power	Gas/LPG or Diesel
Weight*	35,900 – 37,500 lbs. (16,284 – 17,010kg)

Z-135/70

Working Height	141 ft. (43.15m)
Horizontal Reach	69 ft. 9 in. (21.3m)
Up & Over Clearance	32 ft. 6 in. (9.8m)
Lift Capacity	600 lbs. (272kg)
Power	Diesel
Weight*	44,900 lbs. (20,366kg)

*Weight will vary depending on options and/or country standards.

Brush Bandits

Model 65XL (6" Disc Style)



The Model 65XL has been on the market for over a year now and has proven to be a dependable and rugged machine. This unit has been very popular among rental and hardware stores, and is also now being purchased by smaller tree services that have brush and small trees to chip.

The model 65XL is capable of chipping small quantities of brush and trees at one time, keeping two people busy feeding it. Heavy-duty construction and a wide chipper opening allow the 65XL to easily chip 6" diameter and forked material with limited trimming. The 270° discharge spout aims chips in virtually any direction and ensures fully loaded chip trucks. Numerous gas and diesel engine options are available as well as a wide variety of features that allows you to custom equip the 65XL to meet your individual needs.

Model 200+ (12" Disc Style)



The Model 200+ is just one of three 12" diameter capacity hydraulic feed disc-style chippers available from Bandit.

The 200+ has a faster feed at approximately 120 feet per minute and a few standard features that come as options on the Model 150. The 200+ is extremely popular with utility line maintenance contractors in that it quickly disposes of trimmings plus it has the ability to chip up to 12" diameter material. Like the 150, it is an excellent investment and because of the extreme popularity of the 200+, they hold their resale and trade-in value. Rugged construction, a powerful feed system and large infeed opening are keys to this chipper's ability to process trees and brush with limited trimming.

Specifications	Model 65XL	Model 200+
Dimensions - Width x Height x Length / Weight	5'-7" x 7'5" x 10'5" / 1850-2700 lbs.	6' x 8'6" x 14'6" / 5500-6300 lbs.
Tires and Axles		
Capacity	2,200 or 3,500 pound torflex axle, depending on engine option	7000 lbs.
Brakes		Electric
Tires	(2) 20.5 x 8 x 10 load range D, 8 ply	245/75R16 10-ply load range E
Tire Suspension		Torflex
Noise Level	80 decibels or less at 50', 360 degrees	80 decibels or less at 50', 360 degrees
Tongue Jack - Capacity / Type / Movement	2000 lbs. / Stationary foot pad / 15"	5000 lbs. / Stationary foot pad
Safety Chains	1/4" x 5" with hooks	5/16" links x 36" min. (2) with hooks
Steel Fuel Tank Capacity	8 gallons	29 gallons
Steel Hydraulic Tank Capacity	7 gallons	13 gallons
Towing Hitch		
Pintle		2-1/2" lunet ring
Ball	2" ball	2" or 2-5/16"
Hydraulic Feed System		
PSI	1800	2500
Feed Wheel Diameter / Length	10-5/8" / 11-1/2"	7.5" / 16-3/8"
Drive Motor	24 cubic inches	14.6 cubic inches
Feed Rate	80 fpm	120 fpm
Hinged Yoke Assembly	Pivoting	Slide box
Output - 2 / 3 Knife	3.25 gpm / 4.5 gpm	8.0 gpm / 8.0 gpm
Chipper Cutting Wheel		
Disc / Chipper Shaft	2 / 2" diameter	40" diameter x 2" thick / 4" diameter
Knife Pockets / Feed Rate		2 pockets - 2 knives per pocket / 120 fpm
Infeed Hopper Opening		
Height x Width	24" x 42"	29" x 45" (Optional: 64" wide)
Control Bar / Infeed Pan	Forward/Neutral/Reverse / Fold-down with sides	Forward/Neutral/Reverse
Chipper Capacity - Diameter / Feed / Chipper Hood	Up to 6" diameter / Right angle / Hinged	12" diameter / 45" / Hinged
Frame	2" x 4" rectangular metal tubing with support gussets	2" x 6" rectangular metal tubing with support gussets
Discharge System - Chip Deflector / Swivel	Adjustable / 360 degrees	Adjustable / 360 degrees
Tongue - Wall	3/16" 2 x 4 rectangular tubing	3" x 6" rectangular tubing
Lighting Electrical System	12v system with rubber mounted LED taillights, w/ 6-prong replaceable coiled trailer power cord.	12v system with rubber mounted LED taillights, w/ 6-prong replaceable coiled trailer power cord.
Chipper Knives	1/2" x 4" x 7-1/4"	1/2" x 4-1/2" x 7-1/4"

Four-Wheel Drive, Heavy-Duty Trencher

Model 1324D-4

- Home Owners and Professionals.
- For depths 24"-36".
- Works in extreme conditions with rocks and roots.
- Better traction in slick or soft soil.

Easy to understand and use control system features a safety clutch that does not kill the engine or require re-adjusting settings to resume operation. The unique manual chain control allows trenching through extra tough soil, roots or rocks without the need to continually adjust ground speed.

The wheel drive hydrostatic pump and digging chain gear pump are coupled together and then to the engine for a clean and simple application, with easy access for maintenance or adjustment.

The Barreto Advantage

- **Direct Hydraulic Drive to Head Shaft**
 - No Belts - No Chains.
- **Lower Center of Gravity.**
- **Outboard Support Bearing - Standard.**
- **Safety Clutch Stops Wheels and Chain Immediately**
 - Engine continues to run.
 - No micro switches to fail.
 - No need to re-adjust ground speed when resuming operation.

Four Wheel Drive System

The Patented SnapLoc™ 4-Wheel Drive System features:

- **With SnapLoc™ in down position**
 - Superb traction in mud, sand and soft ground.
 - Shifts fulcrum point applying more pressure on longer booms for better ground penetration.
 - More floatation and better traction for crossing furrows or cross-trenching.
 - Maintains effortless straight-line trenching.
 - Eliminates kick-back when hitting rocks or other obstacles.
 - Boom will not "ride up" when digging shallow trenches, or when trenching downhill. Maintains constant depth.
 - Eliminates weight shift for safer loading and unloading on inclines such as ramps and drop gate trailer.
- **With SnapLoc™ in up Position**
 - Better balance and weight distribution for easy pivoting.



Specifications

B&S Vanguard V-Twin, 16 HP Honda OHV GX390, 13 HP

Dimensions: Trench Depth.....	24", 30", 36"
Trench Width	4" - 6"
Boom Travel: Up	60°
Down.....	60°
Head Shaft Height Digging Chain	8"
Transport Length: Front Wheel to Handlebar	83"
Boom to Handlebar	88"
Transport Width	36.5"
Transport Height	46"
Wheel Base	35"
Trench Center to Outside Left	17.5"
Trench Center to Outside Right.....	19"
Weight	1000 Lbs.

Operation

Ground Speed:	
Forward	180 fpm
Reverse	90 fpm
Digging Chain Speed	260 fpm

240 HOLE DIGGER

General's Model 240 is the first one-man, hand-held hole digger to feature an all-position, 4-stroke gasoline engine. Operate on hillsides or store it on its side without fear of damage or oil leaking from the crankcase. It also means no more mixing oil with gasoline. No more separate fuel cans. And, no more smoky, exhaust mess because the Subaru Robin EH035 engine meets the tough, new EPA emission standards.

The 240 is built with unsurpassed features that make it the ideal machine for both homeowner and contractors alike. Digs up to an 8-inch (203mm) diameter hole. Built with oversized ball bearings, heat treated shafts and precision, machine cut gears for extended service life. The 240 Hole Digger was designed to keep it working on the jobsite and not in the repair shop.



300 SERIES HOLE DIGGER

The time-proven 300 Series Hole diggers tackle any construction related hole digging project ... from commercial fencing to upscale landscaping. All with the power and digging performance to meet the demands of the most seasoned construction crew.

The exclusive, patented transmission design features all-metal centrifugal clutches, oil-cooled for longer service life. Clutches are designed to slip on overload or sudden contact with buried obstructions. Spur gears are precision machine-cut and deliver unequalled torque and horsepower to the auger.



MODEL	240 HOLE DIGGER	300 SERIES HOLE DIGGER 310F - 342F - 356F		330H - 343H - 357H
ENGINE				
Make and Model	Subaru Robin EH035V, All-Position, 4-Stroke	Fuji Robin (Subaru) Ec10V series, 2-cycle, EPA Phase 1 exempt	Honda GXV140, 4-cycle	
Horsepower	1.6 HP (1180W)	4.5 HP at 5000 RPM	3600 RPM	
Displacement	2.0 cu. in. (33.5 cu. cm.)	--	--	
Muffler	Lo Tone	Lo Tone type	Lo Tone type	
Starter	Hand rewind	Hand rewind	Hand rewind	
Compression Release	Manual	--	--	
Fuel	Gasoline, unleaded automotive grade	Gasoline, regular or unleaded grade with variable 25/50:1 fuel/oil mixture ratio	Gasoline, regular or unleaded grade	
Spark Plug	Resistor type	Resistor type	Resistor type	
TRANSMISSION				
Type	Totally enclosed, grease lubricated, spur gear reduction	Totally enclosed, oil-lubricated, spur gear reduction		
Nominal Auger Rotation Speed at Rated Engine Speed	166 RPM, no load	144 RPM	144 RPM	
Auger Rotation Direction	Right hand (clockwise) into the ground			
Clutch	3" (76mm) diameter, all-metal automatic-centrifugal, slips (does not fully disengage) on overload	All-metal, oil-cooled, automatic-centrifugal, slips (does not fully disengage) on overload		
Drive Shaft Connection to Auger	1" (25mm) diameter round	310F: 1-3/8" (35mm) hexagon, General® type 342F: 7/8" (22mm) square, Ground Hog® type 356F: Stihl® type	330H: 1-3/8" (35mm) hexagon, General® type 343H: 7/8" (22mm) square, Ground Hog® type 357H: Stihl® type	
Max. Drilling Torque	55 ft.-lbs. (74 N.m)	146 ft.-lbs. (196 N.m)	190 ft.-lbs. (225 N.m)	
AUGER				
Design	Alloy steel blades and screw bits.	Pengo® type, cast-steel boring heads, forged steel teeth and cast-steel screw bits.		
	Thick, cross-sectioned helicoid or sectional auger fighting delivers strength and wear resistance. Fighting pitch is set to produce cleaner, more usable holes in sandy or granular type soils. All head wear parts are field replaceable.			
Diameter	2" (51mm) to 8" (203mm)	2" (51mm) to 18" (457mm)	2" (51mm) to 18" (457mm)	
Lead Auger	Full line is available in standard 30" (762mm) effective digging lengths. Overall auger length is 35" (889mm).	Full line	Full line	
Extension Length	Plain tube - depth to 45" (1143mm)	Continuous auger extensions designed to extend the digging depth available in standard 36" (914mm) effective lengths.		
GENERAL				
Throttle Control	Twist grip type	Heavy-duty, spring return, Magura® twist grip type	Heavy-duty, spring return, Magura® twist grip type	
Operator Handle	Comfort-Zone® operator handle made of heavy-gauge steel tubing with PVC coating grip area.	Comfort-Flex™ handles are ergonomically positioned. A high-strength composite material resists ultraviolet radiation, absorbs vibration and stress while helping to insulate against inadvertent auger contact with underground power sources.		
Weight	26 lbs. (12kg) approximate	61 lbs. (29kg) approximate	71 lbs. (32kg) approximate	

660 DIG-R-MOBILE®

"A one-person operator drill rig providing ultimate power and utility for homeowner and general contractor digging projects."

The 660 DIG-R-MOBILE® has evolved into a highly productive, one-person, towable machine that's ideal for a wide variety of fence erection, sign installation and general construction projects. A powerful hydraulic digging system and ideal operator



ergonomics are combined to deliver digging performance and precision balance for unmatched jobsite productivity.

Specifications

POWER SOURCE

Type: Various industrial quality, 13 hp (9.6kW) category at 3600 RPM, 4-cycle gasoline engines equipped with Lo Tone muffler and spark arrestor.

Fuel Specification: Gasoline, regular or unleaded.

Starting Method: Mechanical rewind.

Air Cleaner: Dual element type.

FRAME

Structure: Unitized welded steel plate and rectangular tube.

Reservoir Location: Center mounted over axle.

Auger Storage: SNAP-LOK™ auger storage system locks auger in the travel position when maneuvering in the jobsite.

Side Tilt Adjustment: 20° from vertical, infinite position, with locking mechanism.

Towbar: Quick-attach type, complete with SAE Class II coupler, adjustable from 1-7/8" (48mm) to 2" (51mm) ball size and safety chains. Included as a standard accessory.

Tow Configuration: From operator position end.

HYDRAULIC SYSTEM

Configuration: Open center type.

Hydraulic Pump: Fixed displacement, gear type, with third line return to reservoir.

System Flow/ Pressure Parameters: 8 GPM (30 lit/min) at 2000 PSI (140kg/cm²).

Hydraulic Motor: Low speed, high torque (LSHT), geroler type direct coupled to the auger.

Maximum Drilling: Torque 276 ft.-lbs. (374 N.m.) at 2000 PSI (140kg/cm²).

Auger Rotation Speed: 144 RPM, no load.

Auger Forward/Reverse Control: Four way, directional control valve, lever actuated, spring loaded to return to the neutral position when released.

Filtration: Integral suction screen to pump, return line diffuser into reservoir and externally mounted, 10 micron return line filter.

POW-R-PORT™ Tool Circuit: Built-in power source for operating HTMA Class II hydraulic tools. Contact the factory for specific information.

Reservoir Capacity: 5 US gallons (19lit).

AUGER

Design: Auger construction features Pengo® type, cast-steel boring heads, forged-steel teeth and cast-steel screw bits for maximum digging performance and versatility in a wide cross section of soil compositions. Thick, cross-sectioned helicoid or sectional auger flighting delivers strength and wear resistance. Flighting pitch is set to produce cleaner, more usable holes in sandy or granular type soils. All head wear parts are field replaceable.

Diameter: 2" (51mm) to 18" (457mm).

Lead Auger and Auger Extension Length: A full line of lead augers and continuous auger extensions designed to extend the digging depth is available in standard 36" (914mm) effective lengths. A non-flighted auger extension is available in a standard 15" (381mm) effective length.

GENERAL

Auger Drive Shaft Configuration: Choice of three options: 1-3/8" (35mm) hexagon (General), 7/8" (22mm) square (Ground hog), or Stihl type. Required configuration to be specified.

Tires: 4.80-12 highway use rated.

Length: 113" (2870mm).

Width: 41" (1041mm).

Operation Weight (Less Towbar): 440 lbs. (200kg).

671 SERIES DIG-R-TACH®

Increase your equipment's versatility and productivity with a 671 Series DIG-R-TACH® earth auger attachment. Engineered to perform with skid steer loaders, small excavators, knuckle-boom cranes and small backhoes, the smaller Series 16 features a two-speed chain/sprocket drive system that allows it to balance smaller flow volumes to auger diameters. Results are cleaner holes with less loose soil and debris.



For higher capacity drilling, the Series 24 is designed for the larger hydraulic systems of backhoes and small excavators. Installation is simple with a dipper-stick mounting bracket.

Specifications

MODEL

671 Series 16	671 Series 24
Hydraulic System Requirements:	
5-20 GPM (19-76 lit/min) flow range. 15 GPM (57 lit/min) optimum flow rate.	15-25 GPM (57-95 lit/min) flow range. 20 GPM (76 lit/min) optimum flow rate.
1500-3000 PSI (105-210kg/cm ²) auxiliary hydraulic system pressure relief valve setting range.	

Auxiliary hydraulic system flow rate determines auger rotational speed. Auxiliary hydraulic system pressure relief valve setting determines actual digging torque produced. Minimal flow rates and relief valve settings may not produce satisfactory digging performance for specific auger diameters and soil types.

Minimum oil viscosity is 50 SSU with a minimum of .125 percent zinc antiwear additives. Hydraulic system must have sufficient heat rejection capacity to limit maximum oil temperature to 200°F (93°C) at maximum ambient temperature.

TRANSMISSION

Drive System: Auxiliary hydraulic system of carrier vehicle serves as power. Low speed, high torque hydraulic motor transfers torque to auger driveshaft through roller chain reduction. Forward and reverse auger direction controlled by auxiliary hydraulic valve foot pedal or hand control. Series 16 incorporates dual sprocket clusters that provide high/low auger speed selection.

Driveshaft Connection To Auger: 2" (51mm) industry standard hexagon.

Maximum Drilling Torque:

High Speed: 665 ft.-lbs. (900 N.m.) at 2500 PSI (175kg/cm ²)	High Speed: 2018 ft.-lbs. (2724 N.m.) at 2500 PSI (175kg/cm ²)
Low Speed: 1330 ft.-lbs. (1800 N.m.) at 2500 PSI (175kg/cm ²)	

Input		Auger RPM		Input		Auger RPM	
GPM	Lit/Min	Low	High	GPM	Lit/Min	Low	High
5	(19)	-	58	15	(57)	-	49
6	(23)	-	70	18	(68)	-	58
8	(30)	-	93	20	(76)	-	65
10	(38)	57	116	22	(83)	-	71
12	(45)	68	139	25	(95)	-	81
15	(57)	85	174	-	-	-	-
18	(68)	102	-	-	-	-	-
20	(76)	113	-	-	-	-	-

AUGER

Design: Auger construction features Pengo® type, cast-steel boring heads, forged-steel teeth for maximum digging performance and versatility. Thick, cross-sectioned helicoid or sectional fighting delivers strength and wear resistance. Fighting pitch is set to produce cleaner, more useable holes in sandy or granular-type soils. All boring head wear parts are field replaceable.

Lead Auger and Auger Extension Length: Industry standard lengths and diameters. Mounted DIG-R-TACH, auger/extensions and excavated soil can result in substantial weight. Refer to carrier vehicle lift height and operational center of gravity envelope information to determine maximum allowable auger length and weight combinations.

GENERAL

Plumb Line Mechanism: Both Series 16 and 24 use double-jointed, universal-joint swivel with full-length sleeved pins.

Basic Weight: 285 lbs. (130kg).

Frame: Unitized, welded steel plate.

HYDRA-MAC

The Best Built Skid Loader You Can Buy!



Fully hydrostatic all gear drive

All gear drive is the most durable drive system available in the skid steer loader industry. All gear drive does away with sprockets, chains and drive belts — eliminating downtime for routine chain and sprocket adjustment. And Hydra-Mac's 24-month warranty on gear drive components is by far the most extensive in the industry. (12-month warranty on all other components)

The original patented dual hydra lever controls

Hydra-Mac was the first skid steer manufacturer to introduce the "T" bar concept . . . first to introduce the dual hydra lever control system—two "T" bars that control all loader functions, and utilize a natural, simple hand coordination. Hydra-Mac loaders are very easy to operate.

IF WE DON'T HAVE IT, WE'LL GET IT FOR YOU.

For more complete information or a demonstration, contact us.



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The Thomas Advantage – The T320 Track Loader

The evolution of the Thomas T320 track loader is proof that it is possible to reinvent the wheel. Instead of another cookie cutter design, Thomas' thinking outside the box has brought you a track loader that is quicker, more responsive, more powerful and more productive featuring less maintenance, longer life and reduced cost of operation than any other loader in its class.

FEATURES:

- 3200 lbs. (1452kg) lift capacity (50% of tipping load).
- 18 in. (457mm) wide tracks provide exceptional stability on slopes.
- High output 87.4 HP (65.2kw) Kubota turbocharge diesel.
- Fast 12.3 mph (19.8km/h) high speed travel range.
- Powerful, over 7000 lbs. (3175kg) of breakout force means easy bucket loading.

PERFORMANCE:

Operating Capacity 50% of Tipping	3200 lbs. (1452kg)
Operating Capacity 35% of Tipping	2240 lbs. (1016kg)
Tipping Load	6400 lbs. (2903kg)
Travel Speed, Low Range	6.8 mph (10.9km/h)
Travel Speed, High Range.....	12.3 mph (19.8km/h)
Hydraulic Pump Output	21.0 gpm (79.5 lpm)
Breakout Force.....	7000 lbs. (3175kg)
Shipping Weight	9400 lbs. (4264kg)
Operating Weight.....	10500 lbs. (4763kg)

ENGINE:

Make	Kubota
Model	V3300T
Horsepower Net	83 HP (61.9kw)
Horsepower (Gross).....	87.4 HP (65.2kw)
Max. Gov. Speed.....	2750 RPM
Max. Torque.....	205.0 lb./ft. (28.4kg/m)
No. Cylinders.....	4
Displacement.....	203 cu. in. (3321 cu. cm)
Alternator	60 Amps
Battery	1460 CCA
Remote Boost Terminal Std.....	Yes
Engine to Pump Power Transfer.....	Direct Coupling
Fuel Capacity.....	28.7 gal. (109 L)

CONTROLS/DRIVE SYSTEM:

Steering Controls.....	2 Hand Levers
Hydraulic Controls.....	2 Hand Levers or 2 Foot Pedals
Transmission	Hydrostatic
Tubular Steel Main Frame	Yes

LOADER HYDRAULICS:

Pump Capacity	21.0 gpm (79.5 lpm)
System Relief Pressure.....	3000 PSI (206.8 bar)
High Flow Output.....	40.0 gpm (151.4 lpm)
System Relief Pressure.....	3000 psi (206.8 bar)
High Flow Hyd. HP.....	52.2 HP (70.0kw)
No. Bucket Cylinders.....	2
Bucket Cylinder Linkage Protection	Yes
Hyd. Reservoir Capacity	24.0 gal. (90.8 L)
Oil Type	10W30

OPERATION:

Standard Track Width.....	18 in. (457mm)
Ground Pressure.....	5.8 lbs. (0.4kg)

SAFETY EQUIPMENT:

Adj. Seat w/Hyd. Controls Lock Switch	Yes
Protective Seat Bar w/Hyd. Controls Lock Switch.....	Yes
Seat Belt w/Hyd. Controls Lock Switch.....	Yes
ROPS/FOPS Operators Cab.....	Yes
Work Lights Std.....	Yes
Cab Operated Boom Supports.....	Yes
Top and Rear Window Glass Std.....	Yes
Self Centering Steering Controls	Yes
Park Brake, Spring Applied-Hydraulic Release.....	Yes



DIMENSIONS:

Overall Operating Height	156.3 in. (3970mm)
Height To Hinge Pin.....	123.1 in. (3127mm)
Overall Height of Vehicle.....	84 in. (2134mm)
Overall Length with Bucket	146 in. (3708mm)
Dump Angle	38
Dump Height.....	94.8 in. (2408mm)
Reach - Fully Raised	23.1 in. (587mm)
Height at 45° Dump Angle.....	82.8 in. (2102mm)
Reach at 45° Dump Angle.....	26.0 in. (660mm)
Max. Roll Back at Ground.....	20
Max. Roll Back Fully Raised	87
Wheelbase.....	48.75 in. (1238mm)
Length, Less Bucket	117.5 in. (2985mm)
Ground Clearance	9 in. (229mm)
Max. Grading Angle - Bucket	88
Angle of Departure.....	27
Bucket Width.....	81.6 in. (2073mm)
Clearance Circle Front.....	66 in. (1676mm)
Clearance Circle Front w/Bucket	89.6 in. (2276mm)
Clearance Circle Rear	69.8 in. (1773mm)
Overall Width Less Bucket.....	78.2 in. (1986mm)
Tread.....	59.6 in. (1514mm)
Standard Tire	N/A
Standard Track Width.....	18 in. (457mm)

Specifications and design are subject to change without notice. Specifications may vary depending on country.

The Best Augers in the Field

HDC STYLE AUGER BIT (Difficult Ground Conditions)

- For compacted soils, heavy clay, asphalt, frozen ground and fractural rock.
- Available in 6" to 48" diameter in four overall lengths.
- 2" round, 2-9/16" round or 2" hex collars available.
- Heavy-duty cast steel boring head using individual tooth pockets (Drive-in teeth using rubber lock retainment).
- Standard wear components are hardened gage (outside) teeth, hardened wisdom (inside) teeth and 3-1/2" diameter hardened fishtail.
- 2-year warranty.



HDF STYLE AUGER BIT (Moderate Ground Conditions)

- Available in 4" to 6" diameter in four overall lengths, having either 2" round, 2-9/16" round or 2" hex collars.
- Built with fabricated boring heads using 1/2" thick plates with 5/8" carriage bolts and nuts to retain the bolt-on tooth.
- Standard wear components are hardened gage (outside) teeth, hardened wisdom (inside) teeth and 3-1/2" diameter hardened fishtail.
- 4" and 6" diameter augers are single flighted and 8" - 36" diameter augers are double flighted.
- 2-year warranty.
- For light to moderate conditions.



HTF STYLE AUGER BIT (Tree Auger)

- Six diameters available: 18", 24", 30", 36", 42" and 48".
- 2" round, 2-9/16" round or 2" hex collars available.
- Standard wear components are hardened gage (outside) teeth, hardened wisdom (inside) teeth and 3-1/2" diameter hardened fishtail.
- 2-year warranty.



Attachment for Tractors, Trucks, Skidsteers



PERFORMANCE QUALITY and RELIABILITY

- 2 lever controls for smooth, comfortable operation.
- 8', 9' and 11' digging depth models.
- High strength steel construction.
- Power dig buckets for performance.
- Quick attach mounting system.

Features and Benefits:

- 2 lever controls.
- Adjustable flip up seat for comfort.
- Cylinder port reliefs and anti-cavitation valves provide overload protection and positive swing control.
- Standard bolt pattern for mounting.
- High pressure inline hydraulic filter.
- Low pressure return line check valve.
- Fold down stabilizer with wide stance stability. Optional vertical stabilizers for stability in confined spaces.
- Grouser off-road, steel stabilizer pads. Option 1 - Rubber street pads for surface protection. Option 2 - Flip over Grouser/rubber street pads.
- Swing cushion stops.
- Independent right and left stabilizer lever controls.
- Optional swing speed control.
- 2-wire high pressure hydraulic hoses.
- Threaded gland high pressure cylinders on boom and dipper.
- Mechanical boom/swing transport lock.
- Steel bushings in all pivot points.
- 2 heavy-duty hardened steel bearings in 180° swing tower.
- All pins with grease zerks.
- Power-dig buckets provide greater digging force, bucket curl or dump height.

Available for RENTAL or PURCHASE



CONCRETE BREAKERS

High Production Destruction: THE CYCLONE

The CYCLONE is one compact package of sheer destructive force, using a simple design and high-strength steels that are proven durable in the demanding concrete and demolition jobs of today.

True Experts, the demolition and breaking contractors, need to stay ahead in a very competitive business ... they need the CYCLONE.

The cyclone attachment fits all makes of skid steers including Bobcat, Case, Caterpillar and John Deere.

- **Easy Operation** reduces operator error and fatigue.
- **Compact Design** and light weight make transport simple.
- **Simple Hook Up** allows for easy change of attachments.
- **Low Maintenance** and minimal wear items reduce downtime.
- **High Production** is maintained due to the broad face of the striking surface which allows for excellent area coverage and production.
- **Shock Free** patented "skid" system keeps THE CYCLONE grounded and dissipates the shock as it pulverizes the concrete.



Specifications:	SW 1500
Impact Energy Blow	1,500 ft./lbs.
Blows Per Minute	32
Total Impact Energy (per minute)	48,000
Operating Weight	750 lbs.
Min. Oil Flow Demand	5 GPM
Min. Hyd. Pressure	2,000 p.s.i.
Operating Height (with weight extended)	6' 10"
Dimensions (HxWxD)	5'x1'x1'4"

Specifications:	SW 3500
Impact Energy Blow	3,500 ft./lbs.
Blows Per Minute	28-45 (adjustable)
Total Impact Energy (per minute)	112,000
Operating Weight	1,540 lbs.
Min. Oil Flow Demand	8 GPM
Min. Hyd. Pressure	2,200 p.s.i.
Operating Height (with weight extended)	7' 6" (adjustable)
Dimensions (HxWxD)	5'x1'6"x1'6"



Concrete Breakers

Available for **RENTAL** or **PURCHASE**



Count on it.

COMPACT UTILITY LOADER AND ATTACHMENTS

Work Smarter — Not Harder!



Toro® Dingo® compact utility loaders turn workers into productivity machines. These compact hydraulic power plants accomplish tasks otherwise done by hand or by less productive machines in a fraction of the time. All Toro Dingo compact utility loaders offer incredible hydraulic power in a compact, maneuverable package. Coupled with a broad array of powerful Toro Dingo attachments, you'll be amazed at what these machines can do!

The Dingo TX delivers incredible power and control in a simple package. It's easy to operate, the track drive is unstoppable, and it offers the operator great mobility combined with 360° visibility. You'll accomplish the toughest tasks in record time.

Now landscape, irrigation, fencing and general utility contractors all use Dingo compact utility loaders to accomplish tasks faster with fewer workers. Reduced crew sizes mean you can assign laborers to other crews and expand your business for more profits.

The Dingo provides tremendous hydraulic power and durability time after time. This machine offers the versatility necessary to complete any of your landscaping jobs in a fraction of manual labor time by combining Dingo's hydraulic power and any of our 35-plus attachments.

The Toro® Dingo®, Bucket, Auger, Backhoe and Trencher Attachments Are All Rental Items at Wharton.



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TRACTOR / LOADER / BACKHOE



T5C Specifications

STANDARD ENGINE:	Kohler Command 20 HP		
TRANSMISSION:	HD Hydrastatic, Eaton 35 HP Rated		
LUBRICATION:	Pressurized w/ Filter		
DRIVE MOTOR:	HD Gerotor Type, Ross "Torquemotor"		
FRONT AXLE:			
Construction	H.D. 1" x 5" Crossbeam		
Spindle Size	1.75 Diameter		
Steering	Power, Hydrastatic		
REAR AXLE:	Dana 44, Rigid Drive Axle Trac Lok Assembly 4.89 Ratio		
TIRES:			
Front	23" x 8" x 12" Skid Steer		
Rear	9.5" x 16" 6-Ply Super Sure Grip		
Optional	31" x 15.5" x 15" Super Terra Grip (260 sq. in. of contact area per tire at 3" penetration)		
Optional	31" x 15.5" x 15" Soft Trac		
CAPACITIES:			
Fuel Tank	7 Gallons (27 L)		
Hydraulic Tank	7 Gallons (27 L)		
HYDRAULIC SYSTEM FOR BACKHOE AND ENDLOADER:			
Pump	Flow	Pressure	Loader Value
Gear Type	7 GPM at 3600 RPM	2400 PSI (144 Bar)	2 Spool Monoblock
Backhoe Valve	Cylinders	Weight	
6-Spool Stack Type	2" and 2.5" Diameters	3100 lbs. (1372kg)	
MEASUREMENTS:			
Loader Dump Height	81 in. (206cm)		
Digging Depth	100 in. (254cm)		
Backhoe Reach	132 in. (335cm)		
Rear Bucket Dump Height	76 in. (193cm)		
Front Tire to Front Bucket	51 in. (130cm)		
Wheelbase	58 in. (147cm)		
Overall Width	48 in. (122cm)		
Overall Height	82 in. (208cm)		
Transport Length	156 in. (396cm)		
CAPACITIES AND FORCES:			
Calculated SAE Dig Forces	Buckets	Capacity	
Dipstick 2800 lbs. (1270kg)	8 in. (203mm)	.90 cu. ft. (26 cu.dm)	
Bucket Curl 3100 lbs. (1406kg)	12 in. (305mm)	1.35 cu. ft. (38 cu.dm)	
Backhoe Lift 750 lbs. (340kg)	16 in. (406mm)	1.80 cu. ft. (51 cu.dm)	
Front Curl 2200 lbs. (998kg)	20 in. (508mm)	2.20 cu. ft. (62 cu.dm)	
Loader Lift 1700 lbs. (771kg)	24 in. (610mm)	2.40 cu. ft. (68 cu.dm)	
	36 in. (914mm)	3.10 cu. ft. (88 cu.dm)	
LOADER CAPACITY:	.25 Yard (.210m ³)		
REAR BUCKET ROTATION:	180 Degrees		
BOOM ROTATION:	145 Degrees		
FRONT BUCKET ROLLBACK:	35 Degrees		

T7 Specifications

STANDARD ENGINE:	Kubota 26 HP		
OPTIONAL ENGINES:	20 HP Kohler Gas, 25 HP Kohler Gas		
TRANSMISSION:	HD Hydrastatic, Eaton 35 HP Rated		
LUBRICATION:	Pressurized w/ Filter		
DRIVE MOTOR:	HD Gerotor Type, Ross "Torquemotor"		
FRONT AXLE:			
Construction	H.D. 1" x 5" Crossbeam		
Spindle Size	1.75 Diameter		
Steering	Power, Hydrastatic		
REAR AXLE:	Dana 44, Rigid Drive Axle Trac Lok Assembly 4.89 Ratio		
TIRES:			
Front	23" x 10.5" x 12" Super Terra Grip		
Rear	31" x 15.5" x 15" Super Terra Grip (260 sq. in. of contact area per tire at 3" penetration)		
CAPACITIES:			
Fuel Tank	9.5 Gallons (36 L)		
Hydraulic Tank	9.5 Gallons (36 L)		
HYDRAULIC SYSTEM FOR BACKHOE AND ENDLOADER:			
Pump	Flow	Pressure	Loader Value
Gear Type	7 GPM at 3600 RPM	2400 PSI (144 Bar)	2 Spool Monoblock
Backhoe Valve	Cylinders	Weight	
6-Spool Stack Type	2" and 2.5" Diameters	4125 lbs. (1732kg)	
MEASUREMENTS:			
Loader Dump Height	96 in. (246cm)		
Digging Depth	104 in. (264cm)		
Backhoe Reach	160 in. (406cm)		
Rear Bucket Dump Height	89 in. (226cm)		
Front Tire to Front Bucket	60 in. (152cm)		
Wheelbase	58 in. (147cm)		
Overall Width	58 in. (147cm)		
Overall Height	82 in. (208cm)		
Transport Length	177 in. (449cm)		
CAPACITIES AND FORCES:			
Calculated SAE Dig Forces	Buckets	Capacity	
Dipstick 2800 lbs. (1270kg)	8 in. (203mm)	.90 cu. ft. (26 cu.dm)	
Bucket Curl 3100 lbs. (1406kg)	12 in. (305mm)	1.35 cu. ft. (38 cu.dm)	
Backhoe Lift 750 lbs. (340kg)	16 in. (406mm)	1.80 cu. ft. (51 cu.dm)	
Front Curl 4400 lbs. (1997kg)	20 in. (508mm)	2.20 cu. ft. (62 cu.dm)	
Loader Lift 1700 lbs. (771kg)	24 in. (610mm)	2.40 cu. ft. (68 cu.dm)	
	36 in. (914mm)	3.10 cu. ft. (88 cu.dm)	
LOADER CAPACITY:	.33 Yard (.380m ³)		
REAR BUCKET ROTATION:	180 Degrees		
BOOM ROTATION:	180 Degrees		
FRONT BUCKET ROLLBACK:	35 Degrees		

Specifications subject to change without notice.



TRACTOR / LOADER / BACKHOE



T6 Specifications

STANDARD ENGINE:		Perkins Diesel 31.5 HP	
TRANSMISSION:		HD Hydrastatic, Eaton 35 HP rated	
LUBRICATION:		Pressurized w/ Filter	
DRIVE MOTOR:		HD Gerotor Type, Ross "Torquemotor"	
FRONT AXLE:			
Construction	H.D. 1" x 5" Crossbeam		
Spindle Size	1.75 Diameter		
Steering	Power, Hydrastatic		
TIRES:			
Front	23" x 10.5" x 12" 4-Ply		
Rear	31" x 15.5" x 15" Super Terra Grip (260 sq. in. of contact area per tire at 3" penetration)		
CAPACITIES:			
Fuel Tank	9.5 Gallons (36 L)		
Hydraulic Tank	9.5 Gallons (36 L)		
HYDRAULIC SYSTEM FOR BACKHOE AND ENDOLOADER:			
Pump	Flow	Pressure	Loader Value
Gear Type	10 GPM at 2800 RPM	2500 PSI (150 Bar)	2 Spool Monoblock
Backhoe Valve		Cylinders	Weight
6-Spool Stack Type		2", 2.5" and 3" Diameter	2 WD - 4560 lbs. (1999kg) 4 WD - 4960 lbs. (2087kg)
MEASUREMENTS:			
Loader Dump Height	102 in. (257cm)		
Digging Depth	120 in. (305cm)		
Backhoe Reach	180 in. (457cm)		
Rear Bucket Dump Height	102 in. (257cm)		
Front Tire to Front Bucket	57 in. (145cm)		
Wheelbase	61 in. (155cm)		
Overall Width	60 in. (152cm)		
Overall Height	82 in. (208cm)		
Transport Length	180 in. (457cm)		
CAPACITIES AND FORCES:			
Calculated SAE Dig Forces		Buckets	Capacity
Dipstick	3010 lbs. (1365kg)	8 in. (203mm)	1.04 cu. ft. (29 cu.dm)
Bucket Curl	5200 lbs. (2359kg)	12 in. (305mm)	1.55 cu. ft. (44 cu.dm)
Backhoe Lift	1000 lbs. (454kg)	16 in. (406mm)	2.07 cu. ft. (59 cu.dm)
Front Curl	6100 lbs. (2766kg)	20 in. (508mm)	2.20 cu. ft. (62 cu.dm)
Loader Lift	2300 lbs. (1043kg)	24 in. (610mm)	2.40 cu. ft. (68 cu.dm)
		36 in. (914mm)	3.10 cu. ft. (88 cu.dm)
LOADER CAPACITY:		.5 Yard (.382m ³)	
REAR BUCKET ROTATION:		180 Degrees	
BOOM ROTATION:		180 Degrees	
FRONT BUCKET ROLLBACK:		35 Degrees	

T9 Specifications

STANDARD ENGINE:		Kubota 32.8 HP Turbo Charged	
TRANSMISSION:		HD Hydrastatic, Eaton 35 HP rated	
LUBRICATION:		Pressurized w/ Filter	
DRIVE MOTOR:		HD Gerotor Type, Ross "Torquemotor"	
FRONT AXLE:			
Construction	H.D. 1" x 5" Crossbeam		
Spindle Size	1.75 Diameter		
Steering	Power, Hydrastatic		
TIRES:			
Front	23" x 10.5" x 12" 4-Ply		
Rear	31" x 15.5" x 15" Super Terra Grip (260 sq. in. of contact area per tire at 3" penetration)		
CAPACITIES:			
Fuel Tank	9.5 Gallons (36 L)		
Hydraulic Tank	9.5 Gallons (36 L)		
HYDRAULIC SYSTEM FOR BACKHOE AND ENDOLOADER:			
Pump	Flow	Pressure	Loader Value
Gear Type	10 GPM at 2800 RPM	2500 PSI (150 Bar)	2 Spool Monoblock
Backhoe Valve		Cylinders	Weight
6-Spool Stack Type		2", 2.5" and 3" Diameter	2 WD - 4560 lbs. (1999kg) 4 WD - 4960 lbs. (2087kg)
MEASUREMENTS:			
Loader Dump Height	102 in. (257cm)		
Digging Depth	120 in. (305cm)		
Backhoe Reach	180 in. (457cm)		
Rear Bucket Dump Height	102 in. (257cm)		
Front Tire to Front Bucket	57 in. (145cm)		
Wheelbase	61 in. (155cm)		
Overall Width	60 in. (152cm)		
Overall Height	82 in. (208cm)		
Transport Length	180 in. (457cm)		
CAPACITIES AND FORCES:			
Calculated SAE Dig Forces		Buckets	Capacity
Dipstick	3010 lbs. (1365kg)	8 in. (203mm)	1.04 cu. ft. (29 cu.dm)
Bucket Curl	5200 lbs. (2359kg)	12 in. (305mm)	1.55 cu. ft. (44 cu.dm)
Backhoe Lift	1000 lbs. (454kg)	16 in. (406mm)	2.07 cu. ft. (59 cu.dm)
Front Curl	6100 lbs. (2766kg)	20 in. (508mm)	2.20 cu. ft. (62 cu.dm)
Loader Lift	2300 lbs. (1043kg)	24 in. (610mm)	2.40 cu. ft. (68 cu.dm)
		36 in. (914mm)	3.10 cu. ft. (88 cu.dm)
LOADER CAPACITY:		.5 Yard (.382m ³)	
REAR BUCKET ROTATION:		180 Degrees	
BOOM ROTATION:		180 Degrees	
FRONT BUCKET ROLLBACK:		35 Degrees	

Specifications subject to change without notice.



Giant-Vac's leaf blowers are designed for professionals and homeowners who demand the ultimate in performance and durability. The one-piece welded-construction housing, engine and axle provide years of dependable service.

Classic Series



Key Features

- Excellent balance.
- One-piece steel housing.
- Large tires and wheels with grease fittings.
- Heavy-duty 3/4" axle.
- Hose kit option.

Specifications

Model	52	90BP
Engine	Briggs & Stratton Intek™ OHV	Briggs & Stratton Intek™ OHV
Horsepower	5.5	9
C.A.R.B. Engine	Yes	Yes
Impeller	4-Blade Steel	4-Blade Steel
Impeller Dia.	15 in.	15-3/4 in.
Easy-Off Taper Lok™ Hub	No	Yes
Operation	Push Type	Push Type
Starting	Recoil	Recoil
CFM	1700	2100
Weight	106 lbs.	129 lbs.
Intake Hose Kit (optional)	5' x 10'	6' x 10'
Exhaust Hose Kit (optional)	5' x 10'	6' x 10'

Whisper Jet™ Blowers



Key Features

- Taper Lok™ hub for easy maintenance.
- Unibody construction and 3/4" axles.
- Aluminum "Jet-Blade" designed impeller for maximum air volume output.
- Large, two-stage inlet openings eliminate clogging.
- No-Flat tires and wheels with grease fittings.

Specifications

Model	60BWJ	85KWJ	10BWJ	13KWJ
Engine	Briggs & Stratton Intek™ OHV	Kohler/Yamaha	Briggs & Stratton Intek™ OHV	Kohler/Yamaha
Horsepower	6	8.5	10	13
Impeller	8-Blade Cast Aluminum			
Impeller Dia.	15 in.	17 in.	17 in.	17 in.
Easy-Off Taper Lok™ Hub	Yes	Yes	Yes	Yes
Tires	Smooth "Turf Safe"	No-Flat Airless, Swivel Caster On Front	No-Flat Airless	No-Flat Airless, Swivel Caster On Front
Side Winder Caster Wheel	Optional	Standard	Optional	Standard
CFM	2180	2580	2510	2610
Weight	128 lbs.	166 lbs.	140 lbs.	174 lbs.

Extreme™ II Leaf Blowers



Key Features

- High-velocity impeller with nine curved blades.
- Exclusive Taper Lok™ hub.
- Lightweight compact design.
- Four-position handle.
- Heavy-duty 3/4" axle.
- Two-stage intake baffle.
- Large tires and wheels with grease fittings.

Specifications

Model	85K-A	90H-A	10B-A	13K-A
Engine	Kohler/Yamaha	Honda	Briggs & Stratton Intek™ OHV	Kohler/Yamaha
Horsepower	8.5	9	10	13
C.A.R.B. Engine	Yes	Yes	Yes	Yes
Impeller	9-Blade Curved	9-Blade Curved	9-Blade Curved	9-Blade Curved
Impeller Dia.	15 in.	15 in.	15 in.	15 in.
Easy-Off Taper Lok™ Hub	Yes	Yes	Yes	Yes
Operation	Push Type	Push Type	Push Type	Push Type
Starting	Recoil	Recoil	Recoil	Recoil
CFM	2560	2560	2500	2590
Weight	149 lbs.	143 lbs.	142 lbs.	151 lbs.
Side Winder Swivel Wheel	Optional	Optional	Optional	Optional

Ruggedly Designed, Easy to Operate, Built tough to last, Lawn Vacuum

Giant-Vac commercial lawn vacuums feature an all-steel welded housing and engine base. A 1/4" steel four-blade impeller with Taper Lok™ hub provides reliable performance under any condition. Commercial lawn vacuums feature large, bicycle-type rear wheels, making them easy to push on turf. A sturdy handle features a comfortable foam grip. The 12.5-cu. ft. debris bag is easy to put on and take off. A deflector placed inside the bag keeps debris directed downward away from the operator.



Key Features

- 1/4" steel, 4-blade impeller.
- Easy-Off Taper Lok™ hub.
- Up to 11:1 compaction ratio.
- 12.5-cu. ft. debris bag.
- Optional hose kits and nose cones.

Specifications

Model	956 IC
Engine	Briggs & Stratton IC
Horsepower	9
Impeller	4-Blade Steel
Impeller Dia.	15-3/4 in.
Easy-Off Taper Lok™ Hub	Yes
CFM	2200
Compaction Ratio	Up to 11:1
Bag Capacity	12.5 cu. ft.
Wheels	20 in. Rear, 8 in. Front
Weight	149 lbs.



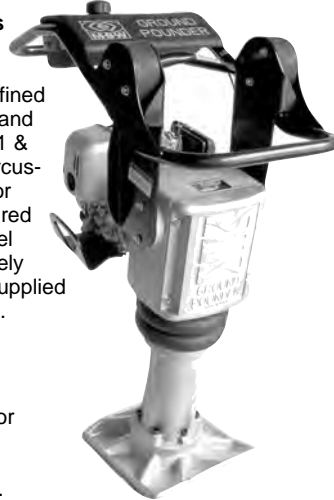
GAS AND AIR RAMMERS

RAMMERS

R420, R421 & R440 SERIES

The **R420, R421 & R440 Series Rammers** are ideally suited for the compaction of granular, mixed and cohesive soils in confined areas. A mainstay in contractor and municipal fleets, the R420, R421 & R440 offer highly productive percussion rammers at less than 128 or 136 lbs. respectively. The contoured fuel tank provides the largest fuel capacity in its class and effectively baffles engine noise. Power is supplied by a 3 hp 4-cycle Honda engine.

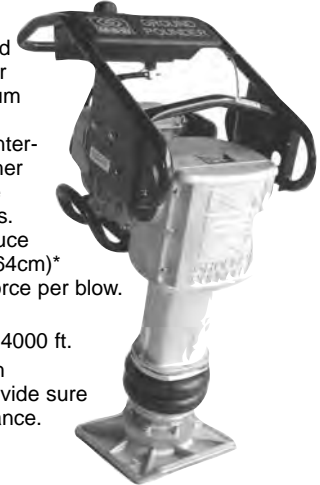
- Up to 3700 lbs. (16.4kN) of compaction force.
- 4-cycle engine.
- Elevated bellows placement for trench applications.
- Polyethylene slide bearings provide minimal internal wear.
- 10" or 11" high density, die cast aluminum tamping shoe.
- 4" and 6" trench shoes available for the R420.



SMART RAMMER SERIES

The Smartest Rammers in the industry, this MBW line is equipped with integral tachometers and hour meters that indicate when maximum operational performance is being reached and when maintenance intervals are needed. The result is higher productivity and increased service life. Weighing between 153-163 lbs. (69-74kg), **Smart Rammers** produce compaction depths to 25 inches (64cm)* and up to 4,550 lbs. (20.2kN) of force per blow. Models R480R and R481R are recommended for altitudes above 4000 ft. Smart Rammers are available with a choice of two engines which provide sure starts and long-term low maintenance.

- Robin EH12 4-cycle.
- Honda GX100 4-cycle.



**Clean sand, optimum moisture
MBW recommends that lifts not exceed 12" of granular soil, 9" of cohesive soil.*

SPECIFICATIONS	R420, R421 & R440 SERIES			SMART RAMMER SERIES			
	R420HC*	R421HC*	R440H	R480R	R480N	R481R	R481H
Shoe Size - WxL	10 x 11.5 in. (25 x 29cm)	11 x 13 in. (28 x 33cm)	11 x 13 in. (28 x 33cm)	11 x 13 in. (28 x 33cm)	11 x 13 in. (28 x 33cm)	13 x 15 in. (33 x 38cm)	13 x 15 in. (33 x 38cm)
Operating Weight	126 lbs. (57kg)	128 lbs. (58kg)	136 lbs. (62kg)	160 lbs. (73kg)	153 lbs. (69kg)	163 lbs. (74kg)	156 lbs. (71kg)
Engine Option	Honda GX100 3 hp (2.2kw)	Honda GX100 3 hp (2.2kw)	Honda GX100 3 hp (2.2kw)	Robin EH12 4 hp (3kw)	Honda GX100 3 hp (2.2kw)	Robin EH12 4 hp (3kw)	Honda GX100 3 hp (2.2kw)
Compaction Force	Up to 3100 lbf (up to 13.8kN)	Up to 3100 lbf (up to 13.8kN)	Up to 3700 lbf (up to 16.4kN)	4550 lbf (20.2kN)	4550 lbf (20.2kN)	4550 lbf (20.2kN)	4550 lbf (20.2kN)
Compaction Area				3300 sq. ft. (307 sq. m)	3300 sq. ft. (307 sq. m)	3900 sq. ft. (362 sq. m)	3900 sq. ft. (362 sq. m)
Travel Speed	Up to 55 ft./min. (16m/min.)	Up to 55 ft./min. (16m/min.)	Up to 55 ft./min. (16m/min.)	60 ft./min. (18.3m/min.)	60 ft./min. (18.3m/min.)	60 ft./min. (18.3m/min.)	60 ft./min. (18.3m/min.)
Compaction Depth	Up to 18 in. (45cm)	Up to 18 in. (45cm)	Up to 18 in. (45cm)	25 in. (64cm)	25 in. (64cm)	25 in. (64cm)	25 in. (64cm)

**Also available is the R420HL and R421HL with a low-vibration handle.*

Specifications subject to change without notice.

AIRRAMMER

The **Airrammer** isn't for everyone... but it's perfect for utilities, municipalities and contractors working in enclosed areas and other sensitive circumstances. The Airrammer's single drawback is that an air compressor is required for power. But if the air compressor is readily at hand, the list of advantages is truly impressive:

- No exhaust fumes or sparks.
- Significantly lower decibel level.
- Enhanced operator safety with deadman control handle.
- Very low hand/arm vibration.
- Performance gauge indicates if rammer is running at optimal performance level.
- Eliminates routine, everyday problems associated with gas powered rammers (carburetion, mixing of fuels, throttle breakage, fouled spark plugs, broken rewind starters, plugged air and fuel filters, carbon filled exhaust ports and mufflers, leaky fuel tanks-caps-lines, etc.).



Without question, the Airrammer is MBW's lowest maintenance rammer. In many situations, the Airrammer is the only means of getting the compaction work done safely.

SPECIFICATIONS	R450A	R451A
Operating Weight	125 lbs. (57kg)	130 lbs. (59kg)
Height	42.5 in. (108cm)	42.5 in. (108cm)
Width	17 in. (43cm)	17 in. (43cm)
Length	27 in. (69cm)	27 in. (69cm)
Shoe Size - WxL	11 x 13 in. (28 x 33cm)	13 x 15 in. (33 x 38cm)
Compaction Force	4500 lbf (20kN)	4550 lbf (20.3kN)
Percussion Rate	650	650
Travel Speed	60 ft./min. (18.3m/min.)	60 ft./min. (18.3m/min.)
Compaction Depth	24 in. (61cm)	24 in. (61cm)
Compaction Area	3300 sq.ft./hr. (307 sq.m/hr.)	3900 sq.ft./hr. (362 sq.m/hr.)
Air Required	75 cfm, 110 psi	75 cfm, 110 psi
RPM	4500	4500

Specifications subject to change without notice.



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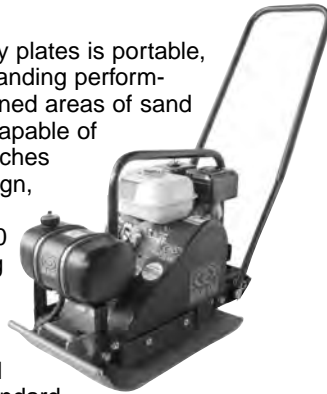
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Clinton, MD (301) 877-8640



HARDEST HITTING, LONGEST LASTING

1400 SERIES

The **1400 Series** of vibratory plates is portable, economical and offers outstanding performance. Ideally suited for confined areas of sand and gravel, the GP1400 is capable of achieving lift depths of 10 inches (25cm). The lightweight design, accompanied by intense vibration, allows the GP1400 series to be used for placing interlocking paving stones. The easily removable handle allows for convenient transport in any vehicle. Roll cage and water tank are standard equipment on AP1400 for asphalt applications.



1800 SERIES

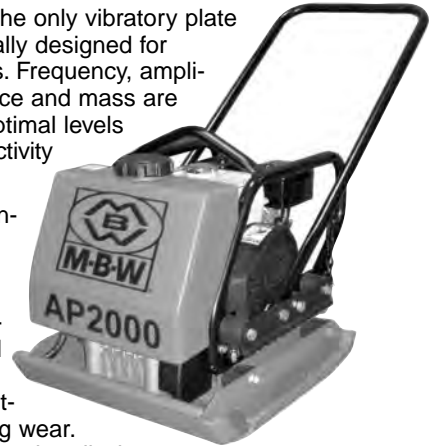
The lightweight, highly portable **1800 Series** of vibratory plates offers an economical alternative for small to medium soil applications. These plates are ideally suited for confined areas of sand and gravel and are capable of achieving lifts of up to 12 inches (30cm). Available with either Honda or Robin engines and optional roll cage.



- Optional neoprene paving pad accessory for interlocking paving blocks.
- One-piece exciter with self-cleaning open plate housing design.

2000 SERIES

MBW's **AP2000** is the only vibratory plate compactor specifically designed for asphalt applications. Frequency, amplitude, centrifugal force and mass are all established at optimal levels for maximum productivity on asphalt.



Further, the mechanical construction of the **AP2000** is specific to this very demanding application. Stress relieved steel plate housings are crack resistant and provide long wear.

Aluminum exciter housing dissipates heat rapidly and custom lubricants preserve bearing and seal integrity. The self-cleaning plate prevents dirt build-up.

The **GP2000** is a permutation of the AP2000 where frequency, amplitude, centrifugal force and mass are adjusted to provide optimal productivity in the compaction of sand and gravel. The GP2000 is capable of achieving excellent densities on lifts of granular soils up to 14" (36cm)*.

- Both units available with either Honda or Robin engines.
- Optional neoprene paving pad accessory for interlocking paving blocks.

* Clean sand, optimum moisture. MBW recommends that lifts not exceed 12".

	1400/1800 SERIES				2000 SERIES			
SPECIFICATIONS	AP1400H	GP1400H	GP1800H	GP1800R	AP2000H	GP2000H	AP2000R*	GP2000R*
Engine	Honda GX120 4.0 hp (3.0kw)	Honda GX120 4.0 hp (3.0kw)	Honda GX120 4.0 hp (3.0kw)	Robin EX13 4.5 hp (3.4kw)	Honda GX160 5.5 hp (4.1kw)	Honda GX160 5.5 hp (4.1kw)	Robin EX13 4.5 hp (3.4kw)	Robin EX13 4.5 hp (3.4kw)
Operating Weight	149 lbs. (68kg)	129 lbs. (59kg)	136 lbs. (62kg)	139 lbs. (63kg)	No Water: 168 lbs. (76kg) Full Water: 193 lbs. (88kg)	165 lbs. (75kg)	No Water: 168 lbs. (76kg) Full Water: 193 lbs. (88kg)	165 lbs. (75kg)
Plate Size WxL	14 x 21 in. (36 x 53cm)	14 x 21 in. (36 x 53cm)	18 x 21 in. (46 x 53cm)	18 x 21 in. (46 x 53cm)	20 x 22 in. (51 x 56cm)	20 x 22 in. (51 x 56cm)	20 x 22 in. (51 x 56cm)	20 x 22 in. (51 x 56cm)
Centrifugal Force	1925 lbf (8.6kN)	1925 lbf (8.6kN)	2300 lbf (10.2kN)	2300 lbf (10.2kN)	2475 lbf (11kN)	3250 lbf (14.5kN)	2475 lbf (11kN)	3250 lbf (14.5kN)
Exciter Speed	5240 vpm	5240 vpm	4710 vpm	4710 vpm	4400 vpm	5050 vpm	4400 vpm	5050 vpm
Compaction Depth	10 in. (25cm)	10 in. (25cm)	12 in. (30cm)	12 in. (30cm)	12 in. (31cm)	14 in. (36cm)	12 in. (31cm)	14 in. (36cm)
Travel Speed	85 ft./min. (26m/min.)	85 ft./min. (26m/min.)	100 ft./min. (30m/min.)	100 ft./min. (30m/min.)	90 ft./min. (27.4m/min.)	120 ft./min. (36.6m/min.)	90 ft./min. (27.4m/min.)	120 ft./min. (36.6m/min.)
Compaction Area	5100 sq. ft./hr. (474 sq. m/hr.)	5100 sq. ft./hr. (474 sq. m/hr.)	9000 sq. ft./hr. (836 sq. m/hr.)	9000 sq. ft./hr. (836 sq. m/hr.)	8550 sq. ft./hr. (794 sq. m/hr.)	10800 sq. ft./hr. (1000 sq. m/hr.)	8550 sq. ft./hr. (794 sq. m/hr.)	10800 sq. ft./hr. (1000 sq. m/hr.)

* Also available is the AP2000R6 or GP2000R6 with a Robin EX17 6 hp engine.

Specifications subject to change without notice.



SOLUTIONS THAT LAST

3550 SERIES

The **GP3550** is a premium, high production compactor with life expectancy that runs to decades with reasonable maintenance. The deck features a full roll cage as standard equipment with provisions for a water tank for asphalt compaction on **AP3550**. The base plate is self-cleaning with an open sided plate design that allows material to flow out and away from the belt/pulley assembly during operation. Both models provide reduced hand/arm vibration, full roll cage protection, enhanced amplitude, faster travel speed and updated yet rugged appearance.



3000-15 SERIES

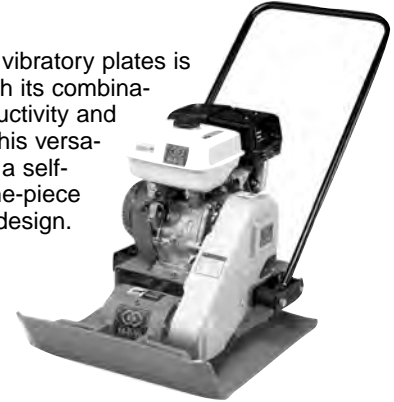
The **GP3000-15** is ideal for confined work areas such as sidewalk, curb and gutter, and narrow trenches. This specialty plate is not a lightweight compactor. Its operating weight is over 200 lbs. (91kg) and produces 3,550 lbs. (15.8kN) of centrifugal force, compaction depths up to 16 in. (41cm)* and a travel speed of 120 ft./min. (36.6m/min.).



* Clean sand, optimum moisture.
MBW recommends that lifts not exceed 12".

5500 SERIES

The **GP5500 Series** of vibratory plates is a contractor favorite with its combination of superlative productivity and mechanical reliability. This versatile compactor features a self-cleaning plate and a one-piece exciter and base plate design.



7000 SERIES

The **GP7000 Series** is MBW's heavy hitter for mid-sized to large jobs with difficult soils and deep lifts of up to 30 in. (76cm)*. Weighing 653 lbs. (296kg) with low frequency and high amplitude, this hard working vibratory plate produces 7,900 lbs. (35.1kN) of centrifugal force and outperforms walk-behind rollers on most granular applications. The GP7000 is easy to maneuver and isolates compaction force away from the operator. A central lifting bail provides easy lift and transport.



* Clean sand, optimum moisture. MBW recommends that lifts not exceed 12".

	3550/3000-15 SERIES				5500/7000 SERIES				
SPECIFICATIONS	GP3550H AP3550H	GP3550R* AP3550R*	GP3000-15H	GP3000-15R	GP5500H	GP5500R	GP5500Y	GP7000H	GP7000Y
Engine	Honda GX160 5.5 hp (4.1kw)	Robin EX13 4.5 hp (3.4kw)	Honda GX160 5.5 hp (4.1kw)	Robin EX13 4.5 hp (3.4kw)	Honda GX240 8 hp (6kw)	Robin EX21 7 hp (5.2kw)	Yanmar 6 hp (4.5kw)	Honda GX340 11 hp (8.2kw)	Yanmar 10 hp (7.5kw)
Operating Weight	GP3550H 226 lbs. (103kg) AP3550H-No Water 229 lbs. (104kg) AP3550H-Full Water 254 lbs. (115kg)	GP3550R 226 lbs. (103kg) AP3550R-No Water 229 lbs. (104kg) AP3550R-Full Water 254 lbs. (115kg)	202 lbs. (92kg)	204 lbs. (93kg)	279 lbs. (127kg)	293 lbs. (133kg)	297 lbs. (135kg)	653 lbs. (296kg)	686 lbs. (311kg)
Plate Size WxL	21 x 22 in. (53 x 56cm)	21 x 22 in. (53 x 56cm)	16 x 20 in. (41 x 51cm)	16 x 20 in. (41 x 51cm)	23 x 24 in. (58 x 61cm)	23 x 24 in. (58 x 61cm)	23 x 24 in. (58 x 61cm)	26 x 30 in. (66 x 76cm)	26 x 30 in. (66 x 76cm)
Centrifugal Force	3550 lbf (15.8kN)	3550 lbf (15.8kN)	3550 lbf (15.8kN)	3550 lbf (15.8kN)	5800 lbf (25.8kN)	5800 lbf (25.8kN)	5800 lbf (25.8kN)	7900 lbf (35.1kN)	7900 lbf (35.1kN)
Exciter Speed	4400 vpm	4400 vpm	4400 vpm	4400 vpm	4700 vpm	4700 vpm	4700 vpm	2800 vpm	2800 vpm
Compaction Depth	18 in. (47cm)	18 in. (47cm)	16 in. (41cm)	16 in. (41cm)	20 in. (51cm)	20 in. (51cm)	20 in. (51cm)	30 in. (76cm)	30 in. (76cm)
Travel Speed	110 ft./min. (34m/min.)	110 ft./min. (34m/min.)	120 ft./min. (36.6m/min.)	120 ft./min. (36.6m/min.)	130 ft./min. (39.6m/min.)	130 ft./min. (39.6m/min.)	130 ft./min. (39.6m/min.)	100 ft./min. (30.5m/min.)	100 ft./min. (30.5m/min.)
Compaction Area	11000 sq. ft./hr. (1022 sq. m/hr.)	11000 sq. ft./hr. (1022 sq. m/hr.)	9600 sq. ft./hr. (890 sq. m/hr.)	9600 sq. ft./hr. (890 sq. m/hr.)	14950 sq. ft./hr. (1390 sq. m/hr.)	14950 sq. ft./hr. (1390 sq. m/hr.)	14950 sq. ft./hr. (1390 sq. m/hr.)	13000 sq. ft./hr. (1210 sq. m/hr.)	13000 sq. ft./hr. (1210 sq. m/hr.)

* Also available is the GP3550R6 or AP3550R6 with a Robin EX17 6 hp engine.

Specifications subject to change without notice.

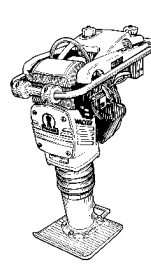


Hardware & Supply Co., Inc.
Supply, Inc. of Virginia
Form Rentals

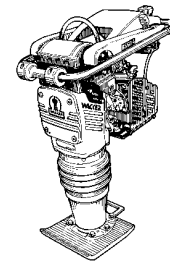
NJ (856) 662-6935 • PA (215) 925-8800
Metro (703) 569-6660 • VA (703) 455-6700
Clinton, MD (301) 877-8640

Vibratory Rammers

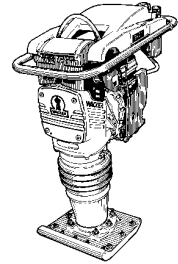
Model	Oper. Wt. (lb.)	Shoe Width (in.)	HP	Blows /min.	Force/ Blow (lb.)	Lift (in.)	FT ³ /h
ES 52Y	123	10	115V/15A	800	2590	18	2600
BS 50-2	129	10	4	700	2695	18	2950
BS 50-2i	131	11	4	700	2695	20	3245
BS 50-4	137	11	2.8	680	2645	18	2795
BS 60-2i	145	11	4	700	3025	23	3135
BS 60-4	154	11	2.8	680	2975	22	2655
BS 70-2i	164	11 or 13	4	700	3375	24	3380
DS 70	183	11 or 13	4.2	700	3550	25	2795



BS 50-2i



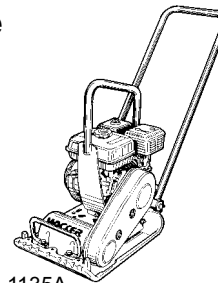
BS 60-4



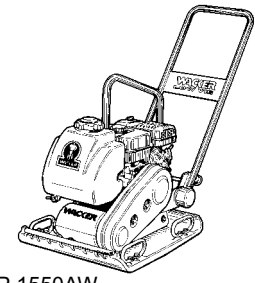
DS 70

Vibratory Plates: single direction and reversible

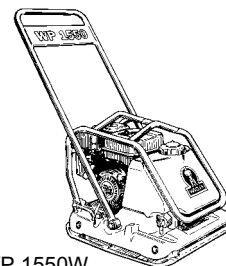
Model	Oper. Weight (lb.)	Plate Width (in.)	HP	Cent. Force (lb.)	Frequency VPM	Speed (ft./min.)	Lift (in.)	FT ³ /h
VP 1135A	137	14	4	2470	5800	85	10	5900
VP 1135AW	137	14	4	2470	5800	85	10	5900
VP 1340	163	15.5	6	2925	5800	75	12	5900
VP 1340A	163	15.5	5.5	2925	5800	75	12	5900
VP 1340W	168	15.5	6	2925	5800	75	12	5900
VP 1340AW	168	15.5	5.5	2925	5800	75	12	5900
VP 1550	184	19.5	6	3375	5800	67	12	6600
VP 1550A	184	19.5	5.5	3375	5800	67	12	6600
VP 1550W	184	19.5	6	3375	5800	67	12	6600
VP 1550AW	190	19.5	5.5	3375	5800	67	12	6600
VP 2050A	230	19.5	5.5	4500	5800	80	14	7880
VP 2050Y	250	19.5	4.7	4500	5800	80	14	7880
WP 1540	190	15.5	6	3375	6000	100	12	6590
WP 1540A	190	15.5	5.5	3375	6000	100	12	6590
WP 1540W	190	15.5	6	3375	6000	100	12	6590
WP 1540AW	190	15.5	5.5	3375	6000	100	12	6590
WP 1550	194	19.5	6	3375	6000	100	12	3375
WP 1550A	194	19.5	5.5	3375	6000	100	12	9750
WP 1550W	194	19.5	6	3375	6000	100	12	9750
WP 1550AW	194	19.5	5.5	3375	6000	100	12	9750
Reversible Plates								
BPU 2540A	308	15.5	5.5	5625	5400	69	16	5425
BPU 3050A	366	19.5	9	6750	5400	69	18	6779
BPU 3545A	700	24	9	7870	4140	72	28	8500
DPU 4045H	725	24	8.4	9000	4150	79	28	8900
DPU 4045Y	655	24	6.7	9000	4150	79	28	8900
BPU 5045A	710	24	13	11240	4140	92	34	10800
DPU 5045H	904	24	8.4	11240	4150	92	34	10800
DPU 6055	1041	28	13.4	13500	4150	92	40	11900
DPU 7060SC	1356	31.5	14.8	15510	3050	82	40	11300
DPU 100-70	1566	38	21.5	22500	3360	98	40	17540



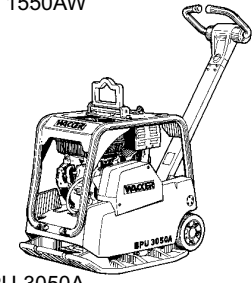
VP 1135A



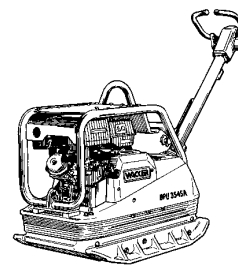
VP 1550AW



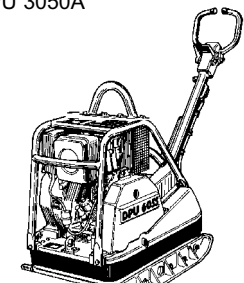
WP 1550W



BPU 3050A



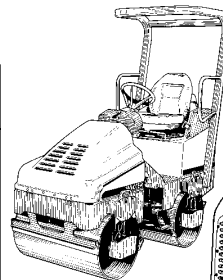
BPU 3545A



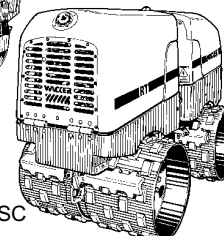
DPU 6055

Vibratory Rollers: ride-on and walk-behind

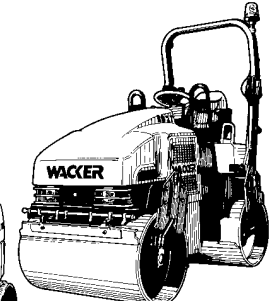
Model	Oper. Weight (lb.)	Drum Width (in.)	HP	Cent. Force (lb.)	Frequency VPM	Speed (ft./min.)	Lift ⁺ (in.)	FT ³ /h
RD 7H	1815	25.5	8.6	2925	3300	0-220	12 (4)	28115
RS 800A	1000	28.3	11	3400	4200	0-200	10 (4)	28300
RSS 800A	1025	28.3	11	3400	4200	0-200	10 (4)	28300
RT 56-SC	3068	22	21	15400	2500	66/131	29.5	7260
RT 82-SC	3247	32	21	15400	2500	66/131	29.5	10560
RD 11A	2586	35.4	18	3000	3900	0-414	10 (4)	73200
RD 11V	2586	35.4	18	3000	3900	0-414	10 (4)	73200
RD 15	3308	31.5	21.2	5170	3000	0-387	12 (4)	60950
RD 27-100	5622	39.4	33.7	15744	3960	0-546	24 (6)	107500
RD 27-120	6063	47.2	33.7	18614	3960	0-546	24 (6)	129000



RD 11A



RT 82-SC



RD 27-120

+Soil (Asphalt)



Vibratory Plate Compactor

STANDARD FEATURES

- Honda 4-cycle engine with low oil shutdown.
- Premium dual eccentric extended-life V-belts.
- Belt guard for safety.
- Sealed clutch.
- Roll cage for added protection.



PC 800 Specifications

Centrifugal Force	3,640 lbs.
Max. Compaction Depth	12 in.
Working Speed	96.8 ft./min.
Productivity	9,940 ft. ³ /hr.
Engine/Horsepower	Honda/5.5 hp
Weight	190 lbs.

ERGONOMIC MOVABLE HANDLE

- Center-mounted swing handle.
- Promotes safe, easy handling in confined applications.
- Reduces vibration for operator.



100% EDGE-TO-EDGE COMPACTION

- Abrasion-resistant, alloy steel plates.
- Up-to-the-edge compaction next to buildings or curbs.
- Lifetime warranty on plate bottom.
- Poly pad available for pavers.

WATER SPRINKLER SYSTEM

- Produces unsurpassed finishes.
- Plastic tank, durable piping and nozzles eliminate clogging.
- Low-profile water bolts.



DESIGNED FOR MEDIUM-SIZED APPLICATIONS ... AND BIG PRODUCTIVITY



Rammer - RV 60

The RV Series of rammers teams the dependable Honda 4-cycle engine with a heavy hitting, smooth running rammer you can depend on day in - day out for all your tough compaction applications.

Developed specifically for the tough jobs, the Honda 4-cycle engine provides a level of reliability unmatched by any mixed fuel rammer using a 2-cycle engine. By eliminating the premature engine failures common with mixed fuel usage, the easy starting Honda engine assures you of extended life and cleaner operation for less maintenance and downtime.

The RV Series Rammer offers greater productivity with a low center of gravity and excellent balance. The five bearings, precision machined gear drive and twin sets of fully encapsulated double springs, provide harder impacts in all weight classes.

The patented shock absorbing ferro-silicon rubber bellows send the impact into the ground, where it belongs and keeps it from coming back up into the machine for longer component life. Coupled with the heavy doughnut style handle isolators for safety and productivity, vibration is kept away from the most important component – the operator.

RV 60 Specifications

Weight	130 lbs.
Dimensions	27.5"Lx14"Wx37"H
Shoe/Plate Size	11"Wx13.5"L
PERFORMANCE	
Impact Blow	3,000 lbs.
Frequency	660-680 VPM
Stroke	3.15 in.
Max. Compaction Depth	Up to 22 in.
Working Speed	27-50 ft./min.
Productivity	3,250 ft. ³ /hr.
ENGINE	
Engine	Honda
Horsepower	4 hp
Type	4-cycle
Max. Operating	3,750 RPM
Fuel	Unmixed
Tank Capacity	0.6 gal.
Fuel Consumption	.19 gal./hr.



SUPERIOR COMPACTION ANY WAY YOU GO

Forward. Reverse. On the spot. In any direction, Stone Reversible Plates perform. Ideal for compacting sand, gravel and mixed soils, and working in narrow trenches and along foundations, walls and abutments. Four models, including gas and diesel options, provide the most complete selection for all soil conditions and jobsite applications.

- **Eccentric System** – Models feature a dual eccentric system. Two counter-rotating eccentrics with adjustable phasing allow directional changes. The infinite adjustment of the eccentric allows “on-the-spot” compaction – giving you that little extra just where you need it.
- **Automotive Gear Advantage (RP1350 Model)** – Equal load distribution among the drive components results in less friction, less heat and therefore less wear than standard pin and groove systems. Added advantage – much easier and less costly to repair.
- **Low Center of Gravity** – You want it to go where it’s supposed to go. The low center of gravity and low profile gained by a centrally located oil-lubricated dual exciter make Stone reversible plates more maneuverable – less likely to tip.
- **Superior Vibration Isolation** – Operator comfort and ability to work until the job is done is important. Stone reversible plates offer superior vibration isolation to the engine and operator – extending engine life and making the plates easier to operate thus reducing operator fatigue.

- **Productive** – Fully hydrostatic, the infinitely variable speed range allows for faster compacting, greater maneuverability and more operator control. With speeds up to 92 ft. per minute you gain maximum productivity up to 13,600 sq. ft. per hour.
- **Serviceability** – Serviceability counts at Stone. And it sets Stone Reversible Plates apart with an easy-to-clean, easy-to-work on design. Service points are easy to see and easy to reach – cutting service time and costs.
- **Protection** – Wrap around protection cage protects the plate from accidental damage on any construction site. And its centrally-located lifting bar allows easy transport in and out of trenches. The heavy-weight RP1350 has a lockdown cover with a fold away lifting eye.
- **Adjustable Handle** – An adjustable flip-up locking handle with padded grip allows you to adjust the height to the operator, making operation and control easier. It also folds down for easy transport or flips up for space saving storage.



The infinite adjustment of the eccentric allows “on-the-spot” compaction.

- **Versatile** – Heavy-duty wear-resistant steel base plates give you optimum performance in most applications. An optional paving mat for popular landscaping stone applications is available on the RP522 and RP652. The mat – mounted to the base plate – allows optimum compaction while preventing cracking and scratching of decorative paving stones.

MODEL	RP522 Series	RP652 Series	RP850 Series	RP1350 Series
Dimensions				
Operating Weight	220 lbs. (100kg)	408 lbs. (185kg)	568-620 lbs. (258-282kg)	1,130 lbs. (513kg)
Plate Size WxL	15.75" x 24" (40 x 60cm)	20" x 28" (50 x 70cm)	24" x 34" (60 x 86cm)	28" x 37" (70 x 93cm)
Operating System				
Engine	4 hp Honda (2.9kW)	9 hp Honda (6.6kW)	9 hp Honda (6.6kW) 6 hp Hatz (4.5kW)	13.6 hp Hatz (10kW)
Transmission	Hydrostatic	Hydrostatic	Hydrostatic	Hydrostatic
Performance				
Centrifugal Force	4,945 lbs. (22kN)	6,744 lbs. (30kN)	8,542 lbs. (38kN)	13,488 lbs. (60kN)
Vibration Frequency	5,880 vpm (98 Hz)	5,700 vpm (95 Hz)	3,900 vpm (65 Hz)	3,780 vpm (63 Hz)
Maximum Productivity	6,456 sq. ft./hr. (600m ² /hr.)	7,101 sq. ft./hr. (800m ² /hr.)	10,200 sq. ft./hr. (936m ² /hr.)	13,600 sq. ft./hr. (1260m ² /hr.)
Max. Travel Speed	80 ft./min. (26m/min.)	92 ft./min. (22m/min.)	85 ft./min. (26m/min.)	92 ft./min. (28m/min.)
Max. Depth Compaction	12" (30cm)	18" (45cm)	20" (50cm)	31" (80cm)
Standard	-	-	6" (15.2cm) wide extensions	6" (15.2cm) wide extensions, electric start
Options	Paving Mat	Paving Mat	-	-

THE SILVER FOX™ Series Forward Plates – Outsmart, Outlast and Outperform

- **Smart, Fast and Nimble** – Get exceptional travel speed of up to 130 ft. per minute and greater climbability from forward-mounted eccentrics. By mounting the eccentrics slightly forward of the engine and adding 15° front ramped base plate, the Silver Fox series delivers high amplitudes and better gradeability even in deep lifts. The ramp allows the plate to gently climb onto the uncompacted surface providing even, progressive compaction.
- **2-Year Eccentric Bearing Warranty** – We back the “heart” of our plate with a 2-year warranty on the heavy-duty eccentric bearings to virtually insure trouble-free performance.
- **Synchronized Drive System** – The eccentric, patented off set eccentric sheave and engine are linked by a single belt. They operate in unison (synchronized) to greatly reduce belt stress. This arrangement ensures more efficient power transfer requiring only one belt, which more than cuts your belt maintenance IN HALF.
- **Premium Kevlar Belt** – The ultimate in v-belt material. Like a synthetic steel, it's very flexible, extremely durable and possesses tremendous strength qualities. Reduces belt replacement for lower lifetime costs.
- **Self-Cleaning Carbon Steel Base Plate** – The unique open base plate design eliminates dirt build up. No ridges or side plates to confine debris. Dirt and stones simply vibrate forward and off the sides. Increased uptime. Superior to modular cast iron, the carbon steel base plate has a tensile strength of 90,000 PSI.
- **Optimized for Asphalt-Work** – The Silver Fox SFA3500 has been designed for extra ordinary action on asphalt. Eccentric placement vpm's and the geometry of the base combine for more productivity and more even asphalt compaction. Ideal for asphalt patching and finishing. This Silver Fox model floats across the surface for smoother finishes. Features include a specially designed inverted front, 90° side angles and wear plates for better maneuvering in confined areas and up close to curbs, foundations and other obstructions.
- **Patented One-Piece Base Plate Design** – The patented integrated base plate/eccentric housing/oil reservoir serves a dual purpose. The extra large oil reservoir provides superior oil cooling for longer bearing life, and the heat is dissipated over the entire plate surface to reduce asphalt sticking, providing smoother finishes.
- **Largest Oil Reservoir in the Industry** – Having a large oil reservoir, running the entire length of the base plate, provides substantially better heat transfer over the entire base. The result is faster warm-ups, a constant, stable working temperature for asphalt applications, and cooler eccentric bearings for longer life.
- **Patented SnapTek Connected Water System** – The patented water system directs an even flow across the entire base plate surface. The Asphalt SFA3500 has a custom sprinkler to continually coat the base with a sheet of water to reduce asphalt sticking. Both feature a Stone exclusive SnapTek coupler to disengage or engage the water tank.



- 2-year eccentric bearings warranty
- SFA3500 asphalt specific plate
- Patented water system

- **Superior Serviceability** – It's our attention to a serviceable design that puts us a step above the rest. Four common wrenches are all that's needed to service Stone plates.
- **Ergonomically Designed** – The little details count – like the handle stops in both directions, lift handles front and back, a roll cage to protect the engine and components and integral centrally located lift points.
- **Narrow, 13" Wide Baby Plate** – SFP2200 can be used for those small jobs or by do-it-yourselfers.
- **Extra Special Features** – Transport Silver Fox plates with optional E-Z transport wheels. Use all the models on pavers, flagstones, landscape bricks or cobbles with the optional paving mat.

MODEL	SFP2200 / SFP2200A	SFP3000 / SFP3000A	SFA3500	SFP4000 / SFP4000A	SFP5100
Dimensions					
Operating Weight	140 lbs. (64kg)	205-210 lbs. (93-95kg)	225-230 lbs. (102-105kg)	215-240 lbs. (98-109kg)	235-260 lbs. (107-118kg)
Plate Size WxL	13" x 21" (33 x 53.3cm)	20" x 24" (51 x 61cm)	20" x 24" (51 x 61cm)	20" x 24" (51 x 61cm)	20" x 24" (51 x 61cm)
Operating System					
Engine Options (kW)	4 hp Honda (3) 4.5 Robin (3.3)	5.5 hp Briggs I/P (4.1) 6 hp Robin (4.4) 5.5 hp Honda (4.1)	5.5 hp Briggs I/P (4.1) 6 hp Robin (4.4) 5.5 hp Honda (4.1)	5.5 hp Briggs I/P (4.1) 6 hp Robin (4.4) 5.5 hp Honda (4.1) 4.2 hp Yanmar Diesel (3.1)	5.5 hp Briggs I/P (4.1) 6 hp Robin (4.4) 5.5 hp Honda (4.1) 4.2 hp Yanmar Diesel (3.1)
Water System	Yes (SFP2200A)	Yes (SFP3000A)	Yes	Yes (SSFP4000A)	No
Water Tank Cap. (L)	7.5 qt. (SFP2200A) (7.1)	13 qt. (SFP3000A) (12.3)	13 qt. (12.3)	13 qt. (SFP4000A) (12.3)	13 qt (12.3)
Performance					
Eccentric Force	2200 lbs. (9.8kN)	3000 lbs. (13.35kN)	3500 lbs. (15.6kN)	4000 lbs. (17.80kN)	5100 lbs. (22.70kN)
Productivity (sq. m/hr.)	6500 sq. ft./hr. (604)	10,000 sq. ft./hr. (929)	10,000 sq. ft./hr. (929)	10,000 sq. ft./hr. (929)	13,000 sq. ft./hr. (1207)
Max. Lift	12" (30.5cm)	12" (30.5cm)	12" (30.5cm)	12" (30.5cm)	14" (35.5cm)
Max. Travel Speed	100 ft./min. (30.5m/min.)	100 ft./min. (30.5m/min.)	100 ft./min. (30.5m/min.)	100 ft./min. (30.5m/min.)	130 ft./min. (40m/min.)
Vibration Frequency	6100 vpm (102Hz)	6000 vpm (100Hz)	5200 vpm (87Hz)	5200 vpm (87Hz)	5200 vpm (87Hz)
Features					
Warranty	Removable Water Tank Roll Cage 1-year, 2-year eccentric bearing	Removable Water Tank Roll Cage 1-year, 2-year eccentric bearing	Removable Water Tank Roll Cage 1-year, 2-year eccentric bearing	Removable Water Tank Roll Cage 1-year, 2-year eccentric bearing	Removable Water Tank Roll Cage 1-year, 2-year eccentric bearing

E-Z Transport Wheels for Models except SFP2200/SFP2200A . Paving Mat also available on all models.

STONE STOMPERS® - NEW AUTHORITY FOR THE NEW MILLENIUM

BROADEST LINE TO EVER HIT THE DIRT



- **Broadest Selection of Models** – Stone offers several models for superior handling, control and reliability. Choose from standard 2-cycle pre-mix, oil-injected 2-cycle or 4-cycle gas.
- **Comfort and Control** – A unique, state-of-the-art snap-on, contoured cover reduces noise and protects the engine yet allows easy access for servicing. A heavy-duty ergonomic throttle puts more comfortable control at your finger tips for easy operation. We've reduced operator fatigue with extra-padded hand grips and superior rubber shock mountings.
- **Precision Built to Last** – Stompers are built to last with precision components. The light-weight authority, XN650 series, features a leading edge design that includes such solid state components as more reliable forged pistons and solid snubbers.
- **Modular Design** – This exclusive innovative, high-tech design totally revolutionizes rammer servicing. The top and bottom modules detach from the boot in minutes, cutting service time virtually in half. Each module can be serviced independently without total machine disassembly. Over the long term, this exclusive feature cuts service costs and lowers lifetime costs. Maintenance is simplified even further with a removable inspection cover for quick drive train checks.

- **Oil Bath Lubrication** – Through an automatic oil splash system all moving parts receive continuous lubrication to keep them running cooler for longer life.
- **Quadruple Fuel Filtration System** – Your fuel supply gets four times the protection – reduces jobsite fuel contamination for more uptime . . .
 - A threaded, screw-in-place fuel cap with an adjustable ventilation valve prevents dust from entering the tank when running.
 - A replaceable mesh screen filter fuel strainer eliminates contamination while refueling.
 - A fine mesh screen filter located at the bottom of the tank prevents dirt from entering the fuel line.
 - An automotive-type in-line fuel filter removes the finest particles from the fuel.
 – Stompers are equipped with a convenient fuel shut off valve, to quickly and easily shut the fuel flow to the engine and provide clean storage of fuel when not in use.
- **High Volume Air Filtration Systems** – Extra large, heavy-duty, top-mounted air filter provides optimum air flow and maximum filter surface to reduce engine wear and extend life. The system consists of washable foam pre-filters and a high capacity fine grade replaceable paper filter. The pre-filters can be rinsed clean and the paper filter tapped clean.
- **Polyethylene Fuel Tank** – Seamless, see-through 3-qt. fuel tank withstands impact,

1-YEAR PRODUCT AND 2-YEAR PISTON RING WARRANTIES
Unique non-metallic piston ring resists wear. It carries a 2-year unconditional warranty.

shows fuel level at a glance. Oil-injected models also feature a 1-qt. polyethylene oil tank.

- **Spring Housing** – Constructed of super rugged, aircraft quality, high tensile steel. When it comes to long term reliability and strength, steel has it all over aluminum alloy.
- **Jumps Higher, Hits Harder, Travels Faster** – This combination spells productivity. You get higher productivity, more reliability and easier servicing, plus better overall performance. You'll see higher jump heights, harder impact forces and faster travel speeds – productivity you can measure everyday on the job.

MODEL	XN650R / XN650RO1	XT728R / XT728RO1	XM832R / XM832RO1	XH670	XH730	XH840
Dimensions						
Weight	125 lbs. (57kg)	130 lbs. (59kg)	158 lbs. (72kg)	132 lbs. (60kg)	140 lbs. (64kg)	145 lbs. (66kg)
Dimensions L x W x H (cm)	30.3" x 13.5" x 38" (84.6 x 34 x 96.5)	28.5" x 15" x 38" (72 x 38 x 96.5)	28.5" x 15" x 38" (72 x 38 x 96.5)	30.6" x 13.5" x 42" (77.7 x 34.3 x 106.7)	29.7" x 14.9" x 42" (75.4 x 37.9 x 106.7)	33.8" x 16.4" x 44" (85.9 x 41.7 x 111.8)
Shoe Size (cm)	10" x 13" (25 x 33)	11" x 13" (27.9 x 33)	11" x 13" (27.9 x 33)	10" x 13" (25.4 x 33)	11" x 13" (27.9 x 33)	11" x 13" (27.9 x 33)
Operating System						
Power	4 hp Robin (3kW)	4 hp Robin (3kW)	4 hp Robin (3kW)	3 hp Honda (2.24kW)	3 hp Honda (2.24kW)	4 hp Honda (2.98kW)
Engine Specs	EC12D	EC12D	EC12D	GX100	GX100	GX120
Engine RPM	4300 (72hz)	4300 (72hz)	3900 (65hz)	4000 (67hz)	3800 (63hz)	3600 (60hz)
Fuel Mixture	50:1	50:1	50:1	-	-	-
Fuel Capacity	3 qts. (2.8 L)	3 qts. (2.8 L)	3 qts. (2.8 L)	3 qts. (2.8 L)	3 qts. (2.8 L)	3 qts. (2.8 L)
Fuel Tank Material	Polyethylene	Polyethylene	Polyethylene	Polyethylene	Polyethylene	Polyethylene
Performance						
Impact Force	2600 lbs. (1182kg)	2800 lbs. (1273kg)	3200 lbs. (1455kg)	2650 lbs. (1205kg)	3100 lbs. (1409kg)	3500 lbs. (1591kg)
Max. Blows/Min.	780 (13hz)	700 (12hz)	660 (11hz)	727 (12hz)	690 (12hz)	655 (11hz)
Max. Forward Travel Speed	60'-70'/min. (18.3-21.3m/min.)	60'-90'/min. (18.3-27.4m/min.)	50'-64'/min. (15.2-19.5m/min.)	60'-70'/min. (18.3-21.3m/min.)	60'-70'/min. (18.3-21.3m/min.)	60'-70'/min. (18.3-21.3m/min.)
Max. Productivity	3500 sq. ft./hr. (325 sq.m/hr.)	4950 sq. ft./hr. (460 sq.m/hr.)	3500 sq. ft./hr. (325 sq.m/hr.)	3500 sq. ft./hr. (325 sq.m/hr.)	3575 sq. ft./hr. (332 sq.m/hr.)	3575 sq. ft./hr. (332 sq.m/hr.)
Max. Lift (cm)	18" (45.7)	18" (45.7)	22" (55.9)	22"-25" (55.9-63.5)	22"-25" (55.9-63.5)	22"-25" (55.9-63.5)
Max. Amplitude	2.5" (6.4cm)	Up to 4" (10.2cm)	Up to 3" (7.6cm)	2.5" (6.4cm)	Up to 3" (7.6cm)	Up to 4" (10.2cm)
Options	Extension, Handle Roller	Extension, Handle Roller	Handle Roller	Extension, Handle Roller	Extension, Handle Roller	Extension, Handle Roller

THE STONE WOLFPAC™ 2500 – THE NO OPTION ROLLER

Everything You Need Is Standard.



– *Exclusive Hydrostatic Drive*
– *Power Steering - Standard*

MODEL		WOLFPAC 2500
Dimensions		
L x W x H	84" x 36" x 56" (213 x 91 x 142cm)	
Weight Total Dry	1585 lbs. (719kg)	
Operating Weight	2070 lbs. (939kg)	
Weight Ballasted Out	2680 lbs. (1215kg)	
Front Roller Diameter	20" (51cm)	
Rear Roller Diameter	24" (61cm)	
Front Roller Width	28" (71cm)	
Rear Drive Roller Width	32" (81cm)	
Wall Clearance	1/2" (13cm)	
Curb Clearance	9" (23cm)	
Wheelbase	58" (147cm)	
Drum Thickness	3/8" (9.6cm)	
Operating System		
Engine	11 hp Honda with low oil alert (8.2KW)	
Power Steering	Hydrostatic	
Hydrostatic Transmission	Yes	
Hydrostatic Pump	Eaton #11	
Drive Motor	Char-Lynn	
Hydrostatic Reservoir Cap.	6.7 gal. (25.36 L)	
Water Tank	Polyethylene (with/ level gauge)	
Capacity	30 gal. (114 L)	
Front Roller Mounting	(4) Ball Bearings	
Rear Roller Mounting	(2) Ball Bearings	
Performance		
Infinitely Variable Speed	0-4.5 mph (7.25km/hr)	
Inside Turning Radius	8.3 ft. (2.5m)	
Gradeability	30%	
Standards – Cocoa Mat, Machined Drums, Adjustable Seat, Tool Box Under Seat, Feathering System (Trans), Neutral Ignition Interlock, Enclosed Engine Compartment, Parking Brake - hand operated, disc.		

- **Power Steering** – This is an absolute necessity on any roller, but you won't find it on all of them. Power steering with a tilted steering wheel offers the greatest comfort to the operator as it's easier to steer, easier to maneuver. The hydraulic cylinder isolates vibration and absorbs the shock instead of transferring it to the operator.
- **Hydrostatic Transmission** – A drive system that is both hydraulically controlled AND hydraulically driven – it's the best investment you can make for performance and longer life.
- **Feathering** – This is the ability to change rolling directions without scuffing the asphalt. Only a split drive system provides this benefit. Another advantage to a state-of-the-art split system is that it only needs a single chain to drive the drum. With an inside turning radius of 8.3 ft. and higher curb clearance, the Stone WolfPac 2500 can get into those confined spaces and closer to walls.
- **Extra Capacity Water Tank** – A large 30 gallon polyethylene water tank gives you more running time ... with longer intervals between refills, you'll stay on the asphalt as much as 50% longer than with some brands. And with a water gauge standard – you'll know just when to refill.
- **Working Weight** – When fully ballasted, the ideal weight is 2,680 lbs. or 1¼ ton, that's 500 pounds more than others in its class. Static rollers rely on their "dead" weight to achieve compaction which means that the extra 500 lbs. achieves good compaction on subbase and base materials and also provides a nice, smooth final finish on asphalt.
- **Neutral Ignition Interlock** – Insures that the unit cannot be started in gear. This convenient safety feature prevents lurching and uncontrolled rolling. A brake-throttle interlock ensures that the engine is at idle when the brake is engaged. Release the brakes and the throttle can be operated independently.
- **Electric Key Start** – A convenience you don't want to be without. A simple turn of the key, and you're ready to roll.
- **Totally Enclosed Engine** – That's down and away from the operator, with a precise compartment for the engine to reduce engine noise. Exhaust fumes and heat are away from the operator, greatly reducing the possibility of an operator getting burned. The engine guard provides additional engine security, discourages vandalism and keeps people from tampering with the carburetor.
- **3/8" Thick Steel Machined Drums** – To insure a nice, smooth surface. Heavy-duty drums will last a long, long time. Supported by easy-to-replace bearings ... roller bearings in front, ball bearings in the rear – deliver trouble-free rolling.
- **Front and Rear Cocoa Mats** – Evenly distribute water over the drums to reduce asphalt sticking for a smooth asphalt finish.
- **Adjustable Seat** – Foam-enhanced seat that adjusts for the operator's height provides comfort during rolling.
- **Tool Box** – A large, convenient storage compartment for tools, manual, lunch, etc.

THE STONE WOLFPAC™ 3100 – THE LONE WOLF STANDS OUT ON THE JOB

- The Right Combination for Any Application** – Ideal for finish layers of driveways, parking lots, bicycle paths and a wide variety of other paved surfaces. A combination of double drum drive, rear drum ballasting and internal front drum vibration allows the operator to match the WolfPac 3100 to the application.
- Maneuverable** – Centerpoint articulation, power steering, a short wheelbase and high curb and minimum wall clearance on both sides make this roller incredibly effective in confined areas.
- Extra Power for Tough Work** – An 18 hp Honda Twin engine and dual drum drive deliver maximum power and optimal torque on flat as well as grades up to 30%. Infinitely variable forward and reverse hydrostatic drive provides smooth acceleration and stopping to prevent mat scuffing.
- Precision Components** – An isolated, dedicated hydraulic circuit for steering and eccentrics optimizes both operations simultaneously. Parker® seal lock hydraulic connector system provides leak-free pressure, torque and vibration. High quality Eaton transmission pump is durable, delivers optimum performance.
- Smooth, Polished Finishes** – The WolfPac 3100 features an overall design that's properly balanced to prevent scuffing or gouging. Heavy-duty machined 35" wide drums with tapered edges provide smooth asphalt finishes. The corrosion resistant, gravity feed water system allows maximum water to the drums, prevents asphalt from sticking. And spring loaded, urethane scrapers evenly spread water over drum surfaces, reducing asphalt build-up.
- Contemporary Styling** – The rugged, yet lightweight, contoured swing away hood delivers optimum air flow through the engine compartment. The styling maximizes line of sight to the roller front, rear and sides. The hood swings away to provide easy service access to the engine compartment components.
- Control At Your Finger Tips** – 4-in-1 control lever includes forward, reverse and neutral drives along with a vibration button. Makes operation convenient and easy.



**SMALL
FAST
NIMBLE**

- Capacity to Keep Working** – Large capacity hydraulic tank delivers cooler hydraulic oil, reduces heat and contamination for longer hydraulic component life. Large, oversized fuel tank and 40-gallon reinforced polyethylene water tank with level indicators minimize refilling stops, provide quick visual fluid level checks.
- Service Made Simple** – The hydraulic front frame bulkhead design allows for easy insertions of diagnostic equipment. Hydraulic and fuel tank drains are accessible and clearly marked. The water system sprinkler bars are easily removed for convenient cleaning.
- Ergonomically Designed for Operator Comfort** – Adjustable seat, tilted steering wheel and conveniently located controls facilitate effortless productivity. Roomy operator compartment provides maximum space and comfort with an unobstructed line of sight.

MODEL	WOLFPAC 3100
Dimensions	
Operating Weight	3045 lbs. (1381kg)
Dry Weight	2396 lbs. (1087kg)
Ballasted Weight	3254 lbs. (1476kg)
Dimensions LxWxH	82" x 39" x 94" (208 x 99 x 239cm)
Drum Width	35.4" (90cm)
Drum Diameter	22" (56cm)
Side Wall Clearance	1.8" (5cm)
Curb Clearance	16" (41cm)
Front/Rear Wall Clearance	3'9" (7.6/22.9cm)
Operating System	
Engine	18 hp Honda Twin (13.4kW)
Fuel Capacity	8 gal. (30 L)
Drive	Hydrostatic Double Drum
Steering	Center-Point Articulating Hydrostatic
Water Tank Capacity	40 gal. (151 L)
Performance	
Vibrating Drum	Front
Centrifugal Force	3000 lbs. (13.3kN)
Frequency	3900 vpm (65 Hz)
Gradeability	30%
Outside Turning Radius	In - 6.6' (2.0m) Out - 9.5' (2.9m)
Infinitely Variable Speed	0-5 mph (8km/hr.)
Standards – Hour meter, ignition switch, neutral ignition interlock, transport link, lifting points, anti-vandal protection, adjustable safety sliding seat, hydraulic transmission by-pass, hydraulic pressure test points, horn.	

THE STONE WOLFPAC™ 6100 ROAD SKILL — NOT OVERKILL

This heavyweight has become the new standard for commercial use, in precision, in speed, in fullblooded performance—**Stone's WolfPac 6100 Roller.**

MODEL		WOLFPAC 6100
Dimensions		
Operating Weight	6180 lbs. (2803kg)	
Dry Weight	5730 lbs. (2600kg)	
Ballasted Weight	n/a	
Dimensions LxWxH	101.7" x 50" x 107" (258 x 127 x 272cm)	
Drum Width	47.25" (120cm)	
Drum Diameter	27.56" (70cm)	
Wall Clearance	1.84" (4.6cm)	
Curb Clearance	20" (52cm)	
Wheelbase	66" (166.6cm)	
Operating System		
Engine	33.5 hp Kubota Diesel (24.98kW)	
Fuel Capacity	11.3 gal. (42.75 L)	
Drive	Hydrostatic Double Drum	
Steering	Hydrostatic Power Steering	
Frame	Center-Point Articulating	
Travel Speed	0-6.2 mph (0-10km/hr.)	
Water System	Pressurized, Gravity Back-up	
Water Tank Capacity	43 gal. (163 L)	
Performance		
Vibrating Drum	Front, Rear, Dual	
Centrifugal Force	5826 lbs. (25.9kN) per drum	
Frequency	3400 vpm (56.6 Hz)	
Oscillation	±15°	
Gradeability	42%	
Inside Turning Radius	Inside - 9.5' (2.9m)	
Max. Area Capacity	128,871 ft. ² /hr. (11,972m ² /hr.)	
Dynamic Linear Force	123.3 lbs./in. (26.6N/mm) per drum	
Standards – Back-up alarm; removable fuel, water and hydraulic tanks; noise dampening; electronic vibration – front, rear or both; self tensioning scrapers; freewheel control; adjustable water control; horn; hour meter; oil pressure gauge; engine temperature, battery, emergency stop button; seat safety switch; adjustable seat; seat belts.		
Options – Working lights, beacon		



Run with the Leader — WolfPac 6100 Roller

- Easy-to-operate. 4-in-1-operator control switch—forward and reverse travel speed, neutral—is easy to reach.
- Make cleaning or service fast and simple with easy to remove fuel, water and hydraulic tanks. Gas springs effortlessly raise the stylized, swing away, impact-resistant hood for easy access to engine compartment.
- Reliability and worry-free operation from Parker® hydraulic components.
- Comfortable operator compartment is completely isolated from vibration. Ergonomically designed steering arm lessens operator fatigue. Adjustable sliding seat, with armrest, allows optimum visibility and operator comfort.
- No-rust, corrosion-free, 47-gallon poly water tank.
- SAHR automatic parking brake system engages when operator leaves the seat.
- Easy to load, unload and tow through the freewheeling system.
- Smooth, even distribution of water comes from standard pressurized water system with a gravity backup.
- Anti-vandal protection prevents misuse or abuse of equipment.
- Operate at night with optional working lights, beacon.

Stone's WolfPac 6100 Rollers are Right Built to easily maneuver in tight areas yet provide reliability, productivity and impact to tackle the larger jobs. For professional, high-volume work where productivity really counts—from road shoulders and on-ramps to commercial and industrial jobs—center-point articulated WolfPac 6100 rollers are ideal for all phases of asphalt rolling. They are nimble and quick over open terrain, hills and slopes.

- **Versatile and Powerful** – The Stone exclusive eccentric system directs the impact force where needed—front, rear, both drums, or static mode. The WolfPac 6100, with a long-lasting, high performance 33.5 hp Kubota water-cooled diesel engine, has power and torque to spare for added climbability and maneuverability. Double-drum drive, double-drum vibration and a wide 47" footprint present greater finishing options of sub-base, binder and finish coats.
- **See Better, Service Easier** – A contoured hood with a unique "line-of-sight" view helps you align drum edges more precisely to curbs. Optimal wall clearance on both sides allows it up close and tight to walls and other obstructions with minimal uncompacted surface. Servicing is easy due to its "full-access" design, grouped service points and swing-away hood.

LP 852 Trench Roller



Rental Model (Inquire about other models also available for sale.)

TECHNICAL DATA

Weight – 850mm (33.5 in.) wide drums

Net Weight 1590kg (3510 lbs.)
Operating Weight 1610kg (3550 lbs.)

Weight – 630mm (24.8 in.) wide drums

Net Weight 1450kg (3200 lbs.)
Operating Weight 1470kg (3240 lbs.)

Performance

Travel Speed 0-4km/h (0-2.5 mph)
Operating Speed 0-2km/h (0-1.2 mph)

Brakes

Service Brake Hydrostatic
Parking Brake Mechanical

Capacities

Engine Oil 3.0 lit. (3.2 qts.)
Fuel Tank 17.0 lit. (18 qts.)
Hydraulic Tank 60.0 lit. (16 gal.)

Engine

Make/Model Hatz 2G40 2-cylinder diesel
Rated Power 13.1kW (18 hp)
Rated Speed 2500 rpm
Cooling System Air cooled
Air Cleaner Dry Type

Electrical System

Battery Voltage 12 V
Battery Capacity 50 Ah
Alternator 280 W
Starter Motor 1.7kW (2.3 hp)

Steering

Steering System Skid Steering
Control Hydrostatic

Traction System

Pump Gear Type
Motors Radial Piston
Pressure Relief Valve 30 MPa (4350 psi) manual
28 MPa (4060 psi) cable/IR-control

Vibration System

Pump Gear Type
Motor Gear Type
Vibration Frequency 30 Hz (1800 rpm)
Centrifugal Force 65 kN (14600 lbs.)
Amplitude 1.8mm (0.07 in.)
Pressure Relief Valve 12 MPa (1740 psi)

STONE CONCRETE MIXERS – CHAMPIONS IN VALUE

FOR QUALITY AND VALUE CHOOSE THE MARKET LEADER

Stone leads the way with over 12 models of concrete mixers – in the most popular sizes, blade configurations and with numerous engine options, Stone Champion Mixers meet virtually every mixing requirement.



- **Heavy-Duty Drum** – The thick steel drum with a rolled reinforced pour lip delivers long life for years of reliable mixing. Mounted on a large, rugged, welded, reinforced steel yoke to provide extra strength in an area where it counts.
- **Cast Iron Ring Gear** – A one-piece cast iron ring gear keeps the drum turning while delivering smoother operation and a longer life.
- **Tapered Roller Bearings** – Greaseable tapered roller bearings on a large diameter steel shaft make drum rotation and emptying quick and easy.
- **Reinforced Large Hand Wheel** – Makes dumping easier and provides greater control during mix discharge.
- **Fully Adjustable** – Positive gear and dog drum lock secure drum in one of the 94 positions for any mixing or storing need.
- **Greased-for-life Pillow Block Bearings** – Sealed and permanent greased bearings eliminate overgreasing and reduce maintenance, lowers cost of ownership.
Available on all models except 25CMP and 25CMPT.

STONE EXCLUSIVE
Unconditional Lifetime Warranty on Drum Bearings and Seals
2-year Drum Warranty

- **Diamond Shaped Expanded Steel Ventilated Cowl** – Good ventilation for the engine is a must. Until now, contractors have had to operate mixers with the cowl open, violating OSHA safety regulations. Not any more! This innovative cowl design actually delivers five times more ventilation to the engine. The result is increased productivity and performance while reducing engine wear.
- **Safety Chain with Patented Attachment** – Safe towing is a necessity! All Stone mixers come with an adjustable safety chain with built in storage housing to insure the chain is always there when you need it.
- **Heavy-Duty Tow Pole** – The strongest tow pole in the industry is downward pitched for high clearance over ground and curbs. Light tongue weight and a choice of pintle or pin-type hitch at no extra cost offer convenient, easy vehicle hook-up.

- **Plastic Drum Alternative** – Stone concrete mixers feature an easy to clean, long wearing, plastic drum alternative. The highdensity, cross-link plastic drum cleans in no time, resists dents, chips, rust and fading. It's available on the 2 cu. ft. 25CMP and 25CMPT and on the 9 cu. ft. 95CMP concrete mixer. Included on the plastic drum concrete mixer are heavy-duty plastic paddles.
- **Exclusive End Dump Models** – Two sizes of end dump mixers – 6 cu. ft. and 9 cu. ft. are ideal for municipal work. With the mixer attached to a truck, the dry mix can be loaded from the truckbed directly into the drum and then dumped into the wheelbarrow or buggy.
- **Convenient Little Champ Mixer** – The 2 cu. ft. little champ is ideal for small mixing jobs; available in 2 models – an easy to transport wheelbarrow style and easy to load pedestal style.

MODEL	25CMPT / 25CMP	45CM	65CM	75CM	95CM / 95CMP	105CM	125CM
Dimensions							
Operating Weight	113 / 123 lbs.	418 lbs.	690 lbs.	696 lbs.	815 lbs.	832 lbs.	897 lbs.
Batch Capacity (Bags)	1/4 bag	1/3 - 1/2 bag	1/2 - 1 bag	3/4 - 1 1/4 bags	1 - 1/2 bags	1 1/4 - 1 3/4 bags	1 1/2 - 2 bags
Batch Capacity (cu. ft.)	2 cu. ft.	4 cu. ft.	6 cu. ft.	7 cu. ft.	9 cu. ft.	10 cu. ft.	12 cu. ft.
Total Volume	3.5 cu. ft.	6.0 cu. ft.	9.0 cu. ft.	9.5 cu. ft.	15.1 cu. ft.	15.6 cu. ft.	19.8 cu. ft.
L x W x H	38.75" x 54.75" / 50" x 40"	70" x 46" x 56"	78" x 46" x 58"	78" x 46" x 58"	84" x 56" x 65"	85 x 56" x 65"	95" x 56" x 70"
Engine							
	1/3 hp Electric	3.5 hp B&S 5.5 hp B&S 5.5 hp B&S IP 5.5 hp Honda 6 hp Robin 3/4 hp Electric	5 hp B&S 5.5 hp Honda 8 hp Honda 6.4 hp Diesel 6 hp Robin 8.5 hp Robin 8 hp B&S IP 8 hp B&S 10 hp B&S IP 1 hp Electric	5 hp B&S 5.5 hp Honda 6.4 hp Diesel 6 hp Robin 8.5 hp Robin 8 hp Honda 8 hp B&S IP 8 hp B&S 10 hp B&S IP 1 hp Electric	6.4 hp Diesel 8.5 hp Robin 8 hp B&S 8 hp Honda 8 hp B&S IP 10 hp B&S IP 1 1/2 hp Electric	6.4 hp Diesel 8.5 hp Robin 8 hp B&S 8 hp Honda 8 hp B&S IP 10 hp B&S IP 1 1/2 hp Electric	8.4 hp Diesel 11 hp Honda 10 hp B&S IP 2 hp Electric

Other models include: 65CMED - 6 cu. ft. end dump, 95CMED - 9 cu. ft. end dump - 95CMPED - 9 cu. ft. polydrum end dump. Features: hand wheel, pintle or pin-type hitch, safety chain. Optional light kit available on all towable mixers.



STONE MORTAR MIXERS – CHAMPIONS IN VALUE

FOR QUALITY AND VALUE CHOOSE THE MARKET LEADER

Stone leads the way with over 10 models of mortar mixers – in the most popular sizes, blade configurations and with numerous engine options, Stone Champion Mixers meet virtually every mixing requirement.

- **Patented Guard Lifter** – A clean drum and guard are important elements of a smooth mix as well as necessary safety precautions. The guard conveniently lifts away for easy cleaning access (does not have to be taken apart to remove) and a quick-pierce bag splitter with sharp multi-points, which is incorporated as part of the guard, makes short work of tough plastic liners.
- **Patented Drum Latch and Front Post Hand Clutch** – Look for a mixer whose controls are conveniently located and easy to operate; higher productivity will result. The knee operated drum latch makes dumping quick and easy. It allows operators to use two hands on the dump handle while disengaging the latch with their knee.
- **Patented Mixing Action** – Exclusive, patented Power-Blend mixing action on heavy-weight models delivers fast thorough blending. Six tough steel paddles with rubber blades rotate in a triple eight mixing action, constantly dividing and recombining the mixture for a smooth uniform mix.
- **Spiral Blade Option** – Stone Spiral Blades deliver faster, smoother blending with less splash, mixing four times faster than conventional blades. The spiral blades are available on 655PM, 755PM and 855PM Stone Mortar Mixer models and are ideal for color blending.
- **Stone Champion Mortar Mixers Feature Removable Bearing Housing** – Champion line of Mortar Mixers now feature a removable bearing and seal housing. The housing, which attaches with three bolts, contains Stone's patented quadruple seal and bearing configuration. The removable housing makes servicing of the seals and bearing, quick and easy. In addition, the design of the housing further reduces cost of ownership and extends the life of the bearing by allowing any contamination to drop out before reaching the bearing. The housing has been designed with a unique built-in puller flange for easy removal of the bearing.

STONE EXCLUSIVE
Unconditional Lifetime Warranty on Drum Bearings and Seals
2-year Drum Warranty

The removable housing is standard on all Stone Mortar Mixers from 4 cu. ft. to 16 cu. ft. and is included on the HM1290 Hydraulic Mixer.

- **Diamond Shaped Expanded Steel Ventilated Cowl** – Good ventilation for the engine is a must. Until now, contractors have had to operate mixers with the cowl open, violating OSHA safety regulations. Not any more! This innovative cowl design actually delivers five times more ventilation to the engine. The result is increased productivity and performance while reducing engine wear.
- **Unconditional Lifetime Warranty on Patented Drum Bearings and Seals** – This is a point of real concern for any mixer owner. If the bearings and seals are not adequate, costly down time and shaft repairs will result. Stone mortar mixers are configured with a quadruple bearing and seal system that offers a combination of materials and seal layers with different hardnesses to insure seal performance and maximize shaft life.
- **Safety Chain with Patented Attachment** – Safe towing is a necessity! All Stone mixers come with an adjustable safety chain with built in storage housing to insure the chain is always there when you need it.
- **Heavy-Duty Tow Pole** – The strongest tow pole in the industry is downward pitched for high clearance over ground and curbs. Light tongue weight and a choice of pintle or pin-type hitch at no extra cost offer convenient, easy vehicle hook-up.



855PM



655PM

- **Greased-for-life Pillow Block Bearings** – Sealed and permanent greased bearings eliminate overgreasing and reduce maintenance, lowers cost of ownership.
- **Innovative High-Dumping Workhorse** – The direct-drive, hydraulic dump 12 cu. ft. HM1290 features an innovative offset pivot for easy dumping into wheelbarrows and buggies. The mixer also features an extra large 16 gal., hydraulic reservoir - self cooling.
- **Plastic Drum Alternative** – Stone mortar mixers feature an easy to clean, long wearing, plastic drum alternative. The high-density, cross-link plastic drum cleans in no time, resists dents, chips, rust and fading. It's available on the 6 and 8 cu. ft. 655PMP and 855PMP mortar mixers.



MORTAR MIXERS

MIX IT UP WITH STONE CHAMPION™ MORTAR MIXERS Stone Mortar Mixer Specifications

MODEL	465PM	655PM / 655PMP	755PM	855PM / 855PMP
Dimensions				
Operating Weight	276 lbs.	550 lbs.	565 lbs.	605 lbs.
Batch Capacity (Bags)	3/4 - 1 bag	1½ - 2 bags	2-2½ bags	2½ - 3 bags
Batch Capacity (cu. ft.)	4 cu. ft.	6 cu. ft.	7 cu. ft.	8 cu. ft.
Total Volume	4.3 cu. ft.	6.9 cu. ft.	8.1 cu. ft.	9.0 cu. ft.
L x W x H	58" x 29" x 37"	64" x 34" x 54"	68" x 34" x 54"	76" x 34" x 54"
Engine				
	5.5 hp B&S 5.5 hp Honda 6 hp Robin 3/4 hp Electric 1 hp Electric	5 hp B&S 5.5 hp Honda 6 hp Robin 8 hp B&S 8 hp Honda 8 hp B&S IP 8.5 hp Robin 1½ hp Electric	8 hp Honda 8 hp B&S 8 hp B&S IP 8.5 hp Robin 1½ hp Electric	8 hp B&S 8 hp Honda 8 hp B&S IP 8.5 hp Robin 10 hp B&S IP 2 hp Electric

MODEL	1050PM	1265PM	1285PM*	1650PM*	HM1290
Dimensions					
Operating Weight	875 lbs.	1085 lbs.	1120 lbs.	1267 lbs.	Gas - 1375 lbs. Electric. - 1398 lbs.
Batch Capacity (Bags)	2½ - 3½ bags	3 - 4 bags	3 - 4 bags	4½ - 5½ bags	3 - 4 bags
Batch Capacity (cu. ft.)	10 cu. ft.	12 cu. ft.	12 cu. ft.	16 cu. ft.	12 cu. ft.
Total Volume	11.5 cu. ft.	14.8 cu. ft.	14.8 cu. ft.	19.5 cu. ft.	14.8 cu. ft.
L x W x H	75" x 56" x 59"	81" x 56" x 59"	81" x 56" x 59"	92" x 56" x 59"	82" x 57" x 58"
Engine					
	8 hp B&S 8 hp B&S IP 8 hp Honda 8.5 hp Robin 10 hp B&S IP 3 hp Electric	10 hp B&S IP 11 hp Honda 3 hp Electric	11 hp Honda 11.5 hp Robin 9.2 hp Wisconsin 5 hp Electric 1 phase 5 hp Electric 3 phase *Totally enclosed gear drive	11 hp Honda 11.5 hp Robin 5 hp Electric 1 phase 5 hp Electric 3 phase *Totally enclosed gear drive	13 hp Honda 5 hp Baldor Electric 1 phase 5 hp Baldor Electric 230V & 460V 3 phase

Mortar Mixer Features: Bag splitter, safety guard, patented guard lifter, safety chain.



BARREL MULTIMIXERS

The MultiMixer is a rotating barrel style mixer that mixes not only concrete, but also mortar and stucco. There are many brands of barrel mixers available, but only ours feature a patented and specially designed drum interior that allows very quick and thorough mixing of these materials. Because of their speed, aggressive mixing action and multi use capability, the MultiMixers are very efficient and cost effective. The MultiMixers are available in portable, wheelbarrow and tow behind styles. They range in size from 5 to 12 cubic feet, and are designed for mixing concrete, mortar, stucco or grout.

Wheelman – 5 CF Wheelbarrow Style Mixer



Makes 250 lbs. of material per batch, the largest capacity portable mixer on the market today.

- **Removable drum** allows loading and unloading by just one person.
- **Direct drive gearbox** – No belts to tighten, no bearings to grease, absolutely the most reliable drive system available today!
- **Great power**, full 1/2 hp, 110v, 6 amp fully enclosed motor, runs perfect off any household outlet.
- **Easy to move around**, construction duty 14" tires make the Wheelman a breeze to roll around the jobsite or home.
- **Fast and efficient mixing**, the computer engineered paddle and drum design, thoroughly mixes up to 250 lbs. of concrete, mortar, stucco, grout or wall mud.
- **Gas powered version available.**



Minuteman – 5 CF Portable Multimixer

- **Power** – A fully enclosed 1/2 hp, 110v motor coupled to a direct drive gearbox.
- **Versatility** – The computer assisted drum and paddle design provides thorough blending of mortar, stucco, grout and of course, concrete.
- **Mix 275 lbs. of mortar, stucco, grout or concrete!**
- **Reliability** – The direct drive gearbox features steel gears in an oil bath and a case hardened drive shaft – mix on weekends or everyday, it can take it.
- **Portability** – Knock down the Minuteman into 3 easy to handle components in 1 minute. One person can easily load it into any size car or truck - even a compact!
- **The Minuteman is the World's Finest Portable Multimixer!**



Workman Series II – 9 and 12 CF Towable Mixers

Features that no competitor can match:

- **One piece removable drum** (easy to replace).
- **Belt driven gearbox** (quiet and powerful). *pics 3, 5, 6*
- **Worm drive dump gear** (easy to discharge). *pics 1, 2*
- **Frame mounted spare tire** (you never know). *pics 4, 8*
- **No huge crown gear** (lightweight, easy to move). *pic 1*
- **Patented interior drum design** (mixes everything fast). *pic 7*
- **Greatly reduced maintenance.**



pic 1



pic 2



pic 3



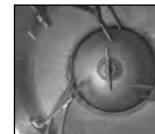
pic 4



pic 5



pic 6



pic 7



pic 8

Other standard features:

- 5.5 hp Honda gas motor or 1.5 hp electric motor.
- 9 CF capacity gives 6 CF batch output (Model 250).
- 12 CF capacity gives 9 CF batch output (Model 350).
- Stabilizing feet on all four corners.
- Full width fenders.
- 2" ball hitch.

Mix concrete, mortar, stucco or grout perfectly everytime.

VERTICAL SHAFT MIXERS – for Masonry Mortar, Dry Pack, Refractory Mortar and Stucco

The fastest mixers available today are the Mortarman vertical shaft machines from IMER U.S.A. The horizontal sweeping action, combined with the free spinning trident paddles, deliver fast and thorough mixing along with rapid and complete discharge. Available mixing torque is tremendous and pre-blending a full batch of dry material is no problem. There is not one zerk fitting to grease or bearing to pack in our entire line of vertical shaft mixers. The drive systems are fully enclosed in an oil bath. IMER's contribution to operator safety is the industry's first safety interlock system. Raise the production grate, and the motor stops.

Mortarman 120 – 4.5 CF Portable Mortar Mixer

The 120 is designed for easy transport by one person. It fits on elevators, passes through standard 36" doorways, and the vertical shaft mixing action keeps the work area free of splashed material. Standard 15 amp 110v household current is plenty of power.

Thoroughly mix load-after-load (175 lbs.) of mortar, stucco, grout, wall and floor mud, without stopping. There are no belts or pulleys to maintain, or bearings to grease, as the gearbox drive is fully enclosed. The lever action discharge is through the bottom of the drum, emptying a batch into a 5 gallon pail or a wheelbarrow is quick n' easy, with no mess!

Why go through the hassles of towing around a mixer, when for any job with up to three people doing a wall or a floor, the Mortarman 120 gets the job done!



Mortarman 240 and 360 – Towable Mortar Mixers

240 Features:

- Mixes **350 lbs.** of mortar, dry pack, stucco, or sand and cement.
- One piece hinged grate with auto shutoff that stops paddles.
- Controlled gravity fed discharge through drum bottom.
- Low and wide design for towing safety and speed.
- Available with **5.5 hp Honda gas** or **3 hp 220v electric**.
- No grease fittings or exposed bearings to maintain.
- Open drum design with paddles that blend not lift.
- Can mix materials from dry to wet.

360 Features:

- Mixes **700 lbs.** of mortar, dry pack, stucco, or sand and cement.
- One piece hinged grate with auto shutoff that stops paddles.
- Controlled gravity fed discharge through drum bottom.
- Low and wide design for towing safety and speed.
- Available with **11 hp Honda gas** or **220v electric**.
- No grease fittings or exposed bearings to maintain.
- Open drum design with paddles that blend not lift.
- Can mix materials from dry to wet.

240 and 360 Benefits:

- Versatility for all trades.
- Eliminates back injuries.
- Custom built for you.
- Great mixing action.
- OSHA rule for worker safety.
- Lower insurance costs.
- Lower maintenance costs.
- Eliminates water splashing.

Isn't it time mixers and mixing technology caught up with the rest of the equipment on a jobsite?

Mini MIX 60 – 12 Gallon Multi Use Bucket Mixer



The MIX 60 is a lightweight, all purpose bucket mixer designed to take the place of a drill motor and a 5 gallon bucket. It is powered by the same 1/2 hp, 110v, motor gear box combination as our popular Minuteman barrel mixer. It is very powerful and reliable. The MIX 60 is also equipped with an auto shut off safety switch that is activated anytime the paddle is raised out of the bucket. The MIX 60 comes with two 12-gallon plastic buckets and two paddles. These paddles are for mixing mortars, dry pack, thin set and grout. The mixing capacity depends on the thickness of the material being mixed. It can range from 50 lbs. to 100 lbs. per batch depending on how stiff the material needs to be.

SELF LEVELING PADDLE (optional) – Part #3207695



Specially designed for "self leveling products" used to prepare floors for linoleum, etc. It is capable of mixing 2 (50 lb.) bags of self leveling material per batch.

PADDLE Selection (standard)



This is the paddle designed just to mix lightweight materials like grout or other powdery materials without a lot of sand in them. This paddle should not be used for making mortar.



This paddle is used for mixing heavy sand based materials like mortar, stucco, etc.



This is a specially designed paddle for mixing self leveling products that have the consistency of pancake batter and must be poured. This paddle is made to mix up to 100 lbs. per batch of self leveling material every 5 minutes.

Gasoline-Powered ... test pumps for water mains or large systems (GHT)

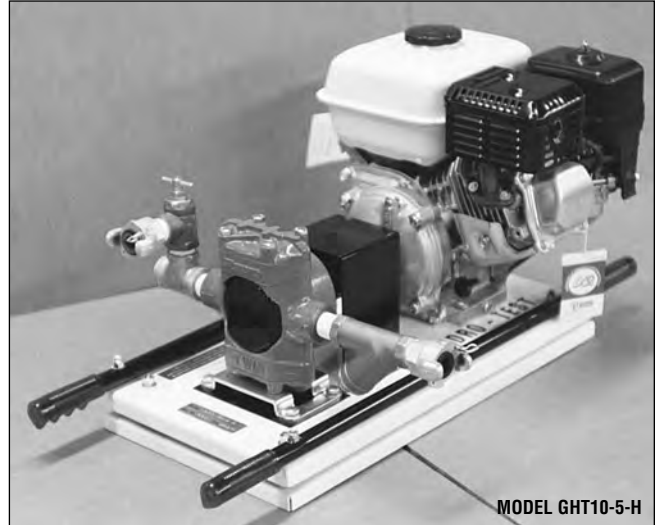
For large systems, water mains, underground sprinkler lines, etc. The GHT5350 (H) and GHT10-5 (H) units have very high output (600 gph) to handle even the largest system in a quick fashion. These are the finest high gallonage test pumps on the market today. Maximum test pressures (up to 400 PSI) can be easily set by the operator in the field. Using dependable Briggs & Stratton or Honda gasoline power, these units are totally portable and can be used wherever a source of water can be obtained. These units are also available with electric or air power upon request.



MODEL GHT5350-H

Model GHT5350 10 gpm 400 psi Max 5.5 HP OHV INTEK (Briggs)
 Model GHT5350-H 10 gpm 400 psi Max 5.5 HP (Honda)

The **GHT5350 (H)** hydrostatic test unit comes complete with all necessary piping, pulsation dampener, backflow prevention check valve, gage and adjustable relief valve.



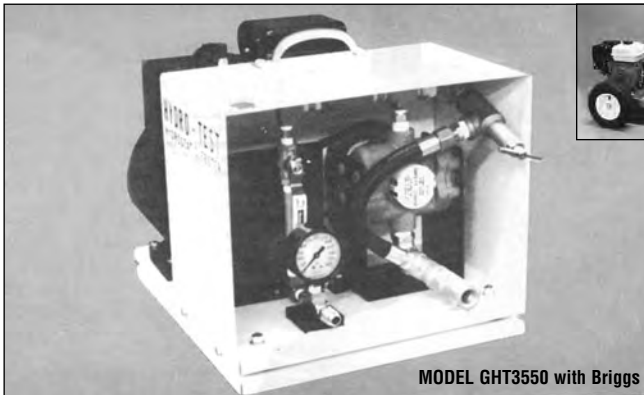
MODEL GHT10-5-H

Model GHT10-5 10 gpm 400 psi Max 5.5 HP OHV INTEK (Briggs)
 Model GHT10-5-H 10 gpm 400 psi Max 5.5 HP (Honda)

The **GHT10-5 (H)** hydrostatic test unit is intended to be a replacement power unit for the contractor who has a test tree, hoses and gages. This unit is shipped with an adjustable relief valve plumbed in.

Gasoline-Powered Hydro-Test Pumps (GHT) ... pressures up to 3500 PSI

Powered by a dependable Briggs & Stratton or Honda gas engine, the GHT series Hydro-Test units are ideal for all applications where electric power is not readily available. Maximum pressures up to 3500 PSI can be generated by these totally adjustable test pumps by the operator in the field for any specific job. The GHT series Hydro-Test pumps are designed to draft water from a drum, gravity feed from a tank or operate with standard water pressure. All units come complete, pre-set, fully tested and ready to use with an adjustable relief valve, test gage and high pressure outlet hose.



MODEL GHT3550 with Briggs



MODEL GHT53000-H

Model GHT52000** 6.0 HP (Briggs Intek) 3 gpm 2000 psi Max 150 lbs.
 Model GHT52000-H** 5.5 HP (Honda) 3 gpm 2000 psi Max 150 lbs.
 Model GHT53000** 6.0 HP (Briggs Intek) 2 gpm 3000 psi Max 150 lbs.
 Model GHT53000-H** 5.5 HP (Honda) 2 gpm 3000 psi Max 150 lbs.
 Model GHT53500-H** 5.5 HP (Honda) 1.2 gpm 3500 psi Max 150 lbs.

**Units supplied with portable pneumatic tire cart (see HT 1.5 series) and 15' outlet hose.

Model GHT3550* 3.5 HP (Briggs) 3 gpm 500 psi Max 85 lbs.
 Model GHT3550-H* 4.0 HP (Honda) 3 gpm 500 psi Max 85 lbs.
 Model GHT31000* 3.5 HP (Briggs) 2 gpm 1000 psi Max 87 lbs.
 Model GHT31000-H* 4.0 HP (Honda) 2 gpm 1000 psi Max 87 lbs.

*Unit furnished with 10' outlet hose and 6' siphon hose.

Electric Powered Hydrostatic Testers (6334)
... pressures up to 1000 PSI



MODEL 6334-350

**Tired of lugging
your tester around?
CT6 Standard Cart
Available as a set
or by itself.**

MODEL CT63 STANDARD CART AND UNIT SET

Cost of Hydrostatic Testing can be reduced as much as 90% using the Hydro-Test Hydrostatic tester. Cased in a 16-gauge steel box, this electric powered hydrostatic tester is portable, easy to use, rugged and money saving. The test pump is designed to work best with water pressure feed but will operate with gravity feed where water pressure is not available. Excellent for testing piping systems, boilers, automatic sprinkler systems, fire hose and extinguisher tanks. The 6334 series testers are the standard of the industry for low pressure testing. Used by contractors, fire departments and fire equipment dealers thousands of times each working day.

These units are equipped with an easily adjustable relief valve that can be set for any maximum pressure, glycerin filled pressure gage, high pressure check valve, 7' electrical cord, a 10' high pressure hose and are shipped complete, ready to operate. Power required 120 volts AC.

Model 6334	250 psi Max	3 gpm	1/2 HP	60 lbs.
Model 6334-350	350 psi Max	3 gpm	3/4 HP	64 lbs.
Model 6334-550	500 psi Max	2 gpm	3/4 HP	65 lbs.
Model 6334-550-1	500 psi Max	3 gpm	1 HP	70 lbs.
Model 6334-750	750 psi Max	2 gpm	1 HP	70 lbs.
Model 6334-1000	1000 psi Max	2 gpm	1.5 HP	84 lbs.

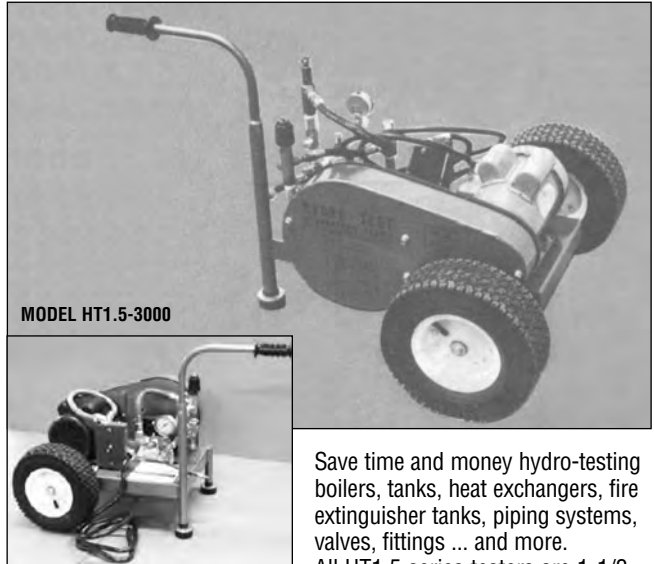
Model CTW-6334	Unit with Cart
Model CTW-6334-350	Unit with Cart
Model CTW-6334-550	Unit with Cart
Model CTW-6334-550-1	Unit with Cart
Model CTW-6334-750	Unit with Cart
Model CTW-6334-1000	Unit with Cart

Model CT63 Standard Cart Only

Portable Carts for 6334 Series Test Pumps

The CT portable carts are designed specifically for use with all 6334 series Hydro-Test units. Two carts are available equipped with ground fault receptacles and flexible industrial rated cords (special order). CT series carts are built with heavy-duty 14-gauge welded tubing, 410/350 2-ply (10" diameter) ball bearing pneumatic tires and special mounting tray for solidly bolting to all 6334 Hydro-Test units.

Electric High Pressure Testers (HT 1.5 & HT5)
... pressures up to 3500 PSI



MODEL HT1.5-3000

Save time and money hydro-testing boilers, tanks, heat exchangers, fire extinguisher tanks, piping systems, valves, fittings ... and more.

All HT1.5 series testers are 1-1/2 HP electric and use standard 120 volt standard outlets. All HT5 series units are 5 HP and use 220/440 volt 3 phase power. Units are totally portable, completely adjustable and very easy to use. Shipped complete and ready to operate, units include all necessary valves, gages and piping. A 15' section of high pressure outlet hose is included.

Model HT1.5-1500	1.5 gpm	1.5 HP	120 V 1 0	1500 psi Max
Model HT1.5-2000	1.2 gpm	1.5 HP	120 V 1 0	2000 psi Max
Model HT1.5-3000	1 gpm	1.5 HP	120 V 1 0	3000 psi Max
Model HT5-2000*	4 gpm	5 HP	220/440 V 3 0	2000 psi Max
Model HT5-3000*	2.4 gpm	5 HP	220/440 V 3 0	3000 psi Max
Model HT5-3500*	2 gpm	5 HP	220/440 V 3 0	3500 psi Max

*HT5 Series is Special Order Only



**Hand Operated
Hydrostatic Test Pumps**

Ideal for testing residential water lines. Also for pressure testing small, pressure tanks, sprinkler, boiler and solar systems. Lightweight and easy to use. 3/4" garden hose inlet and 3/8" NPT outlet. Equipped with shut-off valve, gage and adjustable internal relief valve. 10-foot output hose included.



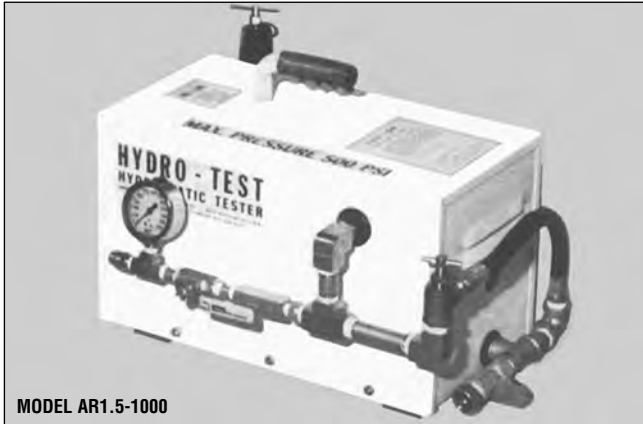
29200	300 PSI (pictured), Shipping weight	12 lbs. (5.5kg)
29201	1000 PSI, Shipping weight	12 lbs. (5.5kg)

Accessories:

3915	10' High-pressure output hose
29250	Pump rebuild kit
34550	10' long suction hose with strainer

HYDROSTATIC TESTING EQUIPMENT

Air Powered Hydrostatic Testers (AR Series) ... pressures up to 3500 PSI



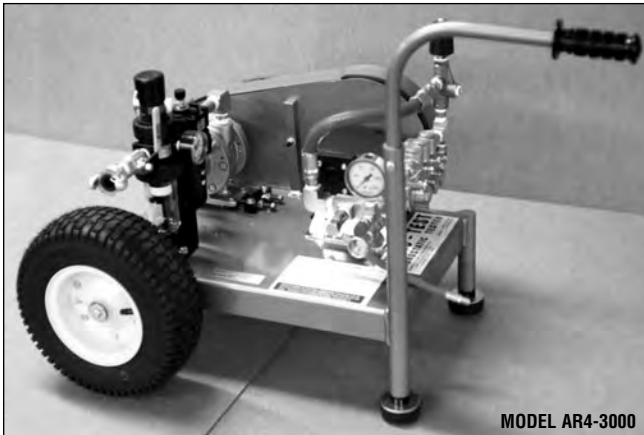
MODEL AR1.5-1000

The AR series air powered Hydrostatic testers are completely portable, safe, rugged, money saving and can be used whenever hydrostatic testing is necessary. Size, height and volume of the system being tested present no problem. Units are designed for use with water, but will operate with other liquids including oils, glycols and fluids compatible with Buna-N materials.

All AR series testers are self priming and will easily draft liquids from a tank or barrel. Units will also work very efficiently with standard water pressure. AR series testers can be used as transfer pumps as well. Liquids can be pumped hundreds of feet high if needed.

These units are equipped with an easily adjustable relief valve that may be set for any maximum pressure needed to do the job. All units are shipped ready to operate and fully tested.

Equipment included - All necessary piping needed for testing, liquid filled gage, backflow prevention check valve, totally adjustable relief valve and a brass Y-strainer on the inlet piping. All air controls (Filter, Lubricator, Regulator) are included. 10' high pressure outlet hose (AR 1.5-500 and AR 1.5-1000) 15' high pressure outlet hose (AR 4-2000, AR 4-3000, AR 5-3500).



MODEL AR4-3000

Model AR1.5-500*	3 gpm	500 psi Max	52 lbs.
Model AR1.5-1000*	2 gpm	1000 psi Max	60 lbs.
Model AR4-2000**	2 gpm	2000 psi Max	125 lbs.
Model AR4-3000**	1.5 gpm	3000 psi Max	150 lbs.
Model AR5-3500**	1.0 gpm	3500 psi Max	165 lbs.

*Units supplied with a 16-gauge steel box (see 6334 series) and a 10' high pressure outlet hose.

**Units supplied with portable pneumatic tire cart and a 15' high pressure outlet hose.

Air Powered Ultra High Powered Hydrostatic Test Units (UHP Series) ... pressures up to 10,000 PSI



MODEL UHP-AR10,000

Model UHP-AR6,000	6,000 psi Max	0.5 gpm	48 lbs.
Model UHP-AR10,000	10,000 psi Max	0.2 gpm	48 lbs.

These low volume output units are very lightweight and can provide up to 10,000 PSI pressure with 100 PSI air supply.

Furnished complete with all air controls, high pressure safety pop off water pressure valve, bleed down valve and outlet hose. Pumps include soft seal check valves.

CONSTRUCTION DEBRIS CHUTES
Let Gravity Do the Work



SUPERCHUTE® polyethylene trash chutes are the choice of suppliers and contractors throughout North America. Superb ease-of-use and durability provide a quick, clean and safe solution. Our designs have been perfected to provide you with the right tool for debris removal.

IDEAL FOR: Builders • Roofers • Scaffolders • Masons • Demo Contractors • Supply Houses • Rental Stores • Renovators

Superchute® sections are tapered tubes that attach quickly and easily to one another using built-in cable assemblies. Create chutes up to 200 ft. in length. Entry sections allow debris to be cleared from any floor level. Use Chute Hoists to install and support the chute.

BENEFITS OF THE WELDED DESIGN (The Original Design)

- No assembly required.
- Permanent tubes with the seam welded shut.
- Sections stack like coffee cups for easy transport and storage.
- Fully compatible with all WRAPAROUND® chute sections.
- Sections are 4' high with a 1" taper (3 sections required per 10 feet).

BENEFITS OF THE WRAPAROUND® DESIGN

- Minimal storage space required.
- A safe and simple closure system.
- Opened chutes stack like sheets of plywood.
- Easily transported in pick-up trucks.
- Fully compatible with all WELDED sections.
- Sections are 4' high with a 1" taper (3 sections required per 10 feet).



THE TOP HOPPER

- One needed per chute system.
- The uppermost section.
- Entry point for debris.
- Heavy-duty construction.



DOOR SECTIONS

- Entries for multi-level work.
- Any number per system.
- Heavy-duty construction.
- Adjust height using Door Adjustment Kit.



REGULAR SECTIONS

- Tube sections.
- No assembly required.
- A system consists mostly of these pieces.



REGULAR SECTIONS

- Tube sections.
- A system consists mostly of these pieces.
- No tools required for assembly.
- Only 1 minute to assemble.
- Clasp uses 5 easy-grip eyebolts.
- A dream to store and transport.



They Go Flat!



ALL SUPERCHUTE® SECTIONS ARE:

- 4 feet tall (because linked sections overlap a little, 3 sections provide 10 ft. of drop).
- Slightly tapered (only 1-inch taper – tight fit minimizes airborne dust).
- Equipped with safe and strong cable linking hardware.
- Branded with your company name.
- Outstandingly resistant to abrasion, chemicals and cold.
- Lightweight, safe, flexible and quiet in use.
- Made from yellow UV treated plastic.
- Six chute diameters available – 18", 23", 27", 30", 33" and 36".

Superchute® sections are designed for temporary use.

Available for RENTAL or PURCHASE



UNDER-FIRED ROAD REPAIR KETTLES

These propane fired kettles are designed for heating and dispensing tack coatings or asphalt cement. Several sizes are available to suit the small, medium or large contractor. All KEB models' maximum operating temperature is 320°F.



KEB170 WITH SUBMERGED POWER SPRAY SYSTEM

Features and Benefits

- Heavy-duty channel iron frame.
- Long lasting all welded construction.
- Industrial grade wide track axle(s) with leaf spring suspension.
- Electric brakes standard on KEB170 and KEB260.
- Adjustable hitch with 3" pintle eye and safety chains.
- Thick sheet metal panels exceed the standard used in competitive products.
- Low center of gravity for safe towing, superior rear visibility and ease of operation.
- Large 18" manhole provides easy access to material vat.
- 10" diameter filler lid.
- Well insulated material vat and firing chamber provide optimum fuel economy.
- Easy to read material thermometers.
- Conveniently located, heavy-duty, adjustable swing-away jack.
- 3" diameter x 12" high vent.
- Exhaust stack(s) with rain cover.
- All necessary stop and directional signal lights.
- Increased corrosion resistance with epoxy primer and standard blue paint finish.

Options

- Power Spray Option (KEB170 and KEB260 Only)
 - 5.5 hp Honda engine drives the submerged 18 GPM pump.
 - Intake pipe furnished with a filter screen.

- Fully adjustable, heavy-duty, external pressure relief valve.
- Plumbing comes with an external suction port for flushing pump, spray hose, spray wand and spray bar (if equipped).
- 15 ft. x 1 in. high temperature hose comes with 5 ft. spray wand.
- 18" x 26" reverse load, anti-splash loading door.
- Additional spray wand with hose.
- 6 ft. spray bar (requires engine upgrade).
- Automatic temperature control.
- 200,000 BTU hand held vapor propane torch with 15 ft. hose.
- Electric breakaway switch with battery.
- Hydraulic surge brakes.
- Hydraulically driven pumping system, forward and reverse.
- Diesel fired heating system.
- 10 lb. fire extinguisher with bracket.
- 10 gal. flushing tank.
- 2" adjustable ball hitch.
- Tool box.
- Strobe light.
- Customer's choice of paint color.

Note: Maximum operating temperature is 320°F.

Specifications

Models	KEB80T	KEB115T	KEB170T	KEB260T
Shipping Weight	825 lb. (375kg)	900 lb. (409kg)	1600 lb. (727kg)	1900 lb. (863kg)
Dimension				
Overall Length	146" (371cm)	154" (391cm)	157" (399cm)	187" (475cm)
Overall Width	55" (140cm)	55" (140cm)	78" (198cm)	78" (198cm)
Overall Height	66" (168cm)	68" (173cm)	68" (173cm)	66" (168cm)
Loading Height	48" (122cm)	48" (122cm)	48" (122cm)	47" (119cm)
Material Capacity (350 gallon unit also available – not shown)	80 gal. (302 L)	115 gal. (435 L)	170 gal. (642 L)	260 gal. (983 L)
Vapor Propane Burner	One 410,000 BTU with out-fire protection	One 410,000 BTU with out-fire protection	Two 410,000 BTU with out-fire protection	Two 410,000 BTU with out-fire protection
100 lb. Propane Bottle Rack	Single	Single	Dual	Dual
Material Dispensing Valve	1-1/2"	1-1/2"	2"	2"
Insulation	Optional	Optional	Standard	Standard
Suspension				
Axle(s)	Single	Single	Single	Single
Capacity	3500 lb. (1591kg)	3500 lb. (1591kg)	3500 lb. (1591kg)	3500 lb. (1591kg)
Wheels	15 x 4.5/4-hole	15 x 5/5-hole	15 x 5/5-hole	15 x 5/5-hole
Tires - size	(2) 205/75R15	(2) 205/75R15	(2) 225/75R15	(2) 225/75R15

Specifications subject to change without notice.

PORTABLE MELTING KETTLES



60 Gallon Portable Melter

A 3 hp Honda engine powers the agitation and a double headed 80,000 BTU propane burner provides the heat. The unit is also equipped with a material thermometer, propane hose with regulator and 1-1/2" draw off valve.

Overall Dimensions: 56"Lx35"Wx43"H
Weight: 380 lbs.



30 Gallon Portable Melter

This unit can provide hot material in 30 minutes or less and is equipped with a draw-off valve, hand agitator, temperature gauge, hinged lid, lifting handles, propane burner, hose and regulator.

Dimensions: 51"Lx25"Wx36"H
Weight: 185 lbs.



10 Gallon Portable Melter

This propane fired melter is equipped with a hand agitator, temperature gauge, propane burner, hose and regulator, bottle holder, hinged lid, lifting handles and draw-off valve.

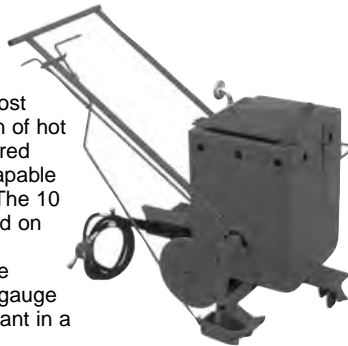
Dimensions: 40"Lx29"Wx33"H
Weight: 102 lbs.

WHEELED APPLICATORS

10 Gallon Direct-Fired Melter/Applicator

Everything you need to do quality crack sealing but the sealant and propane bottle. The fastest and most efficient method for the application of hot applied crack sealants. Propane fired burner with hose and regulator, capable of melting and applying material. The 10 gallon melter/applicator is mounted on steel wheels and is equipped with spring loaded hand control release valve, hand agitator, temperature gauge and steel shoe for striking off sealant in a uniform width.

Dimensions: 47"Lx27"Wx36"H
Weight: 125 lbs.



8 Gallon Heated DQ Bander

This push style wheeled bander is designed with a heat jacket to maintain the material temperature. 13-1/2" diameter steel wheels easily follow meandering cracks. Equipped with a spring loaded hand control release valve and a steel strike off shoe to provide a uniform band width.



APPLICATORS / POTS



4 Gallon Wheeled Pour Pot

This pull style wheeled pour pot eliminates back strain, provides a material bandwidth of 3" and has an adjustable depth screed.



3-1/2 Gallon Pouring Cone

An easy and convenient way to apply hot rubber to random cracks or joints. Allows crew to get into tight places and close to curbs. Fill the cone, lift the plunger and follow the cracks.

Available with 1" or 3/4" spout.

Weight: 12 lbs.

COMPOUND MELTING KETTLES

These oil jacketed gravity feed kettles are designed for crack filling and waterproofing. The heat transfer system consists of the oil vat and the oil expansion reservoir. As the transfer fluid is heated, the material is provided with an indirect heating source.



UCMK145T

Features and Benefits

- Heavy-duty channel iron frame.
- Low profile, elongated material vat design obtains maximum amount of heating surface per volume.
- Low profile allows for loading while standing on the ground.
- 2" pouring spout.
- 410,000 BTU vapor propane burner(s) with automatic safety shut-off valve reduces fuel consumption.
- Wrap around heat design ensures even heat and utilizes a greater amount of the BTU input.
- Exhaust stacks placed in an area which is more advantageous to the safety of the operators.
- Units are insulated for safety and fuel economy.
- Thermometers for both oil and material temperature readings.
- Full sweep mechanical agitation.
- Exterior agitator bearings for easier maintenance.
- Electric brakes.
- Anti-splash lid.
- Adjustable hitch with 2-3/4" pintle eye.
- 3/8" x 4' trailer safety chains.
- Standard paint color is blue.

- All units comply with Canadian and United States motor vehicle safety standard No. 115.

Options

- Diesel Kubota engine with 320,000 BTU diesel burner and hydraulic agitation.
- Vapor propane engine.
- 500,000 BTU liquid propane burner.

- Automatic temperature control.
- Skid mounted, no chassis.
- Full sweep agitation.
- Hand held propane torch.
- Fire extinguisher with bracket.
- Electric breakaway switch with battery.
- Overnight heater.
- 3" pouring spout.
- Customer's choice of paint color.

Specifications

Models	UCMK145	UCMK245	UCMK400
Shipping Weight	1950 lb. (886kg)	2500 lb. (1136kg)	3300 lb. (1500kg)
Dimension			
Overall Length	121" (3073mm)	138" (3505mm)	164" (4166mm)
Overall Width	80" (2032mm)	80" (2032mm)	80" (2032mm)
Overall Height	56" (1422mm)	60" (1524mm)	64" (1626mm)
Loading Height	47" (1194mm)	52" (1320mm)	54" (1371mm)
Material Capacity	145 gal. (378 L)	245 gal. (926 L)	370 gal. (1399 L)
Heat Transfer Oil - capacity	28 gal. (106 L)	35 gal. (132 L)	55 gal. (208 L)
Engine	5.5 hp Honda	5.5 hp Honda	5.5 hp Honda
Tires - size	(2) 225/75R15	(2) 8" x 14.5" 10-ply	(4) 8" x 14.5" 10-ply
Axles - capacity	Drop center 3500 lb. (1591kg)	Drop center 6000 lb. (2727kg)	Heavy-duty tandem 12000 lb. (5454kg)
Burners - vapor propane	One 410,000 BTU	One 410,000 BTU	Two 410,000 BTU

Specifications subject to change without notice.



VANGUARD

Features

Overhead Valve Design

Dura-Bore Case Iron
Cylinder Sleeve

Dual Ball Bearing

Dual-Clean Air
Cleaner

Mechanical
Compression Release

Large Volume Muffler

Oil Guard® Low-Oil
Shutdown System

Magnetron®

Electronic Ignition

Buyer Warranty Package

Engine Warranty

Benefits

Cooler, cleaner and more efficient operation. More HP output with less displacement, less carbon build-up, longer valve life and improved fuel economy.

Withstands wear and abuse while providing improved oil control.

Easily replaceable, extended service life.

Pleated paper filter with foam pre-cleaner ensures maximum protection for extended engine life.

Smooth, easy starts and instant return to maximum power after starting.

Up to 50% quieter than comparable models. Produces low noise levels for a quiet work environment.

Significantly reduces the chance of engine damage due to insufficient lubrication.

Quick, dependable starts with no maintenance required.

2-year limited warranty.

2-year engine warranty for consumer or commercial use applications.



Engine Specifications

	OHV 4 HP	OHV 6 HP	OHV 7.5 HP	OHV 9 HP	OHV 11 HP
Number of Cylinders	1	1	1	1	1
Gross Power: (kW-HP)	3@3600 / 4@3600	4.5@3600 / 6@3600	5.6@3600 / 7.5@3600	6.5@3600 / 9@3600	8.2@3600 / 11@3600
Peak Gross Torque: (Nm/ft-lbs)	7.5@2800 / 5.5@2800	11.1@2800 / 8.2@2800	12.9@3200 / 9.5@3200	18@2800 / 13.3@2800	24.4@2400 / 18@2400
Bore: (mm/in)	62 / 2.4	68 / 2.7	72 / 2.8	80 / 3.2	89 / 3.5
Stroke: (mm/in)	42 / 1.7	50 / 2	52 / 2.1	59 / 2.3	63 / 2.5
Displacement: (cm ³ /in ³)	126 / 7.7	182 / 11.1	215 / 13.1	296 / 18.1	391 / 23.9
Fuel Tank Capacity: (l/qt)	2.5 / 2.6	3.6 / 3.8	4.6 / 4.8	7.9 / 8.3	7.9 / 8.3
Oil Capacity: (l/oz)	0.6 / 20	0.6 / 20	0.9 / 30.4	1.4 / 48	1.5 / 50.8
Dry Weight: (kg/lbs)	13.4 / 29.5	15.9 / 35	21.5 / 47.4	27.3 / 60.1	33.2 / 73
Dimensions: (LxWxH) / (mm/in)	312 x 339 x 336 12.3 x 13.4 x 13.2	340 x 382 x 368 13.4 x 15 x 14.5	366.5 x 387 x 419.6 14.4 x 15.2 x 16.5	390.5 x 445.5 x 461 15.4 x 17.5 x 18.1	420.5 x 464.5 x 466 16.6 x 18.3 x 18.4

INTEK PRO

Features

30 Slant Cylinder

Overhead Valve Design

206 cc Displacement

Dura-Bore Cast Iron
Cylinder Sleeve

Upper DU Bearing and
Heavy-duty Lower Bearing

Dual-Clean Air Cleaner

Float Feed Carburetor

Magnetron®

Electronic Ignition

Fuel Shut-Off Valve

High Oil Fill with
Automotive-Type Dipstick

Engine Warranty

Benefits

More efficient operation and increased horsepower in a clean, compact package.

Provides increased horsepower for tough chores.

Withstands wear and abuse while providing improved oil control.

Replaceable, self-lubricating upper bearing and larger lower bearing withstands load and reduces wear for a longer engine life.

Automotive-type paper filter with a foam pre-cleaner ensures double protection for extended engine life.

Provides increased horsepower for tough chores.

Quick, dependable starts with no maintenance required.

Easy to shut off fuel flow for safe transportation.

Easy to accurately check and service oil. Prevents over and under filling.

2-year engine warranty for consumer use applications or 1-year engine warranty for commercial use applications.



Engine Specifications

	PRO OHV 5.5 HP	PRO OHV 6.5 HP	PRO OHV 8 HP	PRO OHV 10 HP
Number of Cylinders	1	1	1	1
Gross Power: (kW-HP)	4.1@3600 / 5.5@3600	4.9@3600 / 6.5@3600	6@3600 / 8@3600	7.5@3600 / 10@3600
Peak Gross Torque: (Nm/ft-lbs)	12.5@2200 / 9.2@2200	13@2600 / 9.3@2600	17.8@2400 / 13.1@2400	18.6@2400 / 13.7@2400
Bore: (mm/in)	68.3 / 2.7	68.3 / 2.7	79.2 / 3.1	79.2 / 3.1
Stroke: (mm/in)	55.8 / 2.2	55.8 / 2.2	62 / 2.4	62 / 2.4
Displacement: (cm ³ /in ³)	206 / 12.6	206 / 12.6	305 / 18.6	305 / 18.6
Fuel Tank Capacity: (l/qt)	2.8 / 3	2.8 / 3	3.8 / 4	3.8 / 4
Oil Capacity: (l/oz)	0.6 / 20	0.6 / 20	0.8 / 28	0.8 / 28
Dry Weight: (kg/lbs)	15.3 / 33.8	15.3 / 33.8	23 / 51.5	23 / 51.5
Dimensions: (LxWxH) / (mm/in)	383.1 x 267.5 x 394.1 15.1 x 10.5 x 15.5	383.1 x 267.5 x 394.1 15.1 x 10.5 x 15.5	478.5 x 298.1 x 416.8 18.8 x 11.7 x 16.4	478.5 x 298.1 x 416.8 18.8 x 11.7 x 16.4

Wharton can also supply replacement engines from Wisconsin, Deutz, Hatz, Kohler, Onan and other manufacturers.



Hardware & Supply Co., Inc.
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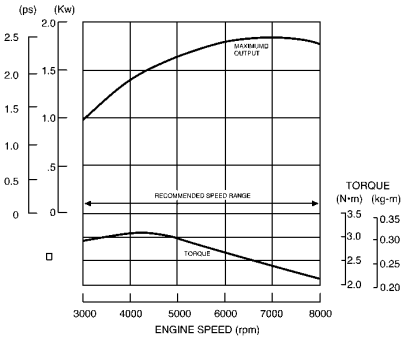
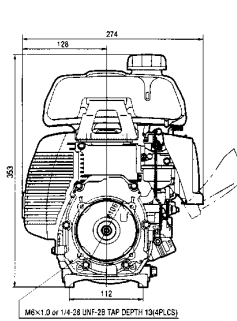
GX Series Engines

Honda GX Series Engines have long been recognized as the industry leader in providing reliable, easy-starting and fuel efficient small engines. You'll find Honda GX Series overhead valve engines on a wide variety of construction, maintenance and premium power equipment. The rental industry, where power equipment is subjected to the ultimate test of durability, relies heavily on Honda OHV engines to ensure customer satisfaction and a minimal level of maintenance and repair.

Horizontal Shaft

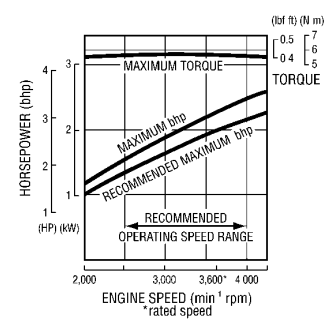
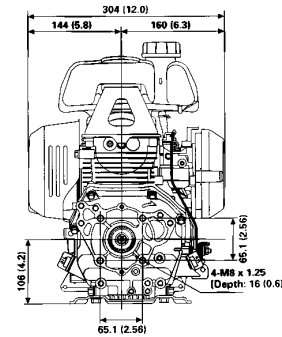
GXH50

A 2.5HP horizontal shaft 4-stroke OHV engine provides an excellent power source for generators, pumps, tillers and small construction equipment.



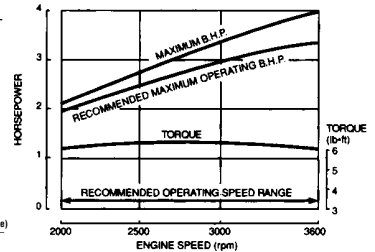
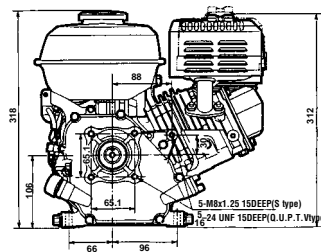
GX100

A 3.0HP horizontal shaft lightweight, OHC engine. Includes mechanical governor and electronic ignition. Perfect for edgers, pumps and concrete finishing equipment.



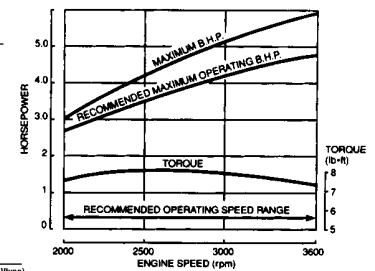
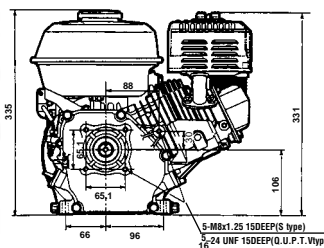
GX120

A 4HP OHV horizontal shaft lightweight engine. Includes Automatic Decompression and Oil Alert® for edgers, pumps, small construction equipment and reel-type lawn mowers.



GX160

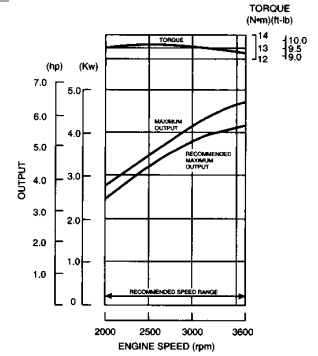
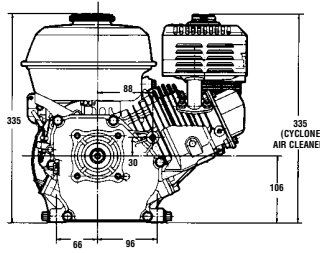
A 5.5HP OHV horizontal shaft engine with electronic ignition and Oil Alert®. Usage includes powering air compressors, generators, pumps, pressure washers, reel-type lawn mowers, cement trowels and construction equipment.



NOTE: All horsepower ratings (shown as maximum power output @3600 rpm) are in accordance with SAE J1995. Actual engine power will be lower. Engine power depends on accessories, operating speeds, operating conditions and other variables.

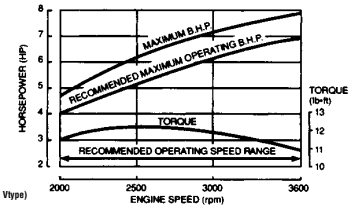
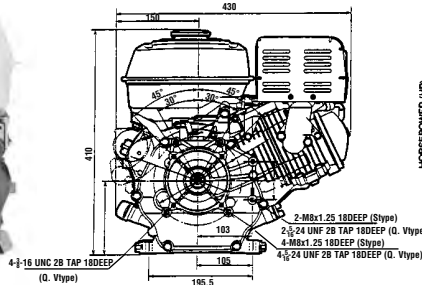
GX200

A 6.5HP OHV horizontal shaft engine with electronic ignition and Oil Alert®. It has the same variety of uses as the GX160 with the addition of one more horsepower for more rigorous applications.



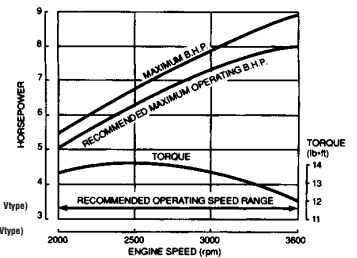
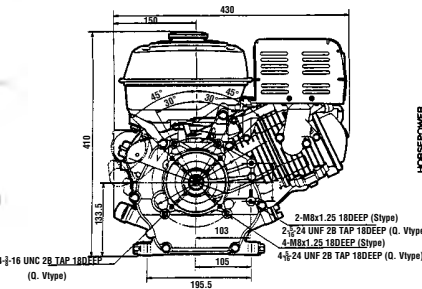
GX240

An 8HP OHV horizontal shaft engine with electronic ignition and Oil Alert®. Its uses include powering cement mixers, air compressors and water pumps, as well as many other construction applications.



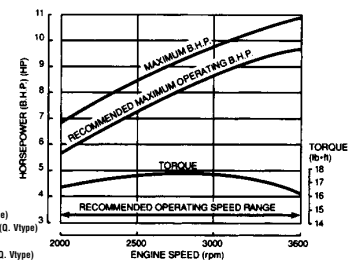
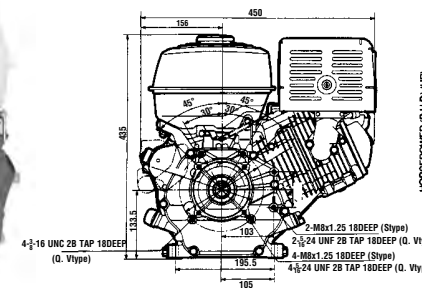
GX270

A 9HP OHV horizontal shaft engine with electronic ignition and Oil Alert®. It has the same variety of uses as the GX240. With one more horsepower, this engine can make difficult jobs seem easy.



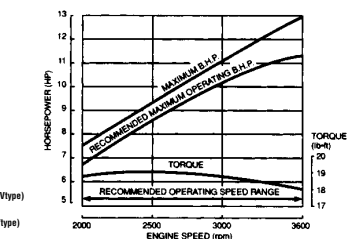
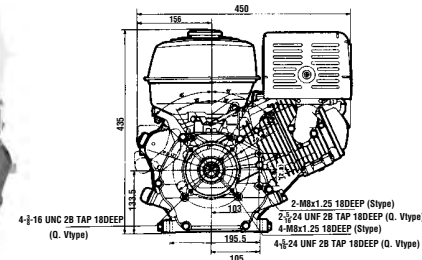
GX340

An 11HP OHV horizontal shaft engine with 25° tilted cylinder, Oil Alert®, electronic ignition, available with varying shaft and reduction ratios. It's used for lawn mowers, pressure washers and a variety of construction equipment.



GX390

A 13HP OHV horizontal shaft engine with automatic decompression for easy starting. The 13HP is the largest workhorse in our line of industrial engines.



NOTE: All horsepower ratings (shown as maximum power output @3600 rpm) are in accordance with SAE J1995. Actual engine power will be lower. Engine power depends on accessories, operating speeds, operating conditions and other variables.



Specifications

GX Series Horizontal Shaft Engine Specifications

HORSEPOWER	MODEL	TYPE	VARIATION	OIL ALERT®	CRANKSHAFT P.T.O.	6 TO 10 REDUCTION (NO CLUTCH)	2 TO 1 REDUCTION • W/CLUTCH ° NO CLUTCH	TOP GOVERNED SPEED—NO LOAD	RECOIL STARTER	12V STARTER	TRANSISTOR IGNITION	AIR CLEANER	FUEL TANK (QT.)	NET WEIGHT
2.5	GXH50		QXA	•	1-1/4 x 5/8 dia. tapped 1/4 28 UNF			7800	•		•	SD	1.27	12
3	GX100	K2	QA2		2-19/64 x 5/8 dia. tapped 1/4 28 UNF			4000	•		•	DE	1.26	23
4	GX120*	T1	QA2		2-7/16 x 3/4 dia. tapped 5/16 24 UNF			3900	•		•	OB	2.64	29
	GX120	T1	QX2	•				3900	•		•	DE	2.64	29
	GX120	T1	QXC9	•				3900	•		•	CY	2.64	30
	GX120	T1	QXS2(1)	•				3900	•		•	DE	2.64	29
	GX120*	T1	HX2	•	2-3/64 x 3/4 dia.	•		3900	•		•	DE	2.64	35
	GX120	T1	TX2	•	2-7/16 x 5/8 threaded			3900	•		•	DE	2.64	29
5.5	GX160	T1	QA2		2-7/16 x 3/4 dia. tapped 5/16 24 UNF			3900	•		•	OB	3.88	34
	GX160*	T1	QX2	•				3900	•		•	DE	3.88	34
	GX160	T1	QXS2(1)	•				3900	•		•	DE	3.88	34
	GX160	T1	QXC9	•				3600	•		•	CY	3.88	34
	GX160	T1	VX2	•	2-53/64 x 3/4 dia. taper 21/4 per ft.			3900	•		•	DE	3.88	33
	GX160	T1	TX2	•	2-7/16 x 5/8 threaded			3900	•		•	DE	3.88	33
	GX160	T1	RH2		2-3/32 x 22mm tapped M8 x 1.25		•	3900	•		•	DE	3.88	45
	GX160	T1	QXE2	•	2-7/16 x 3/4 dia. tapped 5/16 24 UNF			3900	•	•	•	DE	3.88	39
	GX160	T1	LX2	•	2-3/32 x 20mm dia. tapped M8 x 1.25		°	3900	•		•	DE	3.88	35
	GX160*	T1	HX2	•	2-3/64 x 3/4 dia.	•		3900	•		•	DE	3.88	39
6.5	GX200	T1	QX2	•	2-7/16 x 3/4 dia. tapped 5/16 24 UNF			3900	•		•	DE	3.8	36
	GX200	T1	HX2	•	1-31/32 x 3/4 dia.	•		3900	•		•	DE	3.8	41
	GX200	T1	RH2		2-3/32 x 22mm dia. tapped M8 x 1.25		•	3900	•		•	DE	3.8	46
	GX200	T1	VX2	•	2-53/64 x 3/4 dia. taper 21/4 per ft.			3900	•		•	DE	3.8	35
	GX200	T1	VA2	•	2-53/64 x 3/4 dia. taper 21/4 per ft.			3900	•		•	DE	3.8	35
8	GX240*	K1	QA2	•	3-31/64 x 1 dia. tapped 7/16 20 UNF			3900	•		•	DE	6.4	56
	GX240	K1	QAE2	•	3-31/64 x 1 dia. tapped 7/16 20 UNF			3900	•	•	•	DE	6.4	63
	GX240	K1	QAS	•	"			3900	•		•	CY	N/A	54
	GX240	K1	QXC9	•	3-31/64 x 1 dia. tapped 7/16 20 UNF			3900	•		•	CY	6.4	56
	GX240*	K1	HA2	•	3-5/32 x 1 dia.	•		3900	•		•	DE	6.4	59
	GX240	K1	LX2	•	2-23/64 x 25mm tapped M8 x 1.25		°	3900	•		•	DE	6.4	59
	GX240	K1	PA2	•	3-1/2 x 1 dia. 14 NF threaded			3900	•		•	DE	6.4	56
	GX240	K1	RA2	•	2-3/32 x 22mm tapped M8 x 1.25		•	3900	•		•	DE	6.4	62
	GX240	K1	VA2	•	4-11/64 x 22.2mm taper 21/4 per ft.			3900	•		•	DE	6.4	56
9	GX270*	K	QA2	•	3-31/64 x 1 dia. tapped 3/8 24 UNF			3900	•		•	DE	6.4	56
	GX270	K	QAE2	•				3900	•	•	•	DE	6.4	62
	GX270	K	QXC9	•				3900	•		•	CY	6.4	56
	GX270*	K	HA2	•	3-5/32 x 1 dia.	•		3900	•		•	DE	6.4	59
	GX270	K	RA2	•	2-23/64 x 22mm tapped M8 x 1.25		•	3900	•		•	DE	6.4	67
	GX270	K	PA2	•	3-1/2 x 1 dia. 14 NF threaded			3900	•		•	DE	6.4	56
	GX270	K	VA2	•	4-11/64 x 22.2mm taper 21/4 per ft.			3900	•		•	DE	6.4	56
11	GX340*	K1	QA2	•	3-31/64 x 1 dia. tapped 3/8 24 UNF			3900	•		•	DE	6.9	69
	GX340	K1	QAE2	•				3900	•	•	•	DE	6.9	75
	GX340	K1	QXC9	•				3900	•		•	CY	6.9	75
	GX340	K1	QNE2(2)	•				3900	•	•	•	DE	6.9	75
	GX340	K1	VA2	•	4-11/64 x 7/8 taper 21/4 per ft.			3900	•		•	DE	6.9	69
	GX340	K1	VXE2	•				3900	•	•	•	DE	6.9	75
	GX340*	K1	HA2	•	3-5/32 x 1 dia.	•		3900	•		•	DE	6.9	78
	GX340	K1	LX2	•	2-23/64 x 25mm tapped M8 x 1.25		°	3900	•		•	DE	6.9	77
13	GX390*	K1	QA2	•	3-31/64 x 1 dia. tapped 3/8 24 UNF			3900	•		•	DE	6.9	69
	GX390	K1	QXC9	•				3900	•		•	CY	6.9	69
	GX390	K1	QAE2	•				3900	•	•	•	DE	6.9	75
	GX390	K1	QNE2(2)	•				3900	•	•	•	DE	6.9	75
	GX390	K1	VA2	•	4-11/64 x 22.2mm taper 21/4 per ft.			3900	•		•	DE	6.9	69
	GX390	K1	VXE2	•				3900	•	•	•	DE	6.9	75
	GX390	K1	HA2	•	3-15/16 x 1 dia.	•		3900	•		•	DE	6.9	78
	GX390	K1	LX2	•	2-23/64 x 25mm tapped M8 x 1.25		°	3900	•		•	DE	6.9	77

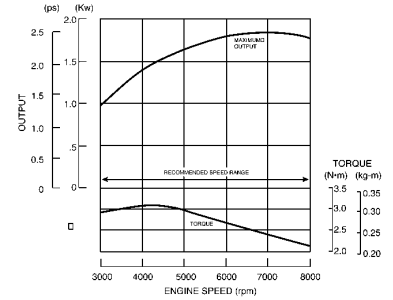
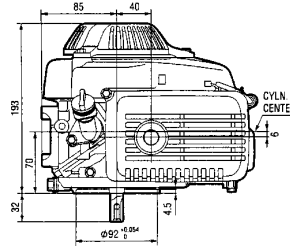
NOTES: (1) 12V (AC)-50w. lamp coil (2) 10 amp charging

SD - Semi dry OB - Oil bath DE - Dual element CY - Cyclone W/O - Without *These models can also be ordered with inner-vent carburetors.

Vertical Shaft

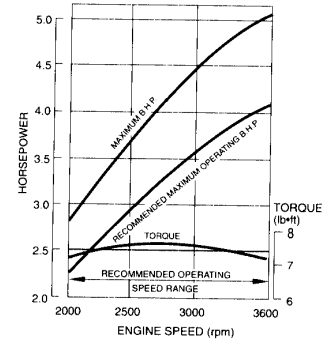
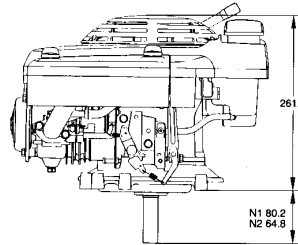
GXV50

A 2.5HP vertical shaft 4-stroke OHV engine offering a rugged, reliable source of power for a variety of small industrial and construction equipment.



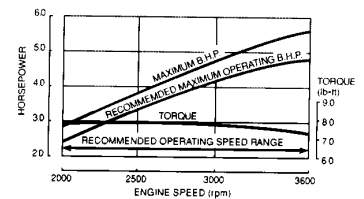
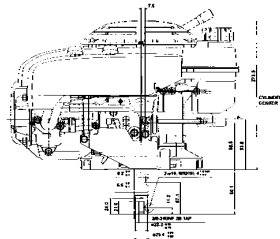
GXV140

A 5HP OHV vertical shaft engine with electronic ignition and dual element air cleaner. Primary application is for lawn mowers (but can be used for a variety of applications).



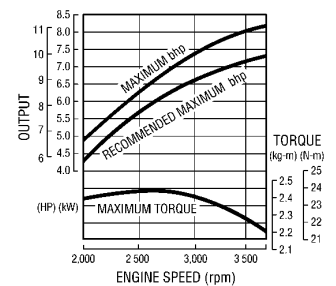
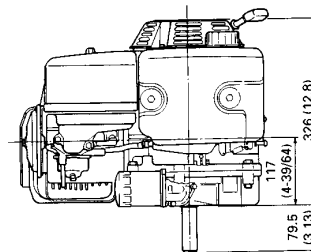
GXV160

A 5.5HP OHV vertical shaft engine with electronic ignition and dual element air cleaners. Uses include commercial lawn mowers and a variety of industrial products.



GXV340

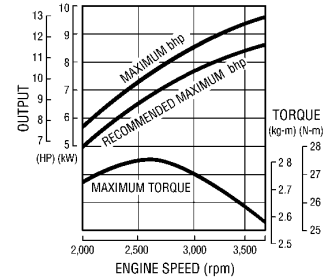
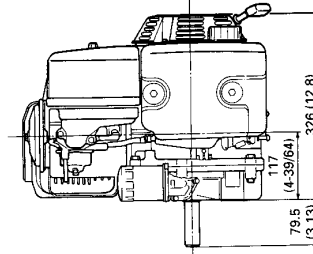
A 11HP OHV vertical shaft engine with easy maintenance features, Oil Alert® and electronic ignition. Used for powering turf equipment and floor buffers.



Vertical Shaft

GXV390

A 13HP vertical shaft engine with features like Oil Alert® and electric start capabilities. Designed with commercial lawn and garden and floor care equipment in mind.



Specifications

GX Series Vertical Shaft Engine Specifications

HORSEPOWER	MODEL	TYPE	VARIATION	OIL ALERT®	CRANKSHAFT P.T.O.	TOP GOVERNED SPEED-NO LOAD	RECOIL STARTER	12V STARTER	TRANSISTOR IGNITION	AIR CLEANER	FUEL TANK (QT.)	NET WEIGHT
2.5	GXV50		VA2		29/32 x 17 taper M8 x 1.25	4800	•		•	SD	.5	12
5.0	GXV140		A1(1)		3-5/32 x 7/8 dia. tapped 3/8 24 UNF	3600	•		•	DE	1.16	26
	GXV140		N1		3-5/32 x 7/8 dia. tapped 3/8 24 UNF	3600	•		•	DE	1.16	26
5.5	GXV160	K1	N12		3-3/16 x 7/8-1 dia. tapped 7/8 24 UNF	3600	•		•	DE	2.01	35
	GXV160	K1	A1(1)		3-3/16 x 7/8-1 dia. tapped 3/8 24 UNF	3600	•		•	DE	2.01	40
11	GXV340	K2	DA33	•	3-1/8 x 1 dia. tapped 7/16 20 UNF	3600	•		•	DE	W/O	72
	GXV340	K2	DE33			3600	•	•	•	DE	2.2	78
	GXV340	K2	DAP2(2)			3600	•	(2)	•	DE	W/O	72
13	GXV390	K1	DA33	•	3-1/8 x 1 dia. tapped 7/16 20 UNF	3600	•		•	DE	W/O	73
	GXV390	K1	DE33			3600	•	•	•	DE	2.2	79

NOTES: (1) Flywheel brake model (2) Provision for electric starter
SD - Semi dry OB - Oil bath DE - Dual element CY - Cyclone W/O - Without

Call Wharton for All Your Replacement Engine Needs





Concrete Accessories

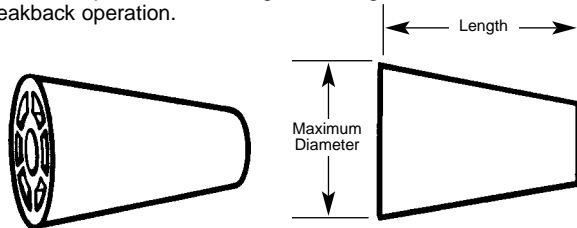
2

Light/Medium/Heavy Formwork Accessories
General Slabwork • Paving Forms
Concrete Forms
Chamfer Strips • Cutters
Column Clamps • Forms • Forming Hardware
Leave-In-Place Concrete Forms
Steel Stakes • Wire • Wire Tools
Concrete Placing • Buckets • Hoppers
Concrete Curing Blankets
Tarpaulins • Reinforced Plastic • Polyethylene Film
Lumber • Rebar • Wire Mesh/Cloth
Rebar Benders/Cutters
Ties • Waterstops
Joint/Finish Formers
Insulation • Waterproofing Membrane
Expansion Joints • Flashing
Asphalt Tools
Wheelbarrows • Mortar Pans
Concrete Finishing • Masonry Tools
Scrapers • Roofing Tools
Epoxy/Cementitious Grouts
Concrete Finishes • Pavement Repair
Patching • Restoration
Cures • Sealers • Water Repellents
Adhesives • Blast Abrasive Equipment



A-2 Plastic Cones

Dayton/Richmond A-2 Plastic Cones can be added to A-3, A-4 and A-44 Snap Ties and A-46 and A-48 Loop Ties. The cones act as internal spreaders, reduce grout leakage, and aid in the breakback operation.



A-2 Plastic Cones are recommended when specifications require a nominal 1", 1-1/4", 1-1/2" or greater breakback. Breakback is approximately 3/16" less than the cone length. Plastic cone sizes, other than those listed, are available on special order.

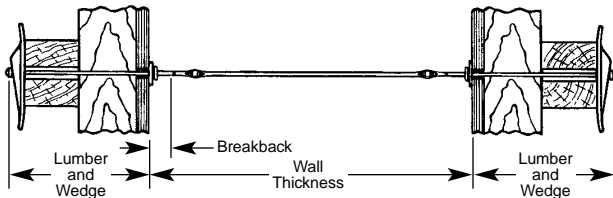
Cone Selection Chart	
Diameter	Length
3/4"	1" 1-1/2"
1"	1" 1-1/2"
1-1/4"	1-1/2" 2"

Note: Plastic Cones are designed to act as internal form spreaders only. They are not intended to support loads applied by personal fall arrest systems and/or scaffold brackets.

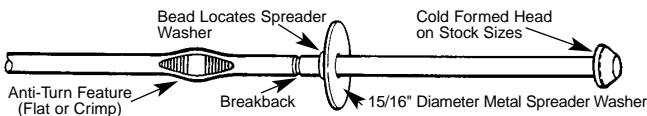
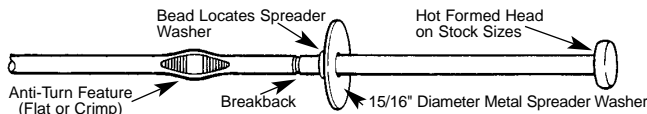
A-3 Standard Snap Tie

2,250 lbs. Safe Working Load

Approximate safety factor 2:1



Dayton/Richmond A-3 Standard Snap Ties are manufactured with either hot or cold forged integral heads. A-3 snap ties have a nominal 1" breakback with 1/4" and 1/2" breakbacks available on special order. Breakbacks over 1" can be provided on special order, but due to the increased concrete bond Dayton/Richmond cannot guarantee that the ties will consistently provide proper breakback. Coating the tie ends with wax will aid in breakback operation.



Each A-3 Snap Tie is fabricated with flats or crimps to prevent the snap tie from turning in the concrete during breakback operations. A-3 Snap Ties are available with fixed metal spreader washers.

A-3 Heavy Snap Tie

3,350 lbs. Safe Working Load

Approximate safety factor 2:1

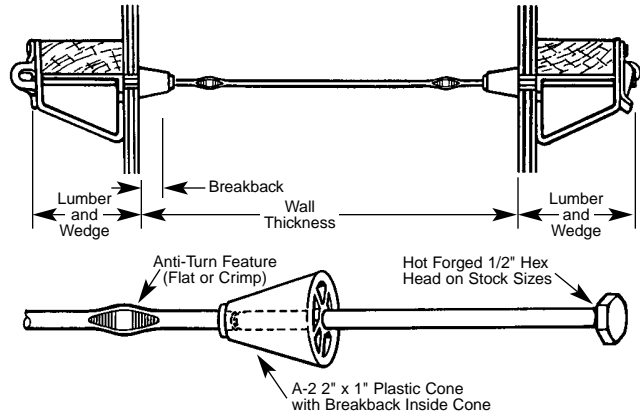
Dayton/Richmond A-3 Heavy Snap Ties are used when a higher safe working load is required. The A-3 snap tie is manufactured with cold forged integral heads and is equipped with flats or crimps to prevent turning.

A-4 Hex Head Snap Tie

2,250 lbs. Safe Working Load

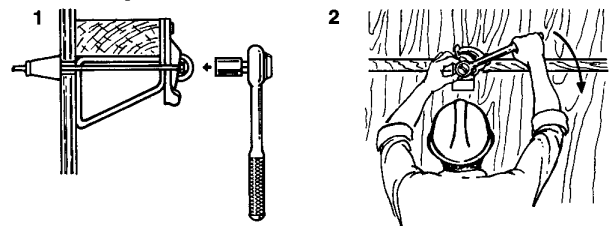
Approximate safety factor 2:1

Dayton/Richmond A-4 Hex Head Snap Ties are manufactured with hot forged integral 1/2" hex shaped heads. The hex head allows short-end snap ties to be broken back with the formwork still in place.



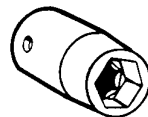
The standard A-4 uses 1" x 1" A-2 Plastic Cones to provide a nominal 1" breakback. Other size cones are available on special order.

How to Break Back A-4 Snap Ties



1. Place a 1/2" six-point socket and ratchet over the head of the tie.
2. Push the bracket eccentric away from the tie head.
3. Standing in front of the tie, hold the socket on the hex head with one hand and turn the ratchet with the other. A 1/4 to 1/2 turn of the ratchet will normally break the tie end.

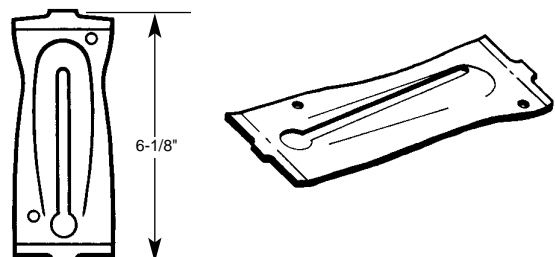
A-31 Hex Head Snap Tie Socket



Dayton/Richmond A-31 Hex Head Snap Tie Socket is used with a standard socket wrench to break A-4 Hex Head Snap Ties.

A-16 Omni Wedge

Dayton/Richmond A-16 Omni Wedge is a high strength snap tie wedge designed to slip over the head of standard or heavy-duty snap ties to provide ample bearing area for proper load distribution into the wales.

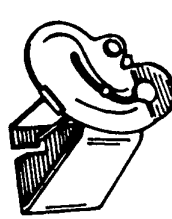


A-81 Jahn "A" Bracket

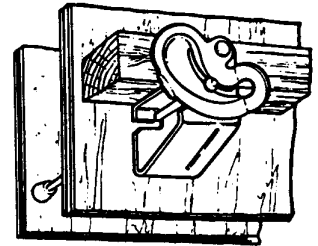
Dayton/Richmond A-81 Jahn "A" Bracket is fabricated from high strength steel with a cad plated eccentric and painted body. The 5/8" take-up of the eccentric compensates for minor lumber variations in thickness. The A-81 bracket can be utilized to hold a single horizontal wale or a single vertical stud with any type of wall form; round, curved, battered, beam and/or columns.

The A-81 bracket can be installed before or after the wales have been positioned. The slots in the bracket allow it to slip over the snap tie end without laborious threading through holes. When properly installed, the A-81 bracket will not loosen from internal vibration of the concrete. Pressure from the bracket is against the 2x4 instead of the plywood.

The A-81 bracket uses 4-3/4" L&W snap ties, is easy to install and strip, requires no nailing and is very fast.



A-81 Jahn "A" Bracket

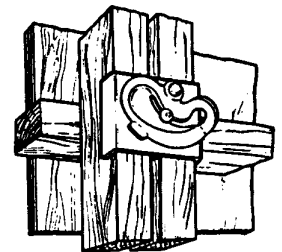


A-82 Jahn "C" Bracket

Dayton/Richmond A-82 Jahn "C" Bracket is designed for use with single 2x4 studs, double 2x4 wales and 8-1/4" L&W snap ties to attach vertical strongbacks to the form. The bracket eccentric compensates for lumber size imperfections. The A-82 bracket can also be used with double wales to support a horizontal plywood joint.

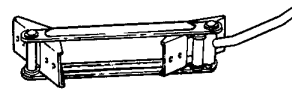


A-82 Jahn "C" Bracket

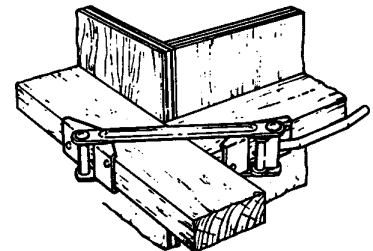


A-83 Jahn Cornerlock

Dayton/Richmond A-83 Jahn Cornerlock is used at outside corners to secure the 2x4 walers. Nail holes are provided for secure attachment and grips on the underside provide a positive non-slip action. The cam action of the locking handle draws the wales together. No special tools are required for installation or stripping.

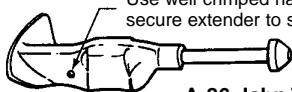


A-83 Jahn Cornerlock



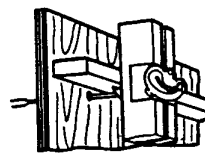
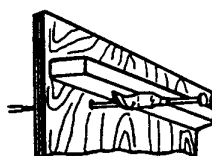
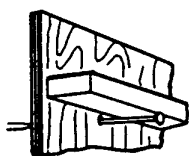
A-86 Jahn Tie Extender

Use well crimped nail through holes in body to secure extender to snap tie.



A-86 Jahn Tie Extender

Dayton/Richmond Jahn Tie Extender is designed to convert 4-3/4" L&W (short) snap ties into 8-1/4" L&W (long) snap ties. The A-86 tie extender allows vertical strongbacks to be added anywhere on the wall form. Mixed length snap tie orders are eliminated so short L&W snap ties can be ordered for the entire job.



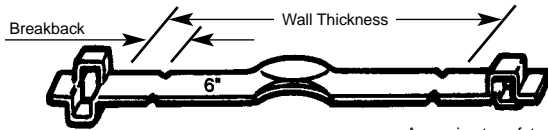
**2,250 lbs.
Safe Working Load**

SWL provides a factor of safety of approximately 2 to 1.

A-21-U Strap Tie

2,250 lbs.
Safe Working Load

Dayton/Richmond A-21-U Strap Tie is used to align, tie and secure steel frame form panels. Ties are available for wall thickness of 6" through 24" in 1/2" increments. The wall thickness is stamped on each tie. Standard breakback for A-21-U ties is 1/2".

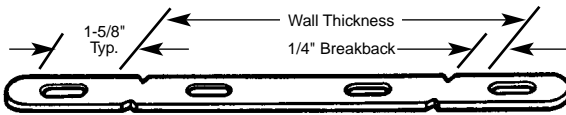


Approximate safety factor 2:1

A-21-X Flat Tie

3,000 lbs.
Safe Working Load

Dayton/Richmond A-21-X Flat Tie is used with the A-51 Wedge Bolt to secure and space modular forms. A-21-X ties are available in 6" through 24" in 1/2" increments. The wall thickness is stamped on each tie. Standard breakback is 1/4".

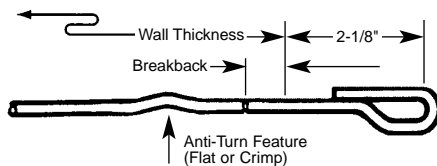


Approximate safety factor 2:1

A-46 Loop Panel Tie, Standard and Heavy

Dayton/Richmond A-46 Loop Panel Ties are designed for securing and spacing modular type forms. Standard units are fabricated with 2-1/8" ends and 1" breakback. Other breakbacks, plastic cones or waterseal washers are available on special order.

When erecting modular type forms, the A-46 ties are placed in the slots between the form panels. An A-51 Wedge Bolt is placed through the adjoining form and into the loop of each tie. A second wedge bolt is then placed through the slot of the first wedge bolt to secure the tie and form together.

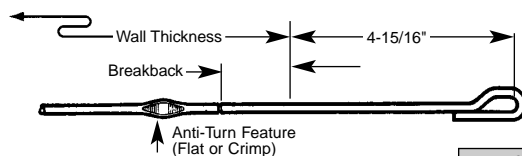


2,250 lbs.
(Standard Ties)
3,000 lbs.
(Heavy Ties)
Safe Working Load

Approximate safety factor 2:1

A-48 Gang Loop Tie, Standard and Heavy

Dayton/Richmond A-48 Gang Loop Tie is similar to the A-46 tie, above, but has end dimensions extended to 4-15/16". The longer length allows the tie to be used with gang form bolts (supplied by others) and to be broken back before the form has been stripped. 1" breakback is standard. Other breakbacks, plastic cones and/or waterseal washers are available on special order.



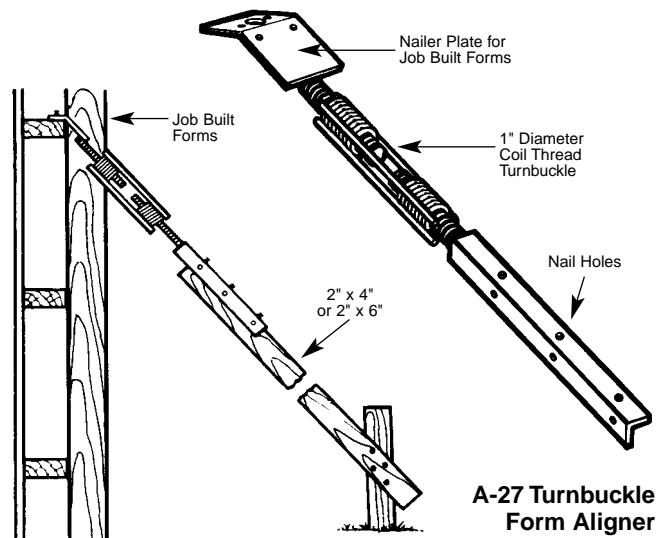
2,250 lbs.
(Standard Ties)
3,000 lbs.
(Heavy Ties)
Safe Working Load

Approximate safety factor 2:1

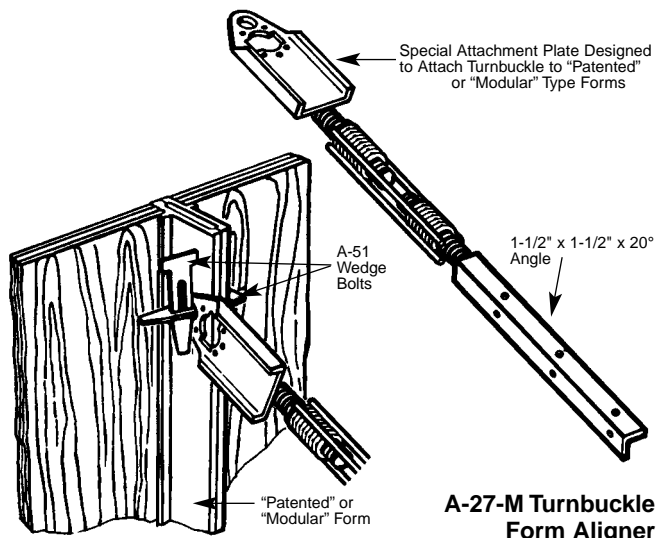
A-27 and A-27-M Turnbuckle Form Aligners

Dayton/Richmond A-27 and A-27-M Turnbuckle Form Aligners are designed to accurately position and plumb vertical forms. The turnbuckle section of the aligner features a 1" diameter self-cleaning coil thread for fast adjustments. Overall length of the aligner is 37" minimum and 40" maximum, offering 3" of effective adjustment.

The A-27 aligner has bent nailing plate equipped with nail holes and a 15/16" hole to accept 3/4" or 7/8" steel stakes. The A-27-M aligner has a special attachment plate that allows direct attachment to modular type forms. Both models are rugged units that offer high reuse and labor savings. The safe working load of the aligners is limited by the lumber, nailing and/or staking methods.



A-27 Turnbuckle Form Aligner



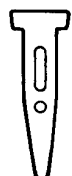
A-27-M Turnbuckle Form Aligner

A-51 Wedge Bolt

Dayton/Richmond A-51 Wedge Bolt is used with A-46 Loop Panel Ties, B-21 Plylags, etc., to secure modular type forms.

3,750 lbs.
Safe Working Load

Approximate safety factor 2:1

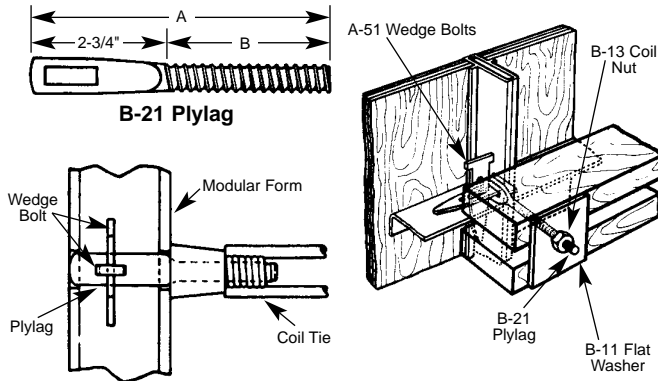


B-21 Plylag

3,000 lbs. Max. Safe Working Load

Approximate safety factor 2:1

Dayton/Richmond B-21 Plylags are used externally on modular forms to attach wales/strongbacks or internally to attach coil ties, rock anchors, etc., to the form. Plylags are manufactured from 1/2" diameter coil rod and are stocked in 6-1/4", 6-3/4", 9-3/4" and 14-3/4" lengths. Other lengths are available on special order.



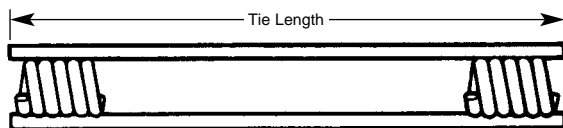
B-21 Plylag Selection Chart			
Type	Diameter	Dimensions	
		A Overall length	B Thread length
B-21	1/2"	6-1/4"	3-1/2"
B-21	1/2"	6-3/4"	4"
B-21	1/2"	9-3/4"	7"
B-21	1/2"	14-3/4"	12"

B-1 Two Strut Coil Tie and B-2 Four Strut Coil Tie

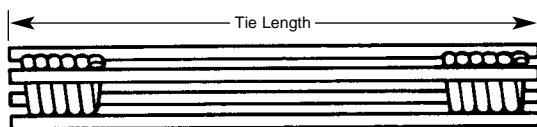
Dayton/Richmond B-1 and B-2 Coil Ties are strong, versatile resistance welded ties designed to take the abuse encountered in medium and heavy concrete construction. The coil tie is an extremely simple tie that is capable of servicing many applications and uses in the field. It can be used with or without cones or combined with coil rod to form an adjustable tie. The coil threads are fast acting and self-cleaning.

B-2 Four Strut Coil Tie Couplers are available and are used in conjunction with D-18 Inside Rods to compensate for form variations.

To determine the required coil tie length, subtract two times the desired or specified setback from the wall thickness. [Wall thickness - (2x setback) = coil tie length].



B-1 Two Strut Coil Tie

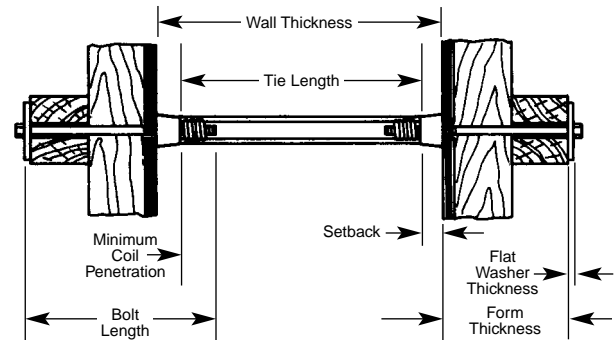


B-2 Four Strut Coil Tie and B-2 Four Strut Coil Tie Coupler

B-1 and B-2 Coil Tie Selection Chart

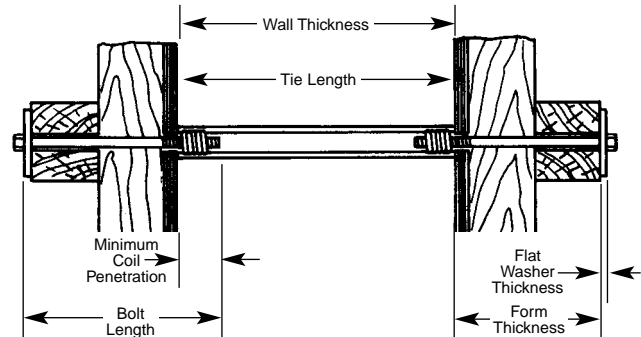
Type	Bolt Diameter	Number of Strut Wires	Safe Working Load Tension (lbs.)
B-1 Standard	1/2"	2	4,500
B-1 Heavy	1/2"	2	6,750
B-1 Standard	3/4"	2	6,750
B-1 Heavy	3/4"	2	9,000
B-1 Standard	1"	2	13,500
B-2 Standard	1"	4	18,000
B-2 Standard	1-1/4"	4	27,000
B-2 Coupler 8"	1/2"	4	9,000
B-2 Coupler 12"	3/4"	4	18,000

Approximate safety factor 2:1



Coil Tie with Loose (Spreader) Cones

Cones are generally used when wall thickness is very thick or an architectural finish is specified.

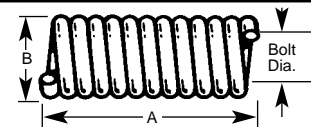


Coil Tie as Spreader and Tie

The coil tie can be used as a combination tie and form spreader when it is not necessary to keep the ends of the tie back from the face of the concrete. If a number of form reuse is contemplated, standard cut washers should be used at the tie ends to protect the form face.

Coils

Standard coils are available for 1/2", 3/4", 1", 1-1/4" and 1-1/2" diameter bolts.



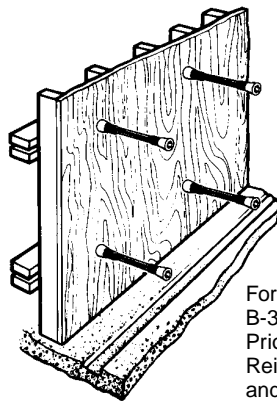
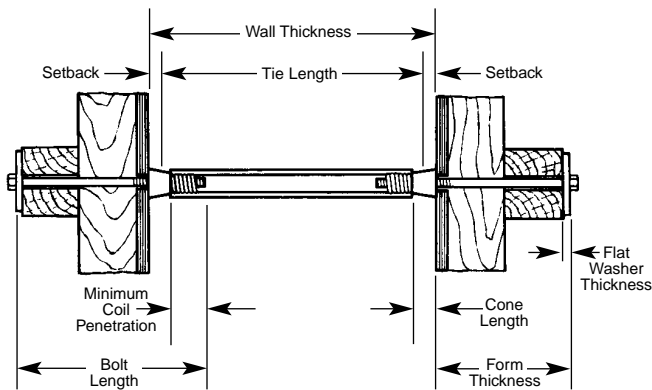
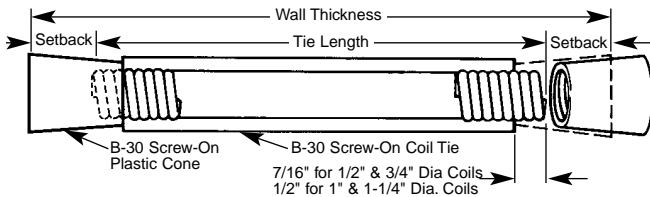
Coil Dimensions

Bolt Diameter	A	B	Wire Diameter	Threads Per Inch
1/2"	1-1/8"	25/32"	.162"	6
3/4"	1-9/16"	1-3/32"	.218"	4-1/2
1"	2"	1-7/16"	.281"	3-1/2
1-1/4"	2"	1-11/16"	.281"	3-1/2
1-1/2"	2-5/16"	1-15/16"	.281"	3-1/2

B-3 Screw-On Coil Tie

Dayton/Richmond Screw-On Coil Tie is designed with longer coils that extend beyond the end of the struts. Plastic cones screw onto the projections to provide a positive setback and act as a fixed internal form spreader.

To determine proper screw-on coil tie length, subtract the required total setback (both sides) from the wall thickness.



Form Panel Showing B-3 Coil Ties in Place Prior to Installation of Reinforcing Steel and Closure Form.

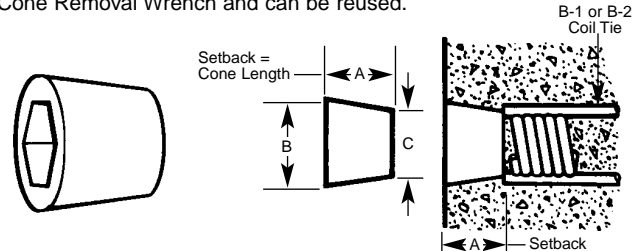
B-3 Screw-On Coil Tie Selection Chart

Type	Bolt Diameter	Number of Strut Wires	Safe Working Load Tension (lbs.)
B-3 Standard	1/2"	2	4,500
B-3 Heavy	1/2"	2	6,750
B-3 Standard	3/4"	2	6,750
B-3 Heavy	3/4"	2	9,000
B-3 Standard	1"	2	13,500
B-3 Standard	1"	4	18,000
B-3 Standard	1-1/4"	4	27,000

Approximate safety factor 2:1

B-29 Loose Plastic Cone

Dayton/Richmond B-29 Loose Plastic Cones are used with B-1 and B-2 Coil Ties. They are placed on the coil bolts after the coil bolts have been inserted through the form face but prior to threading the bolt into the coil tie. The large end of the cone provides sufficient bearing surface to prevent crushing of the plywood around the bolt hole. B-29 plastic cones are removed from the concrete with a B-15 Cone Removal Wrench and can be reused.



Warning: Cones are to be used for spreader action only and are not designed for scaffold bracket or other accessory loads.

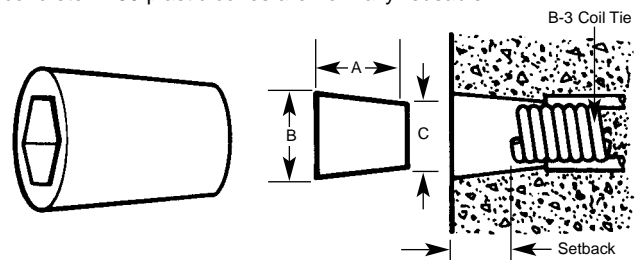
B-29 Loose Cone Selection Chart

Bolt Diameter	Setback (Cone Length) A	B	C
1/2"	1"	1-1/4"	1"
1/2"	1-1/2"	1-1/4"	1"
1/2"	2"	1-1/4"	1"
3/4"	1"	1-5/8"	1-7/16"
3/4"	1-1/2"	1-5/8"	1-7/16"
3/4"	2"	1-5/8"	1-7/16"
1"	1"	-	-
1"	2"	-	-
1"	2-1/2"	2-1/8"	1-3/4"
1-1/4"	2"	-	-
1-1/4"	2-1/2"	2-3/8"	2-1/8"

Approximate safety factor 2:1

B-30 Screw-On Plastic Cones

Dayton/Richmond Screw-On Plastic Cones are designed to thread onto the protruding coil of a B-3 Screw-On Coil Tie. Use a B-15 Cone Removal Wrench to back the cone off the tie and out of the concrete. B-30 plastic cones are normally reusable.



Warning: Cones are to be used for spreader action only and are not designed for scaffold bracket or other accessory loads.

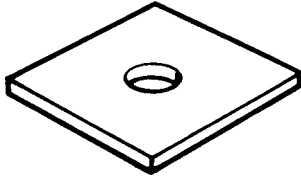
B-30 Screw-On Selection Chart

Bolt Dia.	Setback	A	B	C
1/2"	1"	1-3/8"	1-1/4"	1"
1/2"	1-1/2"	1-7/8"	1-1/4"	1"
1/2"	2"	2-3/8"	1-1/4"	1"
3/4"	1"	1-1/2"	1-5/8"	1-7/16"
3/4"	2"	2-1/2"	1-3/4"	1-7/16"
1"	2"	2-1/2"	2-1/8"	1-13/16"
1-1/4"	2"	2-1/2"	2-3/8"	2-1/8"

Approximate safety factor 2:1

B-11 Flat Washers

Dayton/Richmond B-11 Flat Washers are made from flat steel plate and are available in the sizes shown in the accompanying chart. For best results the space spanned by the washer should not exceed the bolt diameter plus 1/4".



B-11 Flat Washer Selection Chart

Bolt Diameter	Type	Safe Working Load (lbs.)	Size
1/2"	Standard	4,500	3" x 4" x 1/4"
1/2"	Heavy	6,750	4" x 5" x 1/4"
3/4"	Standard	6,750	4" x 5" x 1/4"
3/4"	Heavy	9,000	5" x 5" x 3/8"
1"	Standard	18,000	5" x 5" x 7/16"
1"	Heavy	37,500	7" x 7" x 3/4"
1-1/4"	Standard	27,000	5" x 5" x 3/4"
1-1/4"	Heavy	37,500	7" x 7" x 3/4"
1-1/2"	Standard	37,500	5" x 5" x 3/4"
1-1/2"	Heavy	37,500	7" x 7" x 3/4"

Approximate safety factor 2:1

B-12 Coil Rod

Dayton/Richmond B-12 Coil Rod is available in 1/2" to 1-1/2" diameters in 12' lengths. Field cutting can be accomplished with bolt cutters or carborundum blades.

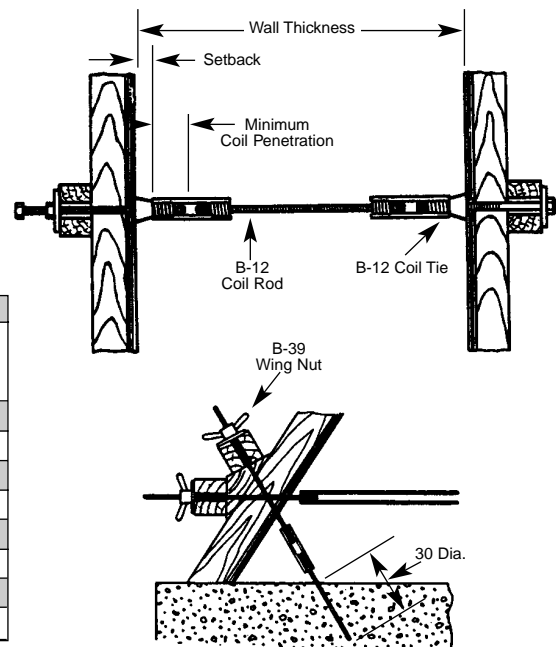
B-12 threaded rod can be used with Coil Ties in many forming combinations to tie formwork, for adjustable ties, for concrete embedments and/or emergency ties.



B-12 Coil Rod Selection Chart

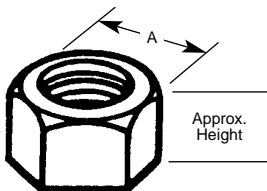
Coil Rod Diameter	Safe Working Loads		Minimum Root Area (sq. in.)	Tensile Stress (psi.)	Yield Stress (psi.)	Minimum Coil Penetration
	Tension (lbs.)	Shear (lbs.)				
1/2"	9,000	6,000	.1385	130,000	110,000	2"
5/8"	12,000	8,000	.2124	113,000	96,000	2-1/4"
3/4"	18,000	12,000	.3079	117,000	100,000	2-1/4"
7/8"	31,000	20,600	.4477	117,000	100,000	2-1/2"
1"	38,000	25,300	.5410	140,000	120,000	2-1/2"
1-1/8"	45,000	30,000	.7163	126,600	105,000	2-1/2"
1-1/4"	56,000	37,500	.9161	123,000	105,000	2-1/2"
1-1/2"	68,000	45,300	1.3892	98,000	85,000	3"

Approximate safety factor 2:1

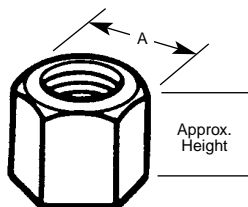


B-13 Coil Nut and B-25 Heavy Coil Nut

Dayton/Richmond B-13 Coil Nuts are available with coil threads in 1/2", 3/4", 1", 1-1/4" and 1-1/2" diameters. Dayton/Richmond B-25 Heavy Coil Nuts are available with coil threads in 1/2", 3/4", 1" and 1-1/4" diameters.



B-13 Standard Coil Nut



B-25 Heavy Coil Nut

B-13 Coil Nut and B-25 Heavy Coil Nut Selection Chart

Coil Nut Type	Dia.	Approx. Height	Width Across Flats A	Safe Working Load Tension (lbs.)	
				Using One B-13 Nut	Using Two B-13 Nuts or One B-25 Heavy Nut
B-13	1/2"	7/16"	7/8"	6,000	9,000
B-25	1/2"	1-3/16"	1-1/8"	—	9,000
B-13	3/4"	5/8"	1-1/8"	9,000	18,000
B-25	3/4"	1-3/16"	1-1/8"	—	18,000
B-13	1"	1"	1-5/8"	18,000	37,500
B-25	1"	2"	1-3/8"	—	37,500
B-13	1-1/4"	1-1/4"	2"	27,000	56,250
B-13	1-1/2"	1-1/2"	2-3/8"	40,500	67,500

Approximate safety factor 2:1

B-14 Coil Bolts

Dayton/Richmond B-14 Coil Bolts are designed for ease of use and durability. Coil bolts have fast acting, self-cleaning coil threads. B-14 Coil Bolts may be fabricated from ASTM A-307 blanks or from B-12 Coil Rod with welded B-13 Coil Nut heads.

Coil bolts are designed to be reusable, but they do wear and must be continuously inspected and replaced when wear or damage is noted. A waterproof grease should be applied to the portion of bolt that will be embedded in the concrete. This will facilitate bolt removal from the set concrete.



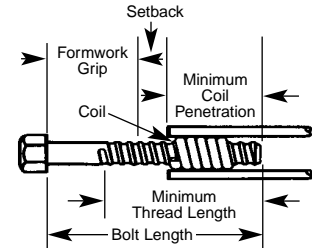
Minimum Coil Penetration Information

When determining the minimum required overall length of coil bolts, you must consider the following items:

Formwork grip (including washer thickness).

Setback of the form tie or insert.

Minimum coil penetration (applies to all coil products).



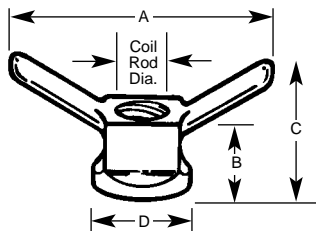
B-14 Coil Bolt Selection and Minimum Coil Penetration Chart

1/2" Dia.		3/4" Dia.		1" Dia.		1-1/4" Dia.		1-1/2" Dia	
Forged Hex Head		Forged Hex Head		Forged Hex Head		Forged Hex Head		Forged Hex Head	
Safe Work Load		Safe Work Load		Safe Work Load		Safe Work Load		Safe Work Load	
Tension	Shear	Tension	Shear	Tension	Shear	Tension	Shear	Tension	Shear
Under 6" 4,125 lbs.	Under 6" 2,750 lbs.	9,000 lbs.	6,000 lbs.	18,000 lbs.	12,000 lbs.	27,000 lbs.	18,000 lbs.	41,250 lbs.	27,500 lbs.
6" & Over 6,750 lbs.	6" & Over 4,500 lbs.								
Minimum Coil Penetration 2"		Minimum Coil Penetration 2-1/4"		Minimum Coil Penetration 2-1/2"		Minimum Coil Penetration 2-1/2"		Minimum Coil Penetration 3"	
Minimum Root Area .1385 Sq. In.		Minimum Root Area .3079 Sq. In.		Minimum Root Area .5410 Sq. In.		Minimum Root Area .9161 Sq. In.		Minimum Root Area 1.3890 Sq. In.	
Threads Per Inch 6		Threads Per Inch 4-1/2		Threads Per Inch 3-1/2		Threads Per Inch 3-1/2		Threads Per Inch 3-1/2	
Bolt Length	Minimum Thread Length	Bolt Length	Minimum Thread Length	Bolt Length	Minimum Thread Length	Bolt Length	Minimum Thread Length	Bolt Length	Minimum Thread Length
3"	2-1/4"	3"	2-1/4"	3"	2"	3"	2"	—	—
4"	3-1/4"	4"	3-1/4"	4"	3"	4"	3"	4"	3"
5"	4-1/4"	5"	4-1/4"	5"	4"	5"	4"	5"	4"
6"	5"	6"	5"	6"	5"	6"	5"	6"	5"
Over 6"	5"	Over 6"	5"	Over 6"	5"	Over 6"	5"	Over 6"	5"

Approximate safety factor 2:1

B-39 Wing Nut

Dayton/Richmond B-39 Wing Nut is made of ductile iron and can be used for any application requiring quick removal and application of a nut.



B-39 Wing Nut Selection Chart

Coil Rod Diameter	Safe Working Load Tension (lbs.)	A	B	C	D
1/2"	9,000	5"	1-1/4"	2-3/8"	1-3/8"
3/4"	18,000	5-7/8"	1-1/4"	2-1/2"	1-3/4"
7/8"	18,000	6"	1-5/8"	2-3/4"	1-3/4"
1"	38,000	6"	1-5/8"	3"	2"
1-1/4"	52,000	5-5/8"	1-5/8"	2-3/4"	2-1/4"
1-1/2"	80,000	6-3/4"	1-7/8"	2-3/4"	2-7/8"

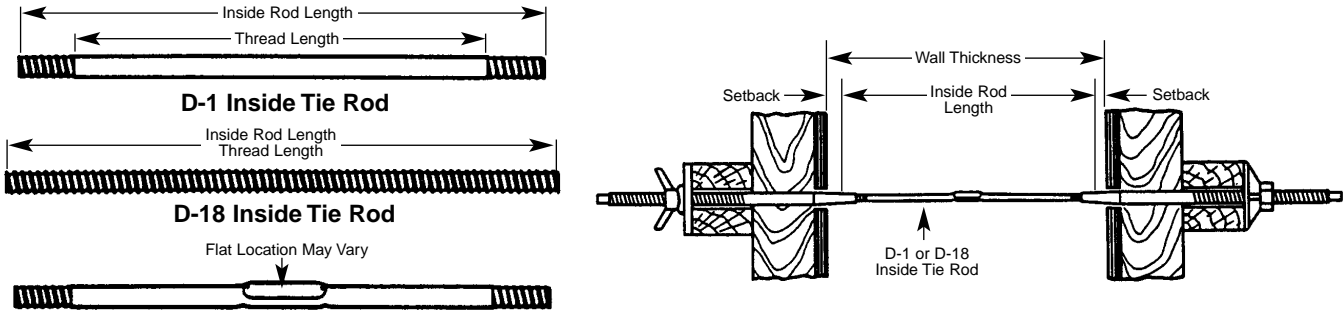
SWL are based on 1/2" setback from face of concrete.

Note: Wing nuts may vary slightly in configuration from that shown.

D-1 and D-18 Inside Tie Rods

Inside tie rods are used with she-bolts to provide a highly adaptable forming system. The inside tie rods are made from high carbon steel with coil threads. National coarse threads can be provided on special order.

The correct inside tie rod length is determined by subtracting the total required setback (both sides) from the wall thickness. Flats are available to prevent turning of the inside tie rods in the concrete and are recommended for wall thickness of 24" or less.



Type	Safe Working Load Tension (lbs.)	Inside Tie Rod			Dimensions	
		Thread Diameter	Thread Type	Thread Length	Minimum Length	Maximum Length
D-1	9,000	1/2"	N.C. or Coil	1-1/4"	5", 6" with flat	20'-0"
D-18	9,000	1/2"	Coil	Continuous	5"	20'-0"
D-1	12,000	5/8"	N.C. or Coil	1-3/4"	5", 6" with flat	12'-0"
D-18	12,000	5/8"	Coil	Continuous	5"	20'-0"
D-1	18,000	3/4"	N.C. or Coil	1-3/4"	5", 6" with flat	12'-0"
D-18	18,000	3/4"	Coil	Continuous	5"	20'-0"
D-1	38,000	1"	N.C. or Coil	2-1/4"	5", 6" with flat	12'-0"
D-18	38,000	1"	Coil	Continuous	5"	20'-0"

Approximate safety factor 2:1
7/8", 1-1/8", 1-1/4" and 1-1/2" and D-18 Inside Rods are available on special order.

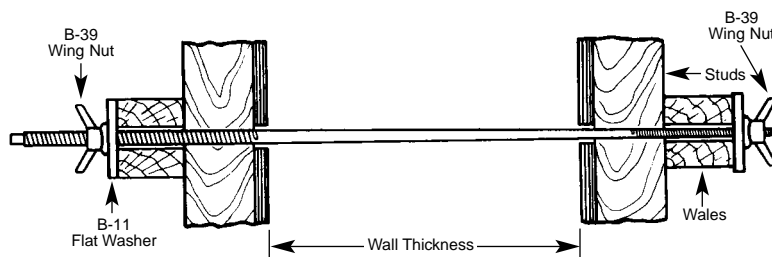
D-9 Taper Ties

Dayton/Richmond D-9 Taper Ties are used where specifications require or permit complete removal of the form tie from the concrete. Standard taper ties are supplied with coil thread in the diameters and lengths shown in the chart. Other lengths are available on special order.

A complete taper tie assembly consists of one taper tie, two flat washers and two appropriate nut devices. Standard taper ties are manufactured with a taper up to 30° in length. Longer tapers are available on special order.

For wrench turning purposes, taper ties are manufactured with a square end. The opposite end (smaller end) is designed with a protruding nose to prevent thread damage during the removal operation. Coating the taper tie with waterproof grease will facilitate taper tie removal.

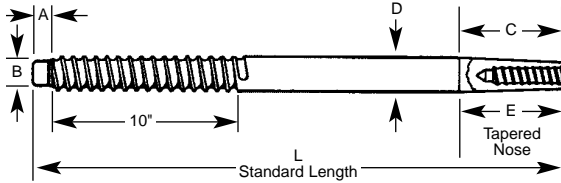
Note: Taper ties will wear and get damaged. They must be continually inspected and replaced if wear or damage is noted.



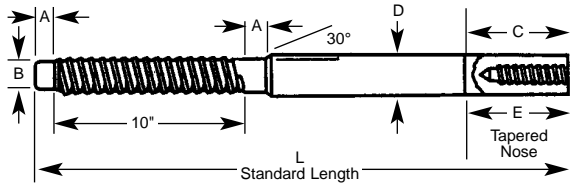
Safe Working Load Tension (lbs.)	Large End of Tie		Small End of Tie		Standard Tie Lengths	Tapered Body Diameter
	Coil Thread Diameter	Length of Thread	Coil Thread Diameter	Length of Thread		
7,500	3/4"	10"	1/2"	2"	34" 43" 52"	.670" - .500"
18,000	1"	10"	3/4"	6"	30" 36" 42" 48" 54" 60" 72"	.884" - .750"
34,000	1-1/4"	10"	1"	6"		1.113" - 1.00"
50,000	1-1/2"	10"	1-1/4"	6"		1.5" - 1.25"
75,000 H.S.	1-3/4"	10"	1-1/2"	6"	36" 48" 60" 72"	1.75" - 1.5"

Approximate safety factor 2:1

D-2 and D-30 She-Bolts

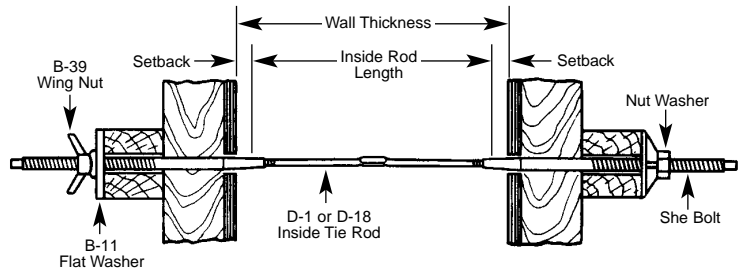


D-2, D-30 She-Bolt



D-30 High Strength She-Bolt

Dayton/Richmond D-2 and D-30 She-Bolts are heavy-duty, reusable forms for medium and heavy concrete construction. The D-2 She-Bolt has a 3/4" diameter and is equipped with Acme thread. The D-30 She-Bolt has coil thread and is available in 3/4" through 1-5/8" diameters in 1/8" increments. She-Bolts are used in conjunction with D-1 or D-18 Inside Rods to form tie a wide range of formwork thicknesses.



D-2 and D-30 She-Bolt Selection Chart												
Type	Safe Working Load Tension (lbs.)	She-Bolt External Thread		Inside Tie Rod Thread		A	B	C	D	E	L	External Hardware Required
		Diameter	Type	Diameter	Type							
D-2	9,000	3/4"	Acme	1/2"	NC	5/8"	1/2"	1-1/4"	3/4"	3"	20"	3/4" Dia. D-6
D-30	9,000	7/8"	Coil	1/2"	Coil	1"	1/2"	1-1/2"	7/8"	2-3/4"	18" 20" 24"	7/8" Dia B-27 or B-39
D-30	12,000	7/8"	Coil	5/8"	Coil	1"	1/2"	1-1/2"	7/8"	2-3/4"	18" 20" 24"	7/8" Dia. B-39
D-30	18,000	1-1/4"	Coil	3/4"	Coil	1"	3/4"	2"	1-1/4"	4"	20" 24" 30" 35"	1-1/4" Dia. B-39
D-30	37,500	1-1/2"	Coil	1"	Coil	1"	3/4"	2"	1-1/2"	4"	20" 24" 30" 35"	1-1/2" Dia. B-39
D-30 HS	56,000	1-1/2"	Coil	1-1/4"	Coil	1"	3/4"	2-3/4"	1-3/4"	4"	20" 24" 30" 35"	1-1/2" Dia. B-39

Note: She-bolts are meant to be reused, but they do wear so they must be continually inspected. When wear or damage is noted, they must be replaced. Approximate safety factor 2:1.

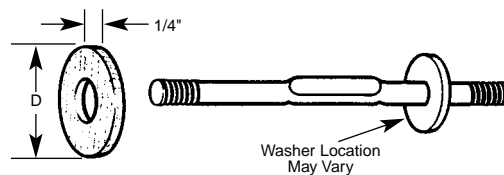
A water proof grease should be applied to the embedded portion of the she-bolt to facilitate removal.

Standard sizes are listed in the chart, other than standard sizes are available on special order.

Caution: The pitch (threads/inch) of the 3/4" diameter Acme thread varies in certain geographical areas of the United States, please check before ordering.

D-33 Waterseal Washer

Dayton/Richmond D-33 Waterseal Washers are neoprene washers used on D-1 Inside Rods to break the continuity of the tie to help eliminate water seepage along the tie. Generally specified when she-bolts are used to form water containment structures.



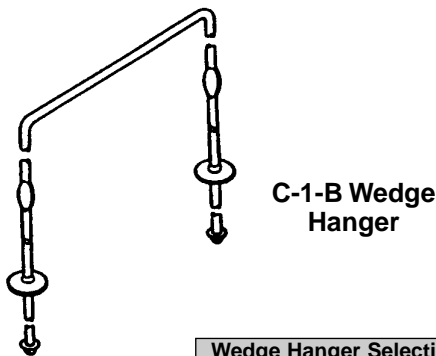
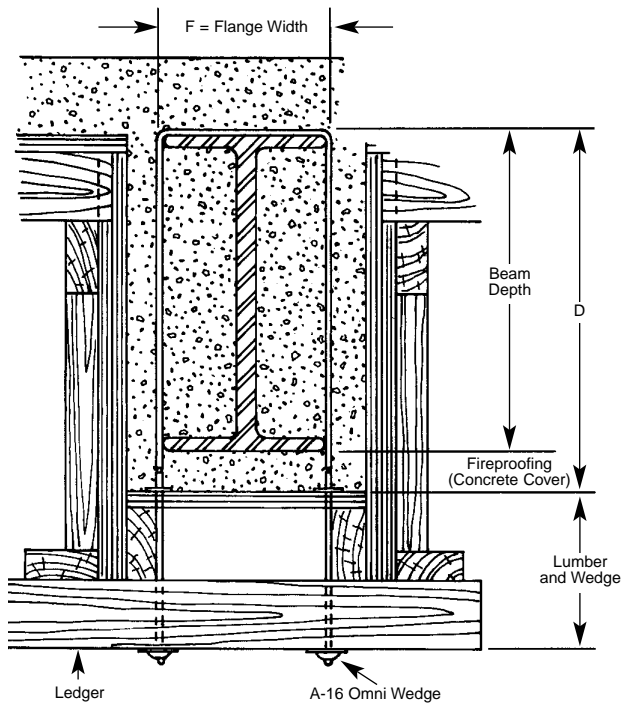
Inside Tie Rod Diameter	"D"
1/2"	1"
3/4"	1-1/2"
1"	1-1/2"

C-1-B and C-1-C Wedge Hangers

Dayton/Richmond C-1-B (with metal spreader washers) and C-1-C Wedge Hangers (without spreader washers) are standard or heavy snap ties that have been shaped to fit over structural steel beams to support fireproofing formwork. Wedge Hangers are normally furnished with a 1" breakback, other breakbacks are available on special order.

When using C-1-B Wedge Hangers (with spreader washers) A-16 Omni Wedges bear on drilled single or double ledgers. This secures the beam bottom against the spreader washers to provide a rigid form and correct depth of fireproofing. C-1-C Wedge Hangers (without spreader washers) are recommended for use only with soffit spacers.

Warning: Hanger must be equally loaded, on both sides of the beam, to prevent hanger rotation.



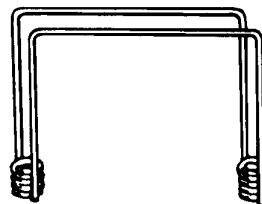
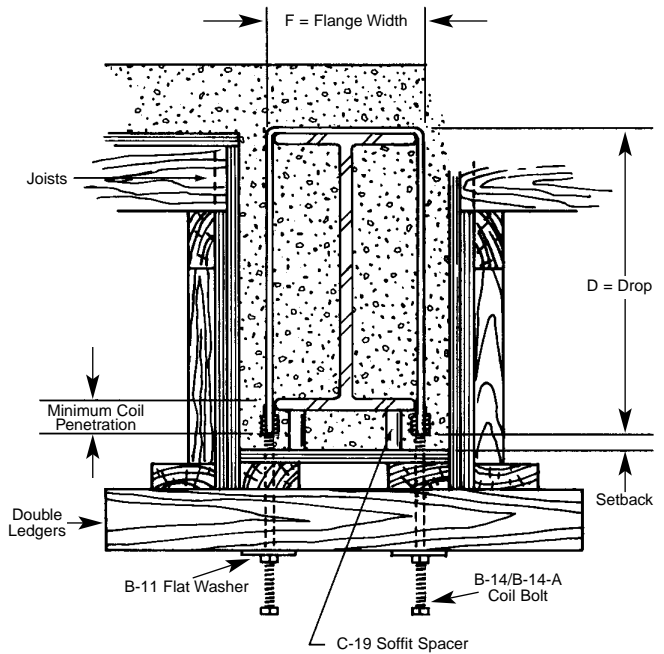
Type	Safe Working Load
Standard	1,500 lbs./side
Heavy	2,000 lbs./side

Approximate safety factor 2:1

C-2 Coil Hanger Saddle Type

Dayton/Richmond C-2 Coil Hanger Saddle Type consists of a two-strut coil tie shaped to fit over a structural steel beam to support fireproofing formwork.

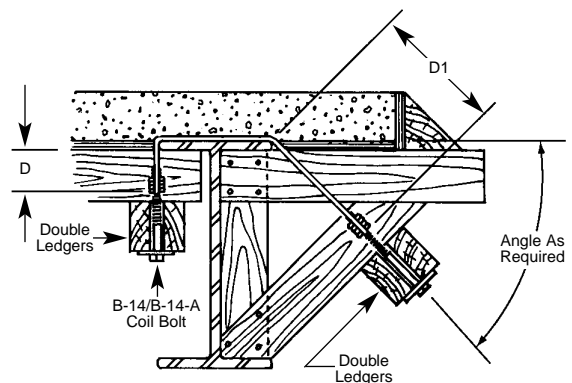
Warning: Hanger must be equally loaded on both sides of the beam, to prevent hanger rotation.



C-2 Coil Hanger

Coil Bolt Diameter	Safe Working Load
1/2"	2,250 lbs./side
3/4"	5,625 lbs./side
1"	7,500 lbs./side

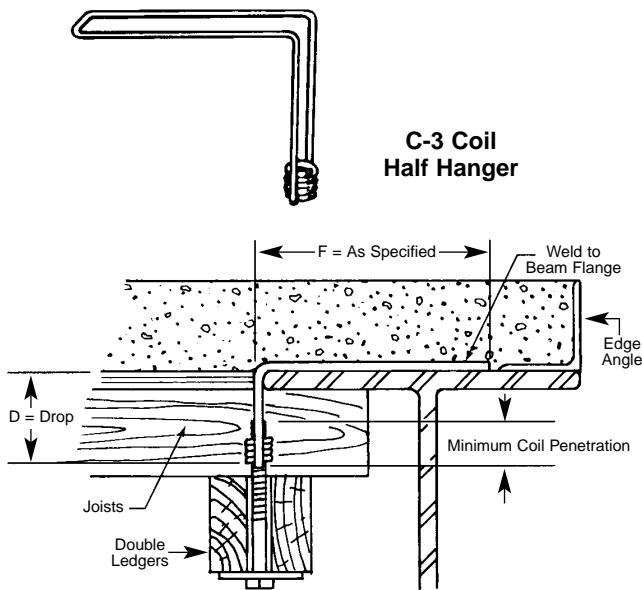
Approximate safety factor 2:1



C-3 Coil Half Hanger

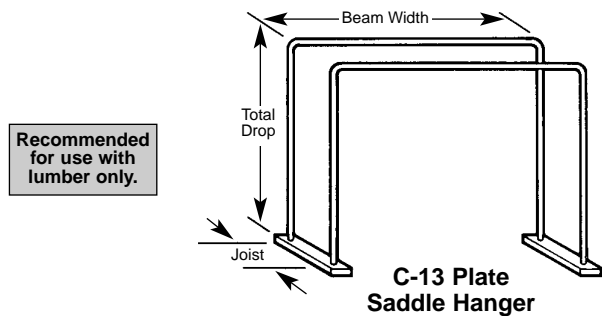
Dayton/Richmond C-3 Coil Half Hangers are 1/2" diameter coil hangers used on exterior structural steel beams. The free end is designed to be welded to the beam flange, or if welding is not permitted, can be bent around and back under the beam flange for a distance of approximately 2".

C-3 Coil Half Hangers are designed for light duty loads only. Safe working load is dependent on the strength of bend or field weld. Tests should be conducted in the field to determine actual safe working loads before implementation.



C-13 Plate Saddle Hanger

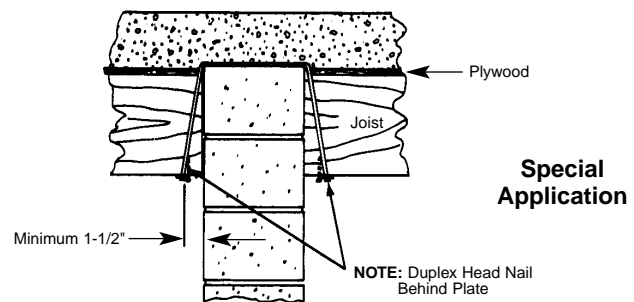
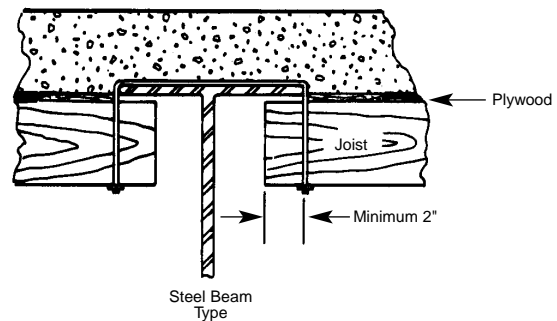
Dayton/Richmond C-13 Plate Saddle Hanger is primarily used with steel beam construction but can be used effectively on precast beams and concrete block walls. No working parts or adjustments are required. Just hang the hanger over a beam, insert the joists over the plates and lay plywood. The bearing plates are 1/2" wide and are fixed in position by swaging the wire. Standard plates are available for 2x4 and 4x4 SAS dressed lumber. C-13 hangers are available with any drop dimension and any beam width over 2" and with heavy-duty 4-gauge wire. C-13 hangers are recommended for use with lumber joists only and should not be utilized to support metal joists.



Joist lumber should extend past the hanger bearing support a minimum of 2".

Warning: Hanger must be equally loaded on both sides to prevent unequal loading and resulting rotation of the hanger.

Special Application: This application requires care to ensure adequate lumber bearing on the hanger. Use duplex head nail behind the hanger plate to prevent the joist from slipping off of the hanger plate. Continuous inspection, before and during concrete placement, is required.



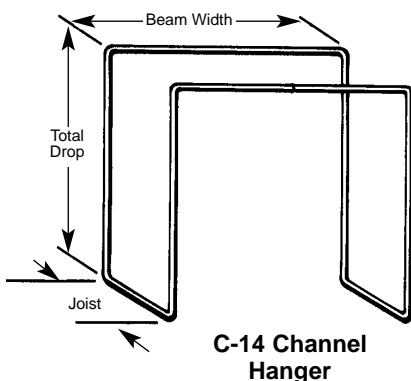
1,000 lbs. for C-13 Standard
1,200 lbs. for C-13 Heavy
Safe Working Loads

Approximate safety factor 2:1

C-14 Channel Hanger

Dayton/Richmond C-14 Channel Hanger is similar to the C-13 hanger with the exception of channels instead of plates to support the wood joists. The channels increase the safe working load on the hanger and help reduce crushing of the wood. Soft wood joists may crush up to 3/16" at safe working loads.

Warning: Hanger must be equally loaded, on both sides of the beam, to prevent hanger rotation.

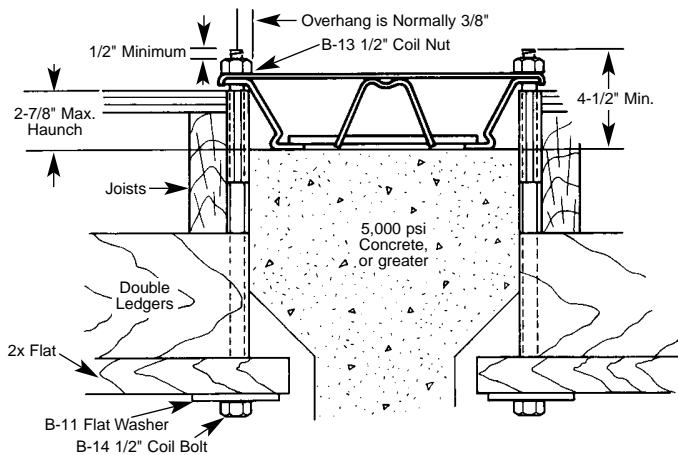


2,250 lbs. Per Side
Safe Working Loads

Approximate safety factor 2:1

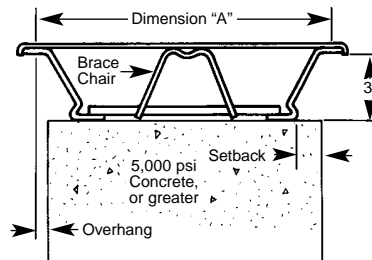
C-46 Con-Beam Hanger

The C-46 Con-Beam Hanger is designed to provide coverage of various haunch heights up to 2-7/8" and numerous overhang conditions. The top plate of the hanger is fabricated from steel strap and is reinforced with a brace chair on wider hangers. C-46 hangers are designed for use with 1/2" Coil Bolts or Coil Rods only.



C-46 Con-Beam Hanger		
Haunch	Overhang	Setback
2-7/8"	3/8"	1"
2-1/2"	5/8"	3/4"
2"	7/8"	1/2"
1-5/8"	1"	3/8"

Note: Dimension "A" is equal to 2 times the overhang plus flange width.
Warning: Con-Beam Hangers are designed for supporting interior formwork only. Do not use for suspending overhang form loads

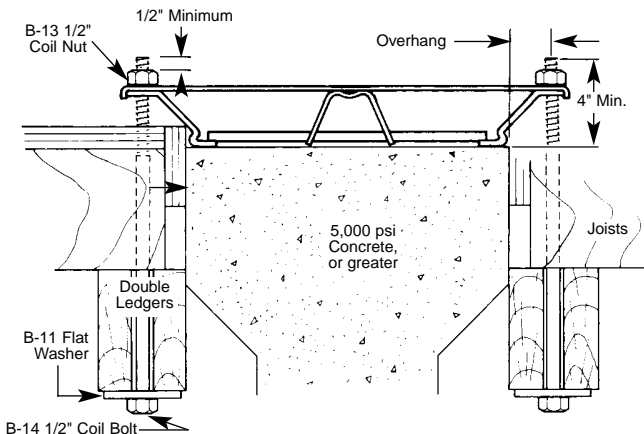


Safe Working Load
3,000 lbs. per Side

Approximate safety factor 2:1
Warning: Hangers must be equally loaded on both sides.

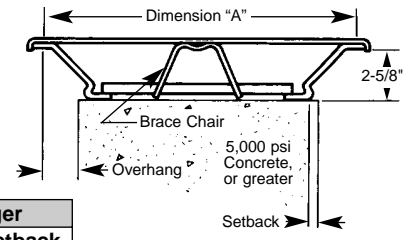
C-47 Con-Beam Hanger

The C-47 Con-Beam Hanger is designed to provide coverage of various haunch heights up to 2-1/2" and overhang conditions up to 1-3/4" away from the beam side. The top plate of the hanger is fabricated from steel strap and is reinforced with a brace chair on wider hangers. C-47 hangers are designed for use with 1/2" Coil Bolts or Coil Rods only.



Safe Working Load
2,000 lbs. per Side

Approximate safety factor 2:1
Warning: Hangers must be equally loaded on both sides.



C-47 Con-Beam Hanger		
Haunch	Overhang	Setback
2-1/2"	3/8"	1-5/8"
2-1/4"	1/2"	1-1/2"
2"	3/4"	1-1/4"
1-3/4"	1"	1"
1-1/2"	1-1/4"	3/4"
1-1/4"	1-1/2"	1/2"
1-1/8"	1-3/4"	1/4"

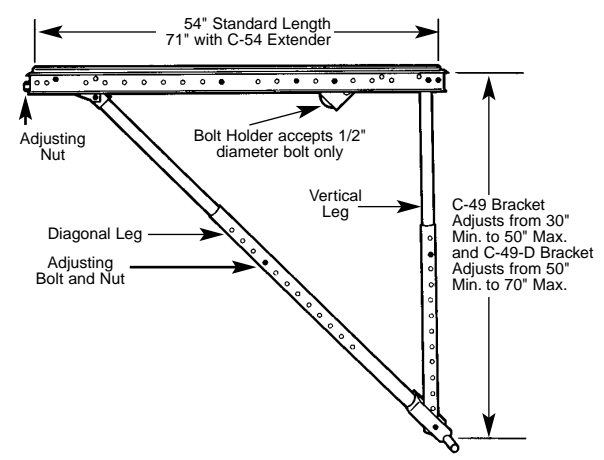
Note: Dimension "A" is equal to 2 times the overhang plus flange width.
Warning: Con-Beam Hangers are designed for supporting interior formwork only. Do not use for suspending overhang form loads

C-49 and C49-D Bridge Overhang Brackets

Dayton/Richmond Bridge Overhang Brackets are designed with maximum adjustability to meet the varied overhang forming requirements on structural steel and precast/prestressed concrete beams. The C-49 and C-49-D Bridge Overhang Brackets accommodate an adjustment range of 30" to 70" and can be mounted to steel beams, precast concrete beams and concrete box beams with the appropriate hanger devices. Both of the bracket models can be easily and quickly preset on the ground and then set in place as needed.

The C-49-D Bridge Overhang Bracket has all of the features of the C-49 bracket but has longer vertical and diagonal legs. The longer legs, and resulting increase in adjustment, allow the bracket to be used on deep structural steel beams to position the construction load transfer near the beam's bottom flange.

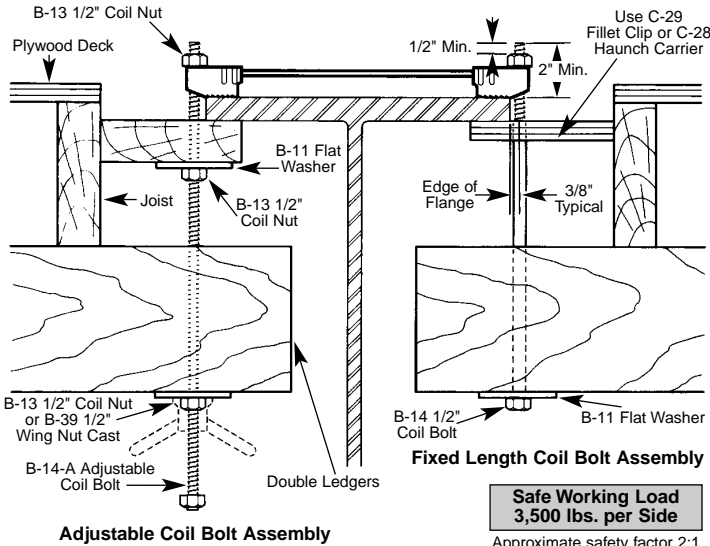
Warning: Overhang brackets should be adjusted to proper grade during the normal "dry run" operation. DO NOT attempt an upward adjustment during the concrete pouring operation. Lowering the bracket adjustment is permissible during the concrete pour.



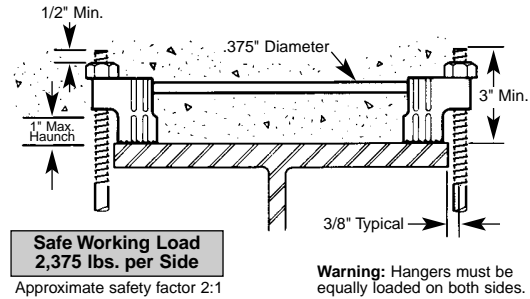
C-60 Pres-Steel Hangers

The C-60 Pres-Steel Hanger - **Type 1** is used for a zero haunch condition and consists of two 1/2" end sections welded to a single wire strut. The hanger allows installation and adjustment from the top of the formwork and works equally well on steel or precast concrete beams.

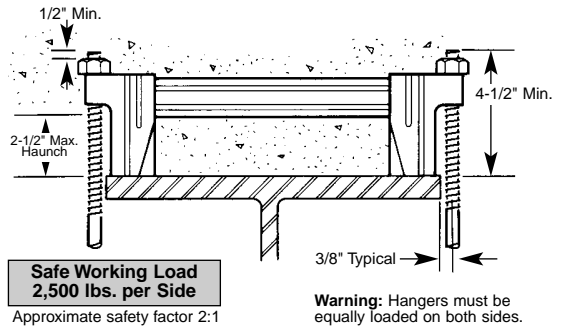
Note: The C-60 Pres-Steel Hangers Type 1, 2, 3, 7 and 8 are designed to be used with full bearing under the end sections. It is essential to check the exact beam width dimensions before ordering.



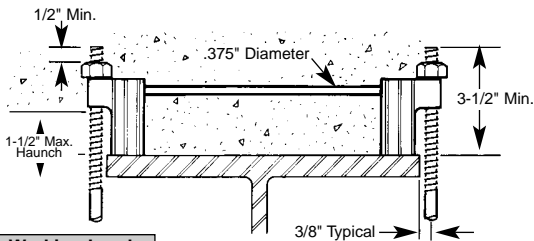
Type 2 is similar to the Type 1 hanger but is designed with a 1" haunch relief.



Type 3 is similar to the Type 2 hanger but is manufactured with a corrugated connecting strap instead of a wire strut. The Type 3 hanger provides up to a 2-1/2" maximum haunch height.

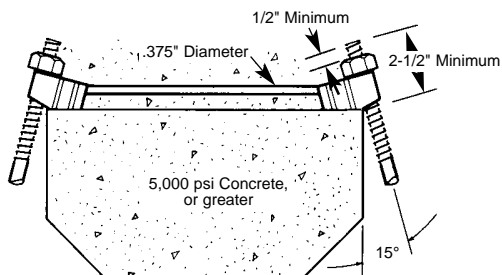


Type 7 is similar to the standard Type 1 hanger but has the capacity to accommodate haunch heights up to 1-1/2".



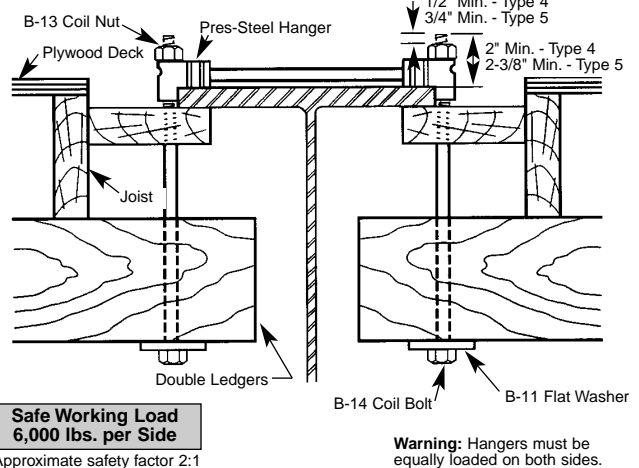
Type 8 is similar to the standard Type 1 hanger except the two 1/2" end sections are set at 15° to provide additional clearance for supporting the deck formwork.

The C-60 Pres-Steel Hanger - Type 8 is available in standard and heavy versions.



Type 4 is fabricated with two 90° 1/2" interlock type end sections welded to a substantial wire strut. It is a high strength hanger used to support bridge deck interior formwork and is especially designed to react to lateral forces prevalent in many forming conditions.

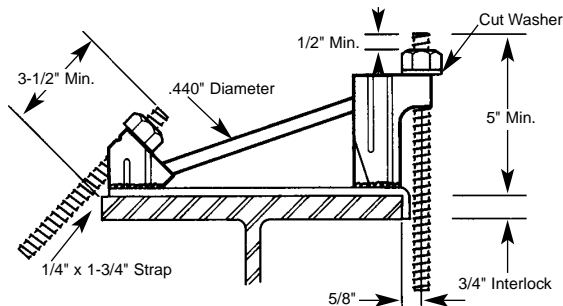
Type 5 is manufactured with two 3/4" 90° heavy-duty end sections welded to a heavy-duty wire strut. It is used similarly to the Type 4, but does not have the interlock end section feature. C-60 Type 5 hangers, with 1/2" 90° end sections are available on special order.



C-62 45° Pres-Steel Hanger

The C-62 45° Pres-Steel Hanger consists of a 1/2" 90° end section with flared legs and a 1/2" 45° end section welded to a wire strut. This assembly is then welded to a 1/4" x 1-3/4" steel strap equipped with a 3/4" interlock end. This is an excellent hanger to use when a haunch is required (up to 2-3/4") on the interior side of the beam and a finishing and/or conveyor machine is to be supported on the overhang formwork.

Note: To obtain the safe working loads listed below, a 1/2" Cut Washer must be used between the top of the 90° end section and the 1/2" Coil Nut.



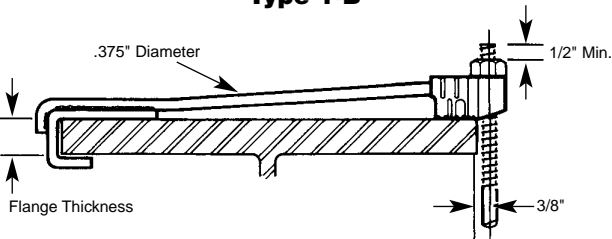
Safe Working Load
4,000 lbs. on 45° Side
2,800 lbs. on 90° Side

Approximate safety factor 2:1

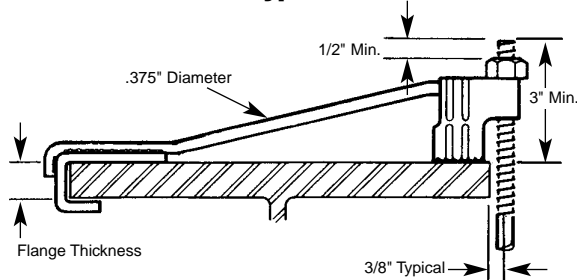
C-63 45° Pres-Steel Hook Hanger, Type 1-B and Type 2-B

The C-63 45° Pres-Steel Hook Hanger **Type 1-B** is manufactured with a 1/2" 90° end section welded to the end of a wire strut. The other end of the wire strut is welded to a reinforced 180° "wrap-around" steel strap. The wrap-around end is designed to slip over the flange of a steel bridge beam. The **Type 2-B** hanger is designed to accommodate up to 1" haunch height.

Type 1-B



Type 2-B

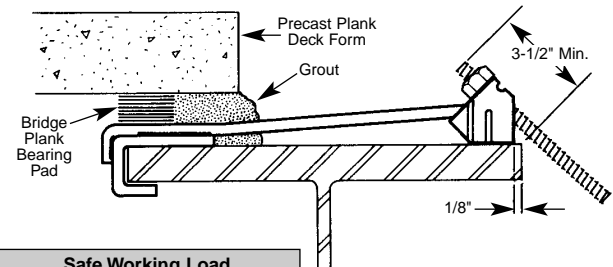


Safe Working Load
Type 1-B - 3,500 lbs.
Type 2-B - 2,375 lbs.

Approximate safety factor 2:1

C-63 45° Pres-Steel Hook Hanger Type 4-AB and Type 5-AB

The C-63 45° Pres-Steel Hook Hanger – **Type 4-AB** is manufactured with a 1/2" 45° end section welded to the end of a wire strut. The other end of the wire strut is welded to a reinforced 180° "wrap-around" steel strap. The wrap-around end is designed to slip over the flange of a steel bridge beam. **Type 5-AB** is similar to the Type 4-AB with the exception of the end section which is 3/4". These hangers are used when one-sided forming is required and field welding is prohibited. C-63 hangers can be furnished for electro-plated or hot dip galvanized corrosion resistance, if required.



Safe Working Load
4-AB - 5,000 lbs. - 1/2" Bolt Dia.
5-AB - 5,000 lbs. - 3/4" Bolt Dia.

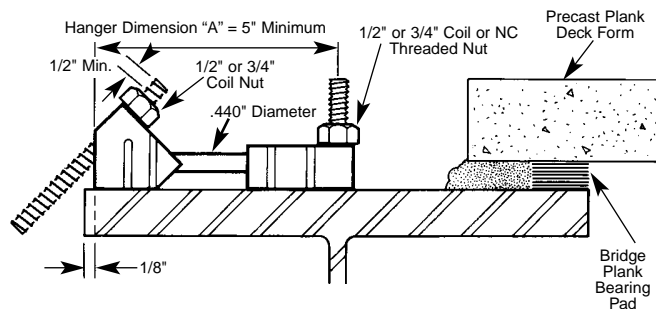
Approximate safety factor 2:1

C-64 45° Pres-Steel Hanger Type 4-A, 4-AN and Type 5-AN

The C-64 45° Pres-Steel Hanger consists of a 90° end section and a 45° end section welded to a single wire strut. The **Type 4-A** is fabricated with a 1/2" 45° end section and a 1/2" 90° end section. **Type 4-AN** is similar with the exception of the 90° end section is a 3/4" unit. **Type 5-AN** is similar to the 4-A but has a 3/4" 90° end section and a 3/4" 45° end section.

The C-64 hangers work well on bridge rehab projects, bridge widening jobs and other similar construction where only exterior formwork support is required. Two appropriate sized B-13 Hex Nuts are included with each hanger.

The actual safe working load of the C-64 hangers is highly dependent on the strength of the weld stud, as well as the strength of the weld itself. The safe working load is based on the use of a properly welded 3/4" diameter stud with a minimum tensile strength of 55,000 psi.

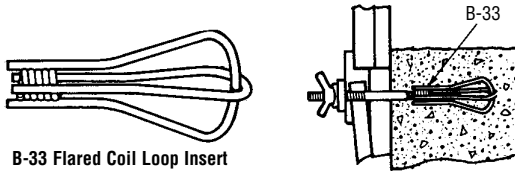


C-64 Pres-Steel Hanger Selection Chart

Type	Maximum Safe Working Load	Bolt Diameter	
		45° End	90° End
4-A	6,000 lbs.	1/2"	1/2"
4-AN	6,000 lbs.	1/2"	3/4"
5-AN	6,000 lbs.	3/4"	3/4"

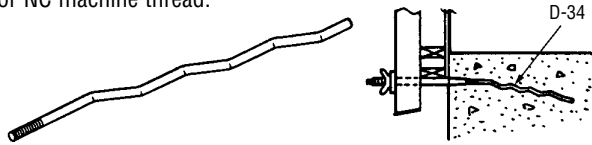
Approximate safety factor 2:1

B-18, B-33, B-43 Flared Coil Loop Inserts are used with coil thread bolts to effectively anchor formwork. Available in several configurations with 3/4", 1", 1-1/4" and 1-1/2" diameter coil thread.

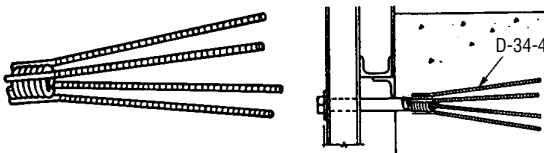


B-33 Flared Coil Loop Insert

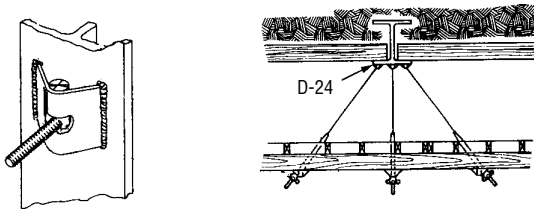
D-34 Crimped Pigtail Inserts are used for forming anchorage in mass concrete. Manufactured in 1/2" through 1" diameters with coil or NC machine thread.



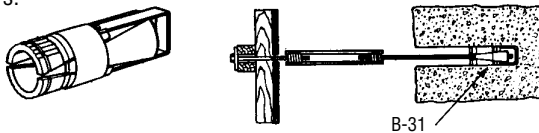
D-34-4 Four Strut Coil Inserts combine the advantages of the coil tie and continuous threaded coil rod to make a highly effective form anchorage.



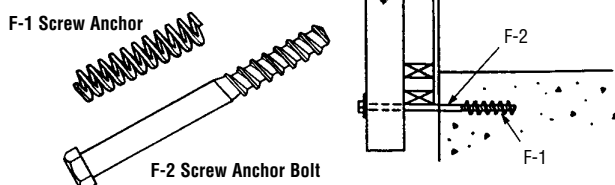
D-24 Adjustable Weld Angle Bracket is designed to tie single-sided forming to steel piles, metal beams, etc. The brackets provide 110° of bolt adjustability and are available in 1/2", 3/4" and 1" diameters.



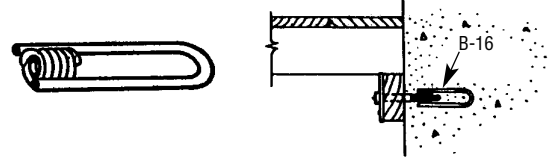
B-31 Rock Anchor is designed for use in sound rock or concrete to secure one-sided forming. Available in 1/2", 3/4" and 1" nominal diameters.



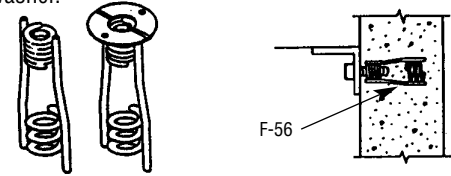
F-1 Screw Anchor is a helical coil used in conjunction with the skein thread **F-2 Screw Anchor Bolt**. Available in 3/8" to 1-1/2" diameters, the screw anchor is very effective supporting cantilever forms and transferring the bolt load into the concrete.



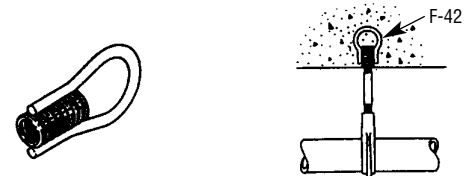
B-16, B-17, B-18, B-33 Coil Loop Inserts are made of a single looped wire welded to a helix coil. They are available in 1/2" to 1" diameters suitable for many concreting applications.



F-56, F-57, F-58, F-59, F-60, F-61 Expanded Coil Inserts are coil or closed ferrule structural connection inserts available in two, four or six strut versions, in 1/2" through 1-1/2" diameters, with or without nailing washer.



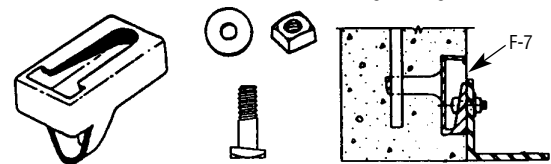
F-42 Loop Ferrule Insert is a versatile insert suited for structural connections and suspension of equipment, ceilings, piping, etc. Available in 1/4" to 1" diameter closed ferrules in 1/8" increments.



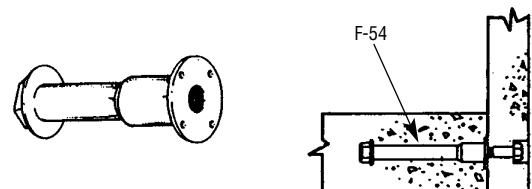
F-44 Thin Slab Ferrule Insert is used where the depth of embedment is limited. It is specially designed to develop good working loads in very thin concrete slabs. Available in 1/4" through 1" diameter, in 1/8" increments, closed ferrules.



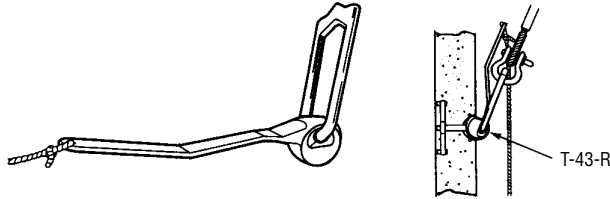
F-7, F-7-L, F-8 Shelf Angle Inserts are malleable iron castings with a wedge shaped holding face that works in conjunction with special Askew Head bolts. Available in standard and long configurations.



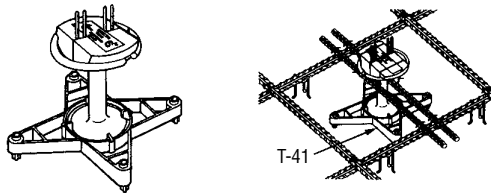
F-54 Ductile Embed is a structural embed available in 5/8" through 1-1/4" diameters and is available in several configurations. This is an integrally forged embed with no welds. It is designed to develop pullout and shear loads exceeding A-325 bolt capacities.



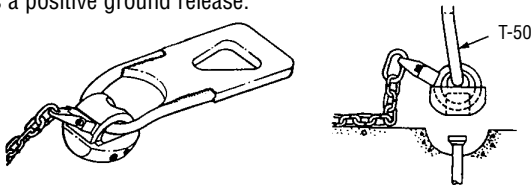
T-43-R Ground Release Lifting Hardware is designed to lift and place tilt-up wall panels quickly and efficiently. The unit offers high safe working loads, ease of operation and a positive ground release.



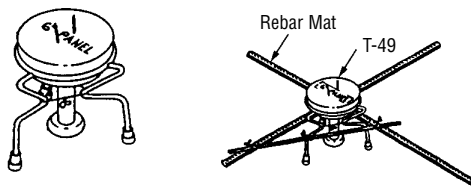
T-41 Ground Release Lifting Insert is a 4-ton insert designed to accommodate the T-43-R Lifting Hardware shown above. The insert is complete with plastic void and plastic or plastic protected base.



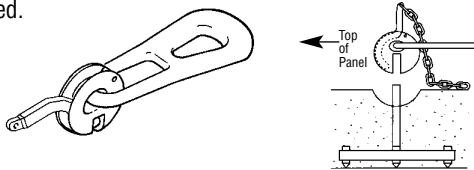
T-50 Gyro Tilt Plus® Hardware is designed to lift and place tilt-up wall panels quickly and efficiently. The system is easy to use, quick and has a positive ground release.



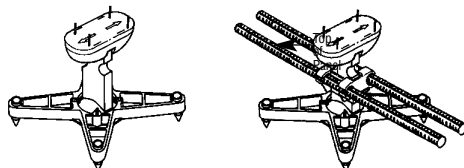
T-49 Gyro Tilt Plus® Insert is a 4-ton insert designed to accommodate the T-50 Gyro Tilt Plus Hardware shown above. The insert is complete with plastic void and plastic protected wire base.



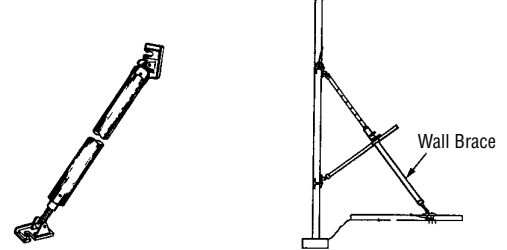
T-92 Tilt-Up 3 Lifting Hardware is designed for use with face lift and edge lift applications and will readily align itself with the pull of the rigging. Ground release is easily accomplished once the load has been relaxed.



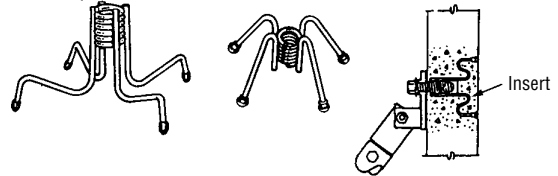
T-90-F Tilt-Up 3 Face Lift Insert is furnished as a complete assembly. It is easy to position, easy to tie into the rebar mat and quickly attached to the T-92 Lifting Hardware, shown above.



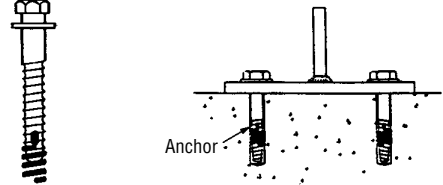
Wall Braces are all steel, heavy-duty wall braces designed to quickly and easily align and brace tilt-up wall panels. Wall braces are available in several models that span brace lengths of 7'6" - 39'0".



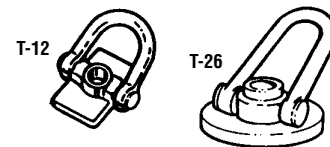
Brace Inserts are available in several versions. They are designed to be cast-in-place and used to anchor tilt-up wall braces during the construction sequence.



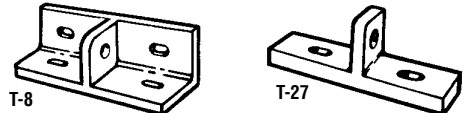
T-13 Coil Anchor is a drill-in anchor designed for use in the floor slabs of tilt-up buildings to attach and anchor wall braces during panel erection or to secure emergency lift plates.



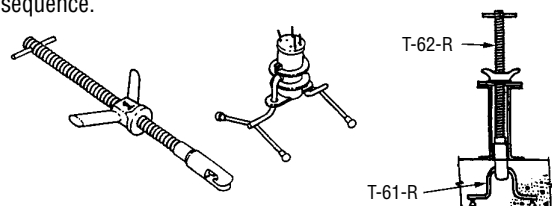
T-12 and T-26 Swivel Lift Plates are designed for use with 3/4" through 1-1/2" lifting bolts to attach to coil lift inserts cast in a tilt-up wall panel.



T-8 Lifting Angle and T-27 Edge Lifting Plate are designed for use with 3/4" through 1" tandem lifting inserts to lift and position tilt-up panels.



T-61-R an T-62-R Quick Release Strongback System, including insert, hardware and aluminum strongbacks, is designed to quickly attach and release tilt-up wall panel strongbacks to speed up the setting sequence.



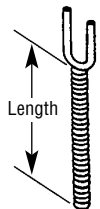
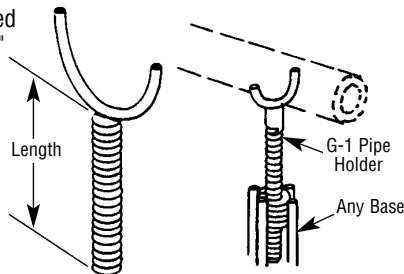
Chair Size Chart								
Screed Chair	Dimensions		Cradle Head Adjust. Length	Slab – 1" Pipe		Slab – 1-1/2" Pipe		Suggested Working Load Less than 1/10" Def. lbs.
	Height	Width		Minimum	Maximum	Minimum	Maximum	
	1"*	2-3/4"	1"*	2-1/4"	2-3/4"	2-1/4"	2-3/4"	900
G-2	1-1/2"	2-3/4"	1-1/2"	3"	3-1/2"	3-1/2"	4"	900
	1-1/2"	2-3/4"	2-1/2"	3-3/4"	4-1/2"	4-1/4"	5"	900
	2-1/2"	3-1/2"	3"	4-1/2"	6"	5"	6-1/2"	800
	3-1/2"	4-1/2"	4"	5-1/2"	8"	6"	8-1/2"	900
G-2	4-1/2"	4-1/2"	4"	6-1/2"	9"	7"	9-1/2"	850
	5-1/2"	4-1/2"	6"	7-1/2"	12"	8"	12-1/2"	800
	7-1/2"	7-1/2"	8"	9-1/2"	16"	10"	16-1/2"	600
	10"	7-1/2"	12"	13-1/2"	22-1/2"	14"	23"	500

*1" Cradle Head accepts 3/4" screed pipe only.

Spacing Chart				
Screed Pipe or Bar	Spacing*			
	Hand Screeding Using 1/2" Diameter Screed Bases		Machine Screeding using 3/4" Diameter Screed Bases	
	Screed Length	Base Spacing	Screed Length	Base Spacing
3/4" I.D. Pipe	8'-0" to 10'-0"	3'-0" to 4'-0"	–	–
1" I.D. Pipe	8'-0" to 10'-0"	4'-0" to 5'-0"	10'-0" to 12'-0"	2'-0" to 2'-6"
1-1/4" or 1-1/2" I.D. Pipe	10'-0" to 12'-0"	4'-0" to 6'-0"	12'-0" to 15'-0"	2'-6" to 4'-0"
1/2" x 1-1/2" Flat Bar	8'-0" to 10'-0"	3'-0" to 4'-0"	–	–
1-1/4" x 1-1/4" x 3/16" T-Bar	8'-0" to 10'-0"	4'-0" to 5'-0"	–	–
2" x 2" x 1/4" T-Bar	10'-0" to 12'-0"	4'-0" to 6'-0"	12'-0" to 15'-0"	2'-6" to 4'-0"

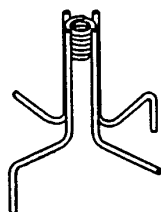
*Spacings are approximate. Judgement of field conditions, weight of screeds, etc., will control.

G-1 Pipe Holder is designed to be used with 1/2" or 3/4" screed chairs to support pipe screed bars. Standard lengths and adjustment ranges are shown in the table above.



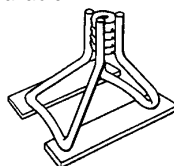
G-1-U Special U-Shaped Cradle Head is designed for uses with a flat screed bar or other similar shapes. G-1-U holders are available in the same lengths as the G-1 holder.

G-2 Screed Chair Bases are available in two styles in 1/2" and 3/4" nominal diameters. Refer to the chart above for pertinent dimensions. They are used in conjunction with G-1 or G-1-U cradle heads to support screed pipes or bars.

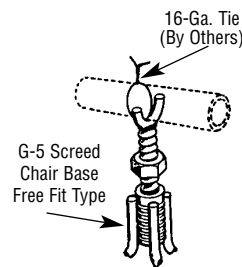
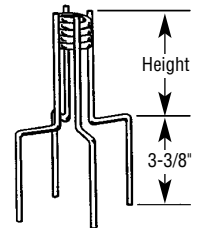


G-2-J Joist Type Adjustable Screed Base is used with bar joist and rib lath construction. Two of the legs are bent down to penetrate the lath on both sides of the joist while the other two legs rest flat on top of the lath. Standard heights are 1" and 1-1/2". Special heights are available on special order.

G-3 Screed Chair Base with Sand Plate is designed for use on fill dirt over vapor barriers or on special materials that are not to be penetrated.

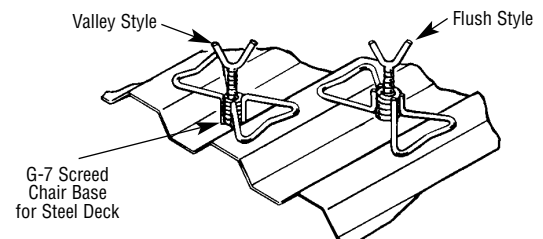


G-4 Screed Bases, Drive Type is recommended for use on fill where greater bearing is required. The G-4 base offers increased stability with its extended legs which are driven into the fill. G-4 bases are available in standard 2-1/2", 3-1/2" and 5-1/2" heights with taller bases available on special order.



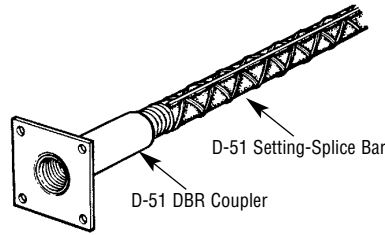
G-5 Screed Chair Base, Free-Fit Type – Any Dayton/Richmond screed chair or base can be furnished with an oversize, slip-fit ferrule. This arrangement allows for adjustment without turning the base or the cradle head. Adjustment is obtained by turning the jam nut. The free-fit feature is especially useful when it is desirable to weld the screed base to steel sub-structures.

G-7 Screed Chair Base for Steel Deck is a 1" high screed base designed with wide bearing struts to adequately span the corrugations of metal decking. The G-7 base is available in two versions; one spans flush with the lands of the decking while the other sets down into the valley.



D-50 DBR Coupler System

The DBR Couplers and DBR Setting/Splice Bars are simple, easy to use and familiar to all construction workers. The coupler is fastened to the formwork by nails, screws or a NC threaded bolt of proper diameter and length. The D-50 DBR Coupler splice meets or exceeds codes requiring 125% fy.

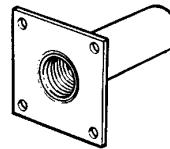


Bar Size Designation	Thread Data	O.D. x Length
#4 [#13]	1/2"-13 NC	3/4"x1-7/8"
#5 [#16]	5/8"-11 NC	7/8"x2"
#6 [#19]	3/4"-10 NC	1-1/16"x2-3/8"
#7 [#22]	7/8"-9 NC	1-1/4"x2-3/4"
#8 [#25]	1"-8 NC	1-3/8"x3-1/8"
#9 [#29]	1-1/8"-8 UN	1-5/8"x3-5/8"
#10 [#32]	1-1/4"-8 UN	1-3/4" x 4-1/8"
#11 [#36]	1-3/8"-8 UN	1-15/16"x4-3/8"

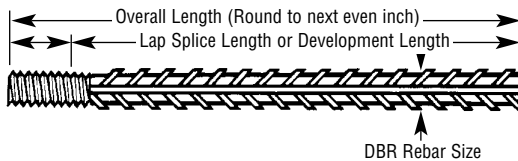
Note: Threads on #9, #10 and #11 couplers are UN not NC.

D-50 DBR Coupler and DBR Setting/Splice Bars

The DBR Couplers is fabricated from high quality steel satisfying ASTM A-108 and is tested in accordance with ACI, AASHTO and ASTM standards. DBR Couplers accommodate rebar sizes #4 through #11 and have an internal positive stop to ensure proper thread engagement. Refer to tables for additional specifications.



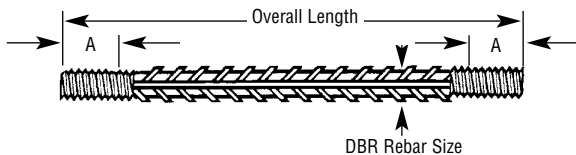
D-51 DBR Straight Bar Threaded One End



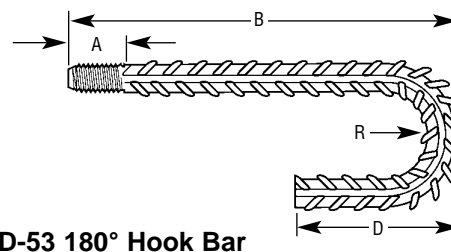
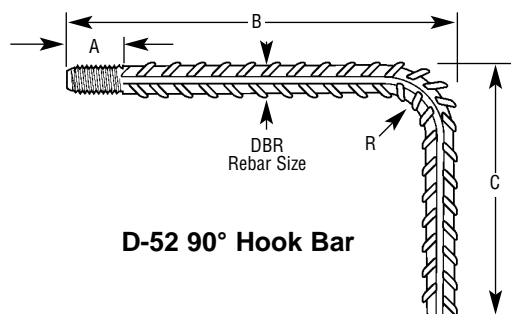
Rebar Size	Thread Data	A Thread Engagement	Cap Color Code
#4 [#13]	1/2"-13 NC	3/4"	Clear
#5 [#16]	5/8"-11 NC	7/8"	Red
#6 [#19]	3/4"-10 NC	1-1/16"	Orange
#7 [#22]	7/8"-9 NC	1-1/4"	Blue
#8 [#25]	1"-8 NC	1-7/16"	Green
#9 [#29]	1-1/8"-8 UN	1-11/16"	Red
#10 [#32]	1-1/4"-8 UN	1-15/16"	Orange
#11 [#36]	1-3/8"-8 UN	2-1/16"	Green

Note: Color coded removable plastic caps protect threads during shipment.
D-51 overall length is required length less one half of coupler length.
D-54 overall length is required length less coupler length minus 5/16".

D-54 DBR Straight Bar Threaded Both Ends



D-52 DBR 90° Hook Bar and D-53 180° Hook Bar Threaded One End



Rebar Size	Thread Data	A Thread Engagement	B* Standard For D-52	B Standard For D-53	D Standard For D-53	R Standard	Cap Color Code
#4 [#13]	1/2"-13 NC	3/4"	4-1/2"	9-3/4"	4-1/2"	1-1/2"	Clear
#5 [#16]	5/8"-11 NC	7/8"	5-1/2"	12"	5"	1-7/8"	Red
#6 [#19]	3/4"-10 NC	1-1/16"	7"	23"	6"	2-1/4"	Orange
#7 [#22]	7/8"-9 NC	1-1/4"	8"	24"	7"	2-5/8"	Blue
#8 [#25]	1"-8 NC	1-7/16"	9"	25"	8"	3"	Green
#9 [#29]	1-1/8"-8 UN	1-11/16"	11"	31"	10-3/8"	4-3/4"	Red
#10 [#32]	1-1/4"-8 UN	1-15/16"	12"	32"	11-5/8"	5-3/8"	Orange
#11 [#36]	1-3/8"-8 UN	2-1/16"	14"	33"	12-7/8"	6"	Green

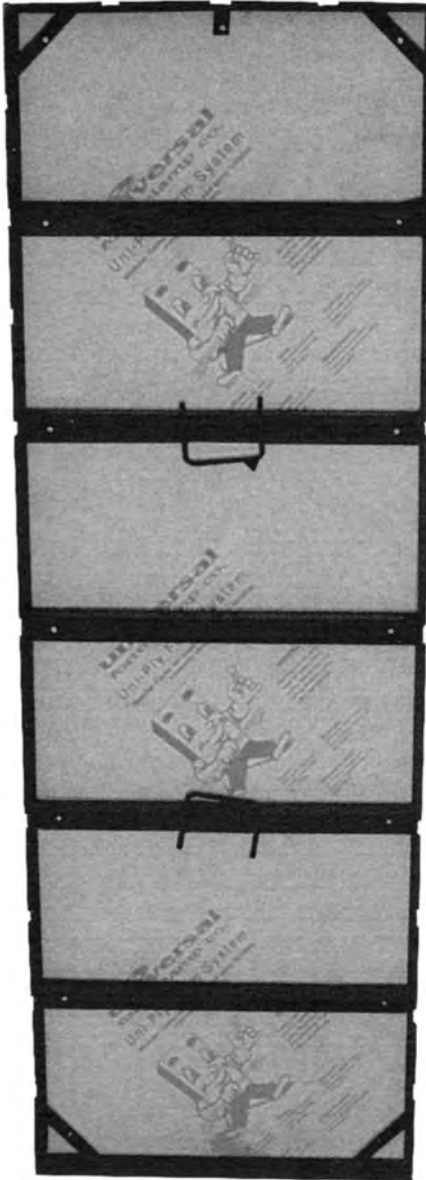
Note: Color coded removable plastic caps protect threads during shipment.
*Based on "R" minimum as shown.
Standard dimensions are to CRSI standard by pin size.



UNI-PLY

Panel Handset System

LIGHT TO MEDIUM FORMING: *Compatible with "Symons Type" handset forming system*



Highest Quality Handset System in the Industry... **GUARANTEED!**

Uni-Ply Panel Handset System is designed for use on almost any light to medium duty projects such as transition walls, cut up walls, ramps, abutments and pilasters. It is also convenient for common to straight walls and also more complex curved, battered or "Y" walls. It is commonly used in residential and small scale commercial applications unless configured with larger systems.

The Uni-Ply Panel Handset System:

- SWL: Up to 1,000 psf
- Safety Factor: 2:1
- Comes standard with 9-ply, 100/30, HDO plywood face; optional premium Xact2Form 9-ply, 220/220, 1/2" birch plywood face available.
- Seven 24" panel sizes available in 3', 4', 5', 6', 8', 9' and 10' heights.

Superior Materials and Manufacturing

Quality Steel: Our UNI-PLY panels are comprised of a combination steel rail frame and quality plywood-faced forming panel for maximum performance. Side and end rails are rolled from 55,000 psi steel and welded continuously at corners for maximum strength. 2" wide angle struts provide the greatest frame and plywood strength on the market. Although sharing the same dimensions as similar competitor panels, this panel is constructed with 2" angle cross members as compared to industry standard 1-3/8" cross members. This allows for a panel with a tighter fit and finish and considerably less chance of plywood deflection.

Quality Plywood: 9-ply, all birch plywood long grain provides a strong and smooth result on your walls for less deflection, longer life and lower usage costs. Premium Xacto2Form birch panels are available.

Professional Powder Coat: Uni-Ply panels are professionally powder-coated as compared to being spray-painted by hand. This baked on coating leaves a smooth, tough surface that makes cleanup easier and gives better protection from weather-wear and typical heavy construction use.

Compatible Ties: Panel loop ties, base ties, stiff back ties, waler ties.

Compatible Parts: Wedge bolts, S-wedge, short and long bolts, base tie bolts, gang form bolts, Uni-ply column hinge, 1-piece waler clamp, Z-tie holder, J-strongback hook, gang waler rod, scaffold bracket, turnbuckle, attachment plate, mini brace.

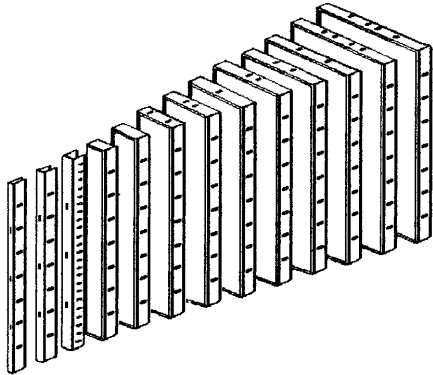
Value-added Services

- Form detailing and field consulting available.

Note: All weights noted are approximate.

UNI-PLY HAND SET PANEL SYSTEM

Highest Quality Hand Set Panel System in the Construction Industry...Guaranteed!



Filler Panels

Available in wood, steel and job-built options (for odd dimensions)

Widths (in.): 1, 1-1/2 or 2" (steel), 4-22 in. increments of 2 inches

Heights (ft.): 3, 4, 5, 6, 8, 9 and 10

For full details on this product contact your local sales representative.

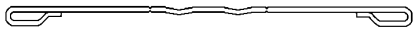
Loop Ties and Accessories

Universal offers a variety of Loop Ties and Accessories to use with your UNI-PLY Hand Set Panel System.



HANDBSET LOOP TIE

Standard 1" breakback. Available in standard and heavy-duty load ratings.



GANG LOOP TIE

Standard 1" breakback. Available in standard and heavy-duty load ratings.



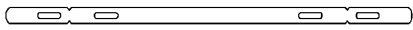
BASE TIE

No breakback.



THREADED LOOP TIE

Standard 1" breakback, loop end. For combination UNI-PLY hand set panel and gang form applications. Nut not included.



HANDBSET FLAT TIE

Standard 1/2" breakback. Available in standard and heavy-duty load ratings.

Hardware Accessories

Wedge Bolts S-wedge Long Bolt Short Bolt Base Tie Bolt Gang Form Bolt UNI-PLY Column Hinge One Piece Waler Clamp Tie Holder	Waler Tie 2x4 Waler 2x6 Scaffold Bracket UNI-PLY Mini Brace Strongback Tie 2x4-2x4 Strongback Tie 2x6-2x4 Strongback Tie 2x6-2x6 J-Strongback Hook 2x4-2x4 J-Strongback Hook 2x6-2x4	J-Strongback Hook 2x6-2x6 8" Gang Waler Rod 14" Gang Waler Rod 18" Gang Waler Rod Gang Waler Plate Turnbuckle-Straight Plate Turnbuckle-Bent Plate Attachment Plate
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UNIKOTE FORM RELEASE – Premium Grade, Neutral Form Release Agent

PRODUCT DESCRIPTION

An economical, chemically neutral, petroleum based form release agent. Unikote Form Release is non-reactive with the alkali in the concrete and creates a barrier that inhibits the bonding of fresh concrete to the formwork. Forms are ready for re-use almost instantly. Unikote Form Release produces a smooth, void free, architectural concrete surface. VOC compliant.

GENERAL USES

Unikote Form Release will aid in the release of the form from hardened concrete on the widest range of forming material.

FEATURES

- Ensures easy stripping of forms.
- Produces smooth natural architectural surfaces – chemical action is not harmful to the concrete surface .
- Will not retard, etch or soften concrete surfaces, even if over-applied.






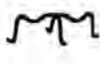





- Run-down is reduced and reinforcing steel stays cleaner.
- May be used on concrete structures that will store potable water.
- Has a neutral release that keeps forms clean.
- Repeated use makes wood forms water-repellent and extends their useful life.
- Inhibits rust formation on steel forms.
- Easy to apply.
- No deleterious effect upon the natural bonding characteristics of secondary toppings or coatings, caulks or sealants.
- Reduces bug holes and extends the life of most forming materials.
- Available in pine, cherry, orange, citrus fragrances.

PACKAGING

- 275 gallon (1040.9 L) totes
- 55 gallon (208 L) drums
- 5 gallon (18.9 L) pails



TYPICAL WIRE SIZE & GEOMETRY

SYMBOL	BAR SUPPORT ILLUSTRATION	MINIMUM WIRE SIZE			USUAL GEOMETRY (VARIATIONS OF PLUS OR MINUS 1/8")
		TOP	LEGS	RUNNER	
SB	 SLAB BOLSTER	NO. 4	NO. 6	-	3/4" TO 3" HEIGHTS IN 5-FOOT AND 10-FOOT LENGTHS. LEGS SPACED 5" ON CENTER, VERTICAL
SBU	 SLAB BOLSTER UPPER	NO. 4	NO. 6	NO. 7	SAME AS SB
BB	 BEAM BOLSTER	UP TO AND INCLUDING 2"			3/4" TO 5" HEIGHTS IN INCREMENTS OF 1/4" AND LENGTHS OF 5 FEET. LEGS SPACED 2-1/2" ON CENTER.
		NO. 7	NO. 7	-	
		OVER 2" TO 5"			
BBU	 BEAM BOLSTER UPPER	UP TO AND INCLUDING 2"			SAME AS BB
		NO. 7	NO. 7	NO. 7	
		OVER 2" TO 5"			
BC	 BAR CHAIR	NO. 7	NO. 7	-	3/4", 1", 1-1/4", 1-1/2" AND 1-3/4" HEIGHTS.
JC	 JOIST CHAIR	NO. 6	NO. 6	-	3/4", 1" AND 1-1/2" HEIGHTS. 4", 5" AND 6" WIDTHS.
HC	 HIGH CHAIR	OVER 2" TO 5"			LEGS AT 20 DEGREES OR LESS WITH VERTICAL. WHEN HEIGHT EXCEEDS 12", LEGS ARE REINFORCED WITH WELDED WIRES OR ENCIRCLING WIRES. HEIGHTS IN 1/4" INCREMENTS.
		NO. 4	NO. 4	-	
		OVER 5" TO 9"			
		NO. 2	NO. 2	-	
HCM	 HIGH CHAIR FOR METAL DECK	SAME AS HC			SAME AS HC . THE LONGEST LEG WILL GOVERN THE SIZE OF WIRE TO BE USED. HEIGHTS IN INCREMENTS OF 1/4".
		-			
CHC	 CONTINUOUS HIGH CHAIR	NO. 2	SAME AS HC	-	SAME AS HC IN 5-FOOT AND 10-FOOT LENGTHS. ALL LEGS ARE 8-1/4" ON CENTER MAXIMUM, WITH LEG WITHIN 4" OF END OF CHAIR.
CHCU	 CONTINUOUS HIGH CHAIR UPPER	SAME AS CHC		NO. 4	SAME AS CHC
CHCM	 CONTINUOUS HIGH CHAIR FOR METAL DECK	UP TO AND INCLUDING 2"			UP TO 5" HEIGHTS IN INCREMENTS OF 1/4". WITH NO. 4 TOP WIRE, MAXIMUM LEG SPACING IS 5" ON CENTER. WITH NO. 2 TOP WIRE, MAXIMUM LEG SPACING IS 10" ON CENTER.
		NO. 4	NO. 4	-	
		NO. 2	NO. 2	-	
		OVER 2" TO 5"			
		NO. 2	NO. 4	-	

ASK ABOUT OUR FULL LINE OF PLASTIC BAR SUPPORTS AND ACCESSORIES.



BRIDGE DECK HANGERS

Type	Part #	Style	SWL (lbs.)
1	T1H	90 & 90 deg.	3,500
1-A	T1AH	90 & 45 deg.	3,500
2	T2H	90 & 90 deg. 1" haunch	2,375
2-A	T2AH	90 & 45 deg.	2,500
3	T3H	90 & 90 deg. 2-1/2" haunch	2,500
4	T4H	90 & 90 deg.	6,000
4-A	T4AH	90 & 45 deg.	6,000
1-1A	CHT11A	Comb. hangers	3,500
1-4A	CHT14A	Comb. hangers	6,000
7	T7H	90 & 90 deg. 1-1/2" haunch	2,375
7-A	T7AH	90 & 45 deg. 1-1/2" haunch	2,375
8	T8H	15 & 15 deg.	3,000
8-A	T8AH	15 & 45 deg.	3,000

Flange Width (in.): 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 & 22. (Add width to Part #)

1/2" hex coil nuts provided with each hanger.
Designed for use with 1/2" diameter bolts only.

BRIDGE DECK HANGERS

Type	Part #	SWL (lbs.)
BDH-1	TBDH1	4,500
BDH-2	TBDH1	4,500
BDH-3	TBDH 1	4,500

Size (in.): 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53 and 54. (Add size to Part #)

FILLET HANGER

Length: 22" Part #FH

FILLET CLIP

Size: 3/4" thru 4" Part #FC

Coil nut and bolt not included.

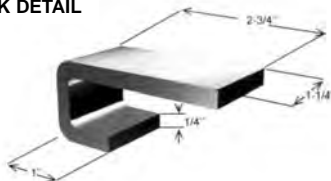
HOOK HANGERS

Type	Part #	Style	SWL (lbs.)
1-B	T1BH	90 deg.	3,500
1-AB	T1AB	45 deg.	3,500
2-B	T2B	90 deg.	2,375
4-AB	T4AB	45 deg.	5,000

Flange Width (in.): 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 & 22. (Add width to Part #)

1/2" hex coil nuts provided with each hanger.

HOOK DETAIL



BRIDGE DECK HALF HANGERS

Type	Style	Part #	Strut Dia.	Tail Length (lbs.)	SWL (lbs.)
1-C	90 deg.	BDHH1C	0.375	9"	3,000
1-S	90 deg.	BDHH1S	0.375	6"	3,000
1-AC	45 deg.	BDHH1AC	0.375	12"	3,000
1-AS	45 deg.	BDHH1AS	0.375	6"	3,000
4-AC	45 deg.	BDHH4AC	0.440	12"	6,000
4-AS	45 deg.	BDHH4AS	0.440	6"	6,000
4-C	90 deg.	BDH4C	0.440	9"	6,000
4-S	90 deg.	BDH4S	0.440	6"	6,000
2-C	1" haun.	BDH2C	0.375	9"	2,375
2-S	1" haun.	BDH2S	0.375	6"	2,375
7-S	2 1/2" haun.	BDH7S	0.375	6"	2,375
8-C	15 deg.	BDH8C	0.375	9"	2,375
8-S	15 deg.	BDH8S	0.375	6"	2,375
4-AP	45 deg.	PSHH4APR	0.440	6"x4"x2"	3,300
4-AP-P	45 deg.	PSHH4APRP	0.440	6"x4"x2" with plate	3,300

One 1/2" coil nut included with each hanger.

ADJUSTABLE HALF HANGER

1	90 deg.	Part #T1AHH
1-A	45 deg.	Part #T1AHH
2	90 deg./1" haun.	Part #T2AHH
8	15 deg.	Part #T2AHH

One clip and three nuts included.

OVERHANG BRACKETS

STANDARD OVERHANG BRACKET

PART #SOHB

Overhang Bracket Conversion Kit converts standard overhang bracket to adjustable overhang bracket using contractor owned horizontal member.

Standard Kit	Part #SOBS
Heavy-Duty Kit	Part #SOBHD

ADJUSTABLE OVERHANG BRACKET

Part #BOB
Part #BOBD

HEAVY-DUTY ADJUSTABLE OVERHANG BRACKET

Part #BOBHD

GUARD RAIL RECEPTABLE

Size: 2 x 4	Part #BOBGRR24
Size: 2 x 6	Part #BOBGRR26

Includes 2 ea. 1/2" N.C. bolts with nuts.

BRIDGE OVERHANG BRACKET EXTENDER

Part #BOBEXT

Includes 2 ea. 1/2" N.C. bolts with nuts.

WALL PLATE ASSEMBLY

Assembly	Part #WPABOB
Adjustment Plate	Part #AP
Wall Bracket	Part #WPAWB

For adjustment bridge overhang bracket.
For use with 3/4" diameter bolt.

WIRE BEAM SADDLE HANGERS

Light forming up to 7 1/2" slab thickness (1 1/2:1) safety factor.
Heavy forming over 7 1/2" slab thickness (2:1) safety factor.
Safe working loads (SWL) are for complete hanger.

Type 1, 2 and 3 may be obtained with safe working loads of 2,500 lbs. (#8 Wire, 4,000 lbs. (#6 Wire) and 6,000 lbs. (#4 Wire).

Wire #	Part #	Part #	Part #	Part #
#8	WBST18	WBST28		
#6	WBST16	WBST26		
#4	WBST14	WBST24	WBST34	WBST454

All (2:1 light forming and (2:1) heavy forming:
1,875 lbs. (#8 Wire), 3,000 lbs. (#6 Wire) and 4,500 lbs. (#4 Wire).

Type 5

SWL (2:1) light forming = 3,000 lbs.
SWL (2:1) heavy forming = 2,250 lbs.

Type 7 and 8

SWL (2:1) light forming = 1,000 lbs.
SWL (2:1) heavy forming = 750 lbs.

PLATE SADDLE HANGER

7-Ga. Wire (1000#) and 4 Ga. Wire (1500#)
Size: Overall length to 18" (with 1 3/4" plate)

Longer sizes available
3 3/4" plate available
Plates can be different sizes
Plates can be set-back

SNAP TIE HANGERS

Type I

SWL (2:1) = 1,500 lbs.

Type II

SWL (2:1) = 2,000 lbs.

Overall dimensions measured from inside to inside of heads.

Type	Description	Part#
I	Standard	STHT1
II	Heavy Duty	STHT2

Overall dimensions (in.): Up to 30, 33, 36, 39, 42, 45, 48, 51, 54, 57 and 60.

Available with 1" large plastic cones or washers.

COIL HANGERS

COIL HANGER SADDLE TYPE

Diameter	SWL (lbs.)
1/2"	2,250
3/4"	5,625
1"	7,500

Overall Length	Part #
To 24"	CH24
To 30"	CH30
To 36"	CH36
To 42"	CH42
To 48"	CH48

Overall length is total length of hanger from bottom of coil to bottom of coil.

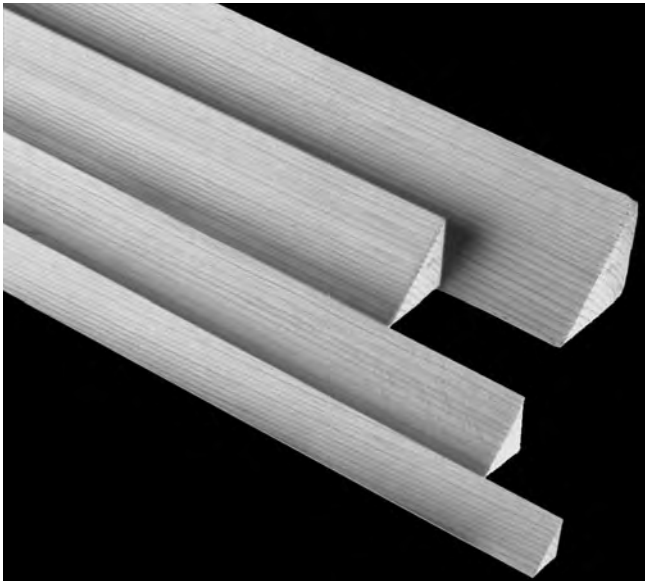
COIL HALF HANGER

Safe working load 800 lbs.

SNAP-TIE "J" HOOK

Available with 1" large plastic cone or no cones.
Hooks with other dimensions are available.

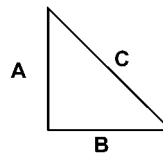
Wood Chamfer . . . for lasting impressions in architectural concrete.



Get an edge on the competition by providing lasting impressions in architectural concrete. Sylvan provides a complete line of Chamfer Strip, Keyway, Rustification, and other Concrete Form Mouldings which create customized appeal on every project. In an era of "value-added" merchandising, you will be able to provide your customers with unique architectural options for any concrete project.

Sylvan's Chamfer is produced out of straight-grain wood which demonstrates precision machining characteristics in terms of size, shape and surface smoothness.

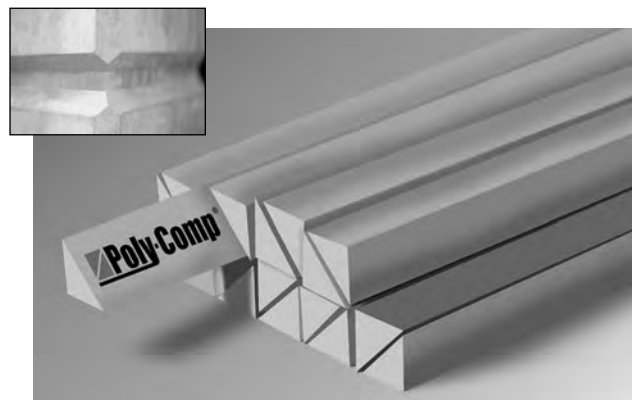
Wood Chamfer Common Sizes



A	B	C
1/2"	1/2"	0.7"
3/4"	3/4"	0.9"
1"	1"	1.4"
1-1/2"	1-1/2"	2.1"
2"	2"	2.8"

Poly-Comp® Plastic Chamfer & Reveal

For architecturally smooth corners in concrete that complement the smooth finish of overlay form panels such as MDO, HDO, or DURA-POUR® Plastic Overlay Form Panels. This plastic chamfer is smooth, holds a straight line, and is easy to cut, nail, staple or glue. Poly-Comp chamfer also delivers straight, clean details for tilt-up applications while practically eliminating on-the-job hassles. Many sizes of Poly-Comp Reveal are available for direct-mill shipment by contacting Wharton Hardware & Supply.



A x B x C	Length	Description	Part No.
3/4"x3/4"x1.06"	8' & 10'	3/4" Poly Chamfer	CHM-75-75-110
1.06"x1.06"x1.5"	10'	1.06" "Double" Chamfer	CHM-106-106-150



Sylvan is best known for its Miter Jaws™ Chamfer Cutter Hand Tool, which combines the accuracy of a miter box with the speed and convenience of a hand tool. We also provide accessory items such as cutter holsters, replaceable blades and anvils. Miter Jaws™ is an industry favorite in trimming chamfer in concrete work.

Replaceable Anvil



Cutter Holster



Stainless Steel Blades





Typical 24" x 24" column form – Ready to pour.



Install Column Clamps while the column Form is horizontal.

**COLUMN CLAMPS
(Scissor Type)**

The **ELLIS Column Clamps** are made of high carbon steel with malleable iron castings.



Wedges are used to tighten Column Clamps.

Here's the fast, easy and accurate way to form columns with the **ELLIS Column Clamps**. All parts are connected to make single units with no loose parts to get lost. The units are identical, no right or left, up or down. Only a hammer is needed to put up the form. Steel bars hold the plywood form sides snugly in place, a wedge is dropped into a rectangular-cut slot and tightened with a tap of a hammer. You can reuse many times.

Available for PURCHASE or RENTAL

Column Clamp Size	Bar Size	Weight per Set	Column Clamp Range of Adjustment		Net Concrete Column Dimensions Using 3/4" Plywood And 2x4 Studs	
			Minimum	Maximum	Minimum	Maximum
36"	5/16" x 2" x 36"	30 lbs.	15" x 15"	28" x 28"	10" x 10"	24" x 24"
48"	3/8" x 2-1/2" x 48"	55 lbs.	21" x 21"	40" x 40"	16" x 16"	35" x 25"
60"	3/8" x 3" x 60"	80 lbs.	33" x 33"	52" x 52"	28" x 28"	47" x 47"

Also available from Ellis:

- Shore Sticks and Clamps
- Jack Wrenches
- Slip-In Shore Holders
- Reshore Springs
- Purlin Splicers
- Red Heads
- T-Heads
- Column Form Clamps (Single Bar Type)
- Screw Jacks and Bridge Jacks
- Guard Rail Stanchions
- Perimeter Protection Posts
- Slip on Guard Rail Brackets
- Twistlock Guard Rail Brackets
- Adjustable Kick Braces

www.ellisok.com





TRANSITION TIES™

Multipurpose Ties for Difficult Forming Problems

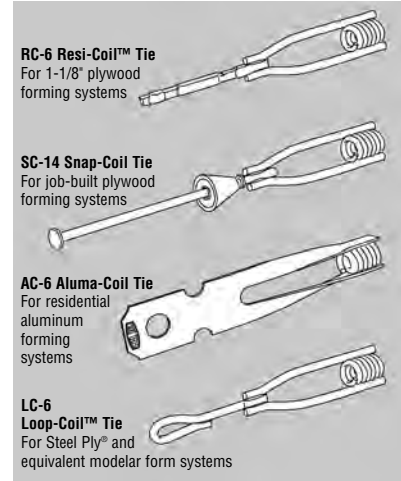
Available for Most Handset Forming Systems

Steel Dog® Transition Ties™ provide a way to connect standard form panels to industry-standard 1/2" threaded coil rod. These strong, versatile ties are the key components of a growing system of accessories to provide solutions for:

- One-sided Forming.
- Adjustable-length ties.
- Blind-side forming with Stay-Form®.
- Long tie substitutes, using Steel Dog® Rebar Hooks.
- Battered walls.
- Bulkheads.

Off-the Shelf Solutions for Many Forming Problems Choose Your Forming System

Steel Dog® Transition Ties™ are part of a versatile family of off-the shelf, interchangeable forming components using industry-standard 1/2" coil rod as the threaded element. Choose the components for your form system and application and get an adjustable, laborsaving, no lead-time forming solution.



RC-6 Resi-Coil™ Tie
For 1-1/8" plywood forming systems

SC-14 Snap-Coil Tie
For job-built plywood forming systems

AC-6 Alumina-Coil Tie
For residential aluminum forming systems

LC-6 Loop-Coil™ Tie
For Steel Ply® and equivalent modular form systems

Patent Pending

Coil-Lag™

The Steel Dog® Coil-Lag™ is designed to provide a temporary means of attaching formwork to wood structures. Typical application: one-sided forming against soldier piles with wood lagging.

FEATURES:

- Standard hex head lag bolt for socket wrench installation.
- Swivel loop coil tie end to accommodate misalignment between lag bolt placement and formwork tie location.
- Accepts standard 1/2" coil rod or 1/2"-13 NC rod (SCL-4NC).
- Less expensive than toggle ties and doesn't require clear space behind timber (compacted soil not a problem).
- Eliminates expensive external bracing or welding.



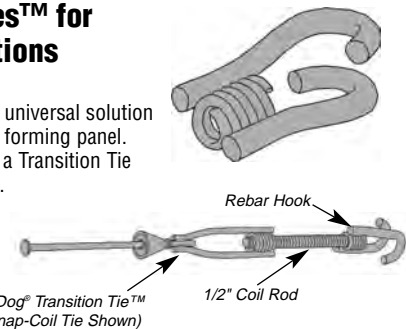
Rebar Hook

Use Rebar Hooks with Transition Ties™ for Stay-Form® Blind Side Wall Applications

Versatile Solution with Off-the-Shelf Components

Steel Dog® Rebar Hooks and Transition Ties™ provide a universal solution to joining Stay-Form® panels to nearly any other type of forming panel. Form a blind side wall of any width by simply threading a Transition Tie together with a length of industry-standard 1/2" coil rod.

- Adjustable length.
- Easy to assemble with gloved hands.
- Standard components mean lower cost.
- No keepers or nuts.
- No need to custom order exact sizes.
- Labor saving, fast attachment.



Steel Dog® Transition Tie™
(SC Snap-Coil Tie Shown)

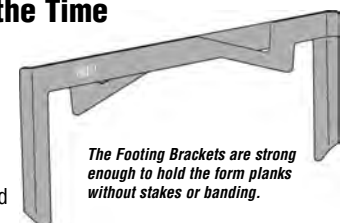
1/2" Coil Rod

Footing Bracket

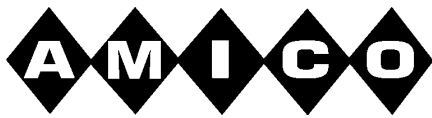
Set-up and Strip Footing Forms in Half the Time

- Eliminates stakes and strapping.
- Lightweight and compact.
- No Measuring needed.
- Made from high strength steel.
- Color coded (Single Plank is White, Double Plank is Red).
- Available in 5 standard widths – 16" to 30".

Amazingly strong, lightweight steel brackets slip over standard lumber planks to instantly set and hold them at the correct spacing. Re-useable hundreds of times.



The Footing Brackets are strong enough to hold the form planks without stakes or banding.



LEAVE-IN-PLACE CONCRETE FORM

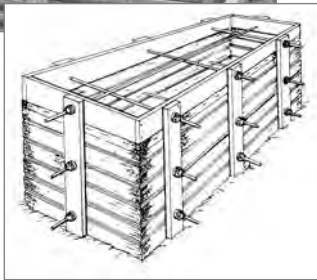
STAY-FORM® A LEAVE-IN-PLACE CONCRETE FORM

Stay-Form® is a ribbed, expanded metal, leave-in-place form for poured-in-place concrete. It is effective for use as forming for bulkheads, pile caps, grade beams, blindside walls, bridge applications and wherever removal of forms is difficult.

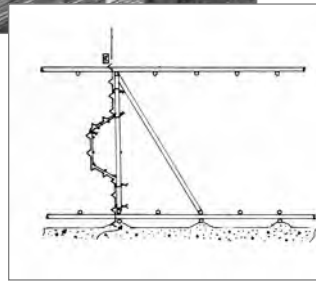
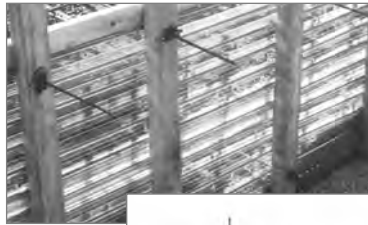
AMICO Stay-Form® is fabricated from hot dipped galvanized coiled sheet steel of 26-gauge thickness for standard grade material at 27" x 97" finished sheet size and of 25-gauge sheet for heavy grade material at 27" x 97" finished sheet size. Stay-Form is formed by lancing and expanding galvanized sheet steel in such a pattern as to allow the subsequent formation of solid sheet V-Ribs of 3/4" depth running parallel to the length of sheet and spaced 3-7/8" apart. That area of Stay-Form that covers the space between adjacent ribs comprises the expanded mesh portion of the piece with a mesh opening size of approximately 15/64" x 3/8" and being of a parallelogram shape.



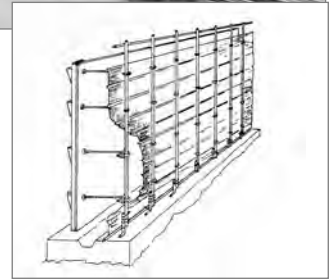
Grade Beams and Pile Caps



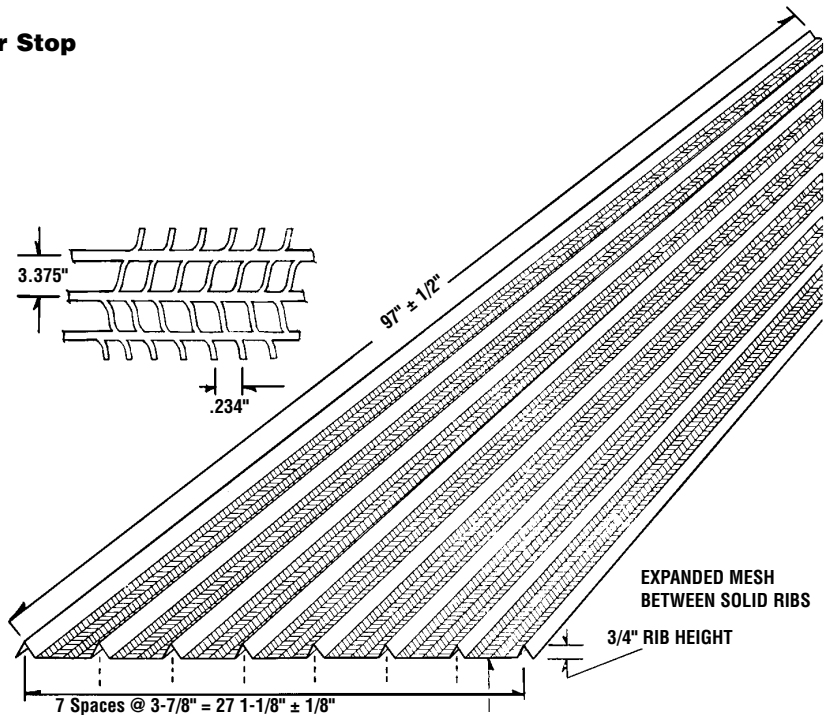
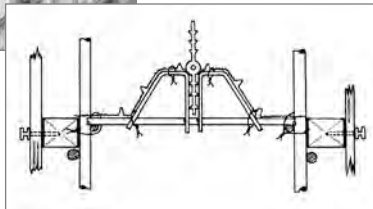
Heavy Mat Bulkheads with Keyway



Blind Side Walls



Vertical Construction Joints with Water Stop



Hardware & Supply Co., Inc.
Supply, Inc. of Virginia
Form Rentals

NJ (856) 662-6935 • PA (215) 925-8800
 Metro (703) 569-6660 • VA (703) 455-6700
 Clinton, MD (301) 877-8640

Metal Keyed Control Joints

QuickKey™ and PRO-KEY™ SYSTEMS

QuickKey™ and PRO-KEY™ are stay in place metal keyed control joint formers for use in concrete flatwork as a control or construction joint. The tongue and groove design provides excellent load transfer characteristics for heavy, wheeled traffic and also prevents uneven settling associated with aggregate interlock. The use of a metal keyed control joint eliminates costly form stripping and saw cutting and slow checker-board placement of concrete.

MATERIAL

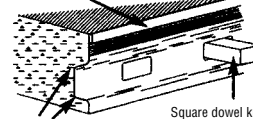
QuickKey™ and PRO-KEY™ are manufactured of 24-gauge, G60 hot dipped mill galvanized steel. They are furnished in 10' lengths for 4", 5", 6", 8", 10" and 12" slabs. Each piece is punched on 6" centers with dowel rod knockouts. QuickKey™ LOCKING-TAB™ stakes are manufactured from 13-gauge HRPO steel and are available in 12", 15", 18", 24" and 30" lengths. PRO-KEY™ LOCK SLOT™ stakes are manufactured from 16-gauge HRPO steel and are also available in 12", 15", 18", 24" and 30" lengths. Both keyed control joint formers are mill galvanized before fabrication and conform to ASTM A 924, ASTM A 653 CQ or LFQ. The corresponding stakes are manufactured from hot rolled, pickled and oiled steel conforming to ASTM A 569.

ADVANTAGES

QuickKey™

- QuickKey™ is the only galvanized joint system that features knockouts for square dowels, which provide better load transfer over round dowels and also reduce edge curl on the slab. (patent pending)
- Knockout sizes meet both ACI and PCA recommendations for the design of tongue and groove key joint.
- LOCKING-TAB™ stakes provide a positive interlock between stake and key joint that eliminates floating or rising from the stake, minimizing high spots. The stake profile features a non-twist design which allows the stake to be driven at a straight angle.
- Saves on installation time ... stake quickly interlocks at any point with key joint, reducing time to place stakes precisely.
- Stiffening ribs are designed for increased rigidity while installing.

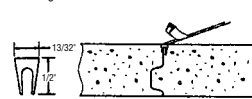
Stake quickly interlocks at any point with key joint, reducing time to place stakes precisely.



A 1:4 slope makes QuickKey™ the only metal key joint that meets both ACI and PCA recommendations.

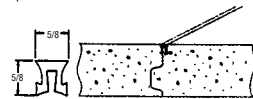
Square dowel knockouts can be used for square or round dowel bars. Dowel knockouts are on 6" centers. Knockout sizes meet both ACI and PCA recommendations.

QuickKey™ removable cap yields straight void ready for sealing



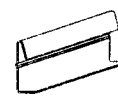
Cat. #2000

Non-removable cap seals the joint because it stays in place.



Cat. #2010

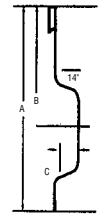
Other accessories include...



QuickKey™ Splice
Cat #2020



QuickKey™ Stake Clip
Cat #2021



Cat. #	Slab Thickness	A	B	C	Knockout Size
QK35	4"	3-1/8"	2"	3/4"	7/8" x 1-3/8"
QK45	5"	4-1/8"	2-1/2"	3/4"	7/8" x 1-3/8"
QK55	6"	5-1/8"	3"	3/4"	1-1/4" x 1-1/2"
QK75	8"	7-1/8"	4"	1"	1-1/4" x 1-1/2"
QK95	10" - 12"	9-1/8"	5"	1"	1-1/4" x 1-1/2"

Dovetail Anchor Slot and Dovetail Anchors

PRO-SLOT™ Anchor Slot is a stay-in-place concrete form used in forming a channel into the face of any cast in place wall or column. By installing Dovetail Anchors into the PRO-SLOT™, you can then anchor brick, block or stone to the concrete surface.

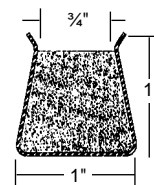
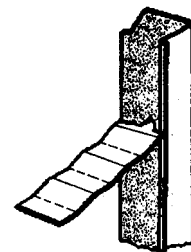
MATERIAL

BoMetals' galvanized PRO-SLOT™ Anchor Slot is manufactured of G60 hot dipped mill galvanized steel in 26/28, 24-, 22-, 20- and 18-gauge. PRO-SLOT™ is offered standard in 10' lengths with custom lengths available on a special order basis. BoMetals' PRO-SLOT™ is standard with a polystyrene foam filler to keep the channel clear of concrete and resist closure due to hydraulic pressure. It is also available without a polystyrene foam.

PRO-SLOT™ incorporates continuous nail grooves along the back edge of the profile to help in nailing the slot to the forms. Dovetail Anchors are manufactured in 16-gauge hot dipped, galvanized steel and are furnished in 3-1/2", 5-1/2" and 7-1/2" lengths with a 1" overall width. PRO-SLOT™ Anchor Slot and Dovetail Anchors are mill galvanized before fabrication and conform to ASTM A 924, ASTM A 653 CQ or LFQ.

ADVANTAGES

- PRO-SLOT™ Anchor Slot and Dovetail Anchors provide a permanent, fast, flexible and cost effective method of anchoring brick, stone and block to cast-in-place concrete walls and columns.
- PRO-SLOT™ provides an excellent anchoring system for both cast-in-place and precast concrete.
- With a heavy, galvanized coating to prevent corrosion, Dovetail Anchors have deep corrugations to increase pull out strength.

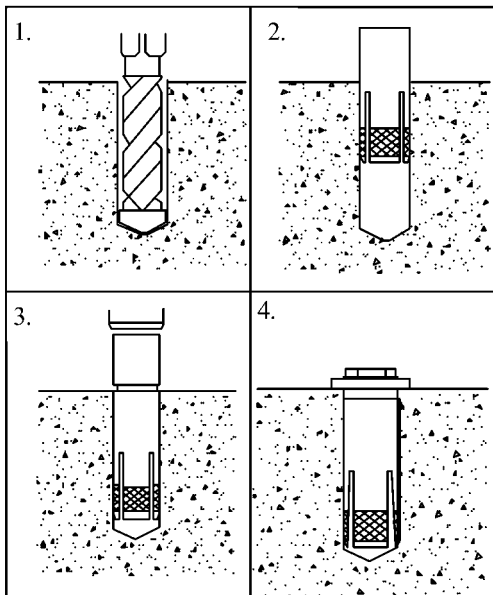


COIL THREAD SUP-R-DROP



FEATURES/BENEFITS

- Ideal for form work and tilt-up bracing.
- Accepts 1/2" or 3/4" coil thread.
- Preassembled for ease of installation.
- Slotted body is precision-matched to tapered internal plug for uniform expansion.
- Knurled body increases friction forces between anchor and wall of hole.



APPROVALS/LISTINGS

- G.S.A Spec FF-S-325C, Group VIII, Type 1.

CONCERNS

- Dead load only.
- Hole depth must be equal to anchor length.

INSTALLATION

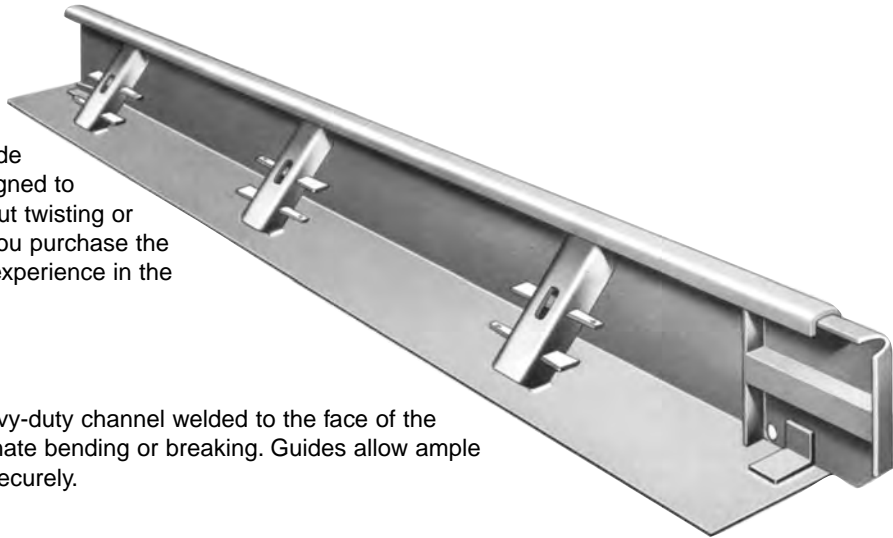
1. Drill hole same length as anchor. Do not use core bits. Maintain accurate hole size. Clean hole of debris.
2. Drop in anchor, slotted end first.
3. To set, drive setting tool into anchor until shoulder of tool is flush with top of anchor.
4. Select appropriate coil thread or coil bolt.

Order Code	Bolt Dia.	Min. Embedment (Anchor Length)	Hole Dia.	Max. Torque (Ft. Lbs.)	Ultimate Tensile & Shear Loads in Lbs. Concrete Strength (PSI)			Box Qty.	Master Qty.
					2000 PSI	4000 PSI	Shear		
1312CT0	1/2"	2"	5/8"	20	5,312	7,798	5,854	50	400
1334CT0	3/4"	3-3/16"	1"	80	12,300	16,019	11,627	25	75

1 setting tool per 100 anchors

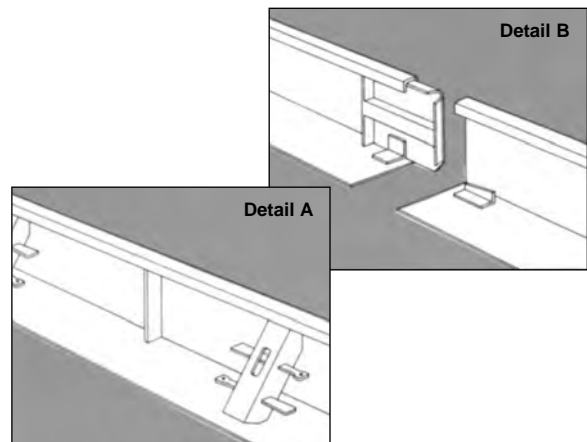
Standard Paving Forms

BMF heavy-duty highway Paving Forms are engineered to withstand the rough use of today's heavy equipment. Fabricated of high quality, American made special alloy steel, these forms are designed to give greater load carrying ability – without twisting or deforming! When you buy BMF forms, you purchase the “know-how” gained from over 50 years experience in the form business.



Slide cam lock assembly features a heavy-duty channel welded to the face of the slide between the driving “ears” to eliminate bending or breaking. Guides allow ample clearance to prevent binding, yet align securely.

Stake pockets butt firmly under rail and are welded to face, lower rail edge and base to give maximum support. Extra heavy 3/8" giant wedges keep forms anchored in line without drifting. BMF engineers have also designed a structural reinforcing system adaptable to all paving forms at a modest additional cost. This system of heavy 1/4" braces (see detail A) nearly doubles the strength of any form keeping weight at a minimum and is particularly recommended when side dump trucks are to be used. Factory experts are available to help you solve any paving problem. Call us today and let us help you build greater profits into your job with BMF forms.

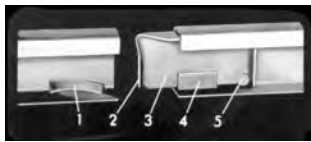
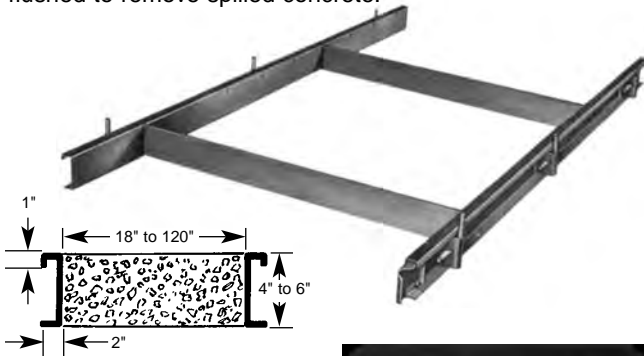


Specifications

O-K Curb Forms Division Plates		1" Dia. Stakes			Form Weight Per 10" Section	Form Weight Per 10" Section
Height	Base	Length	Weight	No.	1/4" Thick	5/16" Thick
6 in.	6 in.	18 in.	12 lbs.	3	144 lbs.	195 lbs.
7 in.	7 in.	18 in.	12 lbs.	3	166 lbs.	217 lbs.
8 in.	8 in.	18 in.	12 lbs.	3	182 lbs.	224 lbs.
9 in.	9 in.	24 in.	16 lbs.	3	207 lbs.	226 lbs.
10 in.	10 in.	24 in.	16 lbs.	3	224 lbs.	281 lbs.

O-K Straight Sidewalk Forms

Here are forms built to help you knock out those bread-and-butter jobs – pouring sidewalks. These forms are light but rugged. O-K Sidewalk Forms have a husky double flange at the top and a single flange at the bottom. Actual strength tests and years of experience have shown that this flange design has more than enough strength with the least amount of weight. The open flange on the bottom is easily flushed to remove spilled concrete.



Slide Cam Lock

1. Run-up wedge
2. Slide cam surface
3. Slide
4. Slide retainer
5. Load Button

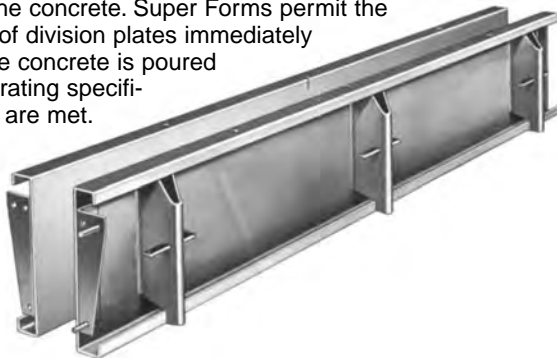


O-K Stake Pocket

1. Maximum rigidity; pocket electro-welded to support top flange.
2. Full height pocket; stake locked in contact with whole length of pocket.
3. Wide V-neck throat.
4. Giant wedge, 3/8" thick; dimpled for retaining; no chain needed.

Super Curb Forms

BMF Super Forms are engineered for those projects where specifications require either full or partial battered design and, that the forms must be left in place until final set of the concrete. Super Forms permit the pulling of division plates immediately after the concrete is poured and vibrating specifications are met.



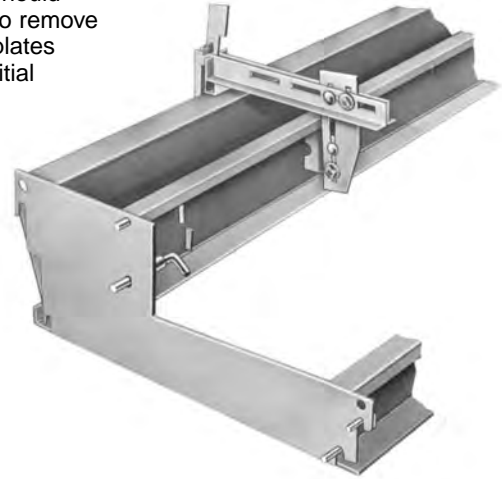
Accessories

BMF accessories are designed to save the contractor time and money in faster settings. Also available are various types of radius edging tools.

- Adjustable Hanger
- Batter Plate
- Diagonal Brace
- Stake Puller
- Steel Stakes
- Hi-Top Spacer
- Division Plate Puller
- Radius Edging Tool
- Slotted Bolt
- Taper Key

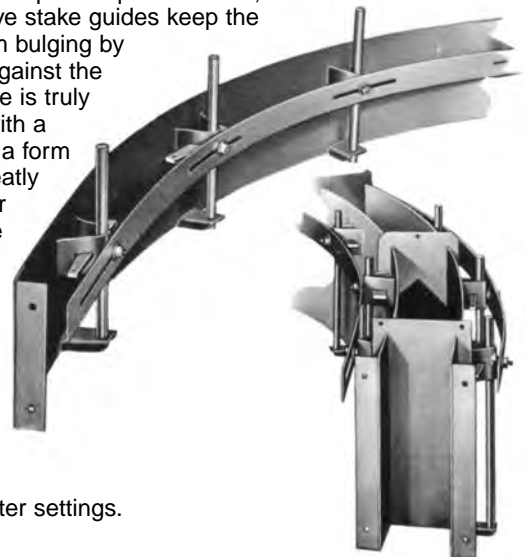
Super Curb and Gutter Forms

Installing combined curbs and gutters in heights up to 24 inches and widths out to 60 inches, gets into real concrete engineering. BMF is aware of the problems involved, and in the Super line has designed forms to reduce problems to a minimum. The fixed dowels on Super Curb and Gutter forms, mean fast, efficient, in-line setting – and even more efficient stripping. Even more important, it should be possible to remove the division plates easily after initial set-up of the concrete on those jobs which specify no stripping of forms until the concrete has set.



Flexible Radi-Lok Forms

Here is a flexible-form engineered for both inside and outside curves on sidewalks, curbs, curbs and gutters. The exclusive Radi-Lok (radius-locking) band holds the curve you set ... even while you move the form ... you don't have to lay out the curve each time. Please specify when ordering as an option. Radi-Lok forms are light, yet rigid enough to take hard use and the stresses of pouring. The Radi-Lok band stiffens up the top of the form, and the exclusive stake guides keep the bottom from bulging by bracing it against the stakes. Here is truly "the form with a memory" – a form that will greatly reduce your setting time on curved work.

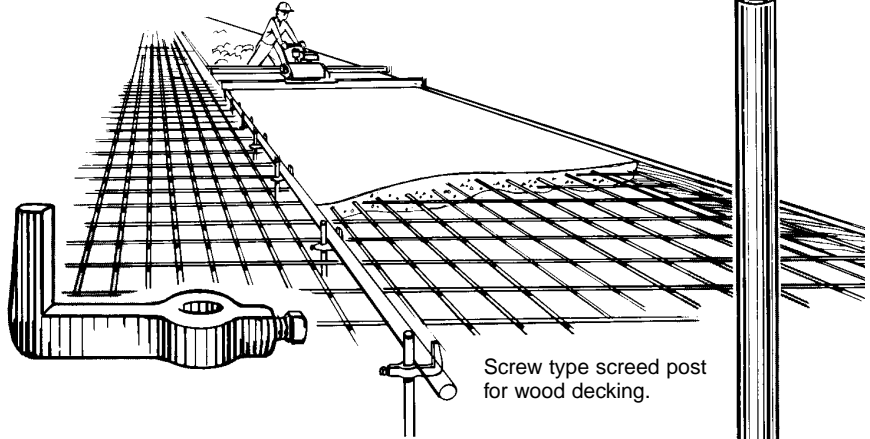
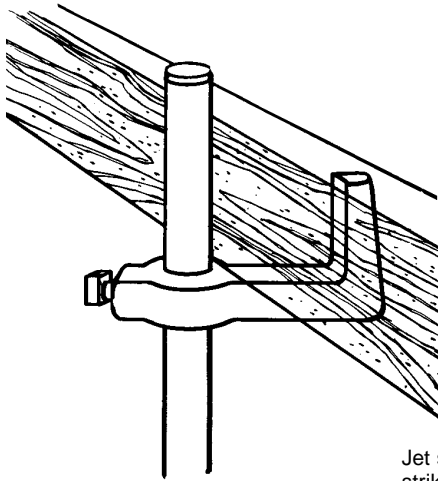




concrete forming accessories, inc.

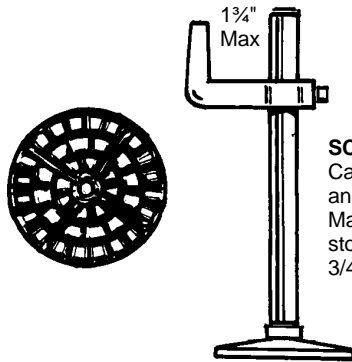
SCREED POSTS/BRACKETS AND STEEL STAKES

JET SCREEDING



Screw type screed post for wood decking.

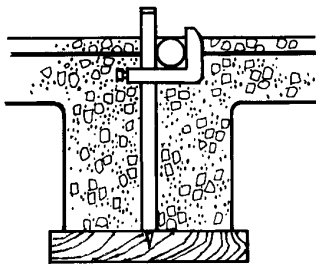
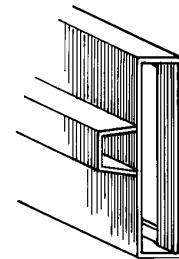
Jet screed brackets and screed posts provide a fast, accurate, adjustable way of striking off all types of concrete flat work from slabs to sidewalks.



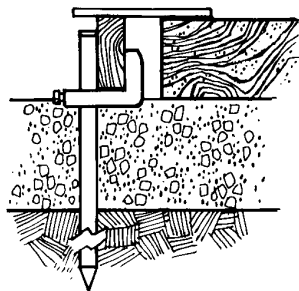
Screed post with detachable pad for steel or concrete decking.

SCREED BRACKETS
Can handle 2" x 4" wood and 1½" I.D. pipe. Maximum 1¾" or flat bar stock can be used with ¾" or 7/8" screed posts.

Keyway attachment leaves space for securing adjacent slab. Keyway can be manufactured to any specifications and can be attached to metal or wood forms with bolts and wing nuts.



Screw type screed post for wood decking.

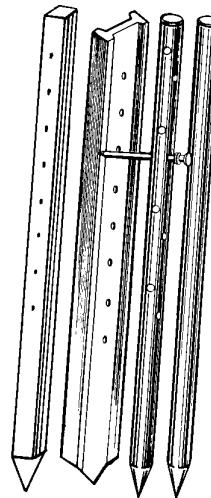


Standard steel stake used in ground conditions.



Bracket adjusts to snug striker bar against screed post.

JET STEEL STAKES



ALL steel stakes are available in 12-, 18-, 24-, 30-, 36-, 42- and 48-inch lengths and longer.

Round nail stakes are available in ¾" and 7/8" diameters with 12 spirally arranged holes on 1" centers. Nail holes are staggered to allow positive nailing despite twisting of stake due to variable ground conditions.

Solid steel form pins for use with steel forming systems are available in ¾", 7/8" and heavy-duty 1" diameters.

All stakes are packaged in rugged, easy handling cartons.

If you don't lose'em ... you can reuse'em time after time ... indefinitely.



ISO 9001:2000 Certified

WIRE AND TOOLS

Mar-Mac Wire, Inc., one of the nation's largest manufacturers of quality wire products, has been serving customers across America for more than 50 years with a full line of industrial and concrete construction wire, tools and accessories.



MAR-MAC PREMIUM Wire Products

Coil Wire

Mar-Mac Premium coil wire products are made specifically for tying reinforcing steel (rebar).

- Soft and flexible, in one continuous piece per coil.
- Available in black annealed and plastic-coated Mar-Mac Gold.

Wire Ties

Mar-Mac Wire Ties are used to tie rebar, and are also used as bag closures for tying trellises, securing rolls of paper, fabric, carpet and much more.

- Standard loop ends.
- Available in black annealed and bonded plastic-coated wire in a variety of standard lengths.

CONTRACTOR Brand Products

Nails

Mar-Mac's CONTRACTOR Brand offers a broad value-based line of concrete construction products, to include:

- Duplex Nails available in 8d and 16d sizes, packaged 50# per box.
- Bright Common Nails in 6d, 8d, 10d, 12d, 16d and 20d, packaged 50# per box.
- Coated Sinker Nails in 8d, 12d and 16d, also packaged 50# per box.

Merchant Coils

CONTRACTOR Merchant Coils are used for tying, bundling and handling various products.

- Available in a range of gauges from 9 to 18.



WIRE MESH

STEELTEX

A combination of wire mesh and a special waterproof backing

Tri-directional glass reinforcing fibers are embedded in the paper for additional strength. The Steeltex form is extremely flexible and is supplied in rolls. Use in swimming pool construction has become common by quality builders, who like the combination of strength and flexibility that Steeltex provides as a form for gunite buildup.

Steeltex Masonry Veneer and Stucco Lath (Style 49-16) has a double ply laminated waterproof backing with a 2" x 2", 16-gauge galvanized electrically welded mesh. It is supplied in rolls 49" wide x 110' 6" long, for a total area of 450 square feet.



Wire and wire mesh produced in all of Ivy's Plants meet or exceed all applicable Industry and Governmental Standards, and we are especially proud that meeting our customer's requirements is our number one goal.



Hardware & Supply Co., Inc.
Supply, Inc. of Virginia
Form Rentals

NJ (856) 662-6935 • PA (215) 925-8800
Metro (703) 569-6660 • VA (703) 455-6700
Clinton, MD (301) 877-8640

EASY-POUR FIBRE TUBES



EASY-POUR Sizes (In Stock in 12' Lengths)

200mm	8"
250mm	10"
300mm	12"
350mm	14"
380mm	15"
400mm	16"
450mm	18"
500mm	20"
550mm	22"
600mm	24"
650mm	26"
700mm	28"
750mm	30"
800mm	32"
850mm	34"
900mm	36"
950mm	38"
1000mm	40"
1050mm	42"
1100mm	44"
1150mm	46"
1200mm	48"

EASY-POUR CONCRETE FORMS are the fast, modern way to pour perfect, cylindrical columns of concrete. They provide a round column at less cost than a comparable rectangular form. **Easy-Pour** forms are available in both Regular and Light wall construction. Regular wall is recommended for most column work but Light wall can be safely and economically used for footings on columns up to 12 feet in height. The **Easy-Pour** form provides a finished surface on the column, largely eliminating the cost of additional finishing work. **Easy-Pour** forms are light in weight, can easily be carried and sawed to desired length at the construction site.

BRACING – Strong **Easy-Pour** forms require a minimum of bracing. Light lumber or scaffolding easily holds forms plumb for pouring. Collars may be used at the column foot if desired. Also, forms may be tied to scaffolding for proper bracing.

POURING – Concrete can be poured into **Easy-Pour** fibre forms at normal rates by any conventional method hopper, chute or wheelbarrow. It can be vibrated during the pour as required without damage to the form. Form should be braced at top and bottom. Slump should not exceed 150mm. Increased rates of pour can be tolerated in an emergency if close inspection is maintained at bottom of form for any weakness.

STRUCTURAL USES – **Easy-Pour** Concrete Forms are ideally suited to shaping columnar structural supports for piers, foundations, stacks, floors, piles, bridges, etc. They may also be used to enclose existing steel posts or columns in

concrete. **Easy Pour** forms are available from 150mm to 1500mm inside diameter up to a tube length of 12 meters or any length which can be transported by common carrier.

STORAGE – Storing **Easy-Pour** forms at the jobsite requires only minimum precautions.

ARCHITECTURAL USES – Round concrete columns add beauty as well as support strength to any structure. They complement any architectural style and can be finished to blend with any tile, paint, terrazzo or other decorative finishes.

CURING AND FINISHING – Proper curing of concrete columns is assured with **Easy Pour** fibre forms. These forms prevent the loss of moisture in the concrete due to seepage, absorption and evaporation.

Concrete Test Cylinders



- Flat or domed lids available.
- Available in light grey, white or yellow.
- Reinforced lip and bottom.
- Notched lip for easy stripping.
- Attached lid on 2x4, 3x6 and 4x8 sizes.

Part Number	Mold Size	Qty/ Carton	Wt./ Carton
1202-310	4x8 light grey (with domed lid)	36	30 lbs.
1202-3102	4x8 light grey (with flat lid)	36	30 lbs.
1202-321	6x12 light grey	36	30 lbs.
1202-318	6x12 yellow	36	30 lbs.
1202-319	6x12 white	36	30 lbs.

Custom printing available on 6x12 size.

Paragon's Concrete Test Cylinders meet all ASTM and AASHTO standards.



SLUMP TESTING

CONCRETE SLUMP TESTING EQUIPMENT

The Hogentogler slump test equipment is used to determine the slump of freshly mixed concrete. Concrete is placed in the slump cone, tamped, then the cone is lifted and the height of the concrete is measured. The slump is the difference between the height of the cone and the height of the concrete after the cone has been lifted. The C7101 is constructed from seamless spun steel and is plated to prevent rusting. Foot lugs and handles are spot welded to the cone.



C7101



C7116



L3415



C9708

MODELS	DESCRIPTION	STANDARDS
C7101	SLUMP CONE	ASTM C-31, C-143, C-172, C-192, C-232
C7104	SLUMP CONE PLASTIC	AASHTO T-23, T-119, T-126, T-141, T-158

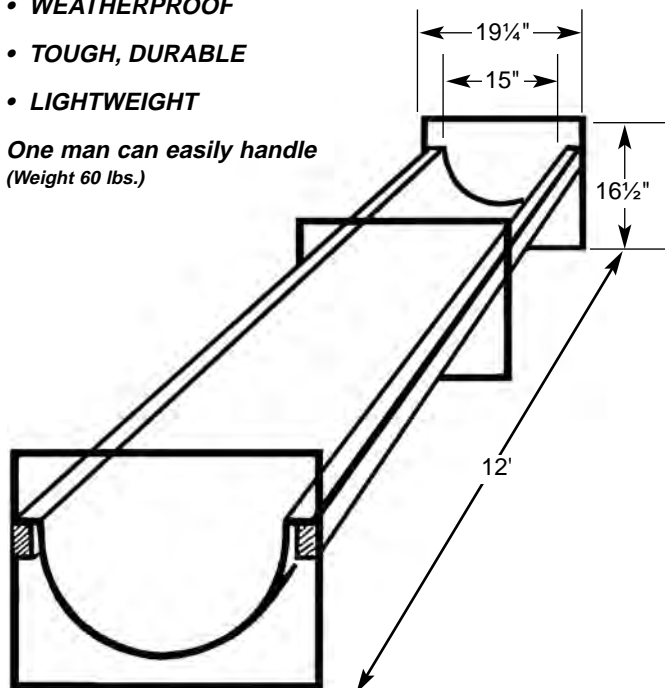
ACCESSORIES	DESCRIPTION
C7116	SLUMP CONE BASE
C7112	TAMPING ROD, 5/8" GRADUATED STEEL PLATED
C9708	TAMPING ROD, 5/8" STEEL PLATED
C9707	TAMPING ROD, 3/8" X 12" (VA SPECS)
C7102	FUNNEL 4"
C7103	FUNNEL 6"
L1301	PAN, 24" X 24" X 3"
L3415	SCOOP, 5" X 8-1/4"
L6381	POINTING TROWEL
L8131	BRUSH, BRASS BRISTLE 10"

Concrete Does Not Stick To This Chute

- Interlocking – Use several to get at Hard-to-get places.
- Self Mounting – Eliminate make-shift props or braces.
- EASY TO CLEAN

- CORROSION AND RUSTPROOF
- WEATHERPROOF
- TOUGH, DURABLE
- LIGHTWEIGHT

One man can easily handle
(Weight 60 lbs.)



Available sizes:

37" Square Treemies

Discharge:

- 7", 12", 18" Diameter
- 7" x 9½" Oval

4'-0" Long Elephant Trunk

- 9" to 8" Diameter
- 13" to 12" Diameter
- 19" to 18" Diameter
- 7½" x 10" to 7" x 9½" Oval

Also Available:

- 12' Utility Chutes
- Mortar Pans

CUT COSTS NOW With ABUTCO Polyethylene Treemies.



- Lightweight
- Weatherproof
- Stickproof
- Tough
- Durable

CONCRETE CONTRACTORS

Save real time and money by using ABUTCO's job-dedicated products.

LIGHTWEIGHT — Easily handled by one man ... 1/8th the weight of steel. No crane hookups needed. Transfers job-to-job, site-to-site easier.

WEATHERPROOF — Linear Polyethylene resists all chemical attack ... will not rust, corrode. Store anywhere.

COLOR — Bright yellow ... hard to mislay or run over.

STICKPROOF — Concrete does not stick. Mix flows easier, hang-up eliminated, cleanup reduced ... no hammering or chipping ... just hose down.

HARDWARE — Positive-lock, easily operated. Safest on the market.

This Product is Better Than Ever!





CONCRETE BUCKETS

“G-Series” General Purpose Concrete Buckets

GAR-BRO general purpose or “G” series concrete buckets are built for modern concrete requirements and general concrete work. Sturdy design and construction provide long life expectancy. All “G” series buckets

feature the GAR-BRO patented double clamshell gate with vertical center discharge. Standard gate size is 15" x 22". Extension collars for increased capacity are available for all models.

Item No.	Rated Capacity Cu. Yds.	Level Capacity Cu. Ft.	Loading Height Inches	Gate Size Inches	Inside Diameter Inches	Weight Pounds
411-G	1/3	10	35	15x18	36	355
413-G	1/2	15	38	15x22	42	420
423-G	3/4	24	46	15x22	48	565
433-G	1	30	51	15x22	54	615
442-G	1-1/2	42	55	15x22*	60	795
462-G	2	58	58	15x22*	68	1,045
493-G	3	90	72	15x22*	68	1,445
4123-G	4	114	85	15x22*	68	1,825

*Optional 22"x 32" gate also available.



Shown with optional side chute

“R-Series” Lightweight Round-Gate Buckets with 16" Diameter Gate

The GAR-BRO round-gate or “R” series concrete bucket is 30% to 50% lighter than most standard steel buckets of the same capacity. The double clamshell 16" diameter gate featuring the patented GAR-BRO venturi throat

is non-jamming, grout tight and self-closing. A variety of attachments are available for all “R” series buckets, including rubber accordion hoppers, side chutes, air operated gate systems and extension collars.

Item No.	Rated Capacity Cu. Yds.	Level Capacity Cu. Ft.	Loading Height Inches	Inside Diameter Inches	Weight Pounds
410-R	1/3	10	34	36	237
413-R	1/2	13.5	41	36	257
420-R	3/4	20.3	44	45	330
427-R	1	27.5	46	54	400
440-R	1-1/2	40.5	53	60	500
454-R	2	54	58	66	675
483-R	3	83	72	66	760

Lightweight Laydown Buckets Extended Gate Type (12" x 12" Quadrant Gate)

GAR-BRO extended gate laydown buckets are designed for use in applications which require both a low loading height and a side discharge. Providing automatic laydown for easy charging and automatic

rotation for vertical discharge. Extended gate buckets feature a single quadrant gate with a 12" x 12" gate opening and positive toggle action gate operating handle.

Item No.	Rated Capacity Cu. Yds.	Level Capacity Cu. Ft.	Loading Height Inches	Overall Width Inches	Overall Suspended Height	Weight Pounds
414	1/2	18	24	45	6'7"	550
424	3/4	27	29	50	7'5"	596
434	1	33	31	54	7'9"	685
444	1-1/2	46	35	60	8'6"	1090
464	2	62	35	67	9'10"	1235
494	3	96	38	75	10'10"	1915
4124	4	130	35	80	11'6"	2324



**“L-Series” Lightweight Laydown Buckets
Vertical Discharge Type (15" x 22" Clamshell Gate)**

The GAR-BRO lightweight laydown bucket is designed for situations in which the loading height of a conventional upright bucket is too great for charging without difficulty or delay. Frame design incorporates a

support structure and pivoted lifting bail, which automatically rotates the bucket to a laydown position when lowered to the ground for charging and to a vertical position when hoisted for discharging.



Item No.	Rated Capacity Cu. Yds.	Level Capacity Cu. Ft.	Loading Height Inches	Overall Width Inches	Overall Suspended Height	Weight Pounds
416L	1/2	16	23	48	5'7"	500
426L	3/4	28	26	55	5'8"	618
436L	1	39	24	62	7'4"	730
446L	1-1/2	43	27	66	7'3"	1180
466L	2	66	32	74	8'7"	1472
496L*	3	89	37	75	10'1"	2000
4126L*	4	131	37	82	10'6"	2775
4156L*	5	149	44	96	11'0"	3935
4186L*	6	210	47	96	11'6"	4000
4236L*	8	242	57	96	13'9"	5317
4296L*	10	294	57	96	15'4"	6000

*Optional 22" x 32" gate also available.

Rubber Accordion Hoppers

These hoppers confine concrete when pouring into narrow forms and prevent segregation due to free-fall. Fastened to the bucket gate, the hopper opens and closes with the gate itself to control

spillage and ensure proper flow control. When grounded, it folds under the bucket without damage. Sizes to fit all GAR-BRO buckets.



Item No.	Bucket Series or Item No.	Length Below Bucket Ft.	Discharge Opening Inches	Weight Pounds
409-E		3	8	27
409-U	All "R" and "G" Round Upright Buckets and all "L" Laydown Buckets	3	8	41
409-W	All "R" and "G" Round Upright Buckets and all "L" Laydown Buckets	3	8	45
429-A	425, 465, 495, 4125 and Buckets with 22" x 32" Gate	3	15	67
429-B	440-D, 440-A, 450-D, 450-A, 460-D, 450-A, 425-A, 465-A, 495-A, 4125-A	5	16	108
439-2 Ply	493-A, 4139-A, 4155-A	4	16	100
439-4 Ply	4145-H, 4195-H	4	16	125
439-6 Ply	4145-A, 4195-A	4	16	150
476-4 Ply	4250-A and Buckets with 39" x 55" Gate	5	15	480
476-6 Ply	4250-A and Buckets with 39" x 55" Gate	5	15	540

Extended Discharge Accordion Hoppers Available.



With the **Vertical Front Discharge Hopper**, forward placement of the gate is especially convenient for loading hand-pushed carts (Item No. 706 or 708) or wheelbarrows. These hoppers are often used as receiving and charging hoppers on tower hoist jobs.

Center Discharge Hoppers are often preferred because, with the same dimensions, they have larger capacities than vertical front discharge types. They are best suited for use with either the "walk-behind" or rider-type powered carts.

Extension collars bolted to top flange give increased capacities. Easily mounted on standardized steel leg frame, the receiving hopper converts to a floor hopper as shown above, with 36-inch floor clearance for "walk-behind" carts or 56-inch floor clearance for "powered carts" ("T" suffix).



Collection Hoppers

GAR-BRO Collection Hoppers are designed to facilitate transfer of concrete from the bucket or transit mix truck to restricted areas. Used in conjunction with a variety of chutes or elephant trunk, the hoppers complete a versatile concrete placement system that will suit any job requirement.

Vertical Front Discharge Hoppers

Specifications / Single Gate Hoppers

	Item Number	Capacity Cu. Ft.	Height Inches	Collar Size	Weight Pounds
Receiving Hopper Without Stand	228 (T)	28	40	*	400
	241 (T)	41	48	A	500
	255 (T)	54	56	B	555
	267 (T)	68	64	C	655
Floor Hopper Complete with Stand	328 (T)	28	6' 4"	*	695
	341 (T)	41	7' 0"	A	795
	355 (T)	54	7' 8"	B	850
	367 (T)	68	8' 4"	C	950

*228/328 are the basic hoppers. Extension collars A, B and C can be attached to the basic hoppers to increase capacity.

Specifications / Double Gate Hoppers

	Item Number	Capacity Cu. Yds.	Height Inches	Collar Size	Weight Pounds
Receiving Hopper Without Stand	2552 (T)	2.0	40	**	840
	2802 (T)	3.0	48	D	990
	2092 (T)	4.0	56	E	1080
	2342 (T)	5.0	64	F	1165
Floor Hopper Complete with Stand	3552 (T)	2.0	6' 4"	**	1200
	3802 (T)	3.0	7' 0"	D	1350
	3092 (T)	4.0	7' 8"	E	1440
	3342 (T)	5.0	8' 4"	F	1525

**2552/3552 are the basic hoppers. Extension collars D, E and F can be attached to the basic hoppers to increase capacity.

Center Discharge Hoppers

Specifications / Single Gate Hoppers

	Item Number	Capacity Cu. Ft.	Height Inches	Collar Size	Weight Pounds
Receiving Hopper Without Stand	232-C (T)	32	40	*	405
	245-C (T)	45	48	A	510
	259-C (T)	58	56	B	570
	272-C (T)	72	64	C	630
Floor Hopper Complete with Stand	332-C (T)	32	6' 4"	*	700
	345-C (T)	45	7' 0"	A	805
	359-C (T)	58	7' 8"	B	865
	372-C (T)	72	8' 4"	C	925

*232-C/332-C are the basic hoppers. Extension collars A, B and C can be attached to the basic hoppers to increase capacity.

Specifications / Double Gate Hoppers

	Item Number	Capacity Cu. Yds.	Height Inches	Collar Size	Weight Pounds
Receiving Hopper Without Stand	2642-C (T)	2.4	40	**	740
	2902-C (T)	3.4	48	D	895
	2182-C (T)	4.4	56	E	985
	2442-C (T)	5.4	64	F	1070
Floor Hopper Complete with Stand	3642-C (T)	2.4	6' 4"	**	1100
	3902-C (T)	3.4	7' 0"	D	1255
	3182-C (T)	4.4	7' 8"	E	1345
	3442-C (T)	5.4	8' 4"	F	1430

**2642-C/3642-C are the basic hoppers. Extension collars D, E and F can be attached to the basic hoppers to increase capacity.

Center Discharge Collection Hoppers

Item Number	Top Opening Size Inches	Height Inches	Dia. of Discharge Opening	Weight Pounds
801	14 x 26	20	6, 8, 12	23
802	18 x 30	22	6, 8, 12	30
UPS	25 x 25	20	6, 8, 12	31
803	30 x 30	24	6, 8, 12, 16	35
808	42 x 42	30	6, 8, 12, 16	60



Elephant Trunk and Collars

Elephant Trunk is normally used with collection hoppers for placing concrete into deep or narrow forms. Flexible and abrasion resistant, it can be attached to a variety of collars to meet job requirements.

Elephant Trunk is available in light and inexpensive polyvinyl chloride (PVC) synthetic, or a nylon reinforced plastic elephant trunk which is sturdy and flexible, yet strong and light. Both types of elephant trunk may be obtained in 6-, 8-, and 12-inch inside diameter sizes. Heavy-duty rubber elephant trunk is available in 8-, 12-, 16-inch and larger sizes.

Steel collars are used to support the elephant trunk and connect it to the hopper by chain linkage. Rectangular collars are used when pouring into narrow forms. Round steel collars are available in 6-, 8- and 12-inch inside diameter sizes. Rectangular collars are available to fit all sizes of elephant trunk.

Steel Drop Chutes

Drop Chutes are normally used in conjunction with collection hoppers to restrict free drop of concrete and prevent segregation. They come in short, lightweight sections that hook together to form a flexible assembly and are available in standardized lengths and diameters. As the pour progresses, drop chutes may be removed to allow the placement to continue yet maintain free fall of the concrete to acceptable limits



Item No.	Top Diameter Inches	Bottom Diameter Inches	Length Inches	For Col. Hopper Discharge Size (in.)	Gauge Steel	Weight Pounds
905	7	6	24	6	16	12
902	9	8	30	8	16	17
901	9	8	36	8	16	20
925	14	12	30	12	16	29
924	14	12	36	12	16	32
926	14	12	48	12	16	43
TC086	9	6	19	8	16	8
TC128	12	8	36	12	16	21

Straight Line Concrete Chutes

Straight Line Chutes are designed to guide horizontal concrete flow from the receiving hopper head to the discharge deflector. Used in conjunction with other chutes and hoppers, the assembly provides maximum versatility of application to suit nearly any job requirement.



Item No.	Description	Weight Pounds
011	10' Chute Section, unlined	100
013	30"x30" steel, Receiving-Hopper Head	56
014	Discharge Deflector	35
015	Swivel-Boom Heel Plate	15
016	Intermediate Line Gate for Flexible Drop	170
017	Connecting Hook for Swivel Chutes	5

Concrete Carts

GAR-BRO Concrete Carts are designed to be perfectly balanced when loaded to capacity. They are lighter at the handle and carry more load with less effort. They roll easily over rough terrain because GAR-BRO carts come standard with 26-inch O.D. pneumatic tires. All GAR-BRO carts can be equipped with rockers to facilitate high-angle dumping.



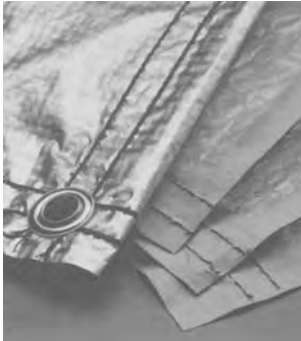
Standard & Rocker Dump Concrete Carts with 400 x 18 Tires

Item No.	Capacity Cu. Ft.	Extreme Width Inches	Length Inches	Wheel Tread Inches	Loading Height Inches	Width Body Inches	Weight Pounds
706	6	30	57	26	32	17	151
708	8	35	60	31	32	22	159
706-R	6	30	58	26	32	17	162
708-R	8	35	61	32	32	22	170

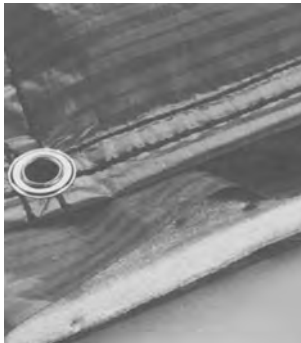
"R" suffix denotes optional dumping rockers.



Concrete Curing – Winter



PATENTED
Space Age Reflective Blankets



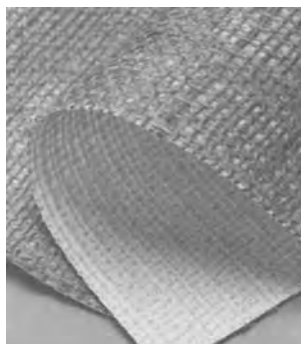
Closed Cell Blankets

WINTER ENCLOSURE MATERIALS

Space Age™ Reflective Blankets - Closed Cell: Midwest now includes Closed Cell in our Space Age™ program. We have decided to use this Space Age™ cover on Closed Cell as well as Bubble. Midwest can now enhance R value of reflective blankets by adding a second layer of aluminum (tests were performed by an independent testing lab with 3" air space).

Space Age™ Reflective Blankets - Bubble: We at Midwest introduced Space Age™ Technology in 1996 and used Bubble for an insulating medium. Midwest can now enhance R value of reflective blankets by adding a second layer of aluminum (tests were performed by an independent testing lab with 3" air space).

Concrete Curing – Summer



Curelap – Poly Coated Burlap



Burlap

CONCRETE CURING BLANKETS – SPACE AGE™

Curelap - Poly Coated Burlap: Space Age™ technology combines poly and burlap to give you a summer concrete curing blanket. Midco Burlap Blankets are a combination of 10 oz. burlap and 5 mil white opaque poly. The 5 mil polyethylene is extruded onto the 10-ounce burlap. The result is a lightweight summer curing blanket that can be used over and over again. The burlap layer distributes the water evenly over the covered surface, while the white opaque poly reflects the intense rays of the sun. In this way, the concrete is allowed to cure ... perfectly.

Midco Burlap Blankets need no rewetting, no resealing and can be used over and over again. After each use, expose burlap side to the sun or air. In this way, the burlap will dry and be ready to use again quickly.

Blankets available in the following widths: 3-1/2', 5', 6-2/3', 8-1/3', 10', 13-1/2', 15', 16-2/3', 20'. Less seaming allowances of 2" per seam. Meets state specifications and A.A.S.H.T.O - M182 Class II.



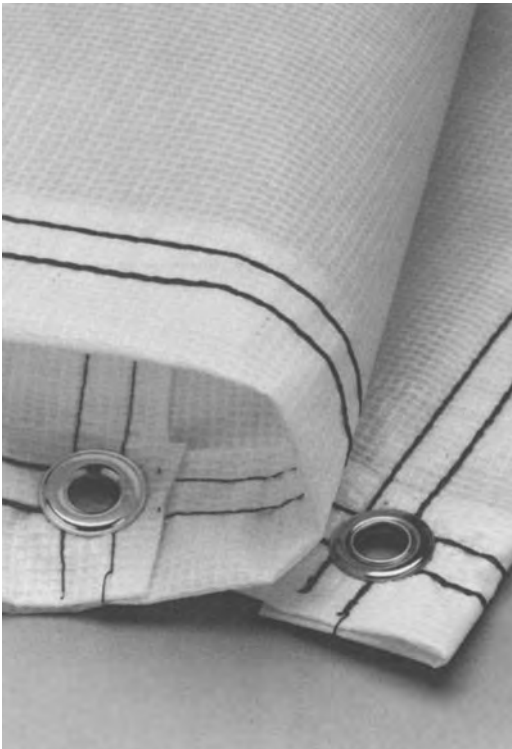
Building Enclosures



Woven/Reinforced



String/Reinforced Dual



Vinyl Tarp - #1300



Canvas Tarp

MOISTOP®

UNDERSLAB VAPOR RETARDER

One Chance to Do It Right

Moistop has long been the industry standard for underslab vapor retarders. With a water vapor permeance of less than .30 perms, Moistop provides an extremely effective barrier to moisture vapor transmission through concrete slabs. Its composite construction of a fiberglass reinforced membrane embedded between two layers of polyethylene assures exceptional protection against tears, punctures and jobsite abuse. The product is part of a complete Moisture Control System for concrete slabs, protecting the subfloor and finished flooring, and engineered to address commercial applications.

Moistop is economically engineered to deliver a superior level of performance at a comparatively low installed cost.

Hassle-Free Installation

Supplied in 96-inch wide rolls, Moistop rolls out fast and smooth over leveled and tamped soil or compacted fill. There is no need to hassle with awkward panels or flimsy folded films. Simply overlap material 6 inches and tape the seams with Moistop® Tape.

Size and Weight

Moistop is supplied in 2,000 sq. ft. rolls (96" x 250'); weight is approximately 4.2 lbs./100 sq. ft. Thickness is 12 mils.

Applicable Standards

American Society for Testing & Materials (ASTM):

- ASTM D-828 – Tensile Properties of Paper and Paperboard Using Constant-Rate-of-Elongation Apparatus.
- ASTM E-96 – Water Vapor Transmission of Materials.
- ASTM F-1249 – Water Vapor Transmission Rate Through Plastic Film and Sheeting Using a Modulated Infrared Sensor.

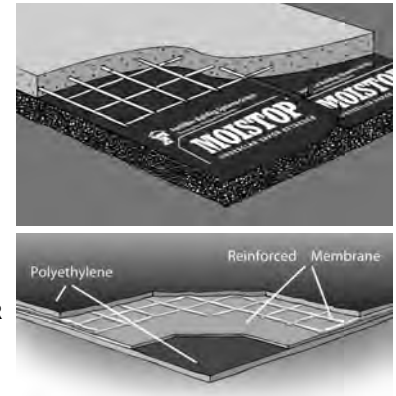
Physical Properties

Moistop is continually tested in accordance with ASTM procedures. Meets Federal Specification UU-B-790a Type 1, Grade "A," Style 4.

Environmental Conditions

Moistop can be used in systems for the control of radon emission.

Moistop protects building interiors from damaging water vapor transmission through concrete slabs.



- **EXCEPTIONAL VAPOR RESISTANCE**
- **TEAR RESISTANT**
- **LIFE-LONG PROTECTION**
- **CONTROLS RADON**
- **MOISTOP® TAPE**
Moistop Tape was designed for use with Moistop Underslab Vapor Retarders. Its excellent adhesion assures tight joints. Moistop Tape is available in 4-inch x 108-foot rolls.

- **THE BOOT™**

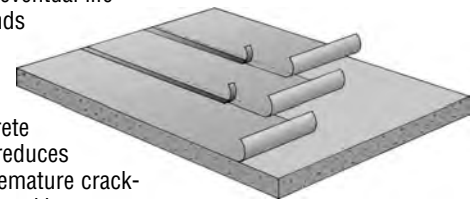
The Boot's unique design makes quick work of sealing around pipes, conduit and other penetrations of any size.

Moistop Underslab Vapor Retarder provides "worry free" protection against concrete slab and flooring degradation.

Orange Label Sisalkraft®

A Reliable Concrete Curing Solution

The strength and eventual life of concrete depends on the curing process. Orange Label Sisalkraft extends the concrete curing cycle and reduces the chances of premature cracking, erosion and breaking to ensure a stronger, more long-lasting concrete slab.



Orange Label Sisalkraft is engineered to control water loss during concrete hydration, ensuring dense, uniformly cured concrete. Two layers of high quality kraft paper with tri-directional reinforcing fibers completely embedded in high-grade asphalt provide superior strength. This helps protect the slab from sun and frost damage. Orange Label Sisalkraft is also treated to resist scuffing, dry rot, mildew and shrinkage. Unlike chemical curing processes, it provides a residue-free, paintable surface once cured.

Orange Label Sisalkraft meets Federal Specification UU-B-790a, Type 2, Grade "E" Style 8 and ASTM Specification C 171. It is available in 3', 4', 6' and 8' widths.

UGL® DRYLOK®



MASONRY WATERPROOFER

A waterproofing paint that is guaranteed to stop water even under pressure. For interior and exterior, above or below grade masonry walls, cinder and concrete blocks, stucco, brick, retaining walls, basements and concrete swimming pools. Oil Base. Available in White, Blue, Beige and Gray.

POLYETHYLENE SHEETING

(4 Mil, 6 Mil, 8 Mil & 10 Mil)

CERTIFICATE OF COMPLIANCE:

By this Certificate of Compliance, we certify that Fortifiber's Polyethylene sheeting manufactured for the use in Construction and Agriculture applications is manufactured to meet the minimum physical property requirements as required by ASTM Standard E154-88 with reference to and including ASTM D4397, C168, D828, E84, E96, E241, C171-92 and D2103.

Fortifiber's polyethylene film when used as a vapor barrier is manufactured to meet the minimum physical requirements as required in accordance with ASTM E96 procedure A. Precautions for deterioration from extended exposure to UV light should be taken as this Fortifiber polyethylene sheeting is manufactured with no ultraviolet retardants unless specified.

Polyethylene Sheeting shall comply with NBS Handbook 130, pertaining to packaging and labeling to accompany NBS Handbook 133, checking the Net Contents of Packaged Goods in full compliance with Weights and Measures Act.



STOCK POLY ITEMS

Construction and Agricultural

Size	Color	Rolls/Pallet	Wt/Pallet
4 Mil			
10'x100'	Clear & Black	42	868
12'x100'	Clear & Black	36	891
14'x100'	Clear	30	868
16'x100'	Clear & Black	30	982
20'x100'	Clear & Black	30	1210
24'x100'	Clear	25	1210
32'x100'	Clear	16	1043
40'x100'	Clear	12	982
6 Mil			
10'x100'	Clear & Black	42	1267
12'x100'	Clear & Black	25	925
14'x100'	Clear & Black	25	1068
16'x100'	Clear & Black	25	1210
20'x100'	Clear & Black	25	1550
24'x100'	Clear & Black	16	1164
28'x100'	Clear & Black	6	1347
32'x100'	Clear & Black	12	1164
40'x100'	Clear & Black	12	1438
8 Mil			
20'x100'	Clear & Black	12	982
10 Mil			
20'x100'	Clear & Black	9	925



Form/Build it with
WOOD



- 2" x 4" x 8'
 - 2" x 4" x 10'
 - 2" x 4" x 12'
 - 2" x 4" x 16'
 - CDX Plywood – 3/8", 1/2", 3/4"
 - B/B Plyform – 5/8", 3/4"
 - HDO for Form Repair – 1/2"
 - Fire Treated Plywood – 1/2", 3/4"
- KEPT IN STOCK!***

Hacks,
Truckloads or
Piecemeal
Pricing!

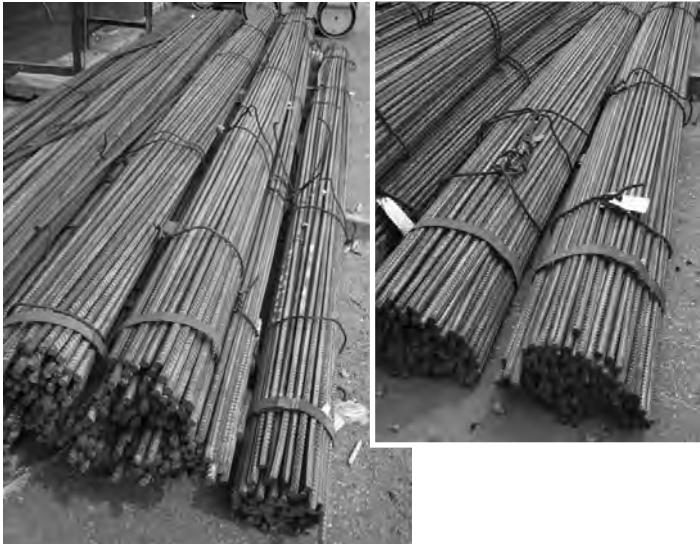


REBAR AND WIRE MESH

CONCRETE REINFORCEMENT BAR

ASTM STANDARD REINFORCING BARS			
BAR SIZE DESIGNATION	AREA SQ. INCHES	WEIGHT POUNDS PER FT.	DIAMETER INCHES
#3	.11	.376	.375
#4	.20	.668	.500
#5	.31	1.043	.625
#6	.44	1.502	.750
#7	.60	2.044	.875
#8	.79	2.670	1.000
#9	1.00	3.400	1.128
#10	1.27	4.303	1.270
#11	1.56	5.313	1.410
#14	2.25	7.650	1.693
#18	4.00	13.600	2.257

PHYSICAL REQUIREMENTS FOR STANDARD ASTM DEFORMED REINFORCING BARS						
TYPE OF STEEL and ASTM SPECIFICATION NO.	SIZE NOS. INCLUSIVE	GRADE	TENSILE STRENGTH MIN. PSI	YIELD MIN. PSI	PER CENT ELONGATION in 8" MINIMUM	COLD BEND TEST PIN DIAMETER (d = nominal diameter of specimen)
Billet-Steel A615-84a	3-6	40	70,000	40,000	#3 .....11 #4, #5, #6....12	Under Size #6 .....4d per S1 .....3-1/2d #6 .....5d
	3-11 14, 18	60	90,000	60,000	#3, #4, #5, #6 .....9 #7, #8 .....8 #9, #10, #11, #14, #18 .....7	Under Size #6 .....4d per S1 .....3-1/2d #6 .....5d #7, #8 .....6d #9, #10, #11 .....8d per S1 .....7d #14, #18 (90°) .....9d

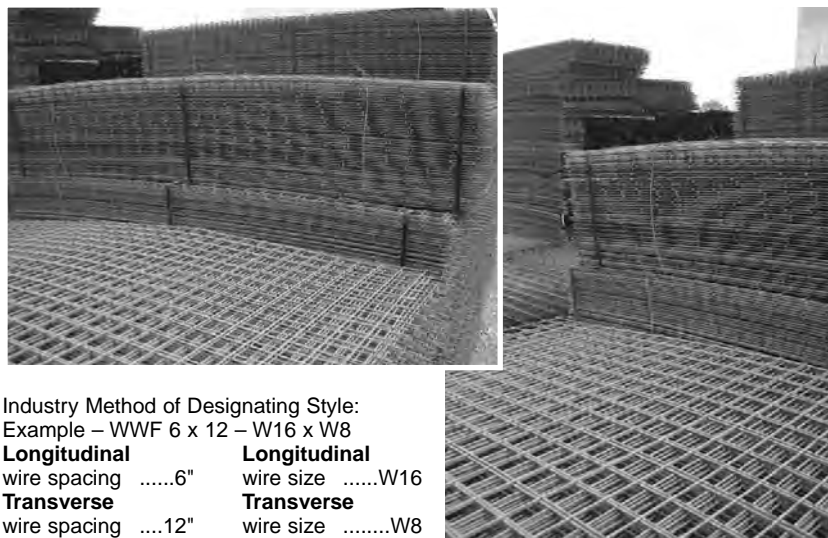


REBAR PIECES PER TON		
SIZE	20' 0" LENGTHS	
	NO. PCS.	WEIGHT
#2	600	.....2004#
#3	266	.....2000#
#4	150	.....2004#
#5	96	.....2003#
#6	67	.....2013#
#7	49	.....2003#
#8	38	.....2029#
#9	30	.....2040#
#10	24	.....2065#
#11	19	.....2019#

Epoxy coated mesh and rebar also available

WELDED WIRE MESH

WELDED WIRE FABRIC			
SPACING	STYLE	(W NUMBERS)	APPROX. WT. PER 100 SQ. FEET
6 x 6	10/10	(W1.4/W1.4)	21
6 x 6	8/8	(W2.1/W2.1)	30
6 x 6	6/6	(W2.9/W2.9)	42
6 x 6	4/4	(W4.0/W4.0)	58
6 x 6	3/3	(W4.7/W4.7)	68
6 x 6	2/2	(W5.4/W5.4)	78
6 x 6	1/1	(W6.4/W6.4)	91
6 x 6	0/0	(W7.4/W7.4)	107
4 x 4	10/10	(W1.4/W1.4)	31
4 x 4	8/8	(W2.1/W2.1)	44
4 x 4	6/6	(W2.9/W2.9)	62
4 x 4	4/4	(W4.0/W4.0)	85



Industry Method of Designating Style:
 Example – WWF 6 x 12 – W16 x W8
Longitudinal wire spacing6" **Longitudinal** wire sizeW16
Transverse wire spacing12" **Transverse** wire sizeW8





REBAR CUTTER/BENDER



Avoid Delays, Shortages and Misfabrication With the Original Dual Rebar Cutter/Bender

- Easily portable.
- Extremely durable.
- Simple to use.

Designed and developed by a contractor, the Dual 345R is the original rebar cutter/bender. For 40 years, we've helped eliminate the headaches and cost overages that result from re-bar shortages, late shipment, misfabrications and other issues that can delay your job.

Model 345R

5/8" rod capacity.
66 lbs.

Tool may be used as a cable cutter by replacing rebar blades with #3456C Cable Blades. Mounting board not included.

ASTM Standard Reinforcing Bars				
Bar Size Designation	Weight (Pounds per Foot)	Nominal Dimensions—Round Sections		
		Diameter (Inches)	Cross Sectional (Area Sq. Inches)	Perimeter (Inches)
#3	.376	.375	.11	1.178
#4	.668	.500	.20	1.571
#5	1.043	.625	.31	1.963
#6	1.502	.750	.44	2.356
#7	2.044	.875	.60	2.749
#8	2.670	1.000	.79	3.142
#9	3.400	1.128	1.00	3.544
#10	4.303	1.270	1.27	3.990
#11	5.313	1.410	1.56	4.430
#14	7.65	1.693	2.25	5.32
#18	13.60	2.257	4.0	7.09



WELDED MESH

Galvanized before welded steel with zinc coated wires and a welded construction to give a strong, tough and rust-resistant product. We offer a wide variety of mesh spacings, widths and gauges.

Ideal for industrial, commercial and residential applications and a variety of outdoor projects.

14-Gauge Wire

Size of Mesh: 2" x 4"
 Length of Rolls: 50', 100'
 Width of Rolls: 36", 48", 60", 72"

14-Gauge

Size of Mesh: 1" x 2"
 Length of Rolls: 25', 50', 100'
 Width of Rolls: 18", 24", 36", 48", 60", 72"

14-/16-Gauge

Size of Mesh: 1" x 1"
 Length of Rolls: 100'
 Width of Rolls: 24", 36", 48", 60", 72"

16-Gauge (Economy Fence)

Size of Mesh: 3" x 2"
 Length of Rolls: 50'
 Width of Rolls: 24", 36", 48"

16-Gauge

Size of Mesh: 1/2" x 1"
 Length of Rolls: 25', 100'
 Width of Rolls: 18", 24", 30", 36", 48"

16-Gauge (Galvanized After Welded)

Size of Mesh: 1" x 1/2"
 Length of Rolls: 100'
 Width of Rolls: 24", 36", 48"

HARDWARE CLOTH

Galvanized after welded wire utilizing hard drawn wire (1/8" mesh woven). Adds strength, rigidity and uniformity to mesh. Heavy zinc coating provides maximum protection and extra durability.

Hardware cloth has an unlimited number of applications around the home, business or farm.

19-Gauge

Size of Mesh: 1/2" x 1/2"
 Length of Rolls: 50', 100'
 Width of Rolls: 24", 30", 36", 48", 60"

23-Gauge

Size of Mesh: 1/4" x 1/4"
 Length of Rolls: 50', 100'
 Width of Rolls: 24", 30", 36", 48"

27-Gauge

Size of Mesh: 8" x 8"
 Length of Rolls: 100'
 Width of Rolls: 24", 30", 36", 48"

HEX NETTING

Galvanized uniform 20-gauge, hexagonal wire, with a reverse twist mesh. Reinforced with a Bee-Line horizontal wire every 12". Available in two mesh sizes with a variety of width and length sizes. Each roll separately packaged.

Ideal for lawn and garden, cages and other home projects.

Size of Mesh: 1", 2"
 Length of Rolls: 50', 150'
 Width of Rolls: 12", 18", 24", 36", 48", 60", 72"

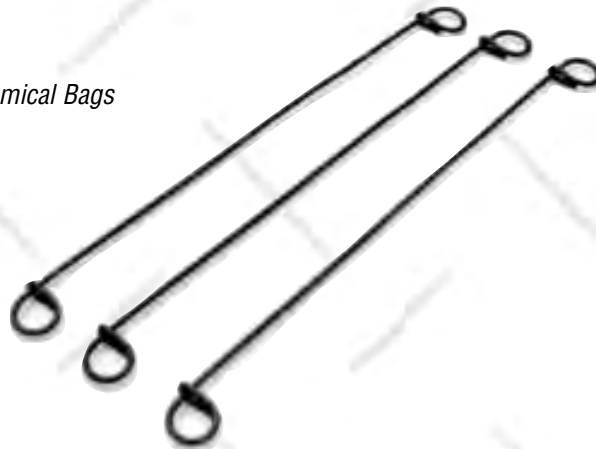


AWT Double Loop Wire Ties

From 3" to 40", 19- to 12-Gauge, in a variety of finishes, American Wire Tie manufactures them all. Custom loops and lengths to your specifications.

Applications:

- Packaging
- Construction
- Pre-Cast
- Pre-Stressed
- Bagging and Bundling
- Foundries
- Carpet and Textile
- Fencing
- Paper
- Bundling for Fertilizer or Chemical Bags
- Pre-Stressed Concrete
- Marine Use
- Scallop Bags
- Gabion Boxes
- Produce Bags
- Potato Bags
- Ice Bags
- Nursery Stock



Finishing Touches

- **Black Annealed** – American Wire Ties are made of dead-soft annealed wire – pliable, yet tough; easy to twist, but hard to break. Some of the many industries presently using the Black Annealed ties are: Construction, Pre-Cast and Pre-Stressed, Bagging and Bundling, Foundries, Carpet and Textile, Fencing, Paper and packaging.
- **PVC Coated** – a dead-soft annealed core, surrounded by a 7 mil thickness of Poly Vinyl Chloride. Used for tying epoxy-coated rebar, bundling, fertilizer or chemical bags and anytime you need cushioned wire with added protection against corrosion, salt or abrasives.
- **Galvanized Annealed** – the same strength as our others, but made from corrosion resistant zinc-coated wire. This is the tie with the long life for pre-stressed concrete, marine use, scallop bags, gabion boxes and any application where length of service is important.
- **Coppered** – An attractive closure for all produce bags, potato bags, ice bags and nursery stock.

Rod Size	No. 2 1/4"	No. 3 3/8"	No. 4 1/2"	No. 5 5/8"	No. 6 3/4"	No. 7 7/8"	No. 8 1"	No. 9 1-1/8"	No. 10 1-1/4"
No. 2 1/4"	3-1/2	4	4-1/2	5	5-1/2	6-1/2	7	7	7-1/2
No. 3 3/8"	4	4-1/2	5	5	5-1/2	6-1/2	7	7	7-1/2
No. 4 1/2"	4-1/2	5	5	5-1/2	6	6-1/2	7-1/2	7-1/2	8
No. 5 5/8"	5	5	5-1/2	6	6-1/2	7	8	8	8-1/2
No. 6 3/4"	5-1/2	5-1/2	6	6-1/2	6-1/2	7-1/2	8	8-1/2	8-1/2
No. 7 7/8"	6-1/2	6-1/2	6-1/2	7	7-1/2	7-1/2	8-1/2	9	9-1/2
No. 8 1"	7	7	7-1/2	8	8	8-1/2	9	9-1/2	10
No. 9 1-1/8"	7	7	7-1/2	8	8-1/2	9	9-1/2	10	10-1/2
No. 10 1-1/4"	7-1/2	7-1/2	8	8-1/2	8-1/2	9-1/2	10	10-1/2	10-1/2

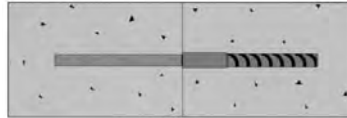


SPEED DOWEL™
PATENTED CONCRETE DOWELING SYSTEM

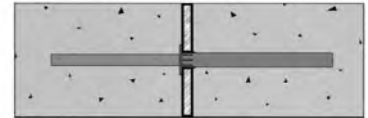
PRODUCT DESCRIPTION:

Speed Dowel all-plastic sleeves are designed for the purpose of assuring proper field positions and alignment of steel dowels at concrete flatwork construction joints and expansion joints. Speed Dowel places rigid polypropylene sleeves in perfect position perpendicular to the vertical joint edge and parallel to both the horizontal plane and to each other. The Speed Dowel sleeve creates a cavity that will accept either smooth or deformed dowels and will prevent bonding to the initial concrete placement. The potential for cracking and spalling are reduced by allowing free shrinking and expansion of adjacent concrete surfaces, while effectively combating differential settlement.

Typical Joint Systems and Proper Slip Dowel Alignment



SPEED DOWEL™ in typical construction joint



SPEED LOAD in typical expansion joint

SPEED LOAD SLEEVES

Sleeve Code	Closed End Dowel Size	Sleeve Length
PSD1/2X5LT	1/2" x 10" Smooth Dowel	5"
PSD1/2X9LT	1/2" x 18" Smooth Dowel	9"
PSD3/4X5LT	3/4" x 10" Smooth Dowel	5"
PSD3/4X9LT	3/4" x 18" Smooth Dowel	9"
Code	Open End Dowel Size	Length
PSD1/2LTO	1/2" x 10" or longer Smooth Dowel	5"
PSD3/4LTO	3/4" x 10" or longer Smooth Dowel	5"



Typical projects include:

- Distribution Centers.
- Manufacturing Facilities.
- Warehouses.
- Commercial / Industrial Developments.
- Parking Facilities.
- Entertainment Centers.
- Airports.

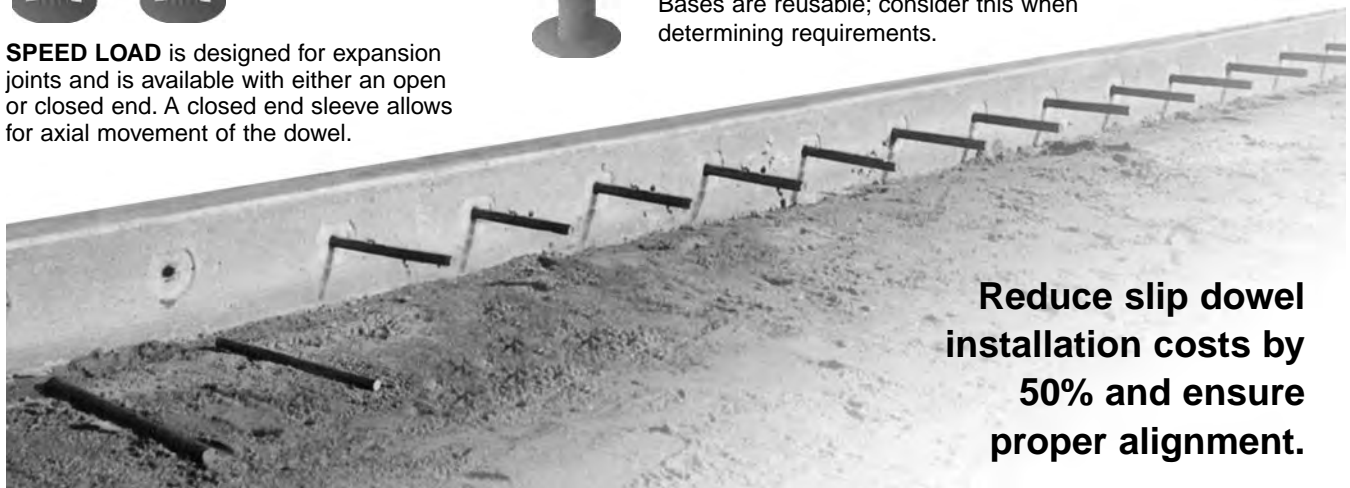


SPEED LOAD is designed for expansion joints and is available with either an open or closed end. A closed end sleeve allows for axial movement of the dowel.

SPEED DOWEL™ SLEEVES AND BASES

Sleeve Code	Round Dowel Size	Sleeve Length	Base Code
PSD09/#4TX	5/8" Smooth or #4 Rebar x 18"	9"	PSD/#4BX
PSD12/#4TX	5/8" Smooth or #4 Rebar x 24"	12"	
PSD09/#5TX	3/4" Smooth or #5 Rebar x 18"	9"	PSD/#5BX
PSD12/#5TX	3/4" Smooth or #5 Rebar x 24"	12"	
PSD09/#6TX	7/8" Smooth or #6 Rebar x 18"	9"	PSD/#6BX
PSD12/#6TX	7/8" Smooth or #6 Rebar x 24"	12"	
PSD09/#7TX	1" Smooth or #7 Rebar x 18"	9"	PSD/#7BX
PSD12/#7TX	1" Smooth or #7 Rebar x 24"	12"	
PSD09/#9TX	1-1/4" Smooth or #9 Rebar x 18"	9"	PSD/#9BX
PSD12/#9TX	1-1/4" Smooth or #9 Rebar x 24"	12"	
PSD230x20TL	20mm x 460mm Round Dowel	230mm	PSD20BL
PSD305x20TL	20mm x 610mm Round Dowel	305mm	
Code	Square Dowel Size	Length	Code
PSDQ9X3/4TX	3/4" x 18" Square Dowel	9"	PSDQ3/4BX
PSDQ12X3/4TX	3/4" x 24" Square Dowel	12"	
PSDQ230X20TL	20mm x 460mm Square Dowel	230mm	PSDQ20BL
PSDQ305X20TL	20mm x 610mm Square Dowel	305mm	

SPEED DOWEL™ is a two-component system consisting of a sleeve and an attachment base. Bases are reusable; consider this when determining requirements.



Reduce slip dowel installation costs by 50% and ensure proper alignment.

Types of Concrete Joints

Contraction (Control) Joint

Contraction joints are designed planes of weakness to control the location of cracks due to shrinkage of concrete.

Construction Joint

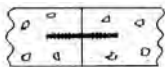
Construction joints are determined by interruptions in the placement of concrete.

Expansion (Isolation) Joint

Expansion joints separate or isolate abutting concrete structures (walls, slabs, footings, columns) protecting them from compressive stresses that may develop due to thermal expansion, settlement, creep, live load deflections, drying shrinkage or crush. Differential movement at these joints can be both lateral and transverse.

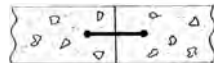
Waterstops for Non-Working Joints

Ribbed Flat



Construction or contraction joints where little or no movement is expected. Ribbed shapes provide a better seal than dumbbell shapes.

Dumbbell



Construction or contraction joints where little or no movement is expected.

Base Seal



Ideal for slab-on-grade joints or walls which will be back-filled. Easy to form.

***Labyrinth**



Primarily used in vertical joints where little or no differential movement is expected. Does not require split forming and adds a key to the joint. Difficult to use in horizontal joints.

***Split Waterstop**



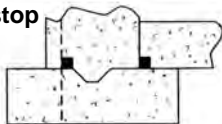
Available in ribbed with centerbulb and dumbbell shapes. Eliminates the need for split form bulkhead.

Hydrotite



Used in joints of limited movement, Hydrotite expands with water contact to create a compression seal. Installs quickly.

Swellstop



Used in precast and cast-in-place below grade applications. Swellstop is intended for non-moving joints only.

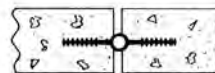
Lockstop



Provides a watertight, mastic bond to concrete surfaces in non-moving joints.

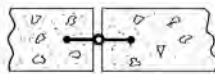
Waterstops for Working Joints

Ribbed with Centerbulb



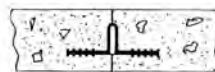
The most versatile type of waterstop available. The centerbulb accommodates lateral, transverse and shear movement. Larger centerbulbs accommodate larger movements.

Dumbbell with Centerbulb



Accommodates lateral, transverse and shear movements. Ribbed shapes provide better sealing characteristics.

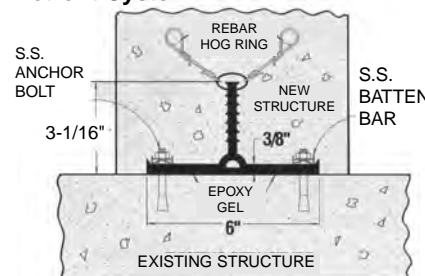
***Tear Web**



Accommodates large movements. Upon joint movement the tear web ruptures allowing the U-bulb to deform without putting the material in tension.

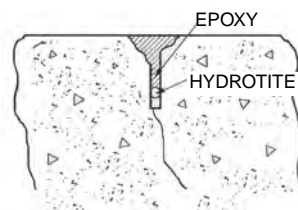
Retrofit Applications

Retrofit System



Seals joints where new construction meets existing structure. Eliminates the need to saw cut and grout in a conventional waterstop.

Hydrotite/Leakmaster



Used in repair of existing joints, Hydrotite reduces stress on sealants. Also use where joining new concrete to existing and little movement is expected.

*Some directional changes or intersections may not be practical or possible with this style of waterstop.

WATERSTOP PROFILES

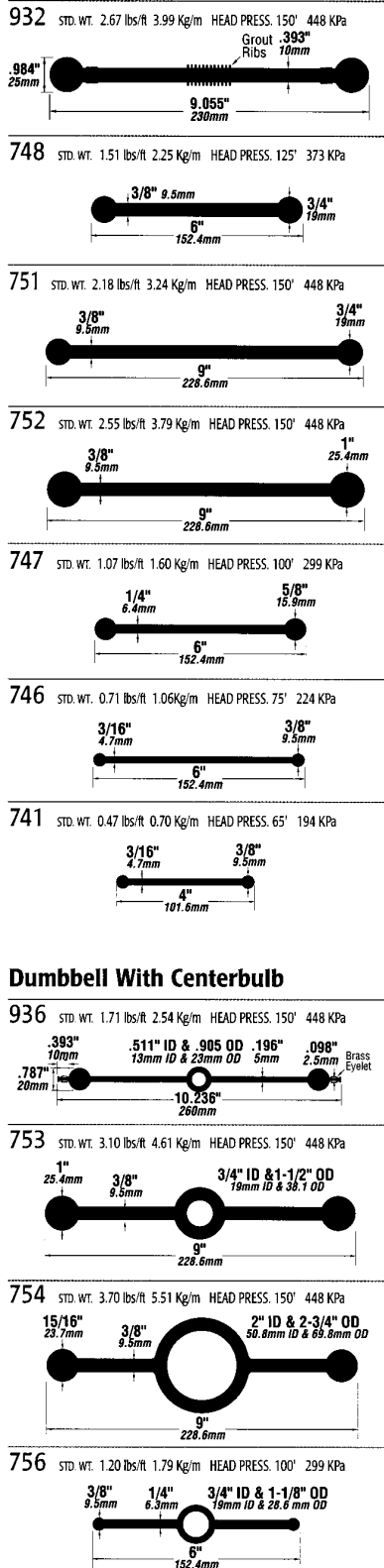
Once you have determined the joint type, the magnitude of the differential movements and the type of waterstop to meet project requirements, you must select a specific profile from the multitude of shapes. The following are a few of the most commonly specified profiles. GREENSTREAK® waterstop is manufactured in widths from 4" to 12" and in thicknesses from 1/8" to 1/2". Over 110 different sizes and profiles are available to meet the most demanding requirements.

Should your project require a special shape, GREENSTREAK offers the world's broadest line of waterstop sizes and profiles. Custom orders will be considered. A Waterstop Profile supplement illustrating all of the profiles is available upon request. For a copy, call GREENSTREAK at (800) 325-9504.

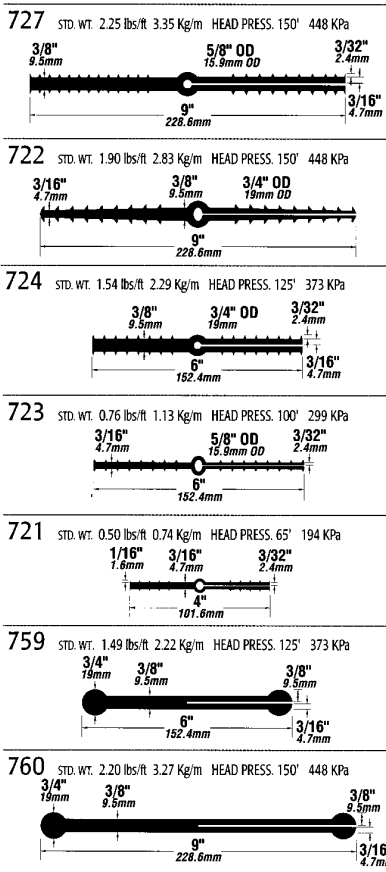
PVC SHAPES		
<p>Ribbed</p> <p>646 STD. WT. 2.37 lbs/ft 3.53 Kg/m HEAD PRESS. 175' 523 KPa <i>Montgomery-Watson</i></p>	<p>Ribbed With Centerbulb</p> <p>735 STD. WT. 2.45 lbs/ft 3.65 Kg/m HEAD PRESS. 175' 523 KPa <i>CH2M-Hill Montgomery-Watson</i></p>	<p>Ribbed With Centerbulb</p> <p>706 STD. WT. 1.90 lbs/ft 2.83 Kg/m HEAD PRESS. 150' 448 KPa</p>
<p>957 STD. WT. 1.75 lbs/ft 2.60 Kg/m HEAD PRESS. 150' 448 KPa</p>	<p>696 STD. WT. 2.65 lbs/ft 3.94 Kg/m HEAD PRESS. 175' 523 KPa <i>Bureau of Reclamation COE</i></p>	<p>702 STD. WT. 0.74 lbs/ft 1.10 Kg/m HEAD PRESS. 65' 194 KPa <i>CH2M-Hill</i></p>
<p>679 STD. WT. 1.50 lbs/ft 2.23 Kg/m HEAD PRESS. 125' 373 KPa <i>Montgomery-Watson</i></p>	<p>718 STD. WT. 2.10 lbs/ft 3.13 Kg/m HEAD PRESS. 175' 523 KPa</p>	<p>701 STD. WT. 0.40 lbs/ft 0.60 Kg/m HEAD PRESS. 50' 149 KPa</p>
<p>956 STD. WT. 1.32 lbs/ft 1.96 Kg/m HEAD PRESS. 125' 373 KPa</p>	<p>709 STD. WT. 1.63 lbs/ft 2.43 Kg/m HEAD PRESS. 175' 523 KPa</p>	<p>838 STD. WT. 1.10 lbs/ft 1.64 Kg/m HEAD PRESS. 150' 448 KPa</p>
<p>786 STD. WT. 2.07 lbs/ft 3.08 Kg/m HEAD PRESS. 175' 523 KPa</p>	<p>953 STD. WT. 1.77 lbs/ft 2.64 Kg/m HEAD PRESS. 150' 448 KPa</p>	<p>712 STD. WT. 4.38 lbs/ft 6.52 Kg/m HEAD PRESS. 225' 672 KPa</p>
<p>783 STD. WT. 1.39 lbs/ft 2.07 Kg/m HEAD PRESS. 125' 373 KPa</p>	<p>732 STD. WT. 1.60 lbs/ft 2.38 Kg/m HEAD PRESS. 125' 373 KPa <i>CH2M-Hill Montgomery-Watson</i></p>	<p>713 STD. WT. 3.60 lbs/ft 5.36 Kg/m HEAD PRESS. 225' 672 KPa</p>
<p>788 STD. WT. 2.07 lbs/ft 3.08 Kg/m HEAD PRESS. 175' 523 KPa</p>	<p>705 STD. WT. 1.19 lbs/ft 1.77 Kg/m HEAD PRESS. 125' 373 KPa <i>Bureau of Reclamation</i></p>	<p>738 STD. WT. 2.73 lbs/ft 4.06 Kg/m HEAD PRESS. 150' 448 KPa</p>
<p>703 STD. WT. 0.73 lbs/ft 1.09 Kg/m HEAD PRESS. 100' 299 KPa</p>	<p>731 STD. WT. 1.73 lbs/ft 2.58 Kg/m HEAD PRESS. 175' 523 KPa</p>	<p>781 STD. WT. 1.73 lbs/ft 2.58 Kg/m HEAD PRESS. 175' 523 KPa</p>

PVC SHAPES

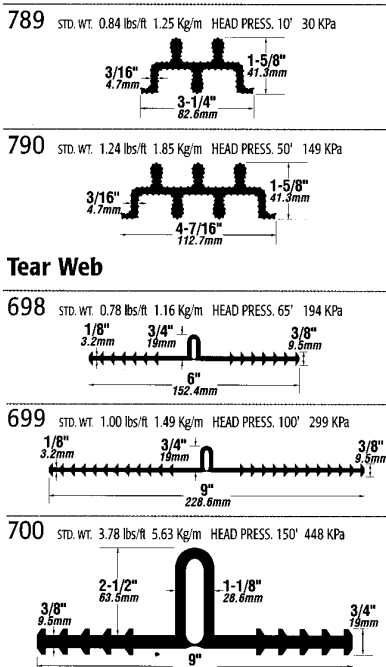
Dumbbell



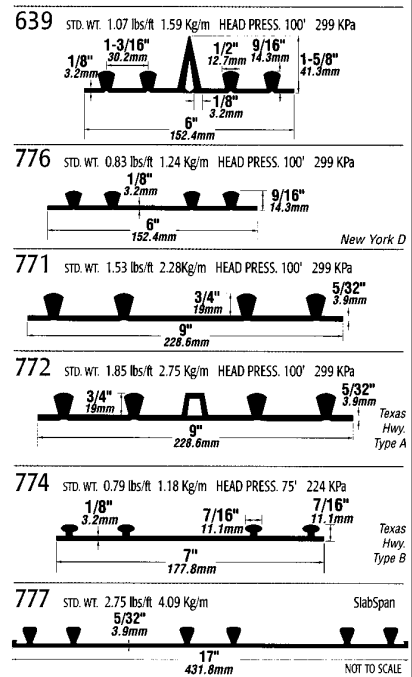
Split Flange



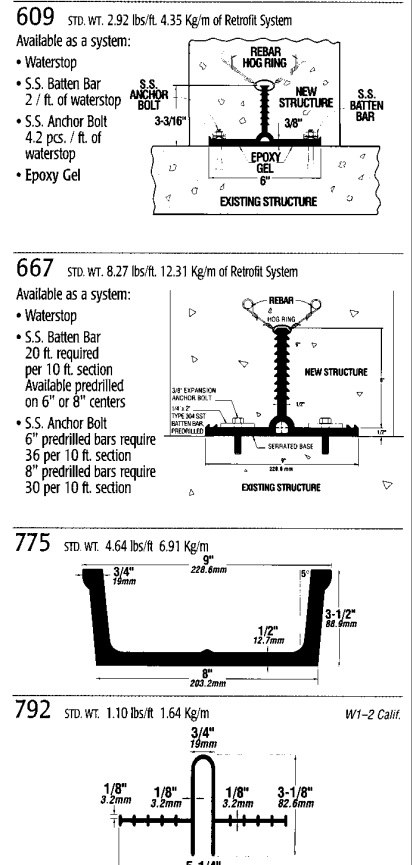
Labyrinth



Base Seal



Special Shapes



RUBBER SHAPES

Neoprene Rubber

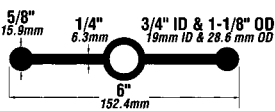
918 STD. WT. 1.51 lbs/ft 2.25 Kg/m HEAD PRESS. 125' 373 KPa



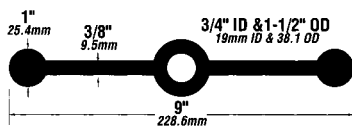
919 STD. WT. 2.20 lbs/ft 3.27 Kg/m HEAD PRESS. 150' 448 KPa



920 STD. WT. 1.22 lbs/ft 1.82 Kg/m HEAD PRESS. 100' 299 KPa



921 STD. WT. 2.90 lbs/ft 4.32 Kg/m HEAD PRESS. 150' 448 KPa



Styrene Butadiene Rubber (SBR)

902 STD. WT. 1.30 lbs/ft 1.93 Kg/m HEAD PRESS. 125' 373 KPa



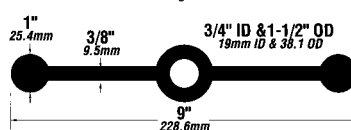
903 STD. WT. 1.90 lbs/ft 2.83 Kg/m HEAD PRESS. 150' 448 KPa



904 STD. WT. 1.05 lbs/ft 1.55 Kg/m HEAD PRESS. 100' 299 KPa



906 STD. WT. 2.50 lbs/ft 3.70 Kg/m HEAD PRESS. 150' 448 KPa

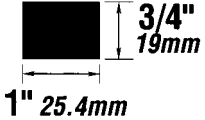


STRIP APPLIED

Hydrotite

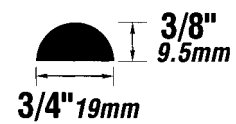
Swellstop

594 STD. WT. 0.55 lbs/ft 0.81 Kg/m



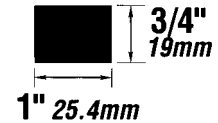
Swellstop II

596 STD. WT. 0.22 lbs/ft 0.33 Kg/m



Lockstop

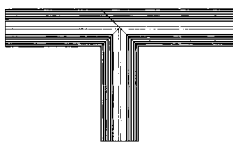
595 STD. WT. 0.48 lbs/ft 0.71 Kg/m



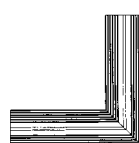
PVC FABRICATIONS

PVC Intersections

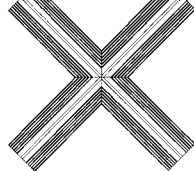
Flat Tee



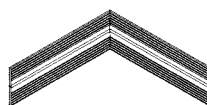
Flat Ell



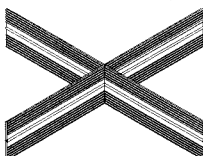
Flat Cross



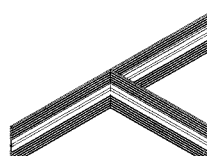
Vertical Ell



Vertical Cross

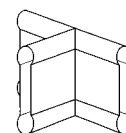


Vertical Tee

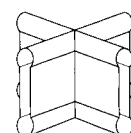


RUBBER FITTINGS

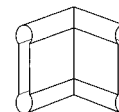
Rubber Fittings (Vertical and Flat)



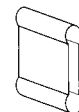
Vertical "T"



Vertical Cross



Vertical Ell



Union

Note: Adhesive available for bonding rubber intersections (unions).

*Consult Greenstreak for special fabrications your project may require

Expanding Waterstops for Concrete Construction Joints



Waterstop-RX is a flexible strip concrete construction joint waterstop that provides a positive seal by expanding upon contact with water. Waterstop-RX is an active waterstop that functionally replaces conventional passive PVC dumbbell waterstops. Waterstop-RX is designed for both continuous and intermittent hydrostatic conditions and has been successfully tested to resist 231 feet (70m) of hydrostatic pressure.

The key to the effectiveness of Waterstop-RX is its 75% sodium bentonite content which provides superior expansion to seal cracks and fill small voids. Proven effective on projects worldwide for over 20 years, Waterstop-RX is a reliable and cost-effective solution to preventing water infiltration through concrete joints.

Waterstop-RX is certified by NSF International to conform with the requirements of NSF Standard 61 – Drinking Water System Components – Health Effects, thus certifying that the product can be used in potable water storage structures.

Installation is fast and easy. Simply adhere Waterstop-RX to the concrete, steel or PVC (pipes) with Volclay WB-Adhesive and then pour the concrete. Waterstop-RX reduces labor costs by eliminating the workmanship rigors of welding the joints or split-forming associated with traditional PVC dumbbell type waterstops. Waterstop-RX can also be used to provide protection when conventional PVC waterstop has been installed without the joints welded.

Three different sizes and profiles are available to match your specific project needs: RX-101, RX-101T, and RX-102.

Waterstop-RX 101 is the largest profile with a rectangular cross section of 1" by ¾" (25 x 19mm). Waterstop-RX 101T is a 1¼" by ½" trapezoidal shape profile with a reinforcing poly scrim embedded in the surface. The patented trapezoidal shape of RX-101T distributes the expansion pressures over a greater area and the reinforcing scrim provides additional product stability when concrete is placed. Waterstop RX-102 is a half-round profile measuring ¾" by 3/8". Requiring only 2" of concrete coverage, RX-102 is designed for concrete less than 8" (200mm) thick.

Waterstop-RX offers a low cost opportunity to enhance the performance of a sound external waterproofing system by sealing the areas of highest probability of water infiltration through the concrete, and should therefore be implemented as part of the waterproofing design.

Waterstop-RX Advantages Over PVC Dumbbell Waterstops

- Easy to Install – Waterstop-RX can be installed by one person without split-forming or splice welding roll ends.
- Positive Seal – Waterstop-RX swells and forms a positive seal.
- No Special Transition Parts – Waterstop-RX does not require special cross, corner or "L" parts to transition from horizontal to vertical.
- Safe – Waterstop-RX is non-toxic and requires no special handling.
- Flexible – Waterstop-RX has excellent flexibility so it can be installed around irregular penetrations like steel H-Piles.
- NSF Standard 61 Certified – Use with potable water tanks.
- New-to-existing Concrete – Installs without chipping or saw-cutting existing concrete.

Limitations

Waterstop-RX is not an expansion joint material and should not be used as such. A traditional expansion joint material must be used in expansion or any moving joint. A minimum of 3" (75mm) of concrete cover must separate Waterstop-RX from the face of the concrete.

Typical Applications

- Construction joints in foundation slabs or below grade walls.
- Around pipes, steel H-piles and other penetrations.
- New-to-existing concrete work.
- Septic tanks, sanitary and storm sewer manholes.
- Utility and burial vaults.
- Box culverts.
- Potable water tanks.

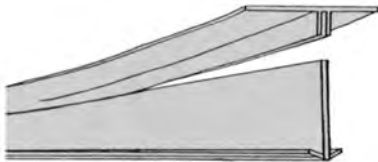
Volclay[®] WB-ADHESIVE

WB-Adhesive is a water-based latex adhesive used to secure Volclay Waterstop-RX into position for all installations – vertical, horizontal and around penetration applications. The product is VOC compliant and changes from a light gray to dark gray upon application. Waterstop-RX is installed to the adhesive after it turns to the dark gray color. Product should be stored in dry, warm conditions and should not be allowed to freeze prior to use. Typical coverage per gallon (3.8 L) is 400-600 linear feet (120-180m).

Product packaging: 1-gallon (3.8 L) cans; 4 cans per box.

JOINT FORMERS

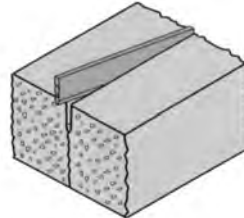
ZIPCAP, 2-Piece Control Joint Former



Cat. No.	Depth
855	1"
856	1-1/2"
857	2"

- Controls random cracking and eliminates saw cutting.
- Installs easily in fresh concrete and provides excellent aggregate interlock.

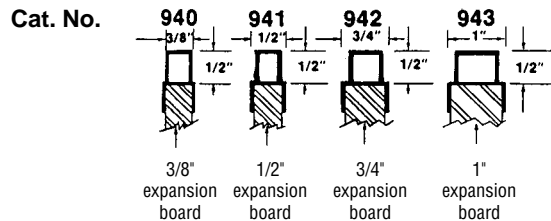
TRANSVERSE Control Joint Former



Cat. No.	Depth	Width
852	2"	1/4"
853	2-1/4"	3/8"
854	3"	3/8"

- Eliminates saw cutting and forms accurate void depth for caulks or sealants.
- Installs easily and can be reused.

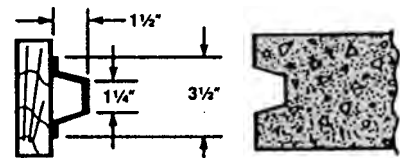
EXPANSION BOARD CAP



- Forms a clean, uniform groove over expansion boards.
- Eliminates joint cleanup.
- Top removes quickly and easily.
- Prepares joint for caulk or sealant.

PLASTIC KEYWAY

Cat. No. 521



- Lightweight, impact resistant plastic.
- Reusable.
- Can be stapled or nailed to form.

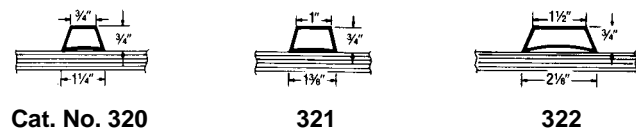
FINISH FORMERS

CHAMFER Strips

	Cat. No.	"A"	Ref.
Radius with Tail	602	1/2"	3/8"
	603	3/4"	9/16"
	604	1"	3/4"
Triangular with Tail	611	1/2"	23/32"
	612	3/4"	1-1/16"
	613	1"	1-13/32"
	614	1-1/2"	2-1/8"
Triangular	621	1/2"	23/32"
	622	3/4"	1-1/16"
	623	1"	1-13/32"

- Prevents leakage and eliminates rubbing or stoning.
- Can be formed for radius applications.
- Reusable.

RUSTICATION Strips



- Creates architectural reveal.
- Can be used to eliminate horizontal seams on form liner applications.
- Use vertically or horizontally.
- No form release needed.
- Reusable.

All products shown on this page are provided in 10-foot lengths. Carton quantities also available.

Flexible solutions. Concrete performance.

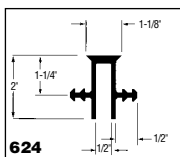
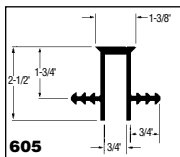
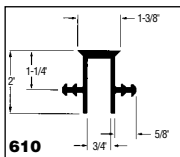
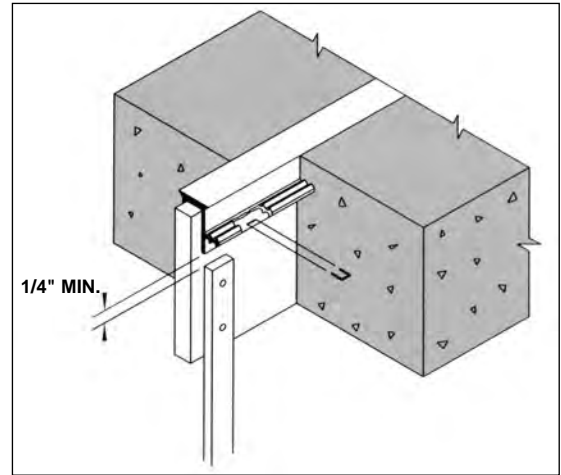
G-SEAL

DURABILITY AND APPEARANCE

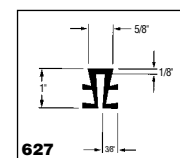
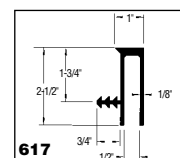
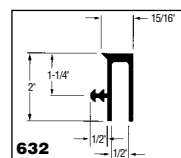
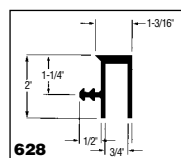
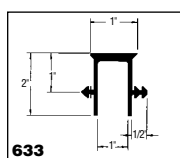
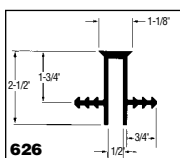
- Acts similar to a waterstop.
- Will not work free from joint.
- Formulated for resistance to normally encountered chemicals.
- Excellent abrasion resistance.
- Available in a variety of colors for decorative concrete.

INSTALLATION BENEFITS

- Creates an aesthetically pleasing concrete joint.
- Compatible with all types of expansion boards.
- Requires no special tools or equipment.
- Installs easily prior to placement of concrete.
- Allows for uninterrupted concrete placement.
- Requires no tooling of joint.
- Installs at any temperature and climatic condition.
- Factory fabrications simplify intersections and transitions.
- Offers flexibility for radius joint positioning.
- Installs safely and is non-toxic.
- Creates maintenance free, long lasting joint seal.



PROPERTY	TEST METHOD	REQUIREMENTS	TYPICAL PROPERTIES OF G-SEAL
Tensile Strength	ASTM D412-92	2350 psi	2470 psi
Elongation	ASTM D412-92	375% min.	410%
Hardness	ASTM D2240-95	81+/-3 Shore A	81 Shore A
Oil Swell ASTM #3 Oil, 70 hrs. @ 212°F Change in volume/weight	ASTM D471-95	+/-3% by volume +/-15% by weight	1.74% by volume -10.1 by weight
Abrasion Resistance (10,500 cycles, 1000 gram load)	ASTM D3884	Material Loss: -0.35 gms. max.	Material Loss - 0.26 gms.
Ozone Resistance (20% strain, 300 pphm, 70 hrs. @ 104°F)	ASTM D518-91	No Cracking	No Cracking
Adhesive Bond Strength	ASTM D412-92	1000 psi min.	1098 psi
Results after Heat Aging (24 hrs. @ 70°C)	ASTM D573	Tensile strength retained - 90% Elongation retained - 90% Hardness change - +/-3	Tensile strength retained - 99% Elongation retained - 98% Hardness change in points 0



STYROFOAM™ Brand Extruded Polystyrene Insulation

For Precast Sandwich Panel Applications

STYROFOAM™ Brand Square Edge

STYROFOAM™ Brand Square Edge insulation is an extruded polystyrene board that meets the needs of commercial foundation and building floor slab market. The closed-cell structure of STYROFOAM™ Brand Square Edge insulation resists water pickup, enabling it to retain a high R-value over time – a necessary property in wet, below-grade commercial foundation applications. STYROFOAM™ Brand Square Edge insulation protects foundation damp-proofing and waterproofing, especially during backfilling. It also provides a secondary barrier against groundwater leakage. With STYROFOAM™ Brand Square Edge insulation, freeze-thaw cycling of the foundation wall is minimized, reducing the potential for cracking. And a warmer foundation can reduce the potential for condensation. STYROFOAM™ Brand Square Edge insulation can be used against commercial interior walls and exterior foundation walls in above- and below-grade applications. STYROFOAM™ Brand Square Edge insulation can be used under the slab or over the deck or subfloor. STYROFOAM™ Brand Square Edge insulation is suitable for use in pervious, semi-pervious and practically impervious soils.

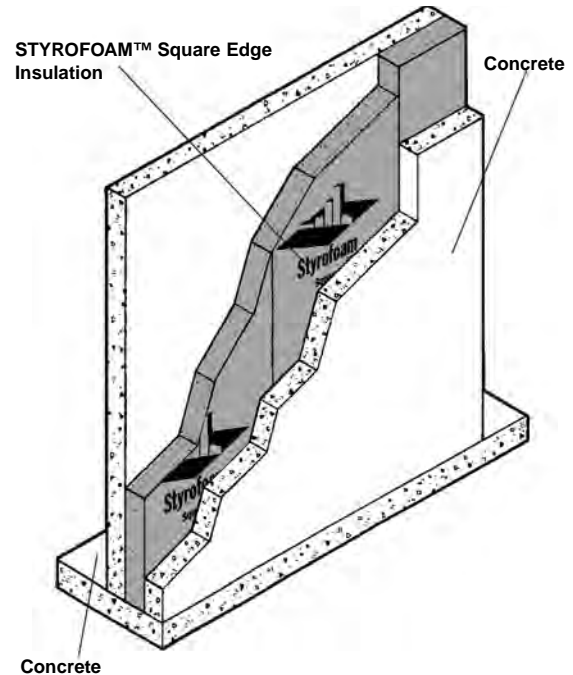
SIZES:

Width and length: 2' x 8' and 4' x 8'
 Thickness: .75", 1", 1.5", 2", 2.5", 3", 4"
 Edge Treatment: Square Edge

Applications:

Concealed Interior Wall / Concealed Roof
 Exterior Precast Walls (Insulated Concrete Systems)
 Foundations / Low Temperature - Floors / Slabs
 Radiant Floor - Over Slab Sub-Floor / Radiant Floor - Under Slab

Precast sandwich panel wall with STYROFOAM™ Brand Square Edge Insulation.



STYROFOAM™ Brand Scoreboard

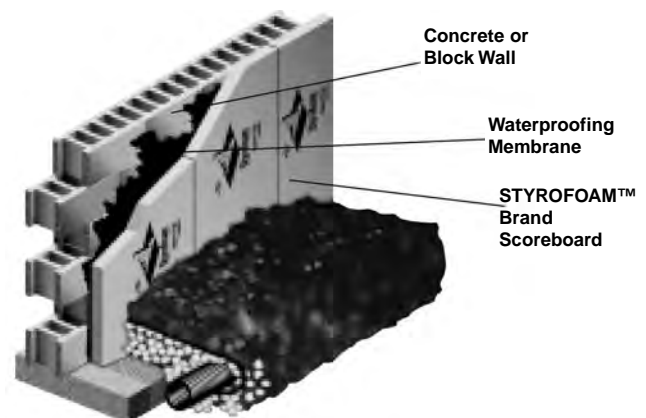
STYROFOAM™ Brand Scoreboard is a closed cell extruded polystyrene foam designed for use in roof, wall and foundation insulation applications. The 48" x 96" boards are scored in the long dimension on 16" and 24" centers. By breaking a 48" x 96" board along the score marks, it is easily converted to two 24" x 96" or three 16" x 96" boards on the jobsite.

SIZES:

Width and length: 4' x 8'
 Thickness: .75", 1", 1.5", 2", 2.5", 3"
 Edge Treatment: Square Edge

Applications:

Crawlspaces / Exterior Basement Walls
 Foundations / Over Slabs / Interior Basement Walls





WATERPROOFING MEMBRANE



650 Waterproofing Membrane For Foundation Walls

Installed on a clean, smooth and dry primed foundation wall, 650 Waterproofing Membrane contains a 56 mil layer of polymerized asphalt formulation. If cracking occurs in the wall, this material will stretch across the crack, maintaining waterproofing integrity.

The backing layer of this membrane is a high strength, extremely puncture resistant polyethylene film.

Use of a protection board is required when installing 650 Waterproofing Membrane on foundation walls.

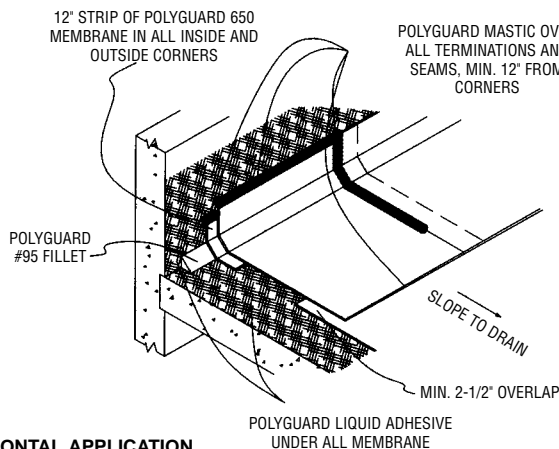
POLYGUARD 650 MASTIC is used with *POLYGUARD SHEET MEMBRANE* at all T-joints and terminations. It is used as a tight seal at the top edge of the membrane and to seal the bottom termination edge of the membrane at the base of the foundation.

POLYGUARD 95 LIQUID MEMBRANE is used with *POLYGUARD SHEET MEMBRANES* to eliminate double-ply sheet on inside and outside corners. As a fillet on inside corners, *POLYGUARD 95 LIQUID MEMBRANE* insures adhesion to concrete in difficult areas to seal. It is also recommended for planter boxes and all slab penetrations.

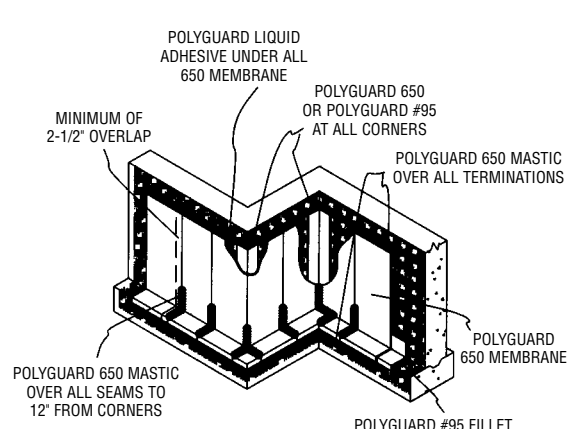
Typical Properties of Polyguard 650 Waterproofing Membranes

Property	Test Method	English	Metric
Film Color		White	White
Membrane Thickness	ASTM D-1000 inch (mm)	.060	1.5
Tensile Strength - Membrane	ASTM D-412 (Modified Die C) PSI (N/mm ²)	325	2.24
Tensile Strength - Film	ASTM D-882 PSI (N/mm ²)	6500	44.82
Elongation - Ultimate failure of rubberized asphalt	ASTM D-412	600%	600%
Permeance	ASTM E-96-B grains/sq.ft./hr./in.HGF (grains/hr/m ²)	.03	.02
Cycling Over Crack @ -15°	STM C-836	No effect	No effect
Peel Adhesion	ASTM D-1000 lb/in.width (N/mm)	10.0	1.75
Overlap Bond	ASTM D-1000 lb/in.width (N/mm)	8.0	1.4
Pliability	ASTM D-146 - 180° bend over 1" mandrel at 25°F (-32 deg C)	No effect	No effect
Puncture Resistance - Membrane	ASTM E-154 (Blunt Instrument) lb. (N)	40	178
Resistance to Hydrostatic Head	ASTM D-5385 - 93 ft (m)	231	70.4
Exposure to Fungi in Soil	GSA-PBS 07115 - 16 Weeks	No effect	No effect
Water Absorption	ASTM D-570	.1%	.1%

ALL HORIZONTAL SURFACES MUST SLOPE TOWARDS DRAINAGE



HORIZONTAL APPLICATION
General



VERTICAL APPLICATION
General



RIGHT-JOINT FIBRE EXPANSION JOINT**Description**

RIGHT-JOINT Fibre Expansion Joint Filler is a composite blend of cellulose long strand fibers in an asphaltic binder securely bonded together and formed into a semi-rigid board.

Features and Benefits

- Provides neat, finished joint appearance while requiring no trimming.
- A tough yet lightweight, easy-to-use, semi-rigid and pliable joint filler fabricated to your needs.
- Non-extruding offers a min. 70% recovery after compression.
- Provides the ideal product for the majority of all expansion/contraction joint requirements.
- Easy to cut – easy to use.
- Should be installed 1/2" below concrete surface and sealed with a suitable sealant such as RIGHT-SEAL 3405.
- RIGHT-JOINT is positioned against concrete forms, at interrupting objects or columns and against abutting structures prior to the installation of concrete.

Use and Applications

Roadways	Sidewalks	Driveways
Patios	Airport Runways	Warehouse Flooring
Parking Lots	Curbs	

Sizes

Thickness: 1/4", 3/8", 1/2", 3/4", 1"
 Standard Lengths: 10', 5'
 Slab Width: 48", 36"
 Cut to Size: 2" to 48" in 1/2" increments

Typical Properties

Compression (to 50% of original).....385-445 psi
 Water Absorption5-8%
 Recovery79-84%
 Density19.0-21 lbs./cu. ft.
 Weathering TestPasses
 Resistance to handlingExcellent

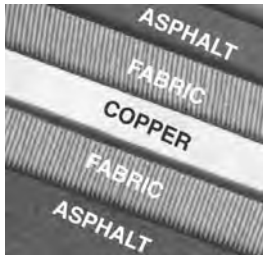
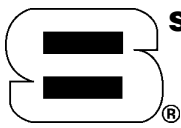
Specifications

Meets or exceeds the performance requirements of:
 ASTM D 1751 AASHTO M213
 FAA Specification item P-610-2.7 Corps of Engineers CRD-C 508
 Various State DOT Approvals

EXPANSION JOINT MATERIALS

Type	Conforms To Specification	Standard Thickness	Slab Widths	Standard Lengths	Weight Per Sq.Ft.(1/2")
FIBRE	<ul style="list-style-type: none"> • ASTM D 1751 • FAA SPECIFICATION ITEM P-610-2.7 • VARIOUS STATE D.O.T. APPROVALS • AASHTO M 213 • CORPS OF ENGINEERS CRD-C 508 	1/4", 3/8", 1/2" 3/4", 1"	36" & 48"	5' & 10'	1.05#
STANDARD CORK	<ul style="list-style-type: none"> • ASTM D 1752, TYPE II • FAA SPECIFICATION ITEM P-610-2.7 • FEDERAL SPECIFICATION HH-F-341 F, TYPE II, CLASS B • NAVY BY&D: 4 YF ITEM 1-05, YF ITEM 2-14, 46YA ITEM 2-04(2) • ANSI A37.114, TYPE II • AASHTO M153, TYPE II • CORP OF ENGINEERS CRD-C 509, TYPE II 	1/4", 3/8", 1/2" 3/4", 1"	36"	5' & 10"	.75#
SELF-EXPANDING CORK	<ul style="list-style-type: none"> • ASTM D 1752, TYPE III • FAA SPECIFICATION ITEM P-610-2.7 • FEDERAL SPECIFICATION HH-F-341 F, TYPE III, CLASS B • NAVY BY&D: 4YF ITEM 1-05, YF ITEM 2-14, 46YA ITEM 2-04(2) • ANSI A37.114, TYPE III • AASHTO M 153, TYPE III • CORP OF ENGINEERS CRD-C 509, TYPE III 	1/4", 3/8", 1/2" 3/4", 1"	36"	5'	1.2#
SPONGE RUBBER	<ul style="list-style-type: none"> • ASTM D 1752, TYPE I • FAA SPECIFICATION ITEM P-610-2.7 • FEDERAL SPECIFICATION HH-F-341 F, TYPE II, CLASS A • AASHTO M 153, TYPE I • CORP OF ENGINEERS CRD-C 509, TYPE I 	1/4", 3/8", 1/2" 3/4", 1"	36"	4.5'	1.70#
NEOPRENE	<ul style="list-style-type: none"> • ASTM D 1056 • SAE 18-R 	1/4", 3/8", 1/2" 3/4", 1"	48"	6'	1.00#

We also stock Homasote Expansion Joint – call for sizes and pricing.



SANDELL®'S COPPER FABRIC THRU-WALL FLASHING

A superior waterproofing material that has been of the highest quality for over 70 years. Sandell®'s Copper Fabric Flashing is composed of a full sheet of copper foil, laminated on both sides with a treated glass fabric. These materials are then bonded together under pressure with a specially blended asphalt to insure moisture protection.

WEIGHTS

2 oz., 3 oz., 5 oz.,
7 oz. or 10 oz.

SIZES

Furnished in rolls
32" or 36" wide
by 25' long.*
Can be cut into
multiple widths.
*Use only with Sandell
Trowel Mastic



SANDELL®'S COATED COPPER THRU-WALL FLASHING

This winning combination will leave moisture out in the cold. Sandell®'s Coated Copper Flashing is a full sheet of copper, laminated on both sides with a rubberized asphalt. This combination guarantees a permanent bond, along with incredible flexibility. The sheet copper is thereby protected from acids, alkaline, and electrolysis.

WEIGHTS

2 oz., 3 oz., 5 oz.,
7 oz. or 10 oz.

SIZES

Furnished in rolls
32" or 36" wide
by 25' long.*
Can be cut into
multiple widths.
*Use only with Sandell
Trowel Mastic



SANDELL®'S COPPER KRAFT THRU-WALL FLASHING

Low in cost and easy to handle, Sandell®'s Copper Kraft Flashing includes a full sheet of copper that is laminated on one side with a reinforced kraft paper. Sandell's Copper Kraft Flashing is bonded together under high pressure with a special blend of waterproofing elastomeric asphalt. This product is recommended for curtain wall and frame construction.

WEIGHTS

2 oz., 3 oz. or 5 oz.

SIZES

Furnished in rolls
32" or 36" wide
by 60' long.*
Can be cut into
multiple widths.
*Use only with Sandell
Trowel Mastic



SANDELL®'S COPPER KRAFT DUPLEX THRU-WALL FLASHING

Sandell®'s Copper Kraft Duplex Flashing exhibits the flexibility and strength of copper combined. Under high pressure the copper is saturated in a waterproofing asphalt bath. The product is then laminated on both sides with a reinforced kraft paper to allow for easy installation.

WEIGHTS

2 oz., 3 oz. or 5 oz.,
7 oz. or 10 oz.

SIZES

Furnished in rolls
32" or 36" wide
by 60' long.*
Can be cut into
multiple widths.
*Use only with Sandell
Trowel Mastic



SANDELL®'S COPPER KRAFT PLUS LEAD THRU-WALL FLASHING

Sandell®'s Copper Kraft Plus Lead Flashing is economical, strong and flexible. The copper is combined with a sheet of asphalt saturated kraft paper and lead sheeting. This combination provides more durability to the copper, and the flashing will not delaminate.

WEIGHTS

2 oz. or 3 oz.

SIZES

Furnished in rolls
32" or 36" wide
by 60' long.*
Can be cut into
multiple widths.
*Use only with Sandell
Trowel Mastic



This user friendly product is also very cost effective. Sandell®'s Copper Kraft Duplex Plus Lead Flashing is combined under pressure with copper, two layers of kraft paper and lead. All four layers are then saturated in a waterproofing asphalt. The heavy asphalt concentration in the layers of kraft paper provides excellent moisture protection.

WEIGHTS

2 oz., 3 oz., 5 oz.
or 7 oz.

SIZES

Furnished in rolls
32" or 36" wide
by 60' long.*
Can be cut into
multiple widths.
*Use only with Sandell
Trowel Mastic

Corporate Office:
Schenectady, NY

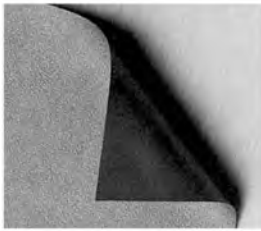
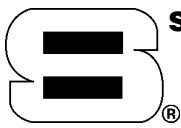
Branch Office:
Birmingham, AL

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NUFLEX PLASTIC FLASHING

Sandell Nuflex Plastic Flashing is a durable, water-proof, PVC material which will provide long in-service life. It is corrosion resistant and will remain flexible under most conditions of storage and use. This product is made from extruded plastic polymers.

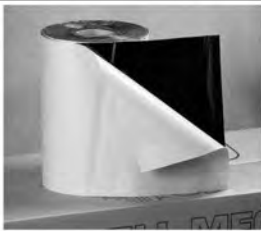
WEIGHTS	SIZES
10 MIL	48" x 150"
20 MIL	48" x 150"
30 MIL	48" x 150"
40 MIL	48" x 150"
56 MIL	48" x 100"



EPDM: Ethylene Propylene Diene Terpolymer

Sandell EPDM is a 40 mil thick synthetic rubber membrane that has high resistance to corrosion, and will not chalk, stain or discolor. This product is durable yet flexible for ease of installation.

Available in rolls of 100', lengths and widths of 12", 18", 24" and 36".



SANDO-SEAL

Sando-Seal is a self adhering 40 mil membrane composed of 32 mils of pliable and highly adhesive rubberized asphalt compound. This product is completely and integrally bonded to an 8 mil, high density, cross laminated polyethylene film. Bonded together, they provide two strong flexible waterproofing layers.

Available in rolls of 75', lengths and widths of 6", 12", 18", 24" and 36".



3 WAY SAW TOOTH FLASHING

This product was designed specifically to be used in cavity walls. The unique outline allows for complete weep hole drainage all in one. It can be manufactured in 112" sheets, allowing for 3% of the product to be lapped.

Available in 10 oz., 16 oz. and 20 oz. copper.



CLOSED CELL NEOPRENE

Is a highly effective expansion joint filler available with or without pressure sensitive adhesive. This product is recognized for its characteristics of being flexible and resilient, which is truly a winning combination in all types of vertical and horizontal joints.

Available in 50' rolls up to 1/2" thick; sheet stock, 5/8" thick and up; widths, 1" through 48".

SANDELL TROWEL MASTIC



Furnished in 5 gal. pails.

Coverage: approx. 25 sq. ft./gal. with 1/16" thickness, 12-1/2 sq. ft./gal. with 1/8" thickness.

Is a cutback asphalt blend containing long fibered material manufactured in proper consistency for easy application. This mastic is used in conjunction with setting and sealing of joints in flashing. Trowel Mastic is also used below grade for dampproofing purposes.

SANDELL NUFLEX MASTIC



Furnished in 5 gal. pails.

Coverage: approx. 25 sq. ft./gal. with 1/16" thickness, 12-1/2 sq. ft./gal. with 1/8" thickness.

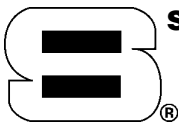
Was specifically formulated to give a perfect bond between Nuflex Plastic Flashing and all construction surfaces. Applied cold with a trowel, this product forms a durable elastic coating which adheres uniformly to Nuflex Plastic. Sandell's Nuflex Mastic adjusts independently to contraction and expansion caused by temperature cycling and structural movement.

SANDO-DRY MASTIC



Available in 29 oz. tubes, 12 tubes/case.

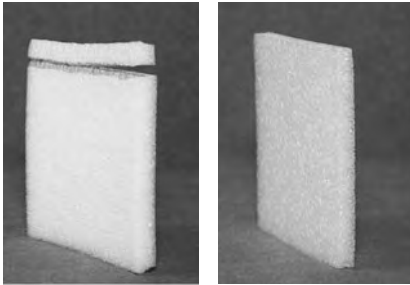
Is an excellent sealant for all types of masonry flashings. This unique rubberized asphalt blend creates successful adhesion characteristics when applied to concrete and wood.



POLYETHYLENE FOAM EXPANSION JOINT FILLER

SANDELL® 'S' NON-CROSSLINKED POLYETHYLENE FOAM

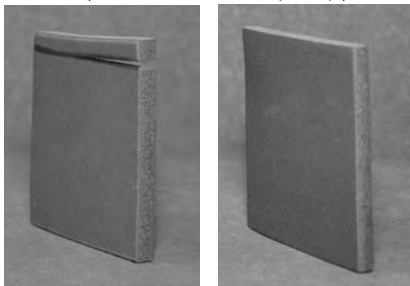
(Available with or without peel top.)



Sandell®'s non-crosslinked polyethylene foam expansion joint filler is available with or without peel top. Both products are commonly used for expansion and contraction in vertical and horizontal joint applications. This product is recommended for cold-applied sealants such as silicone, butyl, polysulfide, acrylic and polyurethane. The unique closed cell structure of this product allows for low moisture absorption. It can be custom cut to fit any application, and does not require bond breaker. Due to the product's ease of use and pliable characteristics, it can be applied more rapidly and efficiently as opposed to costly alternative joint fillers currently on the market today. This product forms a forceful seal that permanently closes the joint. It eliminates the possibility of dirt, moisture and other debris from becoming trapped within the cavity, while permitting movement within the joint. Sandell®'s non-crosslinked polyethylene foam, with or without peel top, is in compliance with ASTM D-3575 requirements. Common sizes include, but are not limited to: 1/8" to 6" thickness, and the standard widths are: 1/2" to 60". All sizes can be customized depending on the necessary requirements for Sandell®'s non-crosslinked polyethylene foam. Sandell®'s non-crosslinked polyethylene foam is available in black or white.

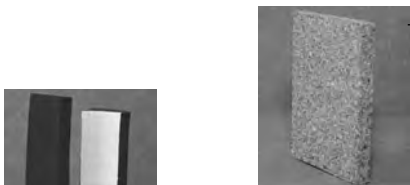
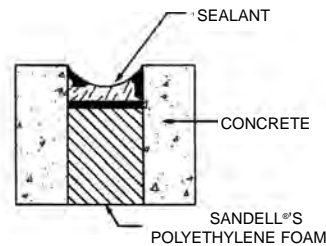
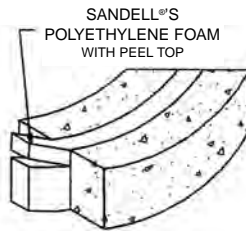
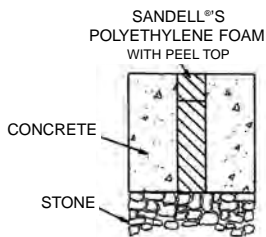
SANDELL® 'S' CROSSLINKED POLYETHYLENE FOAM

(Available with or without peel top.)



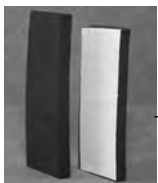
Sandell®'s crosslinked polyethylene foam expansion joint filler is available with or without peel top. Both products are commonly used for expansion and contraction in vertical and horizontal joint applications. It can be used in driveway applications, on sidewalks, highways, runways, curbs, gutters and apron applications. This product was specifically designed for use with hot applied sealants. Sandell®'s crosslinked polyethylene foam expansion joint filler is compatible with most rubber asphalt and coal tar-rubber compounds and is appropriate for sealing areas that require chemical resistance. The product will remain intact for the duration of the application and will not succumb to the elements. It is widely accepted in construction specifications due to the fact that it does not pose any health hazards to building occupants. It is environmentally friendly and low in cost for energy efficient construction. This product can be custom cut to fit any application and does not require bond breaker. Sandell®'s crosslinked polyethylene foam, with or without peel top, is in compliance with ASTM D-3575 standards. Common sizes include, but are not limited to: 1/8" to 6" thickness, and the standard widths are: 1/2" to 60". All sizes can be customized depending on the necessary requirements for Sandell®'s crosslinked polyethylene foam, and it is available in standard gray or beige.

Sandell®'s Polyethylene Foam Details



CORK

Sandell®'s cork is manufactured from all natural components and is available standard or self expanding. Unlike many other products used for expansion and contraction, cork is one of the most durable products on the market today.



CLOSED CELL NEOPRENE

Sandell®'s closed cell neoprene is composed of 100% closed cells which allow the product the ability to resist moisture and other compounds with ease. Common sizes include, but are not limited to: 1/4", 3/8" or 1/2" thickness, and the standard width is 3".



REBONDED SPONGE RUBBER

Sandell®'s rebonded sponge rubber is a very resilient and a flexible bonded rubber joint filler. It is used in concrete structures to compensate for movement. Common sizes include, but are not limited to: 1/8" to 2" thickness, and the standard widths are: 1" to 36".



STANDARD BACKER ROD

Sandell®'s standard backer rod closed cell polyethylene foam is a round, low density, insulation, non-absorbent back up material used to control sealant depth. Common sizes include, but are not limited to: 1/4" to 4". This product is gray in color and is available in a wide range of diameters.



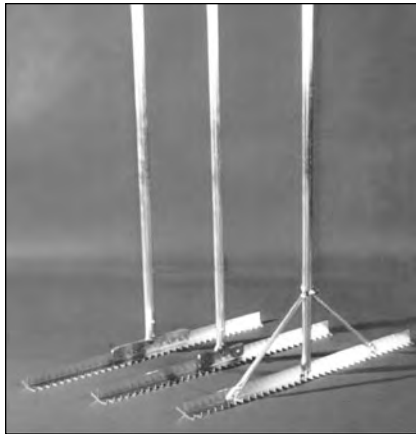
OPEN CELL BACKER ROD

Sandell®'s open cell backer rod is a soft, pliable, round open cell back up material used in expansion and contraction joints. It serves as a backing for elastomeric and other applied caulking sealants. Common sizes include, but are not limited to: 3/8", 5/8", 7/8", 1-1/8", 1-1/2" and 2". This product is canary yellow or black in color and is available in a wide range of diameters.

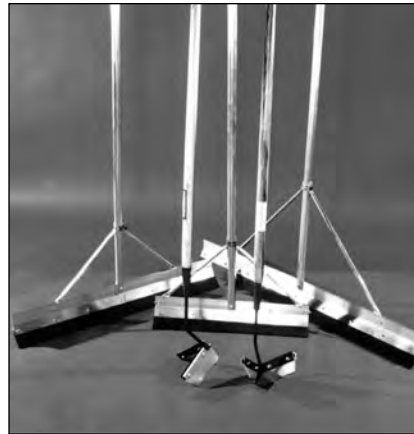


Get the Magnesium Advantage!

America's Number One Choice for Over 40 Years!



Asphalt Lutes



Squeegees

These are the highest quality tools available anywhere—Guaranteed.

Lutes and Rakes are All-Magnesium—**Lighter** and **Stronger** than Aluminum.

Squeegees are magnesium too! Designed to push and pull.

All sizes available.

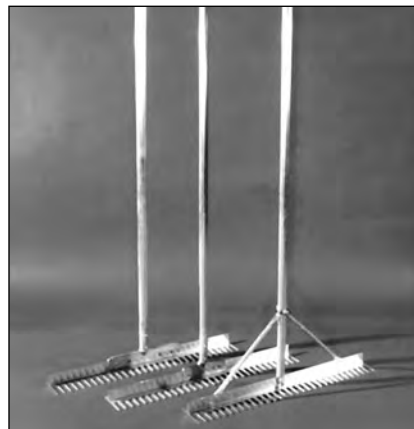
All replacement parts in stock.

We manufacture everything we sell.

Everything we make is UPS available anywhere.

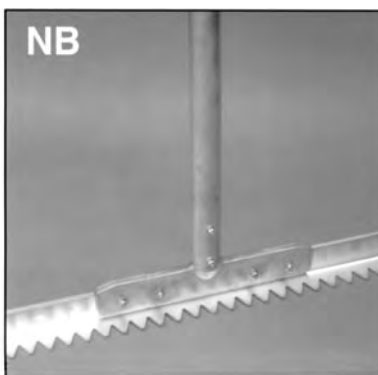


Tampers—Irons



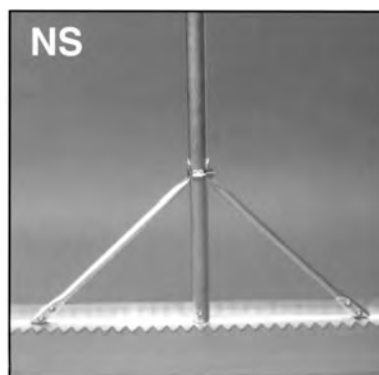
Landscape Rakes

Three Models to Choose From:



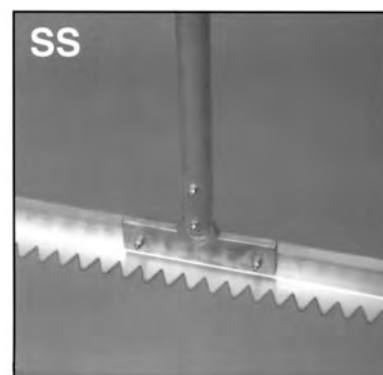
NB Model

- Fat 1-1/2" O.D. Handle.
- 4 Hole T-Casting.



NS Model

- Standard 1-1/4" O.D. Handle.
- Sturdy Braces and Clamp.



SS Model

- Standard 1-1/4" O.D. Handle.
- 2 Hole T-Casting.



Key	Item No.	Brand	Capacity	Cube	Pk. / Wt. Lbs.	Description
A	C5	True Temper®	5 cu. ft.	6.0	1 / 42.6	Heavy-duty homeowner or contractor wheelbarrow. Heavy gauge seamless steel tray with front tray braces, "H" brace and 16" wheel assembly with pneumatic 2-ply tire with oilube bearing.
B	M5T22	Jackson®	5 cu. ft.	6.0	1 / 53.9	Contractor wheelbarrow. Heavy gauge seamless steel tray with front tray braces, "H" brace, steel cross strips and leg stabilizers. 16" wheel assembly with pneumatic 2-ply tire with oilube bearing. Heavy-duty steel tray braces provide added strength and support when pouring heavy loads.
C	M6T22	Jackson®	6 cu. ft.	7.6	1 / 56.8	Contractor wheelbarrow. Heavy gauge seamless steel tray with front tray braces, "H" brace, steel cross strips and leg stabilizers. 16" wheel assembly with pneumatic 2-ply tire with oilube bearing. Heavy-duty steel tray braces provide added strength and support when pouring heavy loads.
D	M11T22	Jackson®	6 cu. ft.	9.2	1 / 63.0	Contractor wheelbarrow. Folded seamless steel tray with wire reinforced trim makes the strongest wheelbarrow available. Heavy-duty steel front tray braces, "H" brace, cross strips and leg stabilizers. 16" wheel assembly with pneumatic 2-ply tire with oilube bearing.
E	BT	Jackson®	N/A	11.2	1 / 59.7	Brick and tile wheelbarrow. Steel front tray braces and leg stabilizers. "H" brace/ 16" wheel assembly with pneumatic 2-ply tire with ball bearing.
F	30MB	Jackson®	6 cu. ft.	9.7	1 / 42.5	51" x 30" x 11" steel mixing box.
G	40MB	Jackson®	11 cu. ft.	12.2	1 / 71.8	64" x 30" x 11" steel mixing box.
H	45MB	Jackson®	16 cu. ft.	19.1	1 / 91.7	75" x 40" x 11" steel mixing box.
I	1MP	Jackson®	3 cu. ft.	4.2	1 / 11.4	32" x 28" x 10" steel mortar pan. Fits on 18MPS.
J	18MPS	Jackson®	N/A	0.3	1 / 7.8	30" x 18" 21" steel mortar pan stand.



ProBoss professional grade wheelbarrows for construction, demolition and rough jobsites.

Structural steel channel undercarriage will stand up to the most demanding jobsite work. Oversized 60" **North American Hardwood** handles enable you to lift the heaviest of loads. Brentwood's UV stabilized polyethylene pan is extremely rugged, easy to clean and stays looking good, job after job. Tire options: standard 1-wheel 6" wide tire; 2-wheel stud tire. Also available with extra heavy-duty 4.80-8 4-ply rated saw tooth ribbed and solid urethane for rough surfaces where flat tires are a problem. **Provided with complimentary handle grips.**



Single Wheel
7 Cu. Ft. Capacity



Double Wheel
6 Cu. Ft. Capacity



Double Wheel
10 Cu. Ft. Capacity

Model No.	Wide Chassis Brentwood Part Number	Description	Ship Wt. each (lbs.)
2-Ply Tire (single wheel with 6" turf tread and double wheel with 3" stud tread)			
PW6S	ACWB-18210*	6 Cube Single Wheel	46
PW6D	ACWB-18211*	6 Cube Double Wheel	56
PW7S	ACWB-18212*	7 Cube Single Wheel	50
PW7D	ACWB-18213*	7 Cube DoubleWheel	60
PW8S	ACWB-18214*	8 Cube Single Wheel	49
PW8D	ACWB-18215*	8 Cube Double Wheel	59
PW10S	ACWB-18216*	10 Cube Single Wheel	55
PW10D	ACWB-18217*	10 Cube Double Wheel	65
16/6.50 X 8"	CCWB-16532	single wheel 6" tire/wh w/zerk fitting and ball bearing	12
4.80 X 8"	CCWB-16614	double wheel stud tire/wh w/zerk and ball bearing	11
Solid Tire - No Flats			
PW6SF	ACWB-18225*	6 Cube Single Solid Wheel	48
PW6DF	ACWB-18226*	6 Cube Double Solid Wheel	60
PW7SF	ACWB-18227*	7 Cube Single Solid Wheel	52
PW7DF	ACWB-18228*	7 Cube Double Solid Wheel	64
PW8SF	ACWB-18229*	8 Cube Single Solid Wheel	51
PW8DF	ACWB-18230*	8 Cube Double Solid Wheel	63
PW10DF	ACWB-18231*	10 Cube Double Solid Wheel	70
No flat tire	CCWB-16552	single or double (No flat) tire/wh w/zerk & ball bearing	9
X-Tra Heavy-Duty 4-Ply Tire			
PW6SX	ACWB-18218*	6 Cube XHD Single Wheel	49
PW6DX	ACWB-18219*	6 Cube XHD Double Wheel	61
PW7SX	ACWB-18220*	7 Cube XHD Single Wheel	52
PW7DX	ACWB-18221*	7 Cube XHD DoubleWheel	60
PW8SX	ACWB-18222*	8 Cube XHD Single Wheel	50
PW8DX	ACWB-18223*	8 Cube XHD Double Wheel	64
PW10DX	ACWB-18224*	10 Cube XHD Double Wheel	70
4.80 x 8"	CCWB-16357	single or double 4-ply tire/wh with zerk & ball bearing	11



CONCRETE FINISHING TOOLS

Bronze Edger

Heavy-duty bronze body wears longer while providing a crisp clean edge. The solid one-piece composite handle is designed for maximum comfort and ease of use.



Item #	Description
G06310	Bronze Edger

Bronze Groover

Heavy-duty bronze body has a long wear life and the solid one-piece composite handle is designed for maximum comfort and ease of use.



Item #	Description
G06301	Big Bit Bronze Groover
G06309	Narrow Bit Bronze Groover
G06316	Deep Bit Bronze Groover

Stainless Steel Edger

The heavy-gauge stainless steel blade is rust-resistant and mounted to a slip-resistant comfort grip handle.



Item #	Description
G06235	6" x 3" - 1/4" Radius - 3/8" Lip
G06236	6" x 4" - 1" Radius - 1-1/2" Lip
G06237	6" x 3-1/2" - 3/8" Radius - 1/2" Lip
G06238	6" x 4" - 1/2" Radius - 5/8" Lip
G06239	6" x 6" - 1/2" Radius - 5/8" Lip

Stainless Steel Groover

The heavy gauge stainless steel blade is rust-resistant and mounted to a slip-resistant comfort grip handle.



Item #	Description
G06234	6" x 3" - 1/2" Depth - 1/2" Width
G06200	6" x 4-3/4" - 3/8" Depth - 1/2" Width
G06211	6" x 6" - 1" Depth - 1/8" Width

Magnesium Hand Floats

Extra long handle allows for three hand positions for extended reach and two handed use. The magnesium blades are durable, lightweight and have a long wear life.



Item #	Description
G06431	16" x 3-1/2" Cast Mag Float
G06432	16" x 3-1/2" Extruded Mag Float
G06434	16" x 3-1/2" Round End Mag Float

Stainless Steel Pool Trowel

The shorter shank tang allows the stainless steel blade more flexibility. The solid one-piece composite handle has a non-slip rubber grip that improves comfort and ease of use.



Item #	Description
G06222	14" x 4" Stainless Steel Pool Trowel

Flat Back Finishing Trowel

High-grade carbon steel blade has a cross ground face with bevel ground edges for a broken-in feel. The solid one-piece composite handle has a non-slip rubber grip that improves comfort and ease of use.



Item #	Description
G06221	16" x 4" Flat Back Finishing Trowel

Finishing Trowel

High-grade carbon steel blade has a cross ground face with bevel ground edges for a broken-in feel. The solid one-piece composite handle has a non-slip rubber grip that improves comfort and ease of use.



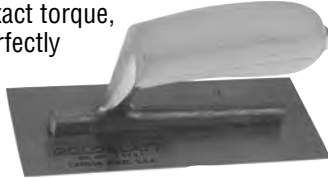
Item #	Description
G06216	12" x 4" Finishing Trowel
G06217	14" x 4" Finishing Trowel
G06218	16" x 4" Finishing Trowel
G06219	18" x 4" Finishing Trowel
G06220	20" x 4" Finishing Trowel





Carbon Steel Finishing Trowel

Strong, lightweight, rustproof aluminum mountings are "locked" to blade with fused rustproof studs. Exact torque, self-locking nut perfectly aligns the handle to the tang. Ultra-smooth straight and camel back handles available.



Item #	Description
G03407	7-1/2" x 3" Camel Back Midget Trowel
G06511	12" x 3" Camel Back Wood Handle
G06512	12" x 4" Camel Back Wood Handle
G06516	14" x 3" Camel Back Wood Handle
G06517	14" x 4" Camel Back Wood Handle
G06521	16" x 3" Camel Back Wood Handle
G06522	16" x 4" Camel Back Wood handle
G06527	18" x 4" Camel Back Wood Handle
G06531	20" x 4" Camel Back Wood Handle
G06532	20" x 5" Camel Back Wood Handle
G06112	12" x 4" Straight Back Wood Handle
G06122	16" x 4" Straight Back Wood Handle

Pace-Setter Finishing Trowel

G03910	11" x 4-1/2" Wood Handle
G06910	12" x 4" Wood handle
G06911	14" x 4" Wood Handle
G06912	16" x 4" Wood Handle

Swimming Pool Trowel

The best pool trowel from coast-to-coast. Made from high grade stainless steel, carbon steel or blue steel to fit your individual requirements. The shorter shank allows for more flexibility and the round edges prevent surface gouging.



Item #	Description
G06174	10" x 4" Pool Trowel - Stainless Steel
G06176	12" x 4" Pool Trowel - Stainless Steel
G06177	14" x 4" Pool Trowel - Stainless Steel
G06179	16" x 4" Pool Trowel - Stainless Steel
G06195	20" x 5" Pool Trowel - High-Carbon Steel
G06103	14" x 4" Pool Trowel - Blue Steel
G06104	16" x 4" Pool Trowel - Blue Steel
G06105	18" x 5" Pool Trowel - Blue Steel

Wood Floats

Lightweight, hardwood mahogany floats have been the favorite for years in close form work. They are all fitted with comfortable wood handles.



Item #	Description
G06156	15" Beveled Edge Mahogany Float
G06157	18" Beveled Edge Mahogany Float
G06151	12" Wide Mahogany Float
G09162	14" Pace-Setter Wood Float

Magnesium Hand Floats

Durable magnesium blade is warp resistant and pre broken-in with rounded corners. They have a tapered thin blade for fitting into tight areas and are fitted with a wood handle.



Item #	Description
G06150	16" Cast Mag Float
G06410	16" Extruded Mag Float
G06411	20" Extruded Mag Float
G06412	24" Extruded Mag Float
G06164	16" Thinline Mag Float
G06425	16" Extruded Mag Float - High Lift Handle
G06450	16" Extruded Mag Float - Round End

Step and Corner Tools

Matched set of inside and outside corner tools. 6" long, 1/2" radius and 2-1/2" sides.



Item #	Description
G06223	Outside Corner Tool
G06224	Inside Corner Tool



CONCRETE FINISHING TOOLS

Edgers & Groovers

Long wearing, heavy gauge stainless steel or bronze bodies make these some of our most popular tools. From our curved end groovers to our flat end edgers, we offer a line of finishing tools to cover all your needs.



Item #	Description
G06241	6" x 3" Curved End Outside Edger
G06264	6" x 3-1/2" Flat-End Edger
G06265	6" x 4" Flat-End Edger
G06940	PACE-SETTER 6" x 3" Edger
G06201	2" x 3" Western Groover
G06208	6" x 3" Universal Groover
G06950	PACE-SETTER 6" x 3" Groover
G06311	Bronze Edger
G06314	Deep Bit Bronze Groover
G06304	Big Bit Bronze Groover

Walking Edgers & Groovers

Save the back with our all angle and flip-flop walking edgers and groovers. Handles not included.



Item #	Description
G16271	10" x 3" Stainless Steel Walking Edger
G16270	10" x 6" Stainless Steel Walking Edger
G16247	8" x 6" Stainless Steel Groover
G16260	Walking Bronze Edger
G16275	Walking Bronze Groover
G16280	Walking Bronze Cali Groover

Stay-True Magnesium Screeds

Made of durable magnesium alloy that does not rust like steel and will not rot like wood, it resists build up of mud. Ends are capped to prevent the build up of material and maintain the light weight. —FOR HAND SCREEDING ONLY—

No Power Screeds.



Item #	Description
G16451	12' x 2" x 4" Screed
G16453	16' x 2" x 4" Screed

Concrete Placers and Rakes

Grade, smooth and spread concrete with ease at the proper working angle. Made of 14-gauge steel or durable aluminum. Reinforced with a blade length U-rib stiffening channel. All welded construction. 54" handle included.



Item #	Description
G16109	Steel Placer w/o Hook
G16119	Steel Placer with Hook
G16103	Aluminum Placer with Hook
G07839	Asphalt Lute

Magnesium Bull Floats

The multiple ribs on this float help strengthen the middle to prevent warping and supply proper weight distribution. This allows it to hold up under the most extreme conditions and last longer than other floats. The magnesium is self-cleaning to prevent build up of material.

Handle bracket is included. Handle is not included.



Item #	Description
G16302	48" x 8" HEAVY-DUTY Mag Bull Float
G16303	48" x 8" Round End Mag Bull Float
G16305	42" x 8" Lightweight Mag Bull Float
G16306	48" x 8" Lightweight Mag Bull Float

Aluminum Extension Handles

This rigid handle fits all Goldblatt bull floats. Cast thread connectors are easy to keep clean which prevents cross threading. The handles are extruded from rugged lightweight aluminum.



Item #	Description
G16326	6' x 1-3/4" Threaded
G16670	6' x 1-1/4" Threaded
G16327	8' x 1-3/4" Threaded
G16289	6' x 1-3/4" Snap-in
G16290	Hustler Bull Float Bracket
G16291	Universal 4-Hole Adapter





Bronze Groover Attachments

Easily attaches with two thumb screws to any 8" magnesium or aluminum bull float. Attach multiple groovers for evenly spaced, parallel grooves.



Item #	Description
G16627	3/4" Wide, 1-1/2" Deep Bronze Groover

California Style Fresno Trowel

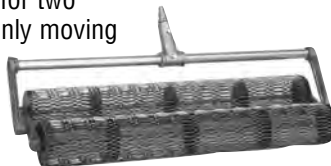
The round edge fresno trowel made popular in California is built with the same quality as our other fresno trowels. They all come with the all-angle handle bracket mounted to a steel shank.



Item #	Description
G16900	36" x 5" Cali Fresno Trowel

ROLLERBUG® Tamper

One person can handle this tamper with ease, and do it twice as fast as a regular tamper. It is ideal for all finishes: float, broom, trowel, exposed aggregate or a key for two course work. The only moving parts are the rollers, making maintenance a breeze. Handle not included.



Item #	Description
G16652	36" ROLLERBUG® Tamper

Handle Brackets and Adapters

Threaded and snap-in adapters to fit any combination of aluminum extension handles and Fresno handles.



Item #	Description
G16665	Posi-Lock Fresno Bracket
G16662	Threaded Fresno Adapter
G16295	Snap-in Fresno Adapter
G16296	Male Snap-in to Male Threads Adapter
G16282	Female Snap-in to Male Threads Adapter

Concrete Finishing Brooms

Lightweight brooms that have long wearing bristles for fine textured finishes on newly laid concrete. All brooms come with a 60" wood handle.



Item #	Description
G16153	36" Plastic Bristle Broom
G16164	24" Plastic Bristle Broom
G16177	36" Soft Bristle Aluminum Broom
G16340	60" Replacement Wood Handle
G16283	72" Wood Handle w/Steel Clevis

Rebar Cutter-Bender

This combination cutter-bender tool can handle rebar up to 3/4" diameter. Made of rugged cast iron controlled by a 54" steel handle. Ships mounted to a sturdy 2" x 8" wood board.



Item #	Description
G07625	Rebar Cutter-Bender

Wire Twister

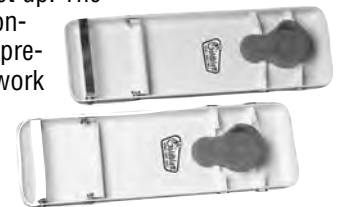
Quickly and safely twist wire ties with this pistol grip twister, just two or three twists and you're done. Built for use and abuse and long life.



Item #	Description
G09312	Wire Twister

Knee Boards

These are great for allowing you to work large slabs before they set up. The smooth face and contoured design help prevent marring your work and require less trowel time to cover up.



Item #	Description
G16150	Plastic Knee Boards
G16152	Stainless Steel Knee Boards

LONDON PATTERN BRICK TROWELS, WOOD HANDLE

- London pattern trowels are designed for laying brick.
- Rounded heel shapes the blade so that the mortar is carried a little further forward on the blade.
- Forged from a single piece of high grade tool steel.
- Impact area is stronger to provide extra endurance.
- Blade is taper ground and polished to give it the correct flexibility for the proper "feel."
- Handle rise is set for the correct hang and balance.
- Comfortable wood handle securely attached.



EDI	Part #	UPC#	Size	Box	Case
10126	33 10	0 35965 0 0126 7	10" x 4-5/8"	2	12
10128	33 10.5	0 35965 0 0128 1	10-1/2" x 4-3/4"	2	12
10130	33 11	0 35965 0 0130 4	11" x 4-7/8"	2	12
10132	33 11.5	0 35965 0 0132 8	11-1/2" x 5"	2	12
10134	33 12	0 35965 0 0134 2	12" x 5-1/8"	2	12
10136	33 13	0 35965 0 0136 6	13" x 5-3/8"	2	12

LONDON PATTERN WIDE BRICK TROWELS, WOOD HANDLE

- Wide London pattern trowels are designed for laying brick or block.
- Rounded heel shapes the blade so that the mortar is carried a little further forward on the blade.
- Blade is wider at the heel than London pattern trowels.
- Wider heel allows for even more mortar to be scooped on the blade.
- Forged from a single piece of high grade tool steel.
- Impact area is stronger to provide extra endurance.
- Blade is taper ground and polished to give it the correct flexibility for the proper "feel."
- Handle rise is set for the correct hang and balance.
- Comfortable wood handle securely attached.



EDI	Part #	UPC#	Size	Box	Case
10148	34 10.5	0 35965 0 0148 9	10-1/2" x 5-3/4"	2	12
10150	34 11	0 35965 0 0150 2	11" x 5-3/4"	2	12
10154	34 12	0 35965 0 0154 0	12" x 5-3/4"	2	12

SLED RUNNERS, HALF ROUND

- Heavy gauge steel mounting with resilient DuraSoft® handle, that provides a soft feel, reduces fatigue and offers excellent durability.
- Specifically designed for finishing horizontal joints.
- Popular for making half-round sunken or half-round rodded joints.
- Both ends are turned up for use in either direction.



EDI	Part #	UPC#	Size	Box	Case
16561	611D	0 35965 0 6561 0	15" x 1/2"	6	6
16562	612D	0 35965 0 6562 7	15" x 5/8"	6	6
16563	613D	0 35965 0 6563 4	18" x 1/2"	6	6
16564	614D	0 35965 0 6564 1	18" x 5/8"	6	6

SLED RUNNERS, "V" JOINT

- Heavy gauge steel mounting with resilient DuraSoft® handle, that provides a soft feel, reduces fatigue and offers excellent durability.
- Sides are 3/4".
- "V" pattern provides a line in the center of the joint to emphasize the joint and conceal small irregularities.



EDI	Part #	UPC#	Size	Box	Case
16565	615D	0 35965 0 6565 8	15" x 3/4"	6	6
16566	616D	0 35965 0 6566 5	18" x 3/4"	6	6

POINTING TROWELS, WOOD HANDLE

- Forged from a single piece of highest grade tool steel for unsurpassed strength.
- Hardwood handle with polished steel ferrule.
- Versatile tool.



EDI	Part #	UPC#	Size	Box	Case
11122	45 4.5	0 35965 0 1122 8	4-1/2" x 2-1/4"	6	6
11124	45 5	0 35965 0 1124 2	5" x 2-1/2"	6	6
11128	45 6	0 35965 0 1128 0	6" x 2-3/4"	6	6
11130	45 7	0 35965 0 1130 3	7" x 3"	6	6

TUCK POINTERS, WOOD HANDLE

- Forged in one piece.
- Tapered for the required sturdiness and correct flexibility.
- Hard wood handle with metal ferrule is securely attached.
- High shank and high lift give plenty of hand room.



EDI	Part #	UPC#	Size	Box	Case
11303	503	0 35965 0 1303 1	6-1/2" x 1/4"	6	6
11304	504	0 35965 0 1304 8	6-3/4" x 5/16"	6	6
11305	505	0 35965 0 1305 5	6-3/4" x 3/8"	6	6
11306	506	0 35965 0 1306 2	6-3/4" x 1/2"	6	6
11307	507	0 35965 0 1307 9	6-3/4" x 5/8"	6	6
11308	508	0 35965 0 1308 6	6-3/4" x 3/4"	6	6
11309	509	0 35965 0 1309 3	6-3/4" x 7/8"	6	6
11310	510	0 35965 0 1310 9	6-3/4" x 1"	6	6

BRICK JOINTERS

- Made from high carbon steel.
- Brick jointers have a convex face for striking concave joints.
- Each end is a different size for making different size joints.
- Tooled joints are recommended for exterior applications because the jointer compacts the mortar to keep moisture from penetrating the joint.
- Concave joint helps conceal small irregularities in laying and emphasizes the pattern.
- 10-1/2" in length.



EDI	Part #	UPC#	Size	Box	Case
15522	80	0 35965 0 5522 2	1/2" x 5/8"	6	72
15524	81	0 35965 0 5524 6	3/4" x 7/8"	6	72
15526	82	0 35965 0 5526 0	5/8" x 3/4"	6	72
15528	83	0 35965 0 5528 4	3/8" x 1/2"	6	72

1/8" BIT-SIZE GRAPEVINE JOINTERS

- Forged from high grade tool steel and heat treated.
- Straight true bit makes a clean "colonial" joint.
- Unique double-ended design gives twice the wear as others.
- 8-1/2" in length.



EDI	Part #	UPC#	Size	Box	Case
15529	84	0 35965 0 5529 1	1/2" x 1/8"	6	72
15530	85	0 35965 0 5530 7	5/8" x 1/8"	6	72

HIGH CARBON STEEL XTRALITE® FINISHING TROWELS

- Highest grade, hardened and tempered spring steel blade.
- Aluminum alloy Xtralite® mounting is lightweight but very strong.
- Smooth natural finish hardwood handle.



EDI	Part #	UPC#	Size	Box	Case
12104	MX1	0 35965 0 2104 8	11" x 4-1/2"	1	12
12124	MXS1	0 35965 0 2124 1	11" x 4-1/2"	1	12
12106	MX2	0 35965 0 2106 7	11-1/2" x 4-1/2"	1	12
12126	MXS2	0 35965 0 2126 5	11-1/2" x 4-1/2"	1	12
12128	MXS3	0 35965 0 2128 9	11" x 4-3/4"	1	12
12110	MX4	0 35965 0 2110 4	11-1/2" x 4-3/4"	1	12
12130	MXS4	0 35965 0 2130 2	11-1/2" x 4-3/4"	1	12
12122	MXS91	0 35965 0 2122 7	10-1/2" x 4-1/2"	1	12
12132	MXS7	0 35965 0 2132 6	12" x 5"	1	12
12134	MXS13	0 35965 0 2134 0	13" x 5"	1	12

"S" Indicates Curved Handle.

MIDGET TROWEL

- Highest grade, hardened and tempered spring steel blade.
- Aluminum alloy Xtralite® mounting is lightweight but very strong.
- Smooth natural finish hardwood handle.



EDI	Part #	UPC#	Size	Box	Case
13105	11	0 35965 0 3105 9	8" x 3"	3	3

HIGH CARBON STEEL XTRALITE® FINISHING TROWELS

- Highest grade, hardened and tempered spring steel blade.
- Aluminum alloy Xtralite® mounting is lightweight but very strong.
- Smooth natural finish hardwood handle.



EDI	Part #	UPC#	Size	Box	Case
13204	MXS56	0 35965 0 3204 9	12" x 3"	1	12
13206	MX62	0 35965 0 3206 3	12" x 4"	1	12
13208	MXS62	0 35965 0 3208 7	12" x 4"	1	12
13222	MX57	0 35965 0 3222 3	14" x 3"	1	12
13224	MXS57	0 35965 0 3224 7	14" x 3"	1	12
13226	MX64	0 35965 0 3226 1	14" x 4"	1	12
13228	MXS64	0 35965 0 3228 5	14" x 4"	1	12
13232	MXS73	0 35965 0 3232 2	14" x 4-3/4"	1	12
13244	MXS60	0 35965 0 3244 5	16" x 3"	1	12
13248	MXS66	0 35965 0 3248 3	16" x 4"	1	12
13262	MXS77	0 35965 0 3262 9	18" x 4-1/2"	1	6
13268	MXS81	0 35965 0 3268 1	18" x 4"	1	6
13272	MXS20	0 35965 0 3272 8	20" x 4"	1	6
13276	MXS205	0 35965 0 3276 6	20" x 5"	1	6

"S" Indicates Curved Handle

HIGH CARBON STEEL XTRALITE® POOL TROWELS

- Blade is made from the highest grade spring steel that is properly shaped and tempered.
- Short aluminum alloy mounting and a curved hardwood handle.
- Blade is flexible enough to conform to almost any radius.
- Ends of the blade are fully rounded.



EDI	Part #	UPC#	Size	Box	Case
13110	SP10	0 35965 0 3110 3	10" x 3"	1	12
13114	SP14	0 35965 0 3114 1	14" x 4"	1	12
13116	SP16	0 35965 0 3116 5	16" x 4-1/2"	1	12

FRESNO TROWELS

- Has a superior quality high carbon steel blade.
- For use with our #9 or #10 handle, sold separately.
- All angle swivel attachment included.
- "R" indicates round ends that leave no drag marks.



EDI	Part #	UPC#	Size	Box	Case
13724	C24R	0 35965 0 3724 2	24" x 5"	1	1
13630	C30	0 35965 0 3630 6	30" x 5"	1	1
13730	C30R	0 35965 0 3730 3	30" x 5"	1	1
13736	C36R	0 35965 0 3756 5	36" x 5"	1	1

WOOD HANDLE

- Wood handles are fitted with a steel clevis.
- For use with both fresno trowels and walking edgers.



EDI	Part #	UPC#	Size	Box	Case
14842	10	0 35965 0 4842 2	72"	1	6

PHILADELPHIA PATTERN BRICK TROWELS, WOOD HANDLE

- Philadelphia pattern trowels are better suited for laying block because they allow more mortar to be placed on the blade.
- Forged from a single piece of high grade tool steel.
- Impact area is stronger to provide extra endurance.
- Blade is taper ground and polished to give it the correct flexibility for the proper "feel."
- Handle rise is set for the correct hang and balance.
- Comfortable wood handle securely attached.



EDI	Part #	UPC#	Size	Box	Case
10106	19 10	0 35965 0 0106 9	10" x 5"	2	12
10108	19 10.5	0 35965 0 0108 3	10-1/2" x 5-1/4"	2	12
10110	19 11	0 35965 0 0110 6	11" x 5-1/2"	2	12
10112	19 11.5	0 35965 0 0112 0	11-1/2" x 5-3/4"	2	12
10114	19 12	0 35965 0 0114 4	12" x 6"	2	12

JOINT RAKER

- Large 1-3/4" skate wheels.
- Strong aluminum handle is contoured to fit the hand and squared off at the end.
- Hardened nail, adjustable to the proper depth, can be securely tightened by slipping the nail in the eye of a spade bolt and twisting.



EDI	Part #	UPC#	Size	Box	Case
15502	89	0 35965 0 5502 4	8-1/2" x 3"	12	12

MARGIN TROWELS, WOOD HANDLE

- Forged from a single piece of highest grade tool steel for unsurpassed strength.
- Tempered, ground and polished from toe to heel.
- Hardwood handle with metal ferrule.



EDI	Part #	UPC#	Size	Box	Case
11202	52	0 35965 0 1202 7	5" x 2"	6	6
11204	54	0 35965 0 1204 1	5" x 1-1/2"	6	6
11206	56	0 35965 0 1206 5	6" x 2"	6	6

GAUGING TROWEL

- Forged from a single piece of highest grade tool steel.
- Carefully taper ground and polished.
- Hardwood handle with polished steel ferrule.
- Used for mixing or "gauging" small quantities of quick setting plaster.



EDI	Part #	UPC#	Size	Box	Case
10748	48	0 35965 0 0748 1	7" x 3-3/8"	12	12

INSULATOR'S TROWELS

- Forged from a single piece of highest grade tool steel.
- Tempered and carefully taper-ground and polished.
- Hardwood handle with polished steel ferrule.
- Flexible blade specially designed for working with insulation.



EDI	Part #	UPC#	Size	Box	Case
11102	47A	0 35965 0 1102 0	5-1/2" x 1-7/8"	12	12
10750	48A	0 35965 0 0750 4	7" x 3-3/8"	12	12

TILE SETTER'S TROWEL

- Forged from a single piece of highest grade tool steel.
- Blade is fully tempered, ground and polished.
- Hardwood handle with steel ferrule.



EDI	Part #	UPC#	Size	Box	Case
10757	57	0 35965 0 0757 3	7" x 4-3/8"	6	60

GROUT BAG

- Bag is seamless and made of black vinyl.
- Used for holding and dispensing grout or mortar.



EDI	Part #	UPC#	Size	Box	Case
17817	GB691	0 35965 0 7817 7	12" x 24"	1	72

SAFETY STEP EDGER WITH DURASOFT® HANDLE

- Made of stainless steel.
- Resilient DuraSoft® handle provides a soft feel, reduces fatigue and offers excellent durability.
- Used to cut four grooves.
- Creates a safety tread effect on steps.
- Edge radius is 1/2".
- Grooves are 3/4" apart and 1/4" deep.



EDI	Part #	UPC#	Size	Box	Case
14280	4280D	0 35965 0 4280 2	6" x 5"	6	6

SAFETY STEP GROOVER WITH DURASOFT® HANDLE

- Made of stainless steel.
- Edges are angled up to use against a guide.
- Resilient DuraSoft® handle provides a soft feel, reduces fatigue and offers excellent durability.
- Used to cut six grooves, 3/4" apart, 1/4" deep.
- Creates a safety tread effect on steps.
- Cuts a groove with 1/8" radius.



EDI	Part #	UPC#	Size	Box	Case
14282	4282D	0 35965 0 4282 6	6" x 6"	6	6

MAGNESIUM BULL FLOATS

- Made from finest extruded magnesium available.
- Comes with complete bracket assembly.
- Lightweight, long wearing and properly balanced to provide the finish you want.
- Square ends.
- Using several handle sections, the finisher can float a slab well beyond normal reach.



EDI	Part #	UPC#	Size	Box	Case
14700	B42	0 35965 0 4700 5	42" x 8"	1	1
14702	B45	0 35965 0 4702 9	45" x 8"	1	1
14704	B48	0 35965 0 4704 3	48" x 8"	1	1

BLUE GLIDER

- Made of blue spring steel.
- C-channel runs the length of the glider to help strengthen the blade.
- Comes with a hardware package consisting of two bolts, two nuts, two lock washers and two flat washers.
- Can be used with the #RL6 RotaLeveler® or #AB4 AutoJust®.
- Ideal tool for a smooth finish on large areas of concrete.



EDI	Part #	UPC#	Size	Box	Case
13987	BG48	0 35965 0 3987 1	48" x 12-3/8"	1	1

CHANNEL BULL FLOAT

- Made from the finest extruded magnesium available.
- Stiffer and more resistant to warping than standard bull floats.
- Using several handle sections, the finisher can float a slab well beyond his reach.



EDI	Part #	UPC#	Size	Box	Case
14707	CB72	0 35965 0 4707 4	72" x 6"	1	1

ALUMINUM HANDLE SECTION

- Made of light, yet rigid tubular design.
- The large threads can be combined with similar handles made by others.
- Diameter 1-3/4".
- **WARNING:** When using handle extensions, always avoid contact with electrical power lines or any electrical source.



EDI	Part #	UPC#	Size	Box	Case
14802	B5 60	0 35965 0 4802 6	5'	6	6

PUSH BUTTON HANDLE SECTIONS

- Anodized spring loaded button-type aluminum sections snap together quickly.
- Will not loosen during use.
- Can be adapted for use with bull floats and other construction tools requiring a long handle.
- Diameter 1-3/8".
- **WARNING:** When using handle extensions, always avoid contact with electrical power lines or any electrical source.



EDI	Part #	UPC#	Size	Box	Case
14806	PB72	0 35965 0 4806 4	6'	6	6

BIG DIAMOND CONCRETE TAMPER

- Reinforced splash-way grill.
- Built to take the pounding and stay flat.
- Properly balanced handle with rubber grips to ensure easy, safe handling.



EDI	Part #	UPC#	Size	Box	Case
16422	T34	0 35965 0 6422 4	34" x 7-1/2"	1	1

ROUND HOLE CONCRETE TAMPER

- Reinforced round hole grill.
- Built to take the pounding and stay flat.
- Properly balanced handle with rubber grips to ensure easy, safe handling.



EDI	Part #	UPC#	Size	Box	Case
14722	T48	0 35965 0 4722 7	48" x 6-1/2"	1	1

METAL SCREEDS

- Made from metal alloy, won't rust or rot.
- Lightweight, long wearing and rigid.
- **WARNING:** When using magnesium screeds always avoid contact with electrical power lines or any electrical source.



EDI	Part #	UPC#	Size	Box	Case
14723	822	0 35965 0 4723 4	12' x 2" x 4"	1	1
14724	824	0 35965 0 4724 1	14' x 2" x 4"	1	1
14725	825	0 35965 0 4725 8	16' x 2" x 4"	1	1

HIGH STRENGTH SCREEDS

- Premium high strength alloy, won't rust or rot.
- More damage and warp resistant.
- Lightweight, long wearing and rigid.
- **WARNING:** When using screeds always avoid contact with electrical power lines or any electrical source.



EDI	Part #	UPC#	Size	Box	Case
14771	14771	0 35965 0 4771 5	10' x 1-1/2" x 3-1/2"	1	1
14772	14772	0 35965 0 4772 2	12' x 1-1/2" x 3-1/2"	1	1
14773	14773	0 35965 0 4773 9	14' x 1-1/2" x 3-1/2"	1	1
14775	14775	0 35965 0 4775 3	16' x 1-1/2" x 3-1/2"	1	1
14776	14776	0 35965 0 4776 0	20' x 1-1/2" x 3-1/2"	1	1

STEEL SPRED-KRETES HEADS

- Blade of 12-gauge cold rolled steel.
- Sturdy steel ferrule is welded securely to the blade and holds the contoured handle firmly in place.
- Superior to a jam type connector.
- Use with #828 handle, sold separately.



EDI	Part #	UPC#	Size	Box	Case
14726	826	0 35965 0 4726 6	20" x 4" w/ hook	6	6
14727	827	0 35965 0 4727 2	20" x 4" w/o hook	6	6

ALUMINUM PLACER

- Aluminum construction, powder coated.
- Braced for additional strength.
- Soft grip end-cap.



EDI	Part #	UPC#	Size	Box	Case
14753	AP753	0 35965 0 4753 1	19-1/2" x 4"	5	10

24" CONCRETE BROOM

- Long wearing 3" black polypropylene bristles set solidly into a natural lacquered hardwood block.
- Threaded hole accepts any standard broom handle.
- Ideal for applying non-slip finish to newly finished concrete surfaces.



EDI	Part #	UPC#	Size	Box	Case
16420	830	0 35965 0 6420 0	24"	1	6

XTRA-HARD WOOD FLOAT

- Made from imported Jarrah hardwood, which is harder than teak.
- Outlasts many ordinary wood floats and won't "fuzz up."
- Smooth hardwood handle.



EDI	Part #	UPC#	Size	Box	Case
14506	147	0 35965 0 4506 3	16" x 3-1/2"	6	18

MAHOGANY DARBIES

- Made from straight grain mahogany.
- Unique two-way tapered blade.
- Designed with thicker blades for longer blade life and a larger handle for increased knuckle room.
- 3-1/2" wide by 3/4" thick at the heel.
- 2" wide by 1/2" thick at the toe.
- 28" darby has a single loop handle.
- The 45" darby has a three-loop handle.



EDI	Part #	UPC#	Size	Box	Case
14510	150	0 35965 0 4510 0	28"	1	6
14511	151	0 35965 0 4511 7	45"	1	6

MAGNESIUM FLOATS WITH WOOD HANDLE

- Extruded from very hard, durable, lightweight magnesium—our most popular float design.
- Comfortable handle is positioned to give the tool perfect balance.
- Handle is secured with torque pad screws that will not back out.
- If a float (rough) finish is desired, floating is the final operation.
- Recommended for use with air entrained concrete.
- Magnesium floats produce a smoother finish than wood.



EDI	Part #	UPC#	Size	Box	Case
14606	142	0 35965 0 4606 0	12" x 3-1/8"	6	6
14604	145	0 35965 0 4604 6	16" x 3-1/8"	6	6
14602	146	0 35965 0 4602 2	20" x 3-1/8"	6	6

REDWOOD FLOATS

- Made from clear, seasoned redwood, 3/4" thick.
- Smooth handle.
- Primarily used for leveling and smoothing concrete prior to final finish.
- Also ideal when a slightly rougher concrete finish is desired.
- The 16" float has a beveled front edge.



EDI	Part #	UPC#	Size	Box	Case
14502	44	0 35965 0 4502 5	12" x 5"	6	6
14504	144	0 35965 0 4504 9	16" x 3-1/2"	6	18

RUB BRICKS

- Fluted silicon carbide stone, comfortable handle.
- 20-grit. Ideal for dressing down and removing form marks from concrete.



EDI	Part #	UPC#	Size	Box	Case
16440	840	0 35965 0 6440 8	6" x 3" x 1"	1	5
16441	841	0 35965 0 6441 5	8" x 3-1/2" x 1-1/2"	1	5

RUBBER FLOATS

- Has a 5/8" thick red rubber pad specially bonded to the aluminum backing plate for long wear.
- Comfortable handle securely attached.
- Frequently used by plasterers and other finishers for rough and/or textured finishes.
- Available with a fine or a coarse pad.



EDI	Part #	UPC#	Size	Box	Case
14404	38	0 35965 0 4404 2	9" x 4" Fine	1	24
14406	39	0 35965 0 4406 6	9" x 4" Coarse	1	24

MOLDED RUBBER FLOAT

- Molded black rubber pad is very compact and has a dense texture.
- Float face is permanently cemented to the lightweight aluminum backing.
- Comfortably fitted with a smooth handle.
- The ideal float for bringing sand to the surface.
- Used by both the concrete finisher and plasterer.



EDI	Part #	UPC#	Size	Box	Case
14408	40	0 35965 0 4408 0	9" x 4"	1	24

TILE GROUTER'S FLOAT

- Pure gum rubber face is bonded to the dense rubber pad, and then cemented to an aluminum backing plate with a smooth handle.
- Edges are beveled and the two front corners are rounded for ease of spreading.
- Dense rubber pad is designed specifically for tile grouting.



EDI	Part #	UPC#	Size	Box	Case
14422	43	0 35965 0 4422 6	9" x 4"	1	24

ALUMINUM HAWK WITH DURASOFT® HANDLE

- Made of heavy gauge hard-rolled aluminum.
- Lightweight but durable.
- Edges have been smoothed and the corners rounded.
- Handle and sponge rubber callus preventer included.
- Resilient DuraSoft® handle provides a soft feel, reduces fatigue and offers excellent durability.
- Used for holding plaster during application.



EDI	Part #	UPC#	Size	Box	Case
15215	1D	0 35965 0 5215 3	13" x 13"	1	12
15216	2D	0 35965 0 5216 0	13-1/2" x 13-1/2"	1	12
15217	3D	0 35965 0 5217 7	10" x 10"	1	18

DRYWALL TROWEL WITH STRAIGHT WOOD HANDLE

- Aluminum alloy mounting is lightweight but very strong.
- High carbon steel blade has a slight concave bow in the blade which helps the user feather the mud and make perfect drywall joints.
- Flexible blade is tempered, ground and polished.
- Fastened to the mounting with hardened steel rivets.
- Diamond shank design keeps the handle from twisting.
- Smooth natural finish hardwood handle.



EDI	Part #	UPC#	Size	Box	Case
12612	12	0 35965 0 2612 3	11" x 4-1/2"	1	12
12614	12A	0 35965 0 2614 7	14" x 4-1/2"	1	12

DRYWALL INSIDE CORNER TROWEL WITH DURASOFT® HANDLE

- Lightweight tool made from one piece of flexible stainless steel with aluminum mounting.
- Resilient DuraSoft® handle with finger guard.
- Blade set at a 103 degree angle that flexes to form a perfect 90 degree corner during use.
- Used to embed tape and smooth out the final layer of mud to taped corners.



EDI	Part #	UPC#	Size	Box	Case
15323	23D	0 35965 0 5323 5	4" x 5"	2	48

THIN COAT INSIDE CORNER TROWEL WITH DURASOFT® HANDLE

- Lightweight tool made from one piece of flexible stainless steel.
- Resilient DuraSoft® handle with finger guard.
- Has a 90 degree angle between the blades.
- Used to embed tape and smooth out the final layer of mud to taped corners.



EDI	Part #	UPC#	Size	Box	Case
15324	24D	0 35965 0 5324 2	5" x 3-3/4"	6	6

DRYWALL OUTSIDE CORNER TROWEL WITH DURASOFT® HANDLE

- Lightweight tool made from one piece of flexible stainless steel.
- Resilient DuraSoft® handle with finger guard.
- Blade is set at an 80 degree angle that flexes during use to 90 degree to form a clean square corner on the outside.
- Used to embed tape and smooth out the final layer of mud to taped corners.



EDI	Part #	UPC#	Size	Box	Case
15325	25D	0 35965 0 5325 9	5" x 3-3/4"	6	6

DRYWALL SAW

- Hardened and tempered blade.
- Five teeth per inch.
- Cuts quickly through wallboard, gypsum, lath and thin coat backing board.
- Comfortable handle.



EDI	Part #	UPC#	Size	Box	Case
16321	21	0 35965 0 6321 0	15"	6	60

T-SQUARE

- Silver anodized finish with black epoxy paint numerals for long wear and legibility.
- Notched head, reverse rulings, and stud markings allow for quick, accurate cuts.
- Aircraft-style rivets secure blades for long term accuracy.
- Has one arm which measures 16" for use in finding studs.
- Head is notched which enables cutting a 48" board in one pass while the board is standing on the floor.



EDI	Part #	UPC#	Size	Box	Case
16328	27	0 35965 0 6328 9	47-7/8" x 22"	1	10

DRYWALL UTILITY SAW

- Heavy gauge blade with eight teeth per inch.
- Sharp point to penetrate wallboard easily without drilling.
- Cuts wallboard, masonite, plywood and wood.
- Hardwood handle with steel ferrule.
- Semi-contour hardwood handle.



EDI	Part #	UPC#	Size	Box	Case
16322	22	0 35965 0 6322 7	6"	6	144

PLASTIC MUD PAN

- Made of long wearing plastic with hang-up tab.
- Equipped with two metal wiping blades.
- Resists chemicals and temperature changes.
- Outside is slightly textured to provide a non-slip surface.



EDI	Part #	UPC#	Size	Box	Case
16394	814	0 35965 0 6394 4	13"	12	12

BUCKET BRUSH

- Made of four rows of 3-1/2" long white tampico bristles.
- 6" plastic handle with hang clip to hook on side of bucket.
- Plastic block is 6" x 3/4".



EDI	Part #	UPC#	Size	Box	Case
16521	521	0 35965 0 6521 4	-	12	12

SHARPSHOOTER® 1 HOPPER GUN WITH 45° ANGLED HOPPER ADAPTER

- Plastic hopper and specially formulated nylon gun.
- Seven orifice sizes with tubular design for reduced overspray and greater texture variety.
- Tight sealing flow shutoff prevents leakage.
- Knurled knob allows for easy adjustment of orifice plate.
- Angled hopper allows user to spray ceilings and walls with hopper gun in upright position.
- Gun features a handy air control valve which allows flow control at the gun instead of at the pump.
- Easy pull swing trigger for greater control and less fatigue with adjustable trigger stop for more consistency in pattern.
- 45° angled hopper adapter included.



EDI	Part #	UPC#	Size	Box	Case
16356	693	0 35965 0 6356 2	-	1	1

FLAT WIRE TEXTURE BROOM

- Machined aluminum tubing will not warp or crack.
- Steel tines provide stiffness for grooving while flexing for durability.
- Intended for providing a uniform groove in concrete roadways, bridges and ramps for drainage and traction.
- Comes with threaded handle adapter installed; adapter can be removed for use with clevis end handle.
- Tines are 5" (127mm) long and 1/8" (3mm) wide.
- Other spacings available by special order including random spacing to meet many state highway specifications.



EDI	Part #	UPC#	Spacing	Size	Box	Case
14855	14855	0 35965 0 4855 2	1/2"	36"	1	1

ROCK-IT™ 2.0 BULL FLOAT BRACKET

- Enables use with extension handles for extremely long ranges.
- Allows multi-angle floating.
- Full pitch controlled by half turn of handle.
- Fits all magnesium bull floats without adapter plates.
- Fits all snap 1-3/8" (3.5cm) and 1-3/4" (4.4cm) snap handles without adapters.



EDI	Part #	UPC#	Size	Box	Case
14799	BF9	0 35965 0 4799 9	-	1	1

ALUMINUM WIRE TIE REEL

- Cast aluminum construction.
- Designed for left or right hand use.
- Large knob provides smooth operation.
- Accommodates all types of tie wire rolls.



EDI	Part #	UPC#	Size	Box	Case
16019	TWR19	0 35965 0 6019 6	na	1	6

NOTCHED TROWELS WITH STRAIGHT WOOD HANDLE

- Cast aluminum alloy mounting is securely attached with rivets to the tempered steel blade.
- Used to spread adhesive or mastic on the base surface before laying tile, carpet or other floor coverings.
- Notch style and size help to control depth of adhesive applied.
- Straight wood handle securely attached.



EDI	Part #	UPC#	Overall Size	Notch Size	Box	Case
15702	701	0 35965 0 5702 8	11" x 4-1/2"	"V" 7/32" x 5/32"	6	6
15706	702	0 35965 0 5706 6	11" x 4-1/2"	"Sq" 1/4" x 1/4" x 1/4"	6	6
15710	703	0 35965 0 5710 3	11" x 4-1/2"	"Sq" 3/16" x 1/8" x 3/16"	6	6
15714	704	0 35965 0 5714 1	11" x 4-1/2"	"U" 3/32" x 3/32" x 1/8"	6	6
15722	706	0 35965 0 5722 6	11" x 4-1/2"	"Sq" 3/32" x 3/32" x 3/32"	6	6

BRICK TONGS

- Heavy-duty tongs designed and built for long wear.
- Can be quickly adjusted to carry from six to ten bricks.
- Tongs are maintenance free.



EDI	Part #	UPC#	Size	Box	Case
16510	88	0 35965 0 6510 8	16"	1	12



SCRAPERS/ROOFING TOOLS



438-A: Heavy-Duty Slag Roof Scraper.

- High quality heavy-duty roof scraper made to exacting standards.
- Comfortable "D" handle is cast from malleable iron and riveted onto 1" o.d. steel pipe mid section.
- Carbon steel blade (1/8" thick) is heat treated to withstand tough use and ground to a blunt edge.
- Blade has slotted holes for easy removal when changing blade or regrinding edge.
- Blade is fitted onto heavy-duty cast socket.

Overall length: 55"

Weight: 10 lbs.

438-C: Blade replacement only.



150-A/150-B: All Purpose Wall Scrapers

- Blade produced from hardened spring steel.
- Fitted with a malleable iron socket to receive a 1" standard tapered broom handle, not included, or add our 150-C hardwood handle.

Blade thickness: .040-gauge.

150-A: 4-inch Wall Scraper

150-B: 7-inch Wall Scraper

150-C: Wall Scraper Handle

- Ramin hardwood handle specially fitted for use with both size wall scrapers.
- Smooth finished 1" diameter hardwood.

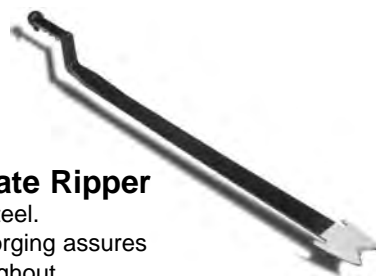
Overall length: 54"

85-A: Straight Slater's Stake

- Stake end ground to a point to hold trimming edge upright.
- Top edge used for trimming and cutting slate.

Size: 1-1/4" x 1/4"

Blade length: 20"



84-A: Standard Slate Ripper

- High grade of carbon steel.
- One-piece closed die forging assures consistent quality throughout.
- Form fitting handle with finger grips prevents hand from slipping off.
- Extra large striking surface.
- Finely ground and polished blade end provides for maximum flexibility.

Blade length: 24-1/2"

Overall length: 30-1/2"

Weight: 3 lbs.



83-B: Standard Pattern Slate Hammer, Right Handed

Our standard pattern slate hammer is forged of high quality tool steel and made to the most exacting standards throughout. Point, claw and hammer face are specially heat treated to withstand tough use. The claw at center is made for pulling nails without damaging installed slate. The beveled edge at top of midsection is used for trimming slate. An all leather handle is featured.

Head face: 3/4" x 7/8"

Overall length: 12-1/2"

Weight: 26 oz.



95-A: Slate Cutter and Trimmer

- Pressed steel tool with guillotine action used to cut slate, mineral fiber shingles or formica.
- Used for cutting smaller pieces to be fitted around chimney or valley of roof, or any other place not requiring full size shingle or slate.
- Cutting blade is specially heat treated to withstand tough use.
- Removable punch is included.
- Two included pieces of angle iron, which can be fitted to bottom section by means of pre-drilled screw holes, provides for greater stability of piece being cut.

Item No.	Overall Length	Weight	Cutting Blade Length
95-A	25"	5 lbs.	4"
95-B	Blade Only		
95-P	Punch Only		



203: Bronze Groover

- Cast from highest quality bronze.
- Fitted with a routed wood handle.
- Working surface is professionally ground to a very smooth finish.

Size: 6" L x 4-1/2" W

Bit size: 5/8" W x 3/4" Deep



205: Deep Bit Bronze Groover

- Cast from highest quality bronze.
- Fitted with a routed wood handle.
- Working surface is professionally ground to a very smooth finish.

Size: 6" L x 4-1/2" W

Bit size: 1/2" W x 1" Deep



210: Bevel Edger

- Unique angled, bevel edger.
- Ideal for finishing steps, curbs, pavements as required.
- Finely ground and polished to a professional finish.

Size: 6" x 3"

Bevel size: 5/8"



212: Curb Edger

- Smaller radius edgers are cast from high quality ductile iron.
- Working surface is finely ground and polished to a professional finish.

Item No.	Lip Depth	Radius	Size
212	1/2"	3/8"	6" x 3"
212X	3/8"	1/4"	6" x 3"



214 and 216: Curb Edgers

- For cement finishing requiring a large rounded edge.
- Working surface is finely ground and polished to a professional finish.

Item No.	Width of Tool	Radius	Length
214	3"	3/4"	6"
216	3-1/2"	1-1/2"	6"



302: Series Square Tampers

- Heavy-duty tamper is cast from high quality grey iron.
- Available in either wood or pipe handle.
- Outside diameter of handle is 1-5/8".

Item No.	Weight (lbs.)	Base Size
Wood Handle		
302-A	10	6" x 6"
302-B	14	8" x 8"
302-C	15	10" x 10"
302-D	17	12" x 12"
Pipe Handle		
302-E	15	6" x 6"
302-F	20	8" x 8"
302-G	21	10" x 10"
302-H	23	12" x 12"



156 and 160: Step Nosing Tools

- Nosing tools are used to finish the nose or bead of the tread of steps.
- Finely ground and polished to a professional finish.

Item No.	Length	Width	"V" Recess	Tread Size
156	7"	4-1/2"	3/4"	2"
160	5-3/4"	3-5/8"	5/8"	1-3/4"



MASTERFLOW®

Features

- High early and 7-day strengths.
- Superior physical properties at high temperatures.
- High flowability.
- Variable fill ratio.
- Epoxy based.
- High bond strength.

Benefits

- Rapid return of equipment to service.
- Ideal for heat-generating equipment.
- Excellent bearing area for even distribution of loads.
- Optimum performance on a project-by-project basis.
- Good chemical resistance.
- Bonds to steel and concrete.

EPOXY GROUTS				
TYPE	DESCRIPTION	YIELD	PACKAGING	
MASTERFLOW® MP	Multi-purpose epoxy grout	Is a three-component, epoxy grout. It is used for anchoring bolts and rebar, for baseplate support and for general repair of concrete structures and surfaces.	0.5 ft. ³ (0.014m ³) per unit 2.0 ft. ³ (0.057m ³) per unit	0.5 ft.³ unit (0.014m³) Component Lbs. (kg) 1 Resin 6.0 (2.72) 1 Hardener 3.0 (1.36) 1 Bag Aggregate 58.3 (26.5) 2.0 ft.³ unit (0.057m³) Component Lbs. (kg) 1 Resin 23.9 (10.85) 1 Hardener 11.9 (5.4) 4 Bag Aggregate 58.3 (26.5)ea.
MASTERFLOW® 648 CP	High-strength foundation grout	Is a high-performance epoxy grouting material for support of heavy equipment. It ensures the proper transmission of static and dynamic loads to the equipment foundation.	One 230 lb. unit of Masterflow® CP will yield approximately 1.73 ft. ³ (0.049m ³) of mixed material at the 6.75 fill ratio.	230 Lb. Unit Resin: One 22 lb. 5 oz. pail (10.1kg) Hardener: One 7 lb. 9 oz. bottle (3.4kg) Aggregate: Four 50 lb. bags (22.7kg ea.)
MASTERFLOW® 648 CP PLUS	High-strength, high-temperature, high-flow epoxy grout	Is a three-component, modified epoxy-resin-based grout with variable fill rates. Masterflow® 648 CP Plus combines high-temperature performance and crack resistance with outstanding flow characteristics.	216 lb. Units (1.73 ft. ³ , 0.05m ³) Resin: One 20.2 lb. pail (9.2kg) Hardener: One 7.6 lb. bottle (3.4kg) Aggregate: Four 47 lb. bags (21.3kg) (A 3-bag high-flow unit will generate 1.35 ft. ³ [0.04m ³]). 54.4 lb. Units (0.43 ft. ³ , 0.012m ³) Resin: One 5.1 lb. pail (2.3kg) Hardener: One 1.9 lb. bottle (0.9kg) Aggregate: One 47 lb. bag (21.3kg) (54.4 lb. unit is shipped in a 5 gallon pail over-pack).	210 lb. Units (1.73 ft.³, 0.05m³) 54.4 lb. Units (0.43 ft.³, 0.0125m³)

APPLICATION

- Areas requiring a moisture-insensitive bond to concrete substrates.
- Deep-pour baseplate applications.
- Repairing of spalled concrete.
- Rebuilding deteriorated curbs, bases and columns.
- Bolt and rebar anchoring.
- Where fast turnaround and high early and 7-day compressive strengths are needed.
- Precision alignment of machinery, compressors and prime movers.
- Foundations under crusher ball mills, slab tables and other equipment.
- Mining, steel, gas and power industries.
- Pulp and paper mills.
- Chemical processing facilities.
- Heavy equipment grouting.

LOCATION

- Interior or exterior.



MASTERFLOW® AND EMBECO®

Features

- Hardens free of bleeding, settlement or drying shrinkage at any recommended consistency.
- High fluidity.
- Wide range of temperature ranges.

Benefits

- Provides high effective bearing area for optimum load.
- Ease of placement.
- Ensures proper placement under a variety of conditions.

CEMENTITIOUS GROUTS				
TYPE	DESCRIPTION	YIELD	PACKAGING	
MASTERFLOW® 928	High-precision mineral-aggregate grout with extended working time	It is a hydraulic cement-based, mineral-aggregate grout with an extended working time. It is ideally suited for grouting machines or plates requiring precision load-bearing support. It can be placed from fluid to damp pack over a temperature range of 45 to 90°F (7 to 32°C).	One 55 lb. (25kg) bag of mix with approximately 10.5 lbs. (4.8kg) or 1.26 gallons (4.8L) of water yields approximately 0.50 ft. ³ (0.014m ³) of grout. The water requirement may vary due to mixing efficiency, temperature and other variables.	55 lb. (25kg) multi-wall paper bags 3,300 lb. (1,500kg) bulk bags.
MASTERFLOW® 713 PLUS	High-precision nonshrink mineral-aggregate grout	Is a cement-based grout with specially graded mineral aggregates. It can be used at any consistency from fluid to damp pack for applications that require precision support and early form stripping or shoulder trimming.	One 55 lb. (25kg) bag mixed with 11.25 lbs. (5.1kg) or 1.35 gallons (5.1 L) of water produces approximately 0.52 ft. ³ (0.015m ³) of grout. Water usage will vary with consistency requirements increasing or decreasing the yield.	55 lb. (25kg) multi-wall paper bags
MASTERFLOW® 816	Aggregate-free cable and duct grout	Is a hydraulic, cement-based, aggregate-free grout. It produces a fluid, pumpable, nonshrink, nonbleeding, high-strength product with extended working time. It provides corrosion protection for highly stressed steel cables, anchorages and rods, and has a wide range of other applications.	One 55 lb. (25kg) bag mixed at 72°F (22°C) with 16.7 lbs. or 2 gallons (7.6kg or 7.58 L) of water produces approximately 0.60 ft. ³ (0.017m ³) of fluid grout at a 20-30 second flow.	55 lb. (25kg) multi-wall paper bags
EMBECO® 636 PLUS GROUT	Nonshrink metallic-aggregate grout	It contains metallic and quartz aggregate and can be used at any consistency from fluid to damp pack. Use it for applications requiring precision support where early form stripping or shoulder trimming are required.	One 55 lb. (25kg) bag mixed with approximately 10.5 lbs. (4.8kg) or 1.26 gallons (4.8 L) of water produces approximately 0.43 ft. ³ (0.012m ³) of grout.	55 lb. (25kg) multi-wall paper bags
EMBECO® 885	High-precision nonshrink metallic-aggregate grout with extended working time	Is a cement-based, metallic-aggregate grout with an extended working time. It is ideally suited for grouting machines or plates requiring optimum toughness and precision load-bearing support, including machine bases subject to thermal movement.	One 55 lb. (25kg) bag mixed with approximately 10 lbs. (4.5kg) or 1.2 gallons (4.5 L) of water produces approximately 0.43 ft. ³ (0.012m ³) of grout.	55 lb. (25kg) multi-wall paper bags
SET® GROUT	General-construction mineral-aggregate nonshrink grout	Is a Portland-cement-based construction grout containing mineral aggregate.	One 50 lb. (22.7kg) bag mixed with 1.0 gallon (3.8 L) of water provides approximately 0.42 ft. ³ (0.012m ³) of mixed grout (at a flowable mix).	50 lb. (22.7kg) multi-wall paper bags
SS MORTAR®	Splice-sleeve grout	Is a cement-based, metallic-aggregate mortar for grouting of NMB Splice Sleeves. This nonshrink, high-strength, ready-to-use grout is used for NMB Class-1 and Class-2 splice sleeves.	One 55 lb. (25kg) bag mixed with 8.25 lbs. (3.75kg) of water produces approximately 0.42 ft. ³ (0.012m ³) of material.	55 lb. (25kg) multi-wall paper bags





EMACO® T AND EMACO® R

• Traffic area repair and surface renovation

CONCRETE REHABILITATION				
TYPE	DESCRIPTION	YIELD	PACKAGING	
EMACO® R300 CI	Surface-renovation mortar with integral corrosion inhibitor	Is a one-component, thixotropic, polymer-modified, cement-based, profiling mortar with an integral corrosion inhibitor. Emaco® R300 CI is used for leveling or resurfacing distressed concrete both interior and exterior. It is shrinkage compensated, fast setting and chloride and carbon resistant.	Approximately 0.43 ft. ³ (0.013m ³) per 55 lb. (25kg) bag. Approximately 21.6 ft. ² (2.0m ²) at 1/4" (6mm) depth without any waste. A 55 lb. (25kg) bag will cover approximately 10.8 ft. ² (0.28m ²) at a 1/2" (12.5mm) thickness.	55 lb. (25kg) multi-wall bags
EMACO® R310 CI	One-component flow-able repair mortar with integral corrosion inhibitor	Is a polymer-modified, cement-based mortar with an integral corrosion inhibitor. It is used for patching or resurfacing distressed horizontal concrete surfaces. Emaco® R310 CI repair mortar is designed for both interior and exterior use.	Approximately 0.45 ft. ³ (0.013m ³) of mortar, which will cover approximately 5.4 ft. ² (0.50m ²) at a 1" (25mm) thickness. An extension of 45% SSD 3/8" pea gravel (25 lb. [11kg] per 55 lb. [25kg] bag) will yield approximately 0.63 ft. ³ (0.018m ³).	55 lb. (25kg) multi-wall bags
EMACO® R320 CI	Fiber-reinforced vertical and overhead repair mortar with integral corrosion inhibitor	Is a one-component, polymer-modified, fiber-reinforced repair mortar containing an integral corrosion inhibitor. It is used for patching and resurfacing distressed concrete, both interior and exterior. It can be applied by low-pressure spraying or hand troweling.	Approximately 0.46 ft. ³ (0.013m ³) which will cover approximately 5.5 ft. ² (0.51m ²) at 1" (25mm) depth without waste.	55 lb. (25kg) multi-wall bags
EMACO® R350 CI	Polymer-modified lightweight vertical and overhead repair mortar with integral corrosion inhibitor	Is a one-component, low-density, polymer-modified, renovation mortar that contains an integral corrosion inhibitor. It is ideally suited for patching and resurfacing distressed concrete. Its lightweight nature allows for excellent build without sagging. Emaco® R350 CI repair mortar can be used both interior and exterior.	Yield is approximately 0.61 ft. ³ (0.017m ³), which will cover approximately 7.4 ft. ² (0.69m ²) at a 1" (25mm) depth without waste.	55 lb. (25kg) multi-wall bags
SET® 45 AND SET® 45 HW	Chemical-action repair mortar	Set® is a one-component, magnesium phosphate-based, patching and repair mortar. This concrete repair and anchoring material sets in approximately 15 minutes and takes rubber-tire traffic in 45 minutes. It comes in two formulations: Set® 45 Regular for ambient temperatures below 85°F (29°C) and Set® 45 Hot Weather for ambient temperatures ranging from 85 to 100°F (29 to 38°C).	A 50 lb. (22.7kg) bag mixed with the required amount of water produces a volume of approximately 0.39 ft. ³ (0.011m ³): 60% extension using 1/2" (13mm) rounded, sound aggregate produces approximately 0.58 ft. ³ (0.016m ³).	50 lb. (22.7kg) multi-wall bags
EMACO® T415	Rapid-strength repair mortar	Is a one-component, high-performance, cementitious product. It produces high early strengths at a wide range of temperatures and can be placed into service for standard rubber-tire traffic in as little as 2 hours (depending on temperature).	Approximately 9.6 ft. ² (0.9m ²) at a 1/2" (13mm) thickness or approximately 0.40 ft. ³ (0.011m ³). With an extension of 55% aggregate 3/8" in size, the yield is approximately 0.58 ft. ³ (0.016m ³).	55 lb. (25kg) multi-wall bags
EMACO® T430	Rapid-strength repair mortar with extended working time	Is a one-component, high-performance, cementitious product. It produces high early strengths at a wide range of temperatures and can be placed into service for standard rubber-tire traffic in as little as 6 hours. Emaco® T430 is specially suited for hot-weather applications when an extended working time is required.	One 55 lb. (25kg) bag mixed with the required water will cover approximately 9.6 ft. ² (0.9m ²) at a 1/2" (13mm) thickness or approximately 0.40 ft. ³ (0.011m ³). With an extension of 55% aggregate, 3/8" in size, the yield is approximately 0.58 ft. ³ (0.016m ³).	55 lb. (25kg) multi-wall bags 3,300 lb. (1,500kg) bulk bags available by special order



MAXIMENT®, MASTERCRON®, LUMIPLATE® AND MASTERPLATE®

CONCRETE FINISHES				
	TYPE	DESCRIPTION	YIELD	PACKAGING
MAXIMENT®	Mineral-aggregate dry-shake surface hardener	Is a ready-to-use, dry-shake, surface hardener. When evenly distributed and finished over freshly leveled and floated concrete, it provides increased wear resistance at a moderate cost.	1.0 - 1.5 lb./ft. ² (4.9 - 7.3kg/m ²)	55 lb. (25kg) multi-wall bags
MASTERCRON® Ff	Mineral-aggregate dry-shake surface hardener and flatness enhancer	Is used to conform to a specific flatness designation. (Refer to ACI 117, ASTM E 1155M-96, and CSA A23.1-00 for specifics regarding the F-Number System.) Fresh concrete has the ability to integrate up to 1.0 lb./ft. ² (4.9kg/m ²) of Mastercron® Ff after screeding.	1.0 - 2.0 lb./ft. ² (4.9 - 9.8kg/m ²)	55 lb. (25kg) multi-wall bags
MASTERCRON®	Colored mineral-aggregate dry-shake surface hardener	Is a ready-to-use, colored, cementitious, dry shake, surface hardener incorporating specially sized and graded mineral aggregate. When evenly distributed and finished over freshly leveled and floated concrete, it adds color and improves the wear resistance of concrete floors.	Primarily for wear resistance: 1.0 - 2.0 lb./ft. ² (4.9 - 9.8kg/m ²) Primarily for color: 1.5 - 2.0 lb./ft. ² (7.3 - 9.8kg/m ²)	55 lb. (25kg) multi-wall bags
LUMIPLATE™	Ferrosilicon non-oxidizing metallic-aggregate dry-shake surface hardener	Is a ferrosilicon, nonoxidizing, metallic-aggregate, surface hardener. It is ideal for industrial floors requiring added abrasion and impact resistance where moisture or humidity may be a factor. Lumiplate™ is also available in a light-reflective formula.	1.5 - 2.5 lb./ft. ² (7.3 - 12.2kg/m ²)	55 lb. (25kg) multi-wall bags
MASTERPLATE® Ff	Metallic-aggregate dry-shake surface hardener and flatness enhancer	Is used on floors designed to conform to a specific flatness designation. (Refer to ACI 117, ASTM E 1155M-96, and CSA A23.1-00 for specifics regarding the F-Numbering System.)	1.0 - 3.0 lb./ft. ² (4.9 - 14.7kg/m ²) If more than 1.0 lb./ft. ² will be applied, apply in two or more applications.	55 lb. (25kg) multi-wall bags
MASTERPLATE® 200	Metallic-aggregate colored dry-shake surface hardener	Is an iron-armored, ready-to-use, cementitious, dry-shake, floor hardener. It utilizes specially treated, sized and graded metallic aggregate. When evenly distributed and finished over freshly leveled and floated concrete, the aggregate improves wear and impact resistance for industrial concrete floors.	Primarily for wear resistance: 1.0 - 3.0 lb./ft. ² (4.9 - 14.7kg/m ²) Primarily for color: 1.8 - 3.0 lb./ft. ² (8.8 - 14.7kg/m ²)	55 lb. (25kg) multi-wall bags

APPLICATION

- Concrete floors needing increased wear resistance.
- Floors that are frequently or continually wet.
- Institutional and commercial floors.
- Refrigerated food-storage areas.
- Where an attractive, surface-colored concrete floor is desired.
- Where improved wear resistance for light to moderate duty traffic is needed.
- When traffic and wear do not demand the added abrasion and impact resistance of a metallic-aggregate surface hardener.
- Warehouse and storage areas.
- Shopping centers, schools, theaters, parking garages, recreational facilities.

LOCATION

- Interior floor surfaces.

SUBSTRATE

- Over freshly placed concrete.



QPR[®] is North America's #1 selling Pavement Repair Material, tested, approved and used by the nation's leading DOT's and Utilities.

Using QPR is as easy as.... 1, 2, 3

1 Clean area to be repaired of any loose material or debris. Water? No problem with QPR. Simply pour the material directly from the bag into the hole. There is no need to even sweep the water from your patch provided it is clear of debris.

2 Pour directly from the bag into the hole. Add material up to a depth of approximately 2 inches. When you have a 2-inch base, use a tamp or shovel back and compact the material to create an even and solid surface. Reapply in 2-inch increments until repair area is filled.

Quick Tip - Need faster set up times? Lightly sprinkle mortar dust or Portland cement over the QPR prior to compaction.

3 When hole is filled, apply a small crown to repair area to allow for additional compaction. Now tamp or wheel roll for the final time, and you may now open to traffic – immediately!

It's that simple.

Performance Guaranteed by  **LAFARGE**
NORTH AMERICA

NJDOT & VADOT
Approved

Q & A

When can I apply Driveway Sealer over the area I just repaired?
As with any asphalt-based repair material, QPR must be allowed to cure prior to the application of any sealer type product. Just as you wouldn't apply a second coat of paint before the first coat dries, you'll need to allow QPR to "dry," as well. Curing time depends on the climatic conditions at the time, but as a general rule your patch should be ready to seal in 20-30 days. The more compaction the patch gets, the more rapidly it will cure. A quick "feel test" used by many pros is to simply place your hand on the patch. If it is still tacky, more cure time is required. If it is dry to the touch and appears somewhat dull, rather than shiny, the patch may be sealed or treated. Remember, cosmetically, QPR is as black as the sealer you are using, so the appearance of your driveway, parking lot or patched area will look as good as new.

How long will it take the patch to harden completely?
As noted on the bag, QPR is specifically designed to remain somewhat pliable after application. This allows the product to continue to fill small voids and crevices through continued compaction. Totally filling these voids prevents water (and in the winter - ice) from getting into the repaired area and ultimately causing your patch to fail. This engineering design is why QPR is the overwhelming choice of Highway Departments and DOT's across North America. Remember, you can, and should begin to drive over your patch immediately. So while it may seem like it has not "set up," it is performing just as it was designed to. Should you require a faster set-up time, for whatever reason, a light sprinkling of mortar dust or Portland cement will help to speed the curing process.

Environmentally Sound

Used Throughout the Mid Atlantic States



Should I cover the patched area while it cures?
Absolutely not. QPR is ready for traffic immediately following compaction. Covering the patch delays the curing process and provides no benefit to your repair.

How deep a hole can I fill?
As long as you compact the QPR every two inches you can fill as deep a hole as you like. Failure to apply proper compaction every two inches will most likely result in the failure of your patch.

Can I use QPR to build a speed bump, curb or ramp?
Probably not. Remember, QPR is a REPAIR material designed to work within the confines of a hole or utility cut. Although we have had some pretty creative customers who have found ways to use QPR in situations not approved by our Engineering Department, QPR is designed solely to patch potholes and utility cuts.

I didn't use all the QPR in the bag, can I use the remaining material later?
Yes. Just seal the bag opening tightly, and the remaining material will stay usable for up to one year. In a couple months, you'll be ready for that winter pothole that always appears at the end of your driveway each January.

How do I get this stuff off my hands?
You can't. QPR adheres to asphalt, steel, concrete and skin, permanently. **JUST KIDDING!** Pumice soaps, orange based cleaners or other common solvents make removing the black marks from your hands easy and worry-free.

www.QPRcoldpatch.com



Product # 1101

Concrete Mix

Original 4000 psi average compressive strength blend of Portland cement, sand and gravel or stone. Just add water. Use for any general concrete work.

Use for setting posts and building:

- Sidewalks
- Downspout Troughs
- Steps
- Floors
- Patios
- Curbs

Available in: 40 lb. bags - 80 per pallet
60 lb. bags - 56 per pallet
80 lb. bags - 42 per pallet



Product # 1102

Mortar Mix

A blend of masonry cement and graded sand. A long lasting, strong bonding mortar. Just add water.

Use for:

- Laying brick, block or stone for walls, columns, etc.
- Repairing damaged joints in brick, block and stone masonry (non-structural).

Available in: 40 lb. bags - 80 per pallet
60 lb. bags - 56 per pallet
80 lb. bags - 42 per pallet



Product # 1103

Sand (Topping) Mix

Original high strength blend of Portland cement and graded sand.

Use for:

- Pouring overlays less than 2" thick.
- Patching and topping chipped concrete surfaces.
- Laying flagstone and paving bricks.

Available in: 40 lb. bags - 80 per pallet
60 lb. bags - 56 per pallet
80 lb. bags - 42 per pallet



Product # 11126

Hydraulic Water-Stop Cement

Special formula allows product to obtain high strength and rapid setting while repelling water.

- Blocking running water or leaks in cracked masonry or concrete surfaces.

Available in: 6 lb. pails - 6 per case,
20 lb. pails - 60 per case



Product # 1701-60

Blacktop Patch

Asphalt cold patch for repairing potholes and large cracks in asphalt pavement.

- Does not require heating or mixing, pour directly out of bag.
- Can be formed and compacted.
- Patched area is ready for immediate use.

Available in: 60 lb. bag - 56 per pallet



Product # 1113

Play Sand

Specially graded sand that has been washed, dried and screened.

Use for:

- Children's sand boxes.

Available in: 50 lb. bags - 56 per pallet

Type I Portland Cement
Type I cement is commonly known as the general purpose cement in the construction trade. Most visible concrete is constructed with Type I cement: highways, bridges, sidewalks, walls and foundations. Allentown Type I cement enjoys a reputation for high compressive strengths exceeding industry standards. Our Type I also allows contractors the finishing and curing characteristics for optimum production and the ultimate in quality.



SPEED CRETE® RED LINE

A fast setting, cement-based concrete and masonry patching compound.

Features/Benefits:

- Initial set in 8-10 minutes.
- Final set within 20 minutes.
- May be "shaved" to desired shape.
- High strength.
- Excellent durability.

Applications:

- Interior and exterior.
- Vertical, overhead, horizontal repairs.
- Used at no slump consistency.
- Outstanding repair material for concrete pipe, curbs, sidewalks, formed and precast concrete.

SPEED CRETE® BLUE LINE

A fast setting, cement based concrete and masonry patching compound formulated for underwater use.

Features/Benefits:

- Rapid set, initial set in 3-5 minutes.
- Underwater cure.
- High strength.
- Durable.
- Used, without forming, at no slump consistency.
- Can be "shaved" to desired contour.

Applications:

- Underwater and below grade repairs.
- Vertical, overhead and horizontal restoration.
- Outstanding material for repair of dams, piers, reservoirs, pilings, seawalls, tunnels, sewer pipe and other underwater surfaces.

SPEED CRETE® GREEN LINE

A fast setting, semi-flowable, high strength, patching material requiring only potable water for mixing.

Features/Benefits:

- Semi-flowable.
- Initial set in 6-15 minutes.
- Final set in 20 minutes.
- Open to traffic in 1 hour.
- High strength.
- Excellent durability.
- Meets or exceeds requirements of ASTM C928.

Applications:

- Rapid patching of horizontal concrete surfaces.
- Interior/exterior, above/below grade.
- Repair material for expressways, bridge decks, streets, loading docks and parking decks.

SPEED CRETE® 2028

A cement based, ready to use, patching and repair mortar which sets fast, and achieves rapid strength gain.

Features/Benefits:

- Sets fast with rapid strength gain.

- Compressive strength of 2,600 psi within one hour.
- Minimizes prolonged shutdowns.
- Nonshrink.
- Contains a migratory corrosion inhibitor.
- Develops tenacious bond.
- Excellent resistance to freeze-thaw and deicing chemicals.
- Patch can be coated or overlaid with Tamms epoxy products after only 24-hour cure.
- Meets or exceeds ASTM C928.

Applications:

Patching of horizontal concrete surfaces such as:

- Highways.
- Loading docks.
- Bridge decks.
- Pavement joint repairs.
- Parking decks.
- Industrial floors.

TAMMSPATCH

A two-component, concrete repair compound consisting of a Portland cement based dry ingredient and a polymer based liquid admixture. TAMMSPATCH is formulated for durability, crack resistance and exceptional bond strength. It is used for the repair of concrete and masonry, and it is applied from featheredge up to 1-inch (2.5cm) thickness in one application.

SPEED PLUG®

A quick setting hydraulic cement compound used to instantly stop running water or seepage leaks in masonry or concrete.

Features/Benefits:

- Non-shrinking, non-metallic and non-corrosive.
- Initial set in 1-3 minutes.
- Stops running water or seepage leaks.
- High strength.
- Controlled expansion.
- Can be applied underwater.

Applications:

Used above or below grade, interior or exterior to stop seepage and flowing water on:

- Concrete/masonry walls and floors.
- Dams, swimming pools, cisterns, reservoirs and water tanks.

AQUASEAL®, AQUASEAL® GEL, AQUASEAL® LV

The AQUASEAL family of products are two-part, 100% solids epoxy systems specifically designed for underwater applications on concrete or masonry surfaces. These products are suitable for applications in both fresh and saltwater.

AQUASEAL: Is a high build protective coating for structures below water.

AQUASEAL LV: Is a low viscosity version that can be mixed with aggregate to form a grout for patching and repair or can be used "neat" for crack repair using pressure injection techniques.

AQUASEAL GEL: Can be used neat or with an aggregate for patching and grouting of underwater vertical surfaces.

FLOORSTONE

The FLOORSTONE products are high compressive strength materials used to fill and level low areas and to patch floor surfaces before traffic bearing floor coverings are installed. There are two versions of FLOORSTONE.

FLOORSTONE SUPREME is used for skim coats and thin fills up to 1/4 inch (6.4cm). FLOORSTONE SUPREME is mixed with LASTEX - a liquid polymer binder.

FLOORSTONE N.I.F. is mixed with water and is used for fills beginning at 1/4 inch up to a maximum of 2 inches in thickness (5.1cm).

Features/Benefits:

- Compatible with most floor coverings, adhesives and mastics.
- Excellent flow and leveling characteristics.
- Yields a smooth, level and hard surface.
- Floor coverings can be applied after 72 hours.
- Properties similar to concrete.
- Pump or pour application.

Applications:

- Repair, fill and level surfaces.
- Interior use over properly prepared concrete, wood, plywood, metal and other rigid substrates.

DURALTOP® GEL

A fast setting, two-component, polymer reinforced, non sag, cementitious patching and repair mortar.

Features/Benefits:

- Fast setting, polymer modified repair mortar.
- Achieves high, early compressive, flexural and bond strengths.
- Contains a migratory corrosion inhibitor.
- Non-sag, high build properties.
- Preproportioned unit.

Applications:

- Structural repairs.
- Exterior or interior, above or below grade.
- Vertical and overhead concrete and masonry repairs.



Tamms

PATCHING AND RESTORATION

DURALTOP® FAST SET

A fast setting, two-component, polymer reinforced, cementitious patching and repair mortar.

Features/Benefits:

- Fast setting, polymer modified repair mortar.
- Achieves high early compressive, flexural and bond strengths.
- Permits foot traffic in 2-4 hours, pneumatic tire traffic in 6-8 hours.
- Contains a migratory corrosion inhibitor.
- Resistance to abrasion and deicing chemicals.
- Increased resistance to freeze-thaw.
- Does not form a vapor barrier.
- Easy to use, pre-proportioned unit.

Applications:

- Structural repairs.
- Exterior/interior, above/below grade.
- Horizontal concrete/masonry repairs.

DURALCRETE®

A multi-purpose, two-component, 100% solids, moisture tolerant epoxy resin compound for load bearing applications.

Features/Benefits:

- High strength.
- High modulus.
- Provides load transfer.
- Virtually no odor.
- 1:1 Mix ratio.
- Outstanding adhesion to concrete.
- Medium viscosity.

Applications:

- Bond fresh concrete (plastic) to hardened concrete.
- Vertical anchor bolt, dowel bar and rebar adhesive.
- Hardened concrete to hardened concrete adhesive.
- Mortar to repair concrete defects.

DURALITH®, DURALITH® LV, DURALITH® GEL

DURALITH, DURALITH LV, and DURALITH GEL are two-part, 100% solids, moisture insensitive, epoxy resin compounds. They are high strength, high modulus, adhesive and mortar binder systems used when load transfer is required. When mixed with aggregate, they yield a high strength epoxy mortar for patching and overlays. They are resistant to salts, gasoline, oil and chemicals. They develop high early strengths, and are recommended for use at temperatures between 40-60°F.

DURALITH is a medium viscosity, high modulus adhesive, mortar binder and grout for concrete structures.

DURALITH LV is a low viscosity, high modulus adhesive and mortar binder

for horizontal repairs of structural concrete. It is used as a rapid setting, pressure injection resin or as an anchor bolt grout, where the anchor holes are drilled vertically.

DURALITH GEL is a non-sag, high modulus adhesive and mortar binder for vertical and overhead repairs of structural concrete. It is also used as an anchor bolt grout where the anchor holes are drilled horizontally. It can be used neat or mixed with silica sand.

LEVEL MAGIC

A cement based, self leveling, high strength underlayment designed for leveling floors. LEVEL MAGIC can be feather-edged and has properties similar to that of concrete and depending on the application, eliminates or minimizes trowelling. It requires the addition of only potable water to achieve a high fluid consistency producing a smooth, level and hard surface. LEVEL MAGIC can be applied in multiple lifts with each lift being no more than 1" thick or can be extended with pea gravel to fill greater depths.

TAMMOLITH

A water-based, chemically active, hardening and dustproofing agent for new or aged concrete floors. It is a colorless solution of fluorosilicate hardening agents and P-15, a powerful wetting and penetrating agent. The hardening agents react with the free lime in concrete to deposit dense, chemically resistant minerals which seal and harden the concrete surface. The hardened surface resists penetration by dust, oil, grease and other contaminants, improving durability while reducing cleaning and maintenance costs.

TAMMS THIN PATCH®

A polymer modified, cement based compound that is formulated for patching and repairing concrete and masonry.

Features/Benefits:

- Single component, polymer modified.
- Trowelable repair mortar.
- Featheredge to one inch.
- High durability.
- Outstanding bond strength.
- High strength.
- User friendly.

Applications:

- Horizontal, vertical, overhead repairs.
- Interior and exterior use.
- Fill small holes, honeycomb and spalled areas.
- Repoint mortar joints.

FLEXOCRETE®, FLEXOCRETE® GEL

Two-component, 100% solids, low modulus, epoxy resin compounds.

FLEXOCRETE is designed for use as an overlay for floors and for epoxy mortar patching of horizontal surfaces.

FLEXOCRETE GEL is a non-sag formulation designed for use in epoxy mortar patching and repairs of vertical and overhead concrete.

FLEXOLITH

A two-component, 100% solids, low modulus, moisture insensitive epoxy binder with properties which make it suitable for use in applications where stress relief and resistance to mechanical and thermal movements are required. FLEXOLITH is formulated for low temperature applications, or where rapid cure is required.

DURALEX® FASTPATCH

A three-component, 100% solids, low modulus, moisture insensitive epoxy repair kit.

Features/Benefits:

- Ease of use.
- No measuring of components.
- Pre-measured resin, hardener and specially blended "non-dusting" aggregate.
- Low modulus resin binder used for stress relief and resistance to impact.
- Resistant to thermal and mechanical movements.
- Rapid cure, minimizes down-times.
- May be applied as low as 40°F.

Applications:

Repair interior or exterior horizontal concrete surfaces such as:

- Warehouse floors.
- Balconies.
- Loading docks.
- Mechanical rooms.
- Parking decks and ramps.
- Food storage areas.
- Bridge decks and nosings.
- Runways.

TAMMS SBC

Surface Bonding Cement – A trowel or spray applied, decorative, fiber reinforced, Portland cement based, breathable, waterproofing coating. The high flexural strength of TAMMS SBC provides excellent resistance to cracking and superior durability against weathering.



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Tamms

CURES AND SEALERS / WATER REPELLENTS

TRI-DAR® 66/1A PROTECTIVE TREATMENT

A penetrating, anti-scale, linseed oil based, waterproofing sealer for the protection and treatment of exterior concrete surfaces. The spraying, pouring and pumping characteristics of TRI-DAR 66/1A are similar to linseed oil.

TRI-DAR® 33, 44

TRI-DAR emulsions are patented, single application curing, sealing and anti-scale compounds. Each forms a semi-permeable membrane to control moisture loss, aid hydration of cement, and ensure rapid development of both early and ultimate design strengths. TRI-DAR emulsions are spray applied directly onto the wet concrete surface to penetrate and help prevent surface or "map" cracking caused by premature drying. Approximately two hours following the application, the emulsion will "break" to allow the linseed oil to form a semi-permeable membrane that immediately protects the surface from rain, controls moisture loss, and aids in hydration. The surface is further protected from the scaling that results from the damaging effects of freezing and thawing when deicing chemicals are used.

TRI-DAR 33/1 is a nonpigmented general purpose curing and sealing emulsion.

TRI-DAR 33/2 is a white pigmented general purpose curing and sealing emulsion.

TRI-DAR 44 series emulsions are formulated with a high viscosity heat bodied Linseed Oil for greater protection through 130-150 freeze-thaw cycles.

TRI-DAR 44/1 is a nonpigmented extreme service curing and sealing emulsion.

TRI-DAR 44/2 is a white pigmented extreme service curing and sealing emulsion.

DURAL 333

A solvent-based epoxy penetrating sealer for concrete and masonry surfaces. It fills the surface porosity thereby lowering absorption of water and salts. The epoxy binds the concrete surface improving the wear resistance and reducing dusting.

DURAL® 335

Solvent free, two-component, moisture insensitive, ultra low viscosity epoxy sealer. It is used interior and exterior to seal slabs, gravity feed resin into cracks and pressure inject cracks on bridge decks, parking garage decks/ramps, airport runways and roadways.

TAMMSCURE WB 30 (C and D)

A water-based, membrane forming, concrete curing compound. It facilitates proper hydration of the concrete, then begins to degrade approximately four weeks after application. TAMMSCURE WB 30C is milky white when applied and dries to a light amber color. TAMMSCURE WB 30D contains a fugitive dye which disappears when exposed to sunlight. TAMMSCURE WB 30 (C and D) will eventually wear off the surface after the concrete curing cycle is complete. Complete degradation usually requires 7-8 weeks in sunlight and under normal traffic conditions. If the concrete is protected and receives light traffic, dissipation time may be substantially longer.

LUSTER SEAL® WB 150, WB STD, WB 300

A water based, curing and sealing compound. It is resistant to yellowing from sunlight exposure, VOC compliant, non-flammable and ready to use. When used as a curing compound, LUSTER SEAL WB helps control hydration of the cement by preventing rapid loss of moisture through the surface of newly placed concrete. As a sealer on concrete, exposed aggregate concrete, and other decorative concretes, LUSTER SEAL WB is designed to protect and give a "wet look." It is available in three formulations, LUSTER SEAL WB 150, WB Standard, and WB 300.

CLEARSEAL® WB 150, WB STD, WB 300

CLEARSEAL WB is a water based, modified acrylic curing, sealing and hardening compound. It is a one-component, VOC compliant formulation which provides a transparent, protective film over new or existing concrete. When used as a curing compound, it promotes proper hydration by reducing moisture loss from the concrete. As a sealer, CLEARSEAL WB reduces dusting, provides a glossy finish and a surface which is easy to maintain. It is available in three formulations, each designed to meet specific requirements: **CLEARSEAL WB 150** is a low viscosity, penetrating cure, sealer and hardener. **CLEARSEAL WB STD** is a higher solids, penetrating cure, sealer and hardener formulated for extended wear. **CLEARSEAL WB 300** has the highest solids content and is formulated to provide a high surface gloss.

CHEMSTOP® WB Regular CHEMSTOP® WB Heavy-Duty

A water based, siloxane/silane, water repellent.

CHEMSTOP WB Regular is formulated for use on dense surfaces such as pre-cast or poured-in-place concrete. **CHEMSTOP WB Heavy-Duty** is used on porous surfaces such as lightweight concrete, concrete block and mortar joints.

BARACADE® SILANE 40

A breathable, ready-to-use, colorless, nonstaining, non yellowing, deep penetrating concrete and masonry water repellent compound. It has an alkylalkoxysilane concentration of 40%. It protects concrete, block, stone and brick against the damaging effects of water intrusion, deicing chemicals, freeze-thaw exposure and airborne contaminants such as acid rain, smog and industrial fumes. BARACADE SILANE protects without altering the appearance or texture of the treated surface. BARACADE SILANE produces a non filming water repellent surface while penetrating deep into the capillaries of the subsurface. Chemical reactions within the capillaries form long lasting water repellent groups that crosslink into a silicone compound.

BARACADE® M.E.

A solvent free micro emulsion concentrate. When mixed with water, it self emulsifies into a unique product capable of repelling water on concrete and masonry surfaces. BARACADE M.E. is a breathable, non staining, colorless material which penetrates deep into the surface to seal out moisture, reduce efflorescence and minimize the damaging effects of freeze-thaw cycles. It protects without altering the appearance or texture of the treated surface and improves resistance to airborne dirt, smog and other air pollutants. BARACADE M.E. is diluted with potable water and can be used effectively in two concentrates.

BARACADE M.E./9, which is mixed 9 parts water to 1 part BARACADE M.E. is specifically designed for use on vertical surfaces.

BARACADE M.E./4.5 is mixed 4.5 parts water to 1 part BARACADE M.E. and is formulated for use on horizontal surfaces.

POR-ROK®

ANCHORING CEMENT—NON SHRINK GROUT

Sets in 15 minutes – Expands as it sets – Stronger than Concrete in 1 Hour

POR-ROK ANCHORING CEMENT is used in the anchoring of heavy machinery, railings, guard rails, banisters, repairing of cracks on damaged concrete substrate. It is a non-shrink, hydraulic, controlled expansion cement in a ready to use preparation. Water is added at the jobsite to provide a pourable, durable anchoring or patching compound. **POR-ROK ANCHORING CEMENT** has almost unlimited field applications.

USES AND APPLICATIONS:

- Anchors—bolts, dowels, railings, reinforcing rods, ceramic fixtures, machinery, pipes in concrete.
- Grouts—heavy machinery, structural columns, bearing plates, pre-cast columns.
- In setting, exerts expansion forces which “locks in” anchor bolts, railings, etc.

ADVANTAGES:

1. No rodding, chaining or vibrating.
2. Pourable.
3. Ideal for patching floors, walls, cracks in concrete structures, caulking foundations/wall voids.
4. Easy to use—mix with water.
5. No heating or two component mixing needed.
6. Quick Setting—sets in 15 minutes.
7. Expands as it sets.
8. Stronger than concrete in 1 hour.

POR-ROK Specifications for Maximum Anchoring Strengths:

The following table specifies the recommended opening to be drilled so that the strength of the setting will approximate the tensile strength of a mild steel bolt of the diameter shown or cause concrete failure.

All bolts must have a washer. The washer should be large enough to fit the diameter of the opening with only enough tolerance so that the washer will be free to reach and rest snugly against the head of the bolt at the bottom of the opening. If the washer is slightly too large, it is better to widen the opening than to reduce the size of the washer. In the case of weaker concrete, the depth should be increased to provide a greater purchase to the concrete slab. This will minimize the danger of failure due to fracture of the concrete in the presence of extreme strains.

Diameter of Bolt to Be Fastened	Diameter of Opening	Minimum Depth of Opening
1/4"	3/4"	3"
3/8"	1-1/4"	4"
1/2"	1-1/2"	4"
5/8"	1-3/4"	6"
3/4"	1-3/4"	6"
1"	2"	8"
1-3/4"	2-1/2"	12"

*The minimum depths shown are based on openings drilled in sound concrete of at least 3,000 lbs./sq. in. compression strength.

POR-ROK CEMENT STEEL REINFORCING ROD PULL-OUT TESTS

An independent testing laboratory recently tested POR-ROK Cement as an anchoring medium for steel reinforcing rods.

Note: Pull-out tests were performed on a specially prepared concrete slab, varying from 24"-8" in thickness, 16 ft. W x 16 ft. L.

Compressive strength of the concrete at 28 days was 4620 psi. Concrete was over one year old when tests were performed.

Holes up to and including 1" diameter were drilled with a carbide bit and a Roto-hammer drill. Holes 1/2" diameter on up were drilled with a diamond core bit.

Compressive Strength: POR-ROK was poured into 2" cube molds, set 40-45 minutes, compression test made on Baldwin Southwark Machine – 60,000 pound capacity in accordance with ASTM specification G29-70T cured either under ambient conditions or to constant weight.

Age	Average Load at Failure	Average Lbs. Per Sq. In.	Test Method
1 hr.	20,360	5090	Air dry
24 hrs.	21,360	5340	Air dry
7 days	27,660	6915	Air dry
7 days	37,016	9254	Dry to Constant Wt.

Bond Strength: High strength A325 bolts with washers that rest on head of bolt large enough to fit diameter of the drilled hole – Test slab is 4620 psi concrete.

Bolt Size (in.)	Diameter of Hole (in.)	Depth of Hole (in.)	Average (lbs.) Bond Strength
1/4	3/4	2	4900 Nut Failed (Pulled Out)
1/2	1-1/2	4	13500 Concrete Failed
3/4	1-3/4	6	42000 Concrete Failed
1	2	8	68000 Concrete Failed

Set Time: At 70°F initial set, 18 in. (±3) final set 45 minutes. Test: Gilmore Setting Needles.

Linear Movement: Non Shrink – Expansion not more than .003 inches per linear inch of POR-ROK.

Coverage: One cubic foot, 100 lbs. of POR-ROK Cement mixed with 2-1/3 gallons of water shall fill one cubic foot.

Weight per Cubic Foot: Weight after setting up not to exceed 125 pounds per cubic foot. Based on 100 lbs. of POR-ROK mixed with 2-1/3 gallons of water.

Test Results:

The following results were reported:

Size of Rod Type of Rod	#4 (1/2") Deformed	#6 (3/4") Deformed	#8 (1") Deformed
Diameter of Hole (in.)	1	1-3/4	2
Depth of Hole (in.)	8	12	16
Yield Load of Rod (lbs.)	-	42,500	43,000
Load Req. to Pull Out Rod	16,200	Rod or Concrete Failed	Rod Failed Weld to Bolt

SHELF LIFE:

When stored in original, un-opened container, one year. Rotate your stock.

PACKAGING:

POR-ROK is packaged in 50 lb., 25 lb., 10 lb. and 5 lb. containers.

Product	Description	Uses	Pkg./Coverage
GROUTING			
SureGrout	Premixed, dimensionally stable, non-shrinking, non-metallic grout. Pumpable and high strength can be mixed flowable, normal or for dry-packaging. Meets: ASTM C-109, ASTM C-1107, ASTM C-827 and CRD C-621.	Cable ducts, horizontal joints and grouting beds between precast and pre-stressed members, anchor bolts, dry packing joints, column grouting and base plates.	50# bag Yield: 0.45 CF/unit
K Pro HP Grout	Factory proportioned, self-leveling, epoxy grout. Non-shrink, extremely high strength and chemical resistant. Meets: ASTM C-881, Types I, II, IV & V, Grade 1, Class C; AASHTO M-235, Types I & II, Grade 1, Class C.	Use whenever quick strength gaining and impact resistant epoxy grout is desired. May be placed in single lifts of 18". Ideal for base plate grouting.	Kit: 3/4 gal. epoxy and 32.5# aggregate Yield: .30 ft. ³ /kit, 3 gal epoxy unit w/ 3 (43#) bags yields 1.2 ft. ³ , 4.5 (43#) bags yield 1.6 ft. ³
BONDING / PATCHING			
Patchwell Kit	Two-component, polymer-modified, cementitious resurfacing kit. Resistant to mild acids, alkali and water. Pre-packaged in its own mixing pail and self-curing, it also includes our migrating corrosion inhibitor for long-lasting, quality repairs. Meets: SS-C-1302 Type I, Class A.	Level, resurface up to 1/2" thick. Water and chemical resistant. High strength, economical material. The best general purpose resurfacer.	5 gal. pail Containing: 40# powder & 1 gal. liquid Yield: 40 SF @ 1/8"
SureFlow 040	Dry, cementitious blend that when mixed with water, produces a pourable or pumpable, self-leveling floor underlayment. Light duty wearing surface.	Level, smooth or resurface damaged, spalled or otherwise rough and uneven surfaces prior to covering with other finished flooring.	50# bag Yield: 0.45 CF/unit
SureWeld	High solids, polyvinyl acetate bonding compound. Can be topped any time within 30 days after application. Re-emulsifiable. Meets: MIL B-19235, ASTM C-631, ASTM C-1059, Type I.	To bond concrete toppings to existing slabs. Bonding, patching compound for plaster and other sound surfaces such as brick, concrete masonry, wood and masonite.	55 gal. drum 5 gal. pail 4/1 gal. case Yield: 150-300 SF/unit
CURING COMPOUND			
Thinfilm	Designed to comply with various State and Federal specifications. Available clear, clear with fugitive dye and white pigmented. All versions are VOC compliant. Meets: ASTM C-309, Types I, ID & II, Classes A & B, AASHTO M-148, Types I & II, Classes A & B.	Highway paving, sidewalk, curb and gutter, airport runways, parking areas. Outdoor use only.	5000 gal. bulk 275 gal. tote 55 gal. drum 5 gal. pail Yield: 150-200 SF/unit
MASONRY CHEMICALS			
Excell	Excell is a concentrated solution of chemically active accelerating agents, powerful surfactants and rust inhibitors. It is designed for use in mortars to reduce the water requirements, shorten the set time, increase strength development and increase the workability of the mortar mix. With proper placement procedures, Excell is not nearly as corrosive as calcium chloride solutions would be.	In cold weather, Excell is added to the mortar to lay block, brick, structural clay tile and glass block. It eliminates the dangers associated with freezing mortar joints. Excell speeds the set of the mortar, hastens the strength gain by chemically reacting with the cement and reducing the water requirement.	208.15 L (55 gal. drum) 18.93 L (5 gal. pail) 15.16 L (4 one-gal. pails)
REPAIR / RESURFACE Epoxy Based			
SurePoxy HM	SurePoxy HM is a 100% solids, two-component, moisture-insensitive, epoxy resin system. It is an all purpose, very high strength, rigid adhesive designed for structural bonding of dry and damp materials free of standing water. It can be applied at temperatures as low as 50 degrees Fahrenheit. Meets: ASTM C-881, Types I, II, IV and V, Grade 2, Classes B, C, D, E and F.	SurePoxy HM is especially suited for bonding of fresh plastic concrete to hardened concrete and steel. When mixed with SurePoxy Mortar or Grout Aggregates, it will produce a high strength grout to level base plates, or use as setting bed for precast concrete, granite or marble. When used neat, it is an excellent adhesive for grouting anchor bolts, pins, dowels, etc. It may also be used to grout horizontal cracks in concrete and wood by gravity feed.	15 gal. unit 3 gal. unit .75 gal. unit 16.5 oz cartridge
SurePoxy Mortar	Factory proportioned, stress relieved epoxy mortar. Just mix and use. Insensitive to moisture during and after cure. Meets: SS-C-1302, Type II, Class A & B, ASTM C-881, Types I & II, Grade 1, Classes B, C, D, E & F.	Resurface, patch, level and repair concrete surfaces for higher chemical and abrasion resistance, when compared to cementitious patches. Reaches strengths quickly.	5 gal. pail Yield: 0.37 CF/unit
SEALERS			
Krystal 25 Emulsion	Krystal 25 is a state of the art, water-emulsion of 100% acrylic polymers. This high quality polymer produces a VOC compliant compound for curing freshly placed concrete, while assuring total resistance to yellowing from ultraviolet exposure. In addition, this product is freeze/thaw stable. Meets ASTM C-309, Types I & ID, Classes A & B, ASTM C-1315, Type I, Class A.	Krystal 25 will cure, harden, dustproof and seal concrete surfaces. This glossy, absolutely non-yellowing, premium quality curing compound/sealer is recommended over all types of concrete floor surfaces, both inside or out, above, on or below grade. It provides an alternative to solvent based materials where fumes may be objectionable.	55 gal. drum 5 gal. pail Yield: 250-400 SF/unit
SURFACE RETARDER			
Expose	Surface retarder for horizontal concrete surfaces. Available in 2 types: blue dye or white pigmented.	Inexpensively expose the aggregate on freshly poured flatwork without "hot-spots."	55 gal. drum 5 gal. pail

EXCELL

Description

Excell is a concentrated solution of chemically active accelerating agents, powerful surfactants and rust inhibitors. It is designed for use in mortars to reduce the water requirements, shorten the set time, increase strength development and increase the workability of the mortar mix. With proper placement procedures, Excell is not nearly as corrosive as calcium chloride solutions would be. Excell works equally with white, gray or colored masonry cement without causing discoloration.

Uses

In cold weather, Excell is added to the mortar to lay block, brick, structural clay tile and glass block. It eliminates the dangers associated with freezing mortar joints. Excell speeds the set of the mortar, hastens the strength gain by chemically reacting with the cement and reducing the water requirement.

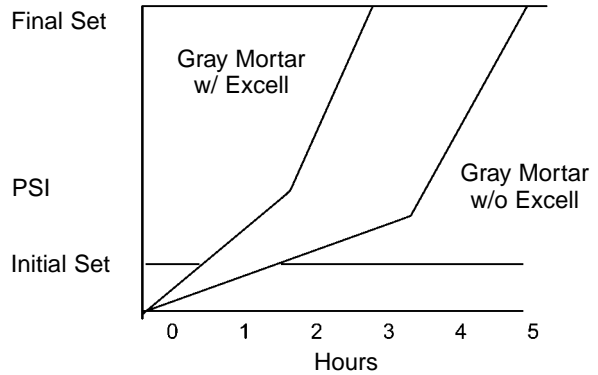
Excell will help reduce construction costs by eliminating cold weather delays. The surfactants improve the workability and actually increase the density of the mortar mix.

Engineering Properties

Test Results of Prepared Mortars

	Gray Mortar With Plain Excell		White Mortar With Plain Excell	
Setting time - hrs./min.				
Initial Set	3:15	2:15	3:30	2:20
Final Set	4:55	4:30	5:00	4:35
Compressive Strength - psi				
1 day	5	60	4.8	45
3 days	508	600	408	335
7 days	775	1010	655	635
28 days	865	1200	785	805
Water Absorption	7%	5.7%	8.5%	6.5%
Efflorescence	None	None	None	None

Setting Time Difference with Excell in Gray Mortar



Packaging

208.15 Liters	(55 gallon drum)
18.93 Liters	(5 gallon pail)
15.16 Liters	(4 one gallon pails)

VOC

0 gal./Liter

Directions

Excell should be added directly to the gauging water (85-100°F, if possible) in the following proportions based on the lowest temperatures expected during the first 24 hours following the work. Add 1 additional quart for each bag of lime in the mix.

25°F – 1 gal. To 15 gal.

20°F – 1 gal. To 10 gal.

15°F – 1 gal. To 7 gal.

Lowest Daily Temp	Each Bag Portland Cement	Each Bag Masonry Colored Mortar &/or cu. ft. Lime
32°	1 quart	1 pint
25°	1½ pints	1½ pints
20°	2 quarts	1 quart

Another method is to add Excell directly to each batch.

Note: Never use frozen materials. Build a windbreaker around mixing equipment to prevent too rapid evaporation. Protection during the first day with tarps or insulating blankets is preferred. To prevent rusting of hollow metal door and window frames, the mortar must be kept stiff and packed tightly without voids. Do not use in concrete containing aluminum, such as conduits, as the product contains some calcium chloride. Never use more Excell than directions call for. For temperatures below 32°F, heat aggregates, use warm water so that concrete temperatures when mixed rises above 50°F, follow ACI 306 "Recommended Procedures for Cold Weather Concreting."

KELIGROUT™

KeligROUT™ is a superior high strength polyester resin anchoring material with guaranteed pullout values exceeding ACI-349-85


KELIGROUT™ Technical Data

Color	Grey	
Compressive Strength	(ASTM D695)	17,000 PSI
Tensile Strength	(ASTM D638)	5,510 PSI
Tensile Modulus	(ASTM D638)	1.14 x 10 ⁶ PSI
Flexural Modulus	(ASTM D790)	1.06 x 10 ⁶ PSI
Temperature Range During Installation		10°F to 110°F
Temperature Range While in Use		-40°F to 200°F
Open Time		20 minutes at 70°F
		10 minutes at 80°F
		5 minutes at 90°F

Since 1983, KeligROUT™ has stood up to the rigors of time in thousands of applications. Kelken's installations have withstood hurricanes such as Hugo and Andrew. It has combatted the seismic forces of California's earthquakes, accepted the constant cyclical loads of light transit systems and crane rail systems throughout the USA, as well as international countries. We have taken the pounding wave actions of the Florida Keys, the ice flows of the Alaskan rivers. We have been used underwater on Coast Guard projects as well as on dams belonging to New England Utility and Florida Power & Light. We have been installed on the Army Corps of Engineer locks during mid-winter in upstate NY. The US Navy has also used KeligROUT™ to anchor the cable arrestors on concrete runways in Oahu, Hawaii and Norfolk, Virginia. KeligROUT™ is approved by the FHWA for both temporary and permanent precast concrete barrier installation on structures.

KELIGROUT™
Vertical application or angled down

- Easy "mix and pour" chemical anchorage material.
- The certainty of mixed "powder" catalyst, easily stirred into resin for setup.
- Can be used at sub-freezing temperatures or in rainy weather.
- May be used underwater.
- Pours from can into large numbers of drilled holes in seconds.
- Every lot guaranteed and certified.


KELIGROUT™ 101-P
Horizontal application or angled up

- Easy-to-use large capacity cartridges.
- Cartridges are much larger than most competitor's, decreasing labor cost of frequent changes.
- Easier to pump than most viscous epoxy cartridges.
- Can be used at sub-freezing temperatures or in rainy weather.
- May be used underwater.
- Every lot guaranteed and certified.
- Equipment:
 - Hand operated
 - Air operated
 - Bulk pump


KeligROUT™ / KeligROUT™ 101-P

Is designed to be used with rebar and threaded anchors.

Applications include:

Bridge & Highway	Marine	Industrial	Sewage Treatment
Barriers	Fender Systems	Tanks	Tank Bases
Bridge Bearings	Crane Rails	Column Bases	Weir Gates
Railings	Bollards	Machine Bases	Crane Rails
Guard Rails	Ladders	Rack Systems	Hand Rails
Expansion Joints	Eyes	Equipment Anchors	Pump Mounts
Fences	Curbs	Crane Railings	Piping Supports
Anchorage	Railings	Railings	

Easy to Use — **A7 Saves You Time and Money**



A7 – 10 Oz.



A7 – 28 Oz.



A7 – 5 Oz.



A7 – 8 Oz.

Fast Dispensing, Fast Curing, Acrylic Adhesive

The acrylic resin and hardening agent are completely mixed as they are simultaneously dispensed from the dual cartridge, through a static mixing nozzle, directly into the anchor hole. A7 can be used with threaded rod or rebar.



How Can An Adhesive Anchor Save You Money?

- Incredibly fast dispensing and rod installation times.
- Significantly faster curing times.
- Easy to use (no-heating) even at freezing cold temperatures.
- Requires less adhesive.

ADVANTAGES

- All weather formula, down to 0°F and below.
- No drip, no sag, easy cleanup.
- Fast and easy dispensing, even 28-oz. cartridge can be hand dispensed.
- Fast curing time, 35 minutes at 60°F.
- Not mix ratio sensitive for maximum consistency.
- Rods are easier to insert into the hole with A7 compared with other adhesives.
- Works in damp holes and underwater applications.
- Requires less adhesive — can be used in 1/16" oversized or 1/8" oversized holes.
- One formula for both hollow and solid base materials.

Curing Times

Base Material Temperature (F°/C°)	Working Time	Full Cure Time
100° / 38°	5 minutes	25 minutes
80° / 27°	5.5 minutes	30 minutes
60° / 16°	7 minutes	35 minutes
40° / 4°	15 minutes	75 minutes
20° / -7°	35 minutes	6 hours
0° / -18°	4 hours	24 hours



A24 – Mixing nozzle for A7-8, A7-5 and A7-10 cartridges.

A50 – Mixing nozzle for A7-28 cartridge also in stock.



A102 – Hand dispenser for A7-28 cartridge.



A101 – Hand dispenser for A7-8 cartridge.



Umbrella Inserts

HBU-38 – Specially designed for fastening to the face of concrete block, clay tile or terra-cotta. Accepts rods between 1/4" and 1/2".

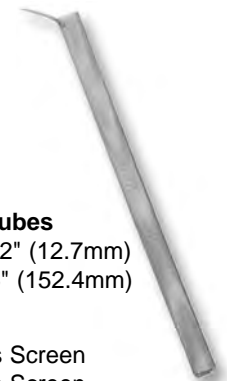


Stubby Screens

HB 38-312 – 3/8" x 3-1/2" Stainless Screen
HB 12-312 – 1/2" x 3-1/2" Stainless Screen

HB 12-6 Screen Tubes

Rod Diameter – 1/2" (12.7mm)
Screen Length – 6" (152.4mm)



Also Available — C6
Always Works
— Even Under the Most
Severe Installation Conditions

Fast Curing Epoxy for All Conditions

The hardener and resin are completely mixed as they are dispensed from the dual cartridge through a static mixing nozzle. The pre-mixed adhesive is injected directly into the anchor hole. C6 can be used with threaded rod or rebar. (18 oz. and 2 oz.)



ESTIMATING TABLES
A7 Number of Anchoring Installations per Cartridge*
 28 Fluid Ounce Cartridge Using Reinforcing Bar with A7 Adhesive in Solid Concrete

REBAR	DRILL HOLE DIA. INCHES	EMBEDMENT DEPTH IN INCHES (mm)														
		1 (25.4)	2 (50.8)	3 (76.2)	4 (101.6)	5 (127.0)	6 (152.4)	7 (177.8)	8 (203.2)	9 (228.6)	10 (254.0)	11 (279.4)	12 (304.8)	13 (330.2)	14 (355.6)	15 (381.0)
# 3	7/16	662.5	331.3	220.8	165.6	132.5	110.4	94.6	82.8	73.6	66.3	60.2	55.2	51.0	47.3	44.2
# 4	5/8	373.0	186.5	124.3	93.2	74.6	62.2	53.3	46.6	41.4	37.3	33.9	31.1	28.7	26.6	24.9
# 5	3/4	286.1	143.0	95.4	71.5	57.2	47.7	40.9	35.8	31.8	28.6	26.0	23.8	22.0	20.4	19.1
# 6	7/8	231.0	115.5	77.0	57.7	46.2	38.5	33.3	28.8	25.7	23.1	21.0	19.2	17.8	16.5	15.4
# 7	1	213.4	106.7	71.1	53.3	42.7	35.6	30.5	26.7	23.7	21.3	19.4	17.8	16.4	15.2	14.2
# 8	1-1/8	177.3	88.6	59.1	44.3	35.5	29.5	25.3	22.2	19.7	17.7	16.1	14.8	13.6	12.7	11.8
# 9	1-1/4	102.8	51.4	34.3	25.7	20.6	17.1	14.7	12.8	11.4	10.3	9.3	8.6	7.9	7.3	6.9
# 10	1-1/2	84.1	42.0	28.0	21.0	16.8	14.0	12.0	10.5	9.3	8.4	7.6	7.0	6.5	6.0	5.6
# 11	1-3/4	51.4	25.7	17.1	12.8	10.3	8.6	7.3	6.4	5.7	5.1	4.7	4.3	4.0	3.7	3.4

A7 Number of Anchoring Installations per Cartridge*
 28 Fluid Ounce Cartridge Using Threaded Rod with A7 Adhesive in Solid Concrete

ROD in. (mm)	HOLE DIA. INCHES	EMBEDMENT DEPTH IN INCHES (mm)														
		1 (25.4)	2 (50.8)	3 (76.2)	4 (101.6)	5 (127.0)	6 (152.4)	7 (177.8)	8 (203.2)	9 (228.6)	10 (254.0)	11 (279.4)	12 (304.8)	13 (330.2)	14 (355.6)	15 (381.0)
1/4 (6.4)	5/16	915.5	457.7	305.2	228.9	183.1	152.8	130.8	114.4	101.7	91.5	83.2	76.3	70.4	65.4	61.0
3/8 (9.5)	7/16	530.0	265.0	176.7	132.5	106.0	88.3	75.7	66.3	58.9	53.0	48.2	44.2	40.8	37.9	35.3
1/2 (12.7)	9/16	381.4	190.7	127.1	95.4	76.3	63.6	54.5	47.7	42.4	38.1	34.7	31.8	29.3	27.2	25.4
5/8 (15.9)	11/16 3/4	273.6 195.6	136.8 97.8	91.2 65.1	68.4 48.8	54.7 39.0	45.6 32.5	39.1 27.9	34.2 24.4	30.4 21.7	27.4 19.5	24.9 17.7	22.8 16.3	21.0 15.0	19.5 13.9	18.2 13.0
3/4 (19.1)	13/16 7/8	192.9 154.4	96.5 77.2	64.3 51.5	48.2 38.6	38.6 30.9	32.2 25.7	27.6 22.1	24.1 19.3	21.4 17.2	19.3 15.4	17.5 14.0	16.1 12.9	14.8 11.9	13.8 11.0	12.9 10.3
7/8 (22.2)	15/16 1	185.1 128.0	92.6 64.0	61.7 42.8	46.3 32.0	37.0 25.6	30.9 21.4	26.8 18.3	23.1 16.0	20.6 14.2	18.5 12.8	16.8 11.6	15.4 10.7	14.2 9.9	13.2 9.2	12.3 8.5
1 (25.4)	1-1/16 1-1/8	158.3 105.2	79.2 52.6	52.8 35.2	39.6 26.3	31.7 21.1	26.4 17.6	22.6 15.0	19.8 13.2	17.6 11.7	15.8 10.5	14.4 9.6	13.2 8.8	12.2 8.1	11.3 7.6	10.6 7.0
1-1/4 (31.8)	1-5/16 1-3/8	101.3 80.0	50.7 40.0	33.8 26.6	25.3 20.0	20.3 15.9	16.9 13.3	14.5 11.4	12.7 10.0	11.3 8.9	10.1 8.0	9.2 7.2	8.4 6.6	7.8 6.1	7.2 5.7	6.8 5.3

A7 Number of Anchoring Installations per Cartridge* Using Reinforcing Bar and Threaded Rod with A7 Adhesive in Solid Concrete
 10 Fluid Ounce Cartridge

REBAR DIA.	HOLE DIA. INCHES	EMBEDMENT DEPTH IN INCHES (mm)				THREADED ROD DIA. in. (mm)	HOLE DIA. INCHES	EMBEDMENT DEPTH IN INCHES (mm)			
		2 (50.8)	4 (101.6)	6 (152.4)	8 (203.2)			2 (50.8)	4 (101.6)	6 (152.4)	8 (203.2)
# 3	7/16	110	55	37	27	3/8 (9.5)	7/16	88	44	28	22
# 4	5/8	63	31	20	14	1/2 (12.7)	9/16	65	31	22	16
# 5	3/4	48	24	16	11	5/8 (15.9)	11/16 3/4	46 33	22 16	14 11	11 7
# 6	7/8	39	18	13	9	3/4 (19.1)	13/16 7/8	33 26	16 13	11 9	7 7
# 7	1	35	18	11	9	7/8 (22.2)	15/16 1	31 22	14 11	11 7	7 5
# 8	1-1/8	29	14	9	7	1 (22.4)	1-1/16 1-1/8	26 18	13 9	9 5	7 3

* The number of anchoring installations is based upon calculations of hole volumes using ANSI tolerance carbide tipped drill bits, the nominal areas of the reinforcing bars and the stress areas of the threaded rods. These estimates do not account for waste.

ESTIMATING TABLES
A7 Number of Anchoring Installations per Cartridge*
 8 Fluid Ounce Cartridge Using Reinforcing Bar with A7 Adhesive in Solid Concrete

REBAR	DRILL HOLE DIA. INCHES	EMBEDMENT DEPTH IN INCHES (mm)														
		1 (25.4)	2 (50.8)	3 (76.2)	4 (101.6)	5 (127.0)	6 (152.4)	7 (177.8)	8 (203.2)	9 (228.6)	10 (254.0)	11 (279.4)	12 (304.8)	13 (330.2)	14 (355.6)	15 (381.0)
# 3	7/16	187.8	93.9	62.6	46.9	37.6	31.3	26.8	23.5	20.9	18.8	17.1	15.6	14.4	13.4	12.5
# 4	5/8	105.7	52.9	35.2	26.4	21.1	17.6	15.1	13.2	11.7	10.6	9.6	8.8	8.1	7.6	7.0
# 5	3/4	81.1	40.5	27.0	20.3	16.2	13.5	11.6	10.1	9.0	8.1	7.4	6.8	6.2	5.8	5.4
# 6	7/8	65.5	32.7	21.8	16.4	13.1	10.9	9.4	8.2	7.3	6.5	6.0	5.5	5.0	4.7	4.4
# 7	1	60.5	30.2	20.2	15.1	12.1	10.1	8.6	7.6	6.7	6.0	5.5	5.0	4.7	4.3	4.0
# 8	1-1/8	50.2	25.1	16.7	12.6	10.0	8.4	7.2	6.3	5.6	5.0	4.6	4.2	3.9	3.6	3.3
# 9	1-1/4	29.1	14.6	9.7	7.3	5.8	4.9	4.2	3.6	3.2	2.9	2.6	2.4	2.2	2.1	1.9
# 10	1-1/2	23.8	11.9	7.9	6.0	4.8	4.0	3.4	3.0	2.6	2.4	2.2	2.0	1.8	1.7	1.6
# 11	1-3/4	14.6	7.3	4.9	3.6	2.9	2.4	2.1	1.8	1.6	1.5	1.3	1.2	1.1	1.0	1.0

A7 Number of Anchoring Installations per Cartridge*
 8 Fluid Ounce Cartridge Using Threaded Rod with A7 Adhesive in Solid Concrete

ROD in. (mm)	HOLE DIA. INCHES	EMBEDMENT DEPTH IN INCHES (mm)														
		1 (25.4)	2 (50.8)	3 (76.2)	4 (101.6)	5 (127.0)	6 (152.4)	7 (177.8)	8 (203.2)	9 (228.6)	10 (254.0)	11 (279.4)	12 (304.8)	13 (330.2)	14 (355.6)	15 (381.0)
1/4 (6.4)	5/16	259.5	129.7	86.5	64.9	51.9	43.2	37.1	32.4	28.8	25.9	23.6	21.6	20.0	18.5	17.3
3/8 (9.5)	7/16	150.2	75.1	50.1	37.6	30.0	25.0	21.5	18.8	16.7	15.0	13.7	12.5	11.6	10.7	10.0
1/2 (12.7)	9/16	108.1	54.1	36.0	27.0	21.6	18.0	15.4	13.5	12.0	10.8	9.8	9.0	8.3	7.7	7.2
5/8 (15.9)	11/16	77.6	38.8	25.9	19.4	15.5	12.9	11.1	9.7	8.6	7.8	7.1	6.5	6.0	5.5	5.2
	3/4	55.4	27.7	18.4	13.8	11.1	9.2	7.9	6.9	6.1	5.5	5.0	4.6	4.3	4.0	3.7
3/4 (19.1)	13/16	54.7	27.3	18.2	13.7	10.9	9.1	7.8	6.8	6.1	5.5	5.0	4.6	4.2	3.9	3.6
	7/8	43.6	21.8	14.6	10.9	8.8	7.3	6.3	5.5	4.9	4.4	4.0	3.6	3.4	3.1	2.9
7/8 (22.2)	15/16	52.5	26.2	17.5	13.1	10.5	8.7	7.5	6.6	5.8	5.2	4.8	4.4	4.0	3.7	3.5
	1	36.4	18.2	12.2	9.1	7.3	6.1	5.2	4.5	4.0	3.6	3.3	3.0	2.8	2.6	2.4
1 (25.4)	1-1/16	44.9	22.4	15.0	11.2	9.0	7.5	6.4	5.6	5.0	4.5	4.1	3.7	3.5	3.2	3.0
	1-1/8	34.4	17.2	12.0	8.6	7.5	6.0	5.0	4.3	3.7	3.3	3.0	2.7	2.5	2.3	2.1
1-1/4 (31.8)	1-5/16	28.7	14.4	9.6	7.2	5.7	4.8	4.1	3.6	3.2	2.9	2.6	2.4	2.2	2.1	1.9
	1-3/8	22.4	11.2	7.6	5.6	4.5	3.8	3.2	2.8	2.5	2.3	2.1	1.9	1.7	1.6	1.5

A7 Number of Anchoring Installations per Cartridge* Using Reinforcing Bar and Threaded Rod with A7 Adhesive in Solid Concrete

REBAR DIA.	HOLE DIA. INCHES	EMBEDMENT DEPTH IN INCHES (mm)				THREADED ROD DIA. in. (mm)	HOLE DIA. INCHES	EMBEDMENT DEPTH IN INCHES (mm)			
		2 (50.8)	4 (101.6)	6 (152.4)	8 (203.2)			2 (50.8)	4 (101.6)	6 (152.4)	8 (203.2)
# 3	7/16	60	30	20	15	3/8 (9.5)	7/16	48	24	16	12
# 4	5/8	34	17	11	8	1/2 (12.7)	9/16	35	17	12	9
# 5	3/4	26	13	9	6	5/8 (15.9)	11/16	25	12	8	6
# 6	7/8	21	10	7	5	3/4	3/4	18	9	6	4
# 7	1	19	10	6	5	3/4 (19.1)	13/16	18	9	6	4
							7/8	14	7	5	4
# 8	1-1/8	16	8	5	4	7/8 (22.2)	15/16	17	8	6	4
							1	12	6	4	3
1 (22.4)	1-1/8	14	7	5	4	1 (22.4)	1-1/16	14	7	5	4
							1-1/8	10	5	3	2

* The number of anchoring installations is based upon calculations of hole volumes using ANSI tolerance carbide tipped drill bits, the nominal areas of the reinforcing bars and the stress areas of the threaded rods. These estimates do not account for waste.

CRACK-PAC® Injection Epoxy

The Crack-Pac™ is a two-part, low viscosity Epoxy-Tie crack injection formula that is dispensed using a standard caulking tool. The mixed adhesive has the viscosity of a light oil and a low surface tension which allows it to penetrate fine to medium width cracks. Resin is contained in the cartridge and hardener is contained in the nozzle. Once the nozzle is threaded onto the cartridge, the hardener is released into the resin-filled cartridge by turning the knob at the base of the nozzle. The two components are mixed by shaking the cartridge.

FEATURES:

- Dispenses with a standard caulking tool, no dedicated dispensing tool needed.
- Low viscosity.
- Clean and easy mixing; no additional tools required.
- Chemically bonds with the concrete to provide a monolithic repair.
- Resistant to oils, salts and mild chemicals.
- Non-Shrink.
- Conforms to ASTM C-881 Type I & II, Grade 1, Classes B & C.

APPLICATION: Crack-Pac is suitable for repair of cracks ranging from 1/64" to 1/4" wide in concrete walls, floors, slabs, columns and beams. It can be used to inject cracks in damp or wet conditions with excellent results.

SHELF LIFE: 24 months from date of manufacture, unopened.

USAGE TEMPERATURE: To mix properly, the resin and hardener must be conditioned to 60°F-80°F before mixing.

STORAGE CONDITIONS: For best results, store between 45°F-95°F.

COLOR: Resin - Blue; Hardener - Clear; Mixed: Light amber.

CLEAN UP: Wipe up with cotton cloths. If desired, scrub area with abrasive, water-based cleaner and flush with water. If approved, solvents such as ketones (MEK, acetone, etc.), lacquer thinner or adhesive remover can be used. **DO NOT USE SOLVENTS TO CLEAN ADHESIVE FROM SKIN.** Take appropriate precautions when handling flammable solvents. Solvents may damage surfaces to which they are applied. Cured Material: Chip or grind off surface.

PROPERTY	TEST METHOD	RESULTS
Viscosity (mixed, 72°F)	ASTM D 2393	1,400 cps
Bond Strength	ASTM C 882	2,010 psi (2-day moist cure) 3,830 psi (14-day moist cure)
Water Absorption	ASTM D 570	0.082% (24 hrs.)
Tensile Strength	ASTM D 638	5,860 psi (7-day cure)
Elongation at Ultimate	ASTM D 638	14.1%
Compressive Yield Strength	ASTM D 695	11,270 psi (7-day cure)
Compressive Modulus	ASTM D 695	318,600 psi
Linear Coefficient of Shrinkage	ASTM D 2566	.002
Gel Time (72°F)	ASTM C 881	2 hours - 60 g mass
Initial Cure (72°F)		24 hours
Mixing Ratio		8:1

CHEMICAL RESISTANCE: Very good to excellent against distilled water, inorganic acids and alkalis. Fair to good against organic acids and alkalis, and many organic solvents. Poor against ketones.



Crack-Pac is also available in the Crack-Pac Injection Kit™. The kit includes everything needed to pressure inject approximately 8 lineal feet of cracks:

- 2 Crack-Pac Cartridge / Nozzle Sets.
- 12 E-Z-Click Injection Ports.
- 2 E-Z-Click Injection Fittings with 12" tubing.
- 1 pint of Paste-Over Epoxy (8 oz. of resin + 8 oz. of hardener).
- 4 disposable wood paste-over applicators.
- 1 pair latex gloves.

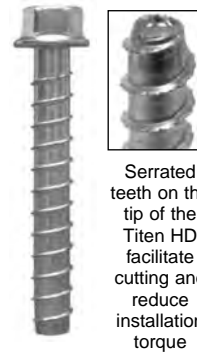
Model No.	Capacity oz. (cu. in.)	Cartridge Type	Carton Quantity	Dispensing Tool(s)
ETIPAC10	9 (16.2)	single	12	Standard Caulking
ETIPAC10KT	18 (32.4)	single	2	

TITEN® Heavy Duty Screw Anchor for Concrete and Masonry

The Titen HD is a patented, high-strength screw anchor for concrete and masonry. The self-undercutting, non-expansion characteristics of the Titen HD make it the ideal anchor for structural applications, even at minimum edge distances and under reduced spacing conditions. The proprietary cutting teeth enable the Titen HD to be installed in one eighth of the time when compared to traditional expansion anchors, and at significantly reduced installation torques. This heat-treated anchor undercuts the concrete to create a strong mechanical interlock over the entire length of the anchor. The anchor can be installed with a standard ANSI tolerance drill bit and is removeable. Recommended for permanent dry, non-corrosive applications or temporary outdoor applications.

PERFORMANCE FEATURES:

- **Higher load capacity and vibration resistance:** Threads along the length of the anchor undercut the concrete and efficiently transfer the load to the base material.
- **Specialized heat treating process:** Creates superior surface hardness at the tip to facilitate cutting, while at the same time not compromising ductility within the anchor body.
- **Less spacing and edge distance required:** The anchor does not exert expansion forces on the base material.
- **Easy post-installation inspection:** The head is stamped with the Simpson "S" sign and the anchor length in inches.



Titen HD
U.S. Patent
5,674,035 &
6,623,228

Serrated teeth on the tip of the Titen HD facilitate cutting and reduce installation torque



Sikadur® 31, Hi-Mod Gel

High-modulus, high-strength, structural epoxy paste adhesive

Description

Sikadur 31, Hi-Mod Gel, is a 2-component, 100% solids, moisture-tolerant, high-modulus, high-strength, structural epoxy paste adhesive. It conforms to the current ASTM C-881 and AASHTO M-235 specifications.

Where to Use

- Structural bonding of concrete, masonry, metals, wood, etc., to a maximum glue line of 1/8 in. (3mm).
- Grout bolts, dowels, pins, vertical and overhead, etc.
- Seals cracks and around injection ports prior to pressure-injection grouting.
- Interior, vertical and overhead repair of concrete as an epoxy mortar binder.
- As a pick-proof sealant around windows, doors, lock-ups, etc., inside correctional facilities.

Advantages

- Tolerant of moisture before, during and after cure.
- High-modulus, high-strength, structural paste adhesive.
- Excellent adhesion to concrete, masonry, metals, wood and most structural materials.
- Paste consistency ideal for vertical and overhead applications.
- Fast-setting and strength-producing adhesive.
- Convenient easy mix ratio A:B = 2:1 by volume.

Sikadur® 35, Hi-Mod LV

High-modulus, low-viscosity, high-strength epoxy grouting/sealing/binding adhesive

Description

Sikadur 35, Hi-Mod LV is a 2-component, 100% solids, moisture-tolerant, low-viscosity, high-strength, multi-purpose, epoxy resin adhesive. It conforms to the current ASTM C-881 and AASHTO M-235 specifications.

Where to use

- Pressure-injection of cracks in structural concrete, masonry, wood, etc.
- Grouting bolts, dowels, pins, etc.
- Gravity-feed of cracks in horizontal concrete and masonry.
- Epoxy resin binder for epoxy mortar patching and overlay of interior, horizontal surfaces.
- Seal interior slabs and exterior above-grade slabs from water, chlorides and mild chemical attack; also improves wearability.

Advantages

- Super low viscosity.
- Convenient easy mix ratio A:B = 2:1 by volume.
- Unique, high-strength, structural adhesive for "can't dry" surfaces.
- Deep penetrating and tenacious bonding of cracks in structural concrete.
- High-early-strength developing adhesive.
- Excellent chemical resistance for flooring systems.

Sikadur® 32, Hi-Mod

High-modulus, high-strength, epoxy bonding/grouting adhesive

Description

Sikadur 32, Hi-Mod, is a multi-purpose, 2-component, 100% solids, moisture-tolerant structural epoxy adhesive. It conforms to the current ASTM C-881 and AASHTO M-235 specifications.

Where to Use

- Bond fresh, plastic concrete to hardened concrete and steel.
- Grout bolts, dowels, pins, etc.
- Grout horizontal cracks in structural concrete and wood by gravity feed.
- Machinery and "robotic" base-plate grout.
- Structural adhesive for concrete, masonry, metal, wood, etc.

Advantages

- Super-strength bonding/grouting adhesive.
- Tolerant to moisture before, during and after cure.
- Excellent adhesion to most structural materials.
- Convenient easy-to-mix ratio A:B = 1:1 by volume.
- Easy-to-use for bonding/grouting applications.
- Fast initial set; rapid gain to ultimate strengths.
- USDA-certifiable for use in food plants.

Sikadur® 42, Grout-Pak

Pre-proportioned, epoxy, baseplate grouting system

Description

Sikadur 42, Grout-Pak is a 3-component, 100% solids, moisture-tolerant, epoxy baseplate grouting system.

Where to Use

- Precision seating of baseplates.
- Grouting under equipment, including heavy impact and vibratory machinery, reciprocating engines, compressors, pumps, presses, etc.
- Grouting under crane rails.
- Grouting for "pour-back" anchorage on post tensioning projects (e.g. segmental bridge).

Advantages

- Ready to mix, pre-proportioned kit.
- Moisture-tolerant.
- Non-shrink / Self-leveling.
- Corrosion and impact resistant.
- Stress and chemical resistant.
- Low heat development.
- High compressive strength.
- Long working time.
- High vibration resistance / Fast strength gain.
- Low peak exothermic system for large pours.
- Minimal shrinkage/expansion.
- High effective bearing area.
- Excellent flowability.
- USDA certifiable.

Packaging

0.5 cu. ft. kit: contains 0.9 gallons epoxy (Component "A" and Component "B") in a 5 gallon pail, separated with a topline; and 50 lb.... aggregate (Component "C") in a multi-wall bag.

Sikagard® 62

High-build, protective, solvent-free, colored epoxy coating

Description

Sikagard® 62 is a 2-component, 100% solids, moisture-tolerant epoxy resin. It produces a high-build, protective, dampproofing and waterproofing vapor-barrier system.

Where to Use

Use as a high-build, corrosion-resistant, protective coating, as a protective lining for secondary containment structures or as a seamless flooring system.

Advantages

- Exceptional tensile strength.
- Good chemical resistance for long-term protection.
- Convenient A:B = 1:1 mixing ratio.
- Easy, paint-like viscosity.
- Available in three standard colors: gray, red and tan. Special color matches available upon request.
- Excellent bonding to all common structural substrates.
- Super abrasion resistance for long-term wear.
- Sikagard 62 gray, after cure, is approved for contact with potable water.
- Material is USDA certifiable.

Sikaflex®-1a

One-part polyurethane, elastomeric sealant/adhesive

Description

Sikaflex-1a is a premium-grade, high-performance, moisture-cured, one-component, polyurethane-based, non-sag elastomeric sealant. Meets Federal specification TT-S-00230C, Type II, Class A. Meets ASTM C-920, Type S, Grade NS, Class 25, use T, NT, O, M, G, I; Canadian standard CAN/CGSB 19.13-M87.

Where to Use

- Designed for all types of joints where maximum depth of sealant will not exceed 1/2 in.
- Excellent for small joints and fillets, windows, door frames, reglets, flashing and many construction adhesive applications.
- Suitable for vertical and horizontal joints; readily placeable at 40°F.
- Has many applications as an elastic adhesive between materials with dissimilar coefficients of expansion.
- Submerged conditions, such as canal and reservoir joints.

Advantages

- Eliminates time, effort and equipment for mixing, filling cartridges, pre-heating or thawing and cleaning of equipment.
- Fast tack-free and final cure times.
- High elasticity - cures to a tough, durable, flexible consistency with exceptional cut and tear-resistance.
- Stress relaxation.
- Excellent adhesion - bonds to most construction materials without a primer.
- Excellent resistance to aging, weathering.
- Proven in tough climates around the world.
- USDA-approved / Odorless, non-staining / Jet fuel resistant.
- NSF-approved for potable water contact.
- Urethane-based; suggested by EPA for radon reduction.
- Paintable with water-, oil- and rubber-based paints.
- Capable of ±25% joint movement.

Sikaflex®-1CSL

High performance, self-leveling, one-part polyurethane sealant

Description

Sikaflex®-1CSL is a single-component, self-leveling, premium-grade polyurethane sealant with an accelerated curing capacity. Meets Federal Specification TT-S-00230C, Type 1, Class A. Meets ASTM C-920, Type S, Grade P, Class 25, use T, NT, M, O, G, I.

Where to Use

Sikaflex-1CSL is used to seal horizontal expansion joints in concrete and cementitious slabs such as:

- Sidewalks / Balconies / Pavements / Terraces.
- Warehouses / Factories / Civil Structures / Plazas.

Advantages

- 1-component, no mixing / Self-leveling, pourable.
- Accelerated curing / Permanently elastic.
- High durability / Resists aging, weathering.
- Excellent adhesion / Jet fuel resistant / Easy-to-use.

Packaging – 10 fl. oz. moisture-proof composite cartridges, 24/case. 30 oz. moisture-proof composite cartridges, 12/case. Available on special order: 5 gallon pails.



Sikaflex®-2c NS

Two-component, non-sag, polyurethane elastomeric sealant

Description

Sikaflex-2c NS is a two-component, premium-grade, polyurethane-based, elastomeric sealant. It is principally a chemical cure in a non-sag consistency. Meets ASTM C-920, Type M, Grade NS, Class 25, use T, NT, M, G, A, O, I and Federal Specification TT-S-00227E, Type II, Class A. Tested in accordance with ASTM C-1382 for use in EIFS Systems.

Where to use

- Intended for use in all properly designed working joints with a minimum depth of 1/4 inch.
- Ideal for vertical and horizontal applications.
- Placeable at temperatures as low as 40°F.
- Adheres to most substrates found in construction.
- An effective sealant for use in Exterior Insulation Finish Systems (EIFS).
- Submerged environments, such as canals and reservoirs.

Advantages

- Capable of +50% joint movement.
- Chemical cure allows the sealant to be placed in joints exceeding 1/2 in. in depth.
- High elasticity with a tough, durable, flexible consistency.
- Exceptional cut and tear resistance.
- Exceptional adhesion to most substrates without priming.
- Available in 40 architectural colors.
- Color uniformity assured via Color-pak system.
- Available in pre-pigmented Limestone Gray (no color-pak needed).
- Non-sag even in wide joints / Easy to mix.
- Paintable with water-, oil-, and rubber-base paints.
- ANSI/NSF 61 approval for contact with potable water.
- Jet fuel resistant



Sika Armatec® 110 EpoCem®

Bonding Agent and Reinforcement Protection

Description

A three-component, solvent-free, moisture-tolerant, epoxy-modified, cementitious product specifically formulated as a bonding agent and an anti-corrosion coating.

Where to Use

- As an anti-corrosion coating for reinforcing steel in concrete restoration.
- As added protection to reinforcing steel in areas of thin concrete cover.
- As a bonding agent for repairs to concrete and steel.
- As a bonding agent for placing fresh, plastic concrete to existing hardened concrete.

Advantages

- Excellent adhesion to concrete and steel.
- Acts as an effective barrier against penetration of water and chlorides.
- Long open time – up to 16 hours.
- Not a vapor barrier.
- Can be used exterior on-grade.
- Contains corrosion inhibitors.
- Excellent bonding bridge for cement or epoxy based repair mortars.
- High strength, unaffected by moisture when cured.
- Spray, brush or roller application.
- Non-flammable, solvent free.

SikaTop® 122 PLUS

Two-component, polymer-modified, cementitious, trowel-grade mortar plus FerroGard 901 penetrating corrosion inhibitor

Description

SikaTop 122 PLUS is a two-component, polymer-modified, Portland cement, fast-setting, trowel-grade mortar. It is a high performance repair mortar for horizontal and vertical surfaces and offers the additional benefit of FerroGard 901, a penetrating corrosion inhibitor.

Where to Use

- On grade, above and below grade, on concrete and mortar.
- On horizontal surfaces.
- As a structural repair material for parking structures, industrial plants, walkways, bridges, tunnels, dams, ramps.
- To level concrete surfaces.
- As an overlay system for topping/resurfacing concrete.
- Overlay in cathodic protection systems.

Advantages

- High compressive and flexural strengths.
- Opens to foot traffic in 4-6 hrs., pneumatic tire in 8-12 hrs.
- High abrasion resistance.
- Increased freeze/thaw durability, resistance to deicing salts.
- Compatible with coefficient of thermal expansion of concrete – Passes ASTM C-884 (modified).
- Increased density – improved carbon dioxide resistance (carbonation) without adversely affecting water vapor transmission (not a vapor barrier).
- Enhanced with FerroGard 901, a penetrating corrosion inhibitor, reduces corrosion even in the adjacent concrete.
- Not flammable, non-toxic.
- Conforms to ECA/USPHS standards for surface contact with potable water.
- USDA approved for food industry.
- ANSI/NSF Standard 61 potable water approved.

SikaTop® 123 PLUS

Two-component, polymer-modified, cementitious, non-sag mortar plus FerroGard 901 penetrating corrosion inhibitor

Description

A two-component, polymer-modified, Portland cement, fast-setting, non-sag mortar. It is a high performance repair mortar for vertical and overhead surfaces, and offers the additional benefit of FerroGard 901, a penetrating corrosion inhibitor.

Where to Use

- On grade, above and below grade, on concrete and mortar.
- On vertical and overhead surfaces.
- As a structural repair material for parking structures, industrial plants, water/waste water treatment facilities, roads, walkways, bridges, tunnels, dams, ramps, etc.
- Approved for repairs over cathodic protection systems.

Advantages

- High compressive and flexural strengths.
- High early strengths / Not flammable, non-toxic.
- Increased freeze/thaw durability and resistance to deicing salts.
- Compatible with coefficient of thermal expansion of concrete - Passes ASTM C-884 (modified).
- Increased density - improved carbon dioxide resistance (carbonation) without adversely affecting water vapor transmission (not a vapor barrier).
- Enhanced with FerroGard 901, a penetrating corrosion inhibitor, reduces corrosion even in the adjacent concrete.
- Conforms to ECA/USPHS standards for surface contact with potable water / USDA approved.
- ANSI/NSF Standard 61 potable water approved.

SikaGrout® 212

High performance, cementitious grout

Description

SikaGrout 212 is a non-shrink, cementitious grout with a unique 2-stage shrinkage compensating mechanism. It is non-metallic and contains no chloride. With a special blend of shrinkage-reducing and plasticizing/water-reducing agents, it compensates for shrinkage in both the plastic and hardened states. A structural grout, it provides the advantage of multiple fluidity with a single component. It meets Corps of Engineers' Specification CRD C-621 and ASTM C-1107 (Grade C).

Where to Use

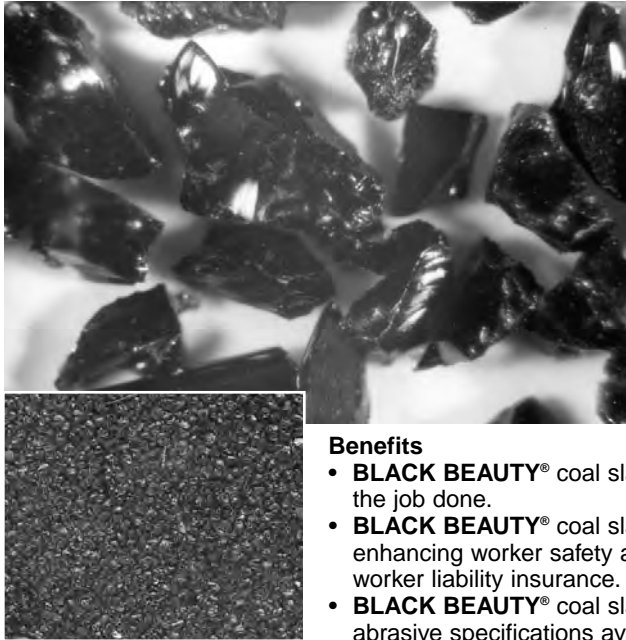
- Use for structural grouting of column base plates, machine base plates, anchor rods, bearing plates, etc.
- Use on grade, above and below grade, indoors and out.
- Multiple fluidity allows ease of placement; ram in place as a dry pack, trowel-apply as a medium flow, pour or pump as high flow.

Advantages

- Easy to use ... Just add water.
- Multiple fluidity with one material.
- Non-metallic, will not stain or rust.
- Low bleed / Low heat build-up.
- Excellent for pumping: Does not segregate ... even at high flow. No build-up on equipment hopper.
- Non-corrosive, does not contain chlorides.
- Superior freeze/thaw resistance.
- Resistant to oil and water.
- Meets CRD C-621 / Meets ASTM C-1107 (Grade C).
- Shows positive expansion when tested in accordance with ASTM C-827 / USDA-approved.



BLAST ABRASIVES



BLACK BEAUTY® – A Coal slag abrasive material for use in removing paint and rust from steel and concrete on bridges, ships, barges, tanks, etc., both indoors and outdoors. Available in four grades to meet your profiling needs.

Features

- Black in color.
- Hard, angular particles.
- Uniform density.
- Low friability.
- Chemically inert.
- Low free silica.
- Passes California Title 17 (CARB).
- Passes 40CFR 261.24a (TCLP).
- QPL Approved: MIL-A-22252A (SH) (selected plant locations only).

Benefits

- **BLACK BEAUTY®** coal slag abrasives are fast-cutting, low-dusting, and tough enough to get the job done.
- **BLACK BEAUTY®** coal slag abrasives exceed Federal and California standards, thereby enhancing worker safety and reducing costs associated with special waste-handling and worker liability insurance.
- **BLACK BEAUTY®** coal slag abrasives pass the newest and most technically-advanced abrasive specifications available.

- UTILITY**
BB1040
- MEDIUM**
BB1240
- FINE**
BB2040
- EX-FINE**
BB3060

Coarse grade **BLACK BEAUTY®** coal slag abrasive for tough blasting jobs, when a rough profile is required, or for special applications; **HEAVY RUST, THICK AND TOUGH COATINGS, MASTICS, TANK LININGS, SHIPS AND BARGES, CONCRETE.**

Medium grade **BLACK BEAUTY®** coal slag abrasive for general purpose repair and maintenance blasting; **REMOVAL OF PAINT AND RUST, STRUCTURAL STEEL, MILL SCALE, GENERAL PURPOSE, AGGREGATE EXPOSURE.**

Fine grade **BLACK BEAUTY®** coal slag abrasive for new construction, light paint and rust removal, and for special maintenance applications requiring reduced profiles; **BRIDGE MAINTENANCE, LIGHT MILL SCALE, LIGHT PAINT AND RUST, NEW STRUCTURAL STEEL.**

Extra fine grade **BLACK BEAUTY®** coal slag abrasive to clean surfaces and create a smooth finish, **Brush-Off Blast**, or in a high-pressure water blast system.

BLACK BEAUTY® COAL SLAG ABRASIVE GRADATION SPECIFICATIONS

	TYLER/U.S.	UTILITY	MEDIUM	FINE	EX-FINE
No.	4/4	- 0 -			
No.	6/6	0 – 2	- 0 -		
No.	8/8	0 – 15	0 – 1		
No.	10/12	45 – 75	0 – 10	- 0 -	
No.	14/16	10 – 35	20 – 45	0 – 5	- 0 -
No.	20/20	0 – 10	20 – 45	0 – 20	0 – 2
No.	28/30		0 – 25	20 – 45	0 – 5
No.	35/40		0 – 10	30 – 60	
No.	48/50			5 – 30	
No.	65/70			0 – 10	78 – 100
No.	80/80				
No.	100/100				0 – 10
No.	200/200				
	PAN	0 - 5	0 – 5	0 – 5	0 – 5

Reed Minerals . . . Committed to providing QUALITY products and services



Hardware & Supply Co., Inc.
Supply, Inc. of Virginia
Form Rentals

NJ (856) 662-6935 • PA (215) 925-8800
Metro (703) 569-6660 • VA (703) 455-6700
Clinton, MD (301) 877-8640

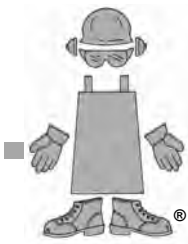


Safety Equipment

3

*Rainwear • Boots
Work Gloves • Foot Guards
Welding Helmets
Goggles • Safety Glasses
Respirators • Dust Masks
Portable Ventilators
Face Shields • Ear Plugs
Protector Rebar Caps
Hard Hats • Thermal Liners
First Aid • Two-Way Radios
Portable Signs • Construction Stands
Flags • Tapes • Flares • Pennants
Barricades • Drums
Reflective Vests
Traffic Control Devices • Signal Lights
Extinguishers
Guardrails • Harnesses
Lanyard Assemblies
Lifelines • Anchors • Grabs
Oil Spill/Cleanup Products*





The Safety Zone

SEIDMAN ASSOCIATES®

RAINWEAR AND BOOTS



W335-PP-(SIZE)

PRODUCT LIST

W310-SIZE

3-piece, 10 mil PVC rainsuit. Available in sizes Small, Medium, Large, Extra Large, 2X and 3X. Yellow.

WP10-1P-RD

Red PVC one-piece rain poncho with hood and side snaps. Packed 25 ponchos per case. One size.

W335-PP-(SIZE)

Heavy weight, 3-piece rainsuit. 35 mil PVC/polyester with detachable hood, adjustable bib pants, cape ventilated back, underarm vents, snap front and fly, 2 flap pockets and corduroy collar. Available in sizes Small through 5X. Sold individually. Yellow, bright orange and bright green.

WR35-PP-(SIZE)

Same as above but 48" full length raincoat only with detachable hood.

BSYE-(SIZE)

Rubber, over-the-shoe slush boots. Sizes 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 and 18. Yellow. Sold by the pair.

BSBK-(SIZE)

Rubber, over-the-shoe slush boots. Sizes 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 and 18. Black. Sold by the pair.

W322-2P-(SIZE)

Medium weight, 2-ply 22 mil, 3-piece rainsuit. PVC, detachable hood, adjustable bib pants, underarm vents, snap front and fly. Available in sizes Small through 3X. Sold individually. Yellow.



W322-2P-(SIZE)



WP10-1P-RD



BSBK-(SIZE)

BSYE-(SIZE)



BSYE-(SIZE)



DUR-ABEL Over-The-Sock Boots

Style
6825



INSULATED HIP BOOTS

- Heavy-duty bar-tread outsoles are long wearing and are designed to self-clean for added attraction.
- Cushion insole for all day comfort.
- Tough, comfortable fabric lining for easy on-off.
- Steel shank reinforces boot construction and supports the foot to reduce fatigue.
- Hand-plyed rubber construction is 100% waterproof.
- Steel safety toe boot styles meet ANSI Z41.1 specifications.
- Black with yellow steel toe cap.
- Steel Toe.

Adult Sizes: 6-15

Style
6820



INSULATED HIP BOOTS

- Heavy-duty bar-tread outsoles are long wearing and are designed to self-clean for added attraction.
- Cushion insole for all day comfort.
- Tough, comfortable fabric lining for easy on-off.
- Steel shank reinforces boot construction and supports the foot to reduce fatigue.
- Hand-plyed rubber construction is 100% waterproof.
- Steel safety toe boot styles meet ANSI Z41.1 specifications.
- Black.
- Plain Toe.

Adult Sizes: 7-14

Style
6845



KNEE BOOTS

- Heavy-duty bar-tread outsoles are long wearing and are designed to self-clean for added attraction.
- Cushion insole for all day comfort.
- Tough, comfortable fabric lining for easy on-off.
- Steel shank reinforces boot construction and supports the foot to reduce fatigue.
- Hand-plyed rubber construction is 100% waterproof.
- Steel safety toe boot styles meet ANSI Z41.1 specifications.
- Black with yellow steel toe cap.
- Steel toe 16".

Adult Sizes: 6-14

Style
6840



KNEE BOOTS

- Heavy-duty bar-tread outsoles are long wearing and are designed to self-clean for added attraction.
- Cushion insole for all day comfort.
- Tough, comfortable fabric lining for easy on-off.
- Steel shank reinforces boot construction and supports the foot to reduce fatigue.
- Hand-plyed rubber construction is 100% waterproof.
- Steel safety toe boot styles meet ANSI Z41.1 specifications.
- Black with brick sole.
- Plain toe 16".

Adult Sizes: 6-15

DUR-ABEL Over-The-Shoe Boots

Style
6959



HIP BOOTS

- Heavy-duty bar-tread outsoles are long wearing and are designed to self-clean for added traction.
- Cushion insole for all day comfort.
- Tough, comfortable fabric lining for easy on-off.
- Hand-plyed rubber construction is 100% waterproof.
- Comes in high visibility yellow.
- 31" high, over-the-shoe style hip boot with extra wide last, belt strap and adjustment to tighten.

Adult Sizes: 7-18

Style
6955



5-BUCKLE ARCTIC BOOTS

- Heavy-duty bar-tread outsoles are long wearing and are designed to self-clean for added traction.
- Cushion insole for all day comfort.
- Tough, comfortable fabric lining for easy on-off.
- Hand-plyed rubber construction is 100% waterproof.
- Black with red soles.
- 14" high, over-shoe style.
- 5 adjustable buckles are rust resistant and provide a snug fit.
- Self draining gussets.
- Ribbed soles for extra traction.

Adult Sizes: 6-17

Style
6952



2-BUCKLE ARCTIC BOOTS

- Heavy-duty bar-tread outsoles are long wearing and are designed to self-clean for added traction.
- Cushion insole for all day comfort.
- Tough, comfortable fabric lining for easy on-off.
- Hand-plyed rubber construction is 100% waterproof.
- Black with red soles.
- Over-shoe style with 2 adjustable buckles that are rust resistant and provide a snug fit.
- Self draining gussets.
- Ribbed soles for extra traction.

Adult Sizes: 6-17

Style
6950



SLUSH BOOTS

- Heavy-duty bar-tread outsoles are long wearing and are designed to self-clean for added traction.
- Cushion insole for all day comfort.
- Tough, comfortable fabric lining for easy on-off.
- Hand-plyed rubber construction is 100% waterproof.
- Comes in high visibility industrial yellow or black.
- 17" high, over-shoe style, extra wide last and top strap with buckle.
- Deep seated heel and rugged treaded sole.
- Fits comfortably over work shoes.

Adult Sizes: 6-18



Industrial Rainsuits and Rainwear

Style 6930



CONSTRUCTION GRADE 3-PIECE RAINSUIT

Medium-weight .30mm PVC/ Polyester fabric, this workhorse provides and excellent value in a supported suit at the price of single-ply PVC!

The suit features detachable hood, corduroy collar, 2-snap pockets, bib overalls, adjustable wrist, waist, ankles and snap-fly front.

Style 6930: Complete Rainsuit, Yellow, Sizes S-6XL

Style 6940



RIP-STOP PVC/NYLON/PVC 3-PIECE RAINSUIT

Heavy-duty PVC/Nylon/PVC scrim material is double stitched and taped to prevent blow outs and still remain waterproof. The fabric is resistant to tearing and abrasion. Especially useful in forestry and municipal environments.

The suit features detachable hood, corduroy collar, 2 snap pockets, bib overalls, adjustable wrist, waist, ankles and snap-fly front.

Style 6940: Complete Rainsuit, Yellow, Sizes S-6XL

Style 2050/
2051



.50MM 2-PIECE RAINSUIT

Our heaviest duty performer, the 2050 is constructed from .50mm PVC bonded onto an oxford polyester lining. This hard-working, long lasting rainwear is designed for the tough stuff...commercial fishing, offshore drilling, boring and excavation, mining, any time you need the strongest gear for the most rugged job!

Attached, hard-hat compatible hood has handy snap-out rain visor. Jackets feature inside pockets, non-conductive zipper and hook-and-loop closures. Double-sided bibs have inside security pocket with zipper.

Style 2050: Complete Rainsuit, Yellow or Safety Orange, Sizes: S-6XL
Style 2051: Jacket only, Yellow, Sizes: S-6XL

Style 8200



2-PIECE RAINSUIT

100% Waterproof doesn't necessarily mean "heavy and uncomfortable." Abel's new RainSuit features our softest most pliable fabric: Abel Micro PVC (a special blend of PVC and Polyurethane) in a garment that contains all the bells and whistles needed for the jobsite and enough reflective material to surpass Class-2 level requirements.

The suit features a concealed hood in the collar, zip front with snap overlay, two-way pockets, bib overalls, adjustable wrist, waist, ankles and snap-fly front.

Style 8200: Yellow Complete RainSuit, Sizes S-6XL

Style 8100/
8101



3-PIECE RAINSUIT

Our most popular 100% waterproof, industrial fabric .35mm PVC/bonded onto oxford polyester, is now available as a rainsuit in high-visibility colors and reflective stripes. When the worksite is near any high-traffic area this type of suit offers improved visibility, especially under low-light conditions.

The jacket features: detachable hood, corduroy collar, snap front with storm flap for added protection, non-conductive safety hardware, two patch-pockets, adjustable wrist for snug fit.

The bib-overalls feature: waist and ankle adjustments for fit, heavy-duty, non-conductive hardware, fly front.

Style 8100: Yellow Complete RainSuit with silver 2" glass bead reflective stripes, Sizes M-6XL

Style 8101: Fluorescent Lime Complete RainSuit with silver 2" glass bead reflective stripes, Sizes M-6XL

Style 2060



3-PIECE RAINSUIT

High Visibility doesn't always require reflective striping. For those purposes Abel provides the 2060 which has the same fabric and features as Style 8101.

Style 2060: Fluorescent Lime Complete RainSuit, Sizes S-6XL



Style 6900



Available up to 6x



Style 10215

Style 6910

35MM PVC/POLYESTER RAINGEAR – 6900 Series

Style	Description	Colors	Sizes
6900	3-pc. Rainsuit w/detachable hood and bib overall	Yellow Orange	S-6XL
6901	Jacket with detachable hood	Yellow	S - 3XL
6902	Full length 49" long Raincoat w/ detachable hood	Yellow	S - 6XL
6907	Rainsuit with attached hood	Yellow	S - 4XL
6908	Jacket with attached hood	Yellow	S - 3XL
6909	Bib Overall	Yellow	S - 5XL
6910	So'wester Hat	Yellow	One Size Fits All
10215	Waist Overall	Yellow	S - 3XL

100% waterproof industrial raingear made and sized for American Industry. All styles in the 6900 Series are made from our .35mm heavy-duty PVC/ polyester fabric. Jackets feature reinforced patch pockets and ventilated cape backs for comfort and coolness. Excellent for industrial and consumer applications.





Industry Proven — Work-Tested Gloves

SHOULDER LEATHER

Double Palm and Index Finger
2-1/2" Rubberized Safety Cuff
MEN'S AND WOMEN'S SIZES

500DP



PREMIUM BLUE
LATEX COATED

Seamless Grey Knit
Latex on Palm and Fingertip
SIZES: S, M, L, XL

700SLC



8 oz. COTTON CANVAS
MEN'S AND WOMEN'S SIZES

708



FLUORESCENT ORANGE

Smooth Finish, Foam Lining
Knit Wrist

1007OR



70% COTTON,
30% POLYESTER

String Knit, PVC Dots
on Two Sides

MEN'S, WOMEN'S
AND YOUTH SIZES

708SKBS



BLACK

Rough Grip Finish,
Interlock Lining, 12" Length

1027R

1007R

Knit Wrist

1017R

10" Length

1047R

14" Length



9 oz BROWN JERSEY

MEN'S, WOMEN'S
AND YOUTH SIZES

750K



POSI SHIELD
WHITE LATEX EXAMINATION

Medical Grade, Lightly Powdered,
5 mil, 100 ct.
SIZES: S, M, L, XL

2500



Rough Rider Drivers Gloves,
easy wearing style and comfort

F150 – Thinsulate Lined

Made entirely from top-grain leather, deep-oil tanned for softness. Each glove is sewn with an inset, keystone thumb and bound at the cuff with leather.

Rough Rider

Top Grain Rough Riders with heavy cuffs protect wrists and forearms

129 – Grain Leather Palm, Safety Cuff

The supple grain leather ensures comfort and grip. Yellow canvas back keeps hands in sight.





**Revco
Tool Handz™ Plus**

Introducing the new Black color Tool Handz PLUS. Now choose from black or blue to perform all your heavy-duty tasks from machine operation to abrasive applications to construction projects.

Features include:

- Rugged Titan™ synthetic leather. Reinforcement guards on palm and fingers.
- Comfortable fit with snug spandex back.
- Small reflective logo and elastic cuff closure.
- Fully machine washable.

99PLUS-BLK – sizes S-2XL
99PLUS-BLUE – sizes S-XL



Whatever your industry, whatever the hazards to your workers' knees, shins, insteps, feet or toes, Ellwood Safety has the protection you need.



#201

**FOOT GUARDS
WITH RUBBER TOE**

Foot guards fit any shoe (no rights or lefts), with 5" (average) and 5-1/2" (large) widths. They are light enough to be worn comfortably all day.

16-ga. Carbon Steel
(.059"), 3-1/8 lb./pair



#303

**ALUMINUM ALLOY
SHIN-INSTEP GUARDS**

Shin guard with knee guard attached with web, sponge rubber hinge. Knee guard 5-3/4" high, 6-1/4" wide, .081" thick; full guard 18-1/2" high.

Alluminum Alloy
Shin Guard (.081"), 1-1/2 lb./pair



#314

**PLASTIC KNEE-SHIN
GUARDS**

Combines the shin guard above attached to a knee guard with web, sponge rubber hinge. Knee guards 5-1/2" high, 6-1/2" wide, .140" thick; full guard 18" high.

Polypropolene Plastic
2-1/2 lb./pair



#800

METATARSAL GUARDS

Ellwood Safety's Metatarsal Guard is designed to be worn with most lace types of Safety Toe Shoes to provide comfortable low cost metatarsal protection.

9 oz./pair

Superglas® Fiberglass Welding Helmets



MODEL 706

MODEL 710 STATIONARY

- **Reinforced edges** for extra strength and non-cracking.
- Good **fiberglass/resin dispersion** for durability.
- **Molded-in glassholder** eliminates risk of light leak.
- Available in **curved bottom shape** for extra margin of protection from smoke and fumes and **straight front shape** for extra margin of protection from sparks and spatter.

Tigerhood® Thermoplastic Welding Helmets



MODEL 906

MODEL 990

MODEL 910

- **Universal shell shape** combines the benefits of a curved bottom and straight front shape.
- **High gloss surface** sheds spatter to extend service life.
- **Made from NORYL**, job proven superior in every welding related performance characteristic.
- **Molded glassholder** corner "pads" protect expensive filter plates.
- **Full size** accommodates required spectacles and respirators while allowing air to circulate to clear smoke and fumes.
- Unique, **free floating headgear** balances and stabilizes the helmets weight. Pliable material conforms to individual head shapes for maximum comfort. Strip proof ratchet knob allows adjustment with a gloved hand.
- **Extremely durable**, does not crack nor break for extended service life.
- **Padded, perforated sweatband** absorbs moisture to provide a cooling effect as air circulates within the helmet.

Flexible/Rigid Frame Welding Goggles



MODEL VG-200-H5

Flexible frame 2" x 4-1/2" lift-front cover goggle with hooded vents.



MODEL VG-600-H5

Reinforced flexible frame 2" x 4-1/2" cover goggle with hooded vents.



MODEL VG-800-H5

Reinforced flexible frame, 50mm lift-front goggle with vents.



MODEL VG-H5

Adjustable fit rigid frame, 50mm cup goggle with baffled vents.

Cover Goggles – EXTRALITE® "Softies"



MODEL VG-10 (Clear)

Also available as VG-11 (Green tinted. Do not use for welding.)

Xtralite® "Softies" have flexible, non-allergenic frames. Exclusive cross venting is provided by a specially designed, molded-in pattern of openings. A soft nose flap and rounded frame edges prevent pressure points. Optically-correct, injection molded polycarbonate lenses assure clear vision. Extralite goggles fit over most prescription and protective glasses.

Fiberglass Head Protection

P-2 Series

Model P-2W
Roughneck caps are built for toughness and durability.



Model P-2H Superglass tolerate heat better.

All have the unique smooth crown design and eight-point suspension systems headband.

Welding Helmet Protective Cap Components



Model 4000 Quick-Lok



Model 6000 Quick-Lok Mounting Blades



Model 5000 Speedy-Loop

AIR-PURIFYING RESPIRATORS

5500 Series Low Maintenance Half Mask



550030M HALF MASK SHOWN

The North 5500 Series incorporates the comfortable and efficient design of the popular 7700 Series half mask with the low cost and convenience of a disposable. All parts are replaceable, extending the useful life of the respirator.

features and benefits

- Made of an extremely soft non-allergenic elastomer for comfort and fit. Contoured sealing flange eliminates discomfort caused by pressure points on facial nerves. Design of nose area provides excellent comfort and fit.
- Low dead air space improves worker comfort by limiting re-breathing of exhaled air.
- Direct cartridge to facepiece seal minimizes replacement parts and simplifies maintenance.
- Three overlapping sizes comfortably fit most users.
- North 5500 Series Half Masks are compatible with all North cartridges, filters and accessories.

Part #	Description	Packaging
550030S	5500 Series Half Mask (Small)	1 per package
550030M	5500 Series Half Mask (Medium)	1 per package
550030L	5500 Series Half Mask (Large)	1 per package
77BAG	Carrybag for Half Mask	1 per package

5400 Series Low Maintenance Full Facepiece



54001 FULL FACEPIECE SHOWN WITH 7581P100 CARTRIDGES

The North 5400 Series provides the comfort and protection you would expect from North at an unbeatable price. No other full facepiece in its price range offers such quality, engineering and attention to detail. Weighing only 14 oz., the 5400's lightweight design offers a level of comfort that ensures greater worker acceptance. Plus, its facepiece seal is made from a soft, pliable elastomer material with high chemical resistance to assure excellent comfort, fit and performance.

features and benefits

- Each facepiece comes with three peel-away windows, six respirator wipes and a storage bag.
- Oral nasal cup reduces fogging and lessens dead air space to improve worker comfort by limiting re-breathing of exhaled air.
- Chin cup helps to position the facepiece properly.
- Hard-coated polycarbonate lens offers an over 200° field of vision, provides excellent optics, is scratch resistant and meets ANSI standards for impact and penetration resistance.
- Two overlapping sizes, small and medium large, will comfortably fit most users.
- With many of the same components of the 7600 Series facepiece, replacement part inventory will be reduced.
- North 5400 Series Full Facepieces are compatible with all North cartridges, filters and accessories.

Part #	Description	Packaging
54001	5400 Series Full Facepiece (Medium/Large)	1 per package
54001S	5400 Series Full Facepiece (Small)	1 per package

Accessories



76BAG FOR FULL FACEPIECE

Accessories for 5400 Series Full Facepiece

Part #	Description	Packaging
80100	Eyeglass frame. Plastic, no lenses	1 per package
760023	Eyeglass frame. Metal, no lenses	1 per package
80836A	Peel-Away Windows (3 Windows per assembly)	5 per package
80944	Anti-fog Wipes	10 per package
76BAG	Carrybag for Full Facepiece	1 per package

GAS & VAPOR

CARTRIDGES

North offers an extensive line of gas and vapor cartridges and particulate filters to satisfy numerous industrial applications. All North cartridges and filters are approved with all North air-purifying half masks and full facepiece respirators. One line of cartridges and filters will simplify your inventory.

Air-Purifying Respirators with cartridges provide respiratory protection against gases and vapors by using sorbents to purify the inhaled air. Cartridges without filters do not remove dusts, fibers and other particles.

North has developed the ezGuide™ software program designed to help the user develop change schedules for North gas and vapor cartridges. ezGuide will also determine the appropriate types of respiratory and hand protection required.

Gas & Vapor Cartridges and Combination Gas and Vapor Cartridges with P100 Particulate Filters

Part #	Color Code	Description
75SC	Olive	Defender™ Multi-Purpose Cartridge for Organic Vapors, Chlorine, Hydrogen Chloride, Sulfur Dioxide, Hydrogen Sulfide (Escape), Hydrogen Fluoride, Chlorine Dioxide, Ammonia, Methylamine and Formaldehyde
75SCP100	Olive/Magenta	Above with P100 Particulate Filter (99.97% Minimum Filter Efficiency)
N75001	Black	Organic Vapor Cartridge
7581P100	Black/Magenta	Above with P100 Particulate Filter (99.97% Minimum Filter Efficiency)
N75002	White	Chlorine, Hydrogen Chloride, Sulfur Dioxide, Hydrogen Fluoride, Chlorine Dioxide, Formaldehyde Cartridge
7582P100	White/Magenta	Above with P100 Particulate filter (99.97% Minimum Filter Efficiency)
N75003	Yellow	Organic Vapor, Chlorine, Hydrogen Chloride, Sulfur Dioxide, Hydrogen Fluoride, Chlorine Dioxide Cartridge
7583P100	Yellow/Magenta	Above with P100 Particulate Filter (99.97% Minimum Filter Efficiency)
N75004	Green	Ammonia, Methylamine Cartridge
7584P100	Green/Magenta	Above with P100 Particulate Filter (99.97% Minimum Filter Efficiency)
N750052	Olive	Mercury Vapor, Chlorine Cartridge with End-of-Service-Life indicator (ESLI for mercury vapor)
75852P100	Olive/Magenta	Above with P100 Particulate Filter (99.97% Minimum Filter Efficiency)

PARTICULATE FILTERS

& ACCESSORIES

Air Purifying Respirators with filters provide respiratory protection against aerosols by removing dusts, mists, fumes, fibers and other particles. Filters do not remove gases or vapors, or correct for oxygen deficiency.

End of service life for filters is normally determined by the increase in breathing resistance sensed by the user. When it becomes difficult to breathe comfortably, the filters should be replaced. R95 filters are limited to a maximum of 8 hours use when used in atmospheres containing oil.

Particulate Filters

Part #	Description
7580P100	P100 Particulate Filter – (99.97% Minimum Filter Efficiency)
75FFP100	P100 Particulate Filter (Pancake) – (99.97% Minimum Filter Efficiency)
7506N95	N95 Non-Oil Particulate Filter (95% Minimum Filter Efficiency)
7506N99	N99 Non-Oil Particulate Filter (99% Minimum Filter Efficiency)
7506R95	R95 Particulate Filter (95% Minimum Filter Efficiency)
7531N95	N95 Non-Oil Particulate Filter Assembly (95% Minimum Filter Efficiency) Includes 7506N95 Filter, N750027 Seal Check/Filter Cover and N750015 Filter Holder
7531N99	N99 Non-Oil Particulate Filter Assembly (99% Minimum Filter Efficiency) Includes 7506N99 Filter, N750027 Seal Check/Filter Cover and N750015 Filter Holder
7531R95	R95 Particulate Filter Assembly (95% Minimum Filter Efficiency) Includes 7506R95 Filter, N750027 Seal Check/Filter Cover and N750015 Filter Holder

Accessories for Cartridges and Filters

Part #	Description
N750015	Filter Holder for 7506N95, 7506N99 and 7506R95 filters. Requires N750027 Seal Check/Filter Cover.
N750027	Seal Check/Filter Cover for 7506N95, 7506N99 and 7506R95 filters. Attaches to Gas and Vapor cartridges. For filter use only, use N750015 Filter Holders.
N750029	Shower Cap for 7580P100 Filter. Protects filter during abatement using water or during decontamination.
N750035	Adapter for assembly of a 75FFP100 Pancake Filter to a gas and vapor cartridge. (Except for Defender Multi-Purpose Cartridge)

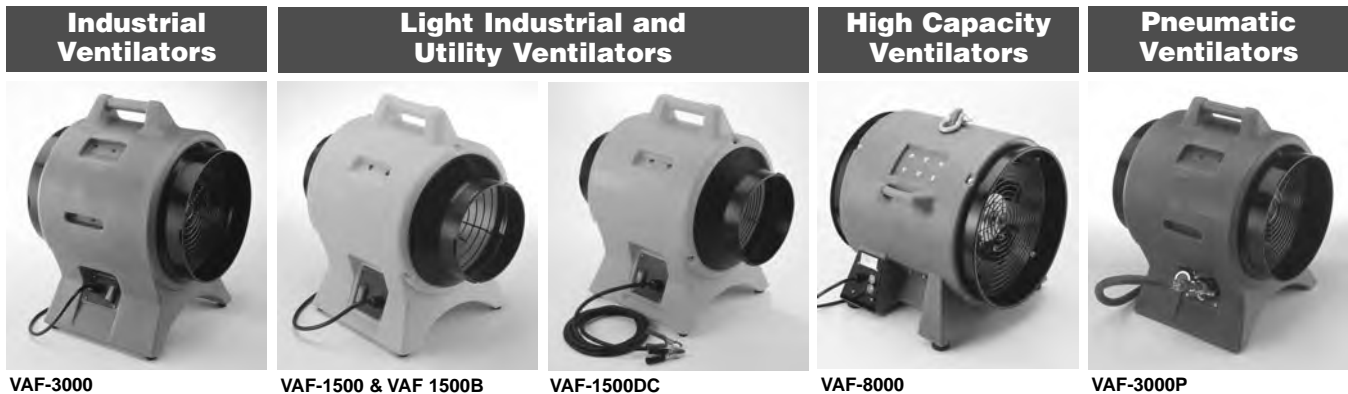


A Variety of Dust Masks Available at Wharton





PORTABLE VENTILATORS



Specifications	3000	1500	1500B	1500DC	8000	3000P			
Voltage	115V AC~*	230V AC~*	115V AC~*	230V AC~	115V AC~	12V DC~	220/440V AC~	200/208V AC~	--
Air Consumption	--	--	--	--	--	--	--	--	38 cfm
Inlet Pressure (max)	--	--	--	--	--	--	--	--	100 psi
Noise Level	--	--	--	--	--	--	--	--	86 dBa
Frequency	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	--
Phase	Single	Single	Single	Single	Single	Three	Three	Three	--
Motor	1 Hp	1 Hp (.75Kw)	1/4 Hp	1/4 Hp	1/4 Hp	1/4 Hp	5 Hp	5 Hp	1.5 Hp
Current (amps)	7.1	4.2	2.3	1.3	2.3	21	12.8/6.4	13	--
Bearings	--	--	--	--	--	--	--	--	Perm. Lub.
R.P.M.	3425	2850	3200	2660	3200	3200	3450	3450	3000
Max. S.P.	3"	2.5" (68mm/Aq)	1.5"	1.5"	1.5"	1.1"	6.1"	6.2"	--
Air Flow Rates									
Free Air	2091 cfm	2000 cfm	848 cfm	774 cfm	1262 cfm	696 cfm	7184 cfm	7336 cfm	2063 cfm
15' Straight	1756 cfm	1700 cfm	552 cfm	616 cfm	554 cfm	542 cfm	--	--	1753 cfm
15' 1-90 bend	1637 cfm	1400 cfm	511 cfm	522 cfm	531 cfm	465 cfm	--	--	1616 cfm
15' 2-90 bends	1500 cfm	1250 cfm	482 cfm	508 cfm	518 cfm	449 cfm	--	--	1450 cfm
25' Straight	1734 cfm	1650 cfm	574 cfm	552 cfm	616 cfm	464 cfm	7100 cfm	7187 cfm	1619 cfm
25' 1-90 bend	1550 cfm	1250 cfm	505 cfm	477 cfm	543 cfm	392 cfm	6693 cfm	6733 cfm	1497 cfm
25' 2-90 bends	1498 cfm	1245 cfm	484 cfm	475 cfm	502 cfm	379 cfm	6271 cfm	6107 cfm	1433 cfm
50' Straight	1643 cfm	1425 cfm	483 cfm	457 cfm	512 cfm	389 cfm	6839 cfm	7004 cfm	1531 cfm
50' 1-90 bend	--	--	--	--	--	--	6494 cfm	6733 cfm	--
50' 2-90 bends	--	--	--	--	--	--	6015 cfm	6151 cfm	--
100' Straight	1361 cfm	1125 cfm	--	--	--	--	6681 cfm	6777 cfm	1243 cfm
Dimensions									
Fan Type	Axial Blower/Extractor	Axial Blower/Extractor	Axial Blower/Extractor	Axial Blower/Extractor	Axial Blower Only	Axial Blower/Extractor	Axial Blower/Extractor	Axial Blower/Extractor	Axial Blower/Extractor
Size	12" dia.	12" dia.	8" dia.	8" dia.	8" dia.	8" dia.	20.5" dia.	20.5" dia.	12" dia.
Weight	32.5 lbs.	32.5 lbs.	18 lbs.	18 lbs.	18 lbs.	14 lbs.	119 lbs.	119 lbs.	28 lbs.
H x L x W (in.)	21x17x14	21x17x14	18.5x18.5x12.5	18.5x18.5x12.5	18.5x15x12.5	18.5x18.5x12.5	27.5x27.5x25.5	27.5x27.5x25.5	21x17x14

Flow rate performance verified by CEESI in accordance with AMCA STD 210.85. *UL & CUL Listed

Ventilator Accessories



Flexible, light-duty vinyl woven polyester ducts are easily retractable and designed to handle large volumes of air.

Model	Duct with Quick Connect
0815	8" x 15'
0825	8" x 25'
1215	12" x 15'
1225	12" x 25'
1225-SC	12" x 25'
2025	20" x 25'



This metal circular ring will allow you to connect multiple sections of duct.

Model	Coupler
8000	8"
1200	12"



Metal rack is perfect for safe duct storage – up to two 15' ducts or one 25' duct.

Model	Holds Duct Size
DSR-28-08	8" diameter
DSR-25-12	12" diameter



This duct hose, made of flexible, light duty vinyl woven polyester is designed to collapse into its own attached carrying bag.

Model	Size
Bag-O-Duct-1225	12" x 25'



Lightweight (9 lb.) plastic attachment for wet carpet and floor drying applications. Constructed with built-in handle for easy transport. Connects with supplied bungee cord.

Model
CDA-3000 (VAF-3000 only)



FACE SHIELDS

Face Shields



Shown with 170-SB (0742-0020)

- Available in Polycarbonate, Propionate, Acetate and APCP™.
- Larger sizes provide additional protection from top, bottom and sides.
- Excellent with the Jackson 170-SB headgear.
- All Jackson face shields meet or exceed ANSI A87.1 standards for secondary eye protection. Primary eye protection (safety spectacles) required with use of these products in accordance with ANSI Z87.1.

MATERIAL TABLE

Material	Shape	Impact Resistance	Scratch Resistance	Heat Resistance	Optics
Polycarbonate	Molded/Sheet	Best	Better	Best	Best
Propionate	Molded	Better	Good	Good	Better
Acetate	Sheet	Better	Best	Better	Best
APCP™	Sheet	Good	Better	Better	Good

Headgear

170 Headgear – The Jackson 170 headgear has 45 head size adjustments and 5 crown adjustments. The New Ratchet system eliminates “backing off” by the push and turn design. A lower ratchet strap offers added comfort and strength. For Shadow and HML Series produced before May 2000.

170-P Headgear – The Jackson 170-P headgear has all the features of the 170 except a rubber strap is used in place of a ratchet. Our “Pipeline” style is most comfortable for out-of-position welding.

170-SB Headgear – The Jackson 170-SB is ideal for use with Jackson face shields.



0742-0020

Recommendations for Attachments (Face Shields to Safety Caps)

Capshields (For Bill Forward Wear)

437 CAPSHIELD (Blade Mount) DIELECTRIC

- All plastic, totally dielectric device for slotted caps.
- Curved plastic channel fits over the bill of the cap and includes pivoting blades which snap easily into cap slots.
- Visors are secured with integral plastic lugs.
- Use with SC 6/16 safety cap.



0742-0037

337 CAPSHIELD DIELECTRIC

- Totally dielectric device for non-slotted caps.
- Curved plastic channel fits over the bill and secures with adjustable rubber headband that stretches around the exterior cap crown.
- Visors are secured with integral plastic lugs.
- Use with SC 3 safety cap.



0742-0036

137 CAPSHIELD METAL

- Metal device for non-slotted caps.
- Curved aluminum channel and coil spring attachment.
- Use with SC 3 safety cap.



0742-0049

37 HATSHIELD METAL

- Metal device for non-slotted caps.
- Curved aluminum channel and coil spring attachment.
- Allows for attachment of any Jackson visor to protective hat.
- Use with SH 3 safety cap.



0742-0035

Cap Adapters (With polyethylene spark deflector)

382 B CAP ADAPTER DIELECTRIC

- Easiest, least costly adapter.
- Mounts visor to slotted caps.
- Includes an integral spark deflector and pivoting blades.
- Visors secured with integral plastic lugs.
- Use with SB 6 and SC 6/16 safety caps.
- SC 6/16 can be worn bill forward or backward.



0742-0025

282 B CAPMOUNT ADAPTER

- Mounts visor instantly on a wide variety of non-slotted caps with integral plastic lugs.
- Uses clips pressed over the cap rim for firm fit; removes with thumb pressure.
- Not to be used with caps with slots with rain troughs.
- Use with SC 3 (bill backward) safety caps.



0742-0024

182 B CAPMOUNT ADAPTER METAL

- Permits attachment of any visor/spark deflector combination to any non-slotted cap.
- Not recommended for use with caps with slots.
- Visors secured with integral plastic lugs.
- Use with SC 3 (bill backward) safety caps.



0742-0023

82 B CAPMOUNT ADAPTER DIELECTRIC

- Quick detach brackets that join any visor and spark deflector with plastic pins to any cap equipped with #87 mounting blades.
- Use with SB 6 and SC 6/16 safety caps.
- SC 6/16 can be worn bill forward or backward.



0742-0022

82 BM CAPMOUNT ADAPTER METAL

- Quick detach brackets that join any visor and spark deflector with plastic pins to any cap equipped with #87 mounting blades.
- Use with SB 6 and SC 6/16 safety caps.
- SC 6/16 can be worn bill forward or backward.



0742-0099



Spectacles — Integra

- ▲ Single lens and adjustable temples ensure reliable performance.
- ▲ Replacement lens extends the life of each pair.
- ▲ Select frames available with ratchet adjustment temples.
- ▲ Lenses are coated for superior scratch resistance.
- ▲ Lenses provide 99% protection against harmful UV rays.
- ▲ Exceeds ANSI Z87.1-2003 High Impact requirements.
- ▲ Exceeds CSA Z94.3 standards / CE EN166 Certified.



SB410S Clear Lens
Black Frame



SB420S Gray Lens
Black Frame



SB430S Amber Lens
Black Frame



SNWR410S Clear Lens
Red/White/Blue Frame

Spectacles — Solo® Also available in Anti-Glare Green Tints

- ▲ Lightweight and economical, the temples are vented on this spectacle for added comfort.
- ▲ S510SD — Dispenser packaging includes 12 individually wrapped, clear lens glasses.
- ▲ S510SB — Bulk packaging includes 100 individually wrapped, clear lens glasses.
- ▲ Lenses provide 99% protection against harmful UV rays.
- ▲ Exceeds ANSI Z87.1-2003 High Impact requirements.
- ▲ Exceeds CSA Z94.3 standards / CE EN166 Certified.



S510S Clear Lens / Frame Combination
S510SHC Clear Scratch Coated Lens
S510SJ Jumbo Size

Hard Hats — Cap Style

- ▲ Shell constructed from High Density Polyethylene materials.
- ▲ Low profile design.
- ▲ Rain troughs on sides and back of helmet channel moisture away.
- ▲ Universal accessory slots fit cap mounted ear muffs and chin straps.
- ▲ Soft brow pad is replaceable and washable.
- ▲ Snap Lock suspension features “tuck away” adjustment for all day, hassle free wear.
- ▲ Ratchet suspension is easy to adjust — allows the wearer to modify the fit while wearing.
- ▲ Meets ANSI Z89.1-2003 standards, Type 1 — Class C, G and E.

Replacement suspensions and headbands available.



Accessories

LCS20
Lens Cleaning Station with 16 oz.
Cleaning Solution / 1200 Tissues



HP16010 White Cap Style
6 Point Snap Lock Suspension
HP16110 White Cap Style
6 Point Ratchet Suspension



**6 Point Ratchet
Suspension**

Back Support Belts

- ▲ Stabilizes the spine, supports the abdomen and lower back to prompt proper lifting techniques.
- ▲ Constructed from lightweight durable material.
- ▲ Contoured shape allows flexibility and complete freedom of movement.
- ▲ Features breakaway suspenders.
- ▲ Washable and shrink resistant.
- ▲ Plastic support stays / 2 overlap style adjustable panels.
- ▲ Conveniently packaged / Available in sizes S-3XL.



Hearing Protection — Ear Muff

- ▲ NRR 22db.
- ▲ Durable nylon headband / Soft foam ear cups.
- ▲ Meets ANSI S3.19 requirements.



NORTH Safety Products

DeciDamp^{2™}



280006

**EAR
PLUGS**
NRR29



282505

Features/Benefits

- **Expands to Fit Ear Canal**
Maximizes wearer protection.
- **Foam Construction**
One size fits most. Lightweight, soft and comfortable. Non-toxic and non-irritating, disposable.
- **Sealed Pouches**
Available in cellophane and degradable paper. Maximum cleanliness, assures employees that plugs are unused.
- **Available with Cord**
More convenient to use, visible for safety checks.

single lens



'Cudas™

- Six-base lens curve and folded-back lens design provide increased peripheral vision and protection.
 - Stylish frames made of durable, modified nylon.
 - 'CudaSlide™ adjustable temple for maximum comfort.
 - Indoor/Outdoor lens reduces glare and increases wearing time.
 - Standard pack 12.
- ANSI Z87.1+ / CE Approved**



ML 'Cudas™

- Larger lens for greater coverage.
 - Same great design as 'Cudas.
 - Meets CSA Z94.3 high impact and sideshield requirements.
 - Adjustable temples.
 - Standard pack 12.
- ANSI Z87.1+ / CSA Z94.3**

GREY
19421
19422
19365
N/A
19458

CLEAR FOGGARD® PLUS
SMOKE FOGGARD® PLUS
BLUE MIRROR
GOLD MIRROR
RX INSERT

'Cuda Seven™

- Seven-base curved lens for wrap-around protection and no distortion in peripheral vision.
 - Adjustable temples.
 - Rx frame insert available.
 - Standard pack 12.
- ANSI Z87.1+**



BLACK **REP. LENS**
19428 19449 IR 5.0



'Cudas™ Caddy

- Stores one pair of 'Cudas™ spectacles and two replacement lenses for a variety of applications / situations.
- Features belt loops for convenience.
- Caddy sold separately #19174.

19175 CLEAR, AMBER, SMOKE
19179 CLEAR, SMOKE, SUNBURST
19174 CADDY

19804
19805
19806
19807
19808
19809
19859
19860

CLEAR LENS
CLEAR FOGGARD® PLUS
SMOKE MIRROR LENS
INDOOR/OUTDOOR LENS
BLUE MIRROR LENS
AMBER LENS
IRUV 3.0
IRUV 5.0

Nemesis™

- Sleek, sporty style.
 - Soft touch temples.
 - Lightweight construction.
 - Single lens wrap-around protection.
 - Standard package 12.
- ANSI Z87.1+**



dual lens



Nomads

- Lightweight construction.
 - Detachable sideshields and universal bridge.
 - NOTE: Does not meet CSA Z94.3 standards.
 - Standard pack 10.
- ANSI Z87.1+**

19531 CLEAR
19532 SMOKE
19533 SILVER MIRROR
19534 METALLIC RAINBOW
19535 METALLIC BLUE

18594
18595
18596
19597
18598
18599

BLACK
ELECTRIC BLUE
GLACIER GREEN
NEON ORANGE
NEON YELLOW
RED

spectacle cords

- Conveniently fits any spectacle, to have them readily accessible.
- 12 per bag.



LENS COLOR	FRAME COLOR		
	BLACK	BLUE	REPLACEMENT LENSES
Clear	19142	19157	19013
Clear FogGard® Plus	19143	19158	19121
Smoke	19144	19159	19014
Smoke FogGard® Plus	19145	N/A	19122
Sunburst	19146	N/A	19029
Blue Steel	19147	N/A	19015
Vermilion	19148	N/A	19120
Amber	19149	N/A	19119
Indoor/Outdoor	19563	N/A	N/A

NOTE: 'Cudas spectacles meet high impact requirements of CSA Z94.3. They do not meet the CSA Z94.3 sideshield requirements.

Drybrow® sweatbands

Keep cool and prevent perspiration from running into your eyes in hot, humid conditions with Allsafe Services & Materials specialized sweatbands.



AA-100 #22008

- Deluxe, full-size (8-5/8" long).
- Packaged 25/bag; individually sleeved for increased shelf life.

AA-101 #22009

- Packaged 100/bag (not individually sleeved).

AA-103 #22011

- Packaged 25/bag (not individually sleeved).



DB-801 #22013

- Economy price range.
- Full-size (8-5/8" long).
- Packaged 100/bag (not individually sleeved).

DB-803 #22017

- Packaged 25/bag (not individually sleeved).



AA-102 #22010

- Deluxe clip-on, full-size (8-5/8" long).
- Fits on a hard hat, welding helmet or sandblast hood.
- Packaged 25/bag (not individually sleeved).

BARGARD® protector caps



A-5 #23704

- Fits rebars 3/8" to 3/4" diameter.
- Also fits inside 1" ID pipe.
- Standard package 200.



A-10 #23700

- Fits rebars 3/8" to 1-1/4" diameter.
- Also fits inside 1-3/4" ID pipe.
- Standard package 100.



A-20 #23702

- Fits rebars 1" to 2-1/4" diameter.
- Standard package 100.

WARNING – BarGard® caps are not designed or intended to provide impact or impalement protection. They are not a substitute for covering vertical reinforcing steel with timber, as recommended by OSHA, and are not recommended for use when protection from falls is required. For additional information on acceptable methods of guarding against impact or impalement, consult OSHA CFR TITLE 29, PART 19120, ANSI A10.9-1983, and your state regulations for specific requirements.

Allsafe Services & Materials hats and caps are molded from high-density polyethylene for protection and lightweight comfort. All are carefully styled to provide the right protection for the right circumstance, for just about any workplace. In construction, foundry, utility, chemical, forestry, mining or food processing, our hats and caps will give wearers all the comfort, fit and protection they need. All hats and caps meet ANSI Z89.1-2003 Type 1, Class G, E and C as required by OSHA.

Western Outlaw™ hard hat



#3007313

- Meets ANSI Z89.1-2003 standards.
- Stylish, comfortable and fits all head sizes.
- Ratchet Suspension.

ANSI Z89.1+

3010943	WHITE
3010944	TAN
3010945	GRAY
3007313	BLACK

Sentry III™ cap



#14011

- Universal slots accommodate hearing, welding and faceshield accessories.
 - Comfortable 6-point nylon suspension with CoolmaxCM terrycloth sweatband.
 - Ratchet holds cap in place for secure fit.
 - Pin-Lock model has wide nape strap for secure fit.
 - Standard pack 12.
- ANSI Z87.1+**

Through cold and chill, snow, rain and sleet, Allsafe Services & Materials offers the industry's most comprehensive line of thermal winterwear to give workers full protection from the elements. Our cap liners are made from the most technologically advanced fabrics that combine the best of performance features with a number of comfort options.

TEMPERATURE RANGE CODING

	45° to 32°F or 8° to 0°C
	32° to 0°F or 0° to -20°C
	0° to -20°F or -20° to -28°C

The above suggested ranges are to assist in choosing an appropriate liner for various climates.

Thermal cap liners



165

#22251

- Lightweight protection.
- 100% cotton.
- Napped flannel interior.
- Liner color may vary due to material availability.
- Standard pack 12.



225 Plus

#22298

- Blue quilted nylon shell with fastener straps.
- Three layers of thick foam.
- Meets 16 CFR 1610, Class I.
- Standard pack 12.



400

#22297

- Full head and neck coverage with extra-long nape and wrap-around collar.
- 100% cotton, denim exterior.
- Thick, sherpa lining for maximum warmth.
- Standard pack 3.

10 person kits



- 3011187
10 Person Metal
- 3011186
10 Person Poly

- Available in Metal or Poly box.
- Kits Meet ANSI Standard Z308.1-2003.
- Ideal for small workplaces.

Description (10 Person Kit)	Units	Pieces Per Unit
10-BA Bandage Assortment	1	
Certi-Strip Plastic, 1"x3"		16
Certi-Gauze Pad, 3"x3"		4
Certi-Strip, Fingertip		1
Certi-Strip, Knuckle		1
Adhesive Certi-Tape, 1/2"x5 yd.	1	
10-AA First Aid Assortment	1	
BZK Towelette		10
Certi-Burn Cream, 1gm		6
Insect Sting Wipe-up		1
Cold Pack, Certi-Cool Junior	1	
Forceps, Plastic 4.5"	1	
Certi-Gauze Roll - 1"x6 yd.	1	
Gloves, Nitrile, Pair M/L	2	
Scissors, Bandage w/Red Hdl. 4"	1	
Trauma Pad 5"x9"	1	
Triangular Bandage, 40"	1	
First Aid Facts Sheet	1	

25 Person Kit Contractor 25 Kit

Description (25 Person Kit)	Units	Pieces Per Unit	Units	Pieces Per Unit
25-BA Bandage Assortment	1			
Certi-Strip Plastic, 1"x3"		25	1	50
Certi-Gauze Pad, 3"x3"		4		
Certi-Gauze Pad, 4"x4"		1		
Eye Pad		1		
Certi-Strip, Fingertip		1		
Certi-Strip, Knuckle		1		
Adhesive Certi-Tape, 1/2"x5 yd.	1		1	
Ammonia Inhalant 1"x1"	1			
Certi-Strip Adhesive Bandage, Plastic 1"x3"				1
25-AA First Aid Assortment	1		1	
BZK Towelette		10		10
Certi-Burn Cream, 1gm		6		6
Insect Sting Wipe-up		2		2
Aspirin Tablets 2/pkg.	2			
Cold Pack, Certi-Cool Junior	1		1	
Eye Wash, Certi-Ose 20ml	1			
Forceps, Plastic	1		1	
Certi-Gauze Roll - 2"x6 yd.	1		1	
Gloves, Nitrile, Pair M/L	2		2	1
Trauma Pad 5"x9"	1		2	1
Triangular Bandage, 40"	1		1	1
First Aid Facts Sheet	1		1	1

25 person kits



- 3011190
25 Person Metal
- 3011188
25 Person Poly

- Available in Metal or Poly box.
- Kits Meet ANSI Standard Z308.1-2003.
- Ideal for most work environments and medium businesses and workplaces.
- Contractor 25 meets basic requirements, ideal for most jobsites.



- 3011467
Contractor 25 Poly

Description (50 Person Kit)	Units	Pieces Per Unit
Certi-Strip, Adhesive Bandage, Plastic 1"x3"	1	100/box
50-BA Bandage Assortment	1	
Certi-Strip Plastic, XLG		2
Certi-Gauze Pad, 4"x4"		2
Certi-Gauze Pad, 3"x3"		4
Eye Pad		2
Adhesive Certi-Tape, 1/2"x5 yd.	1	
50-FA-1 First Aid Assortment	1	
Alcohol Wipe-Ups		10
Certi-Burn Cream, 1gm		6
First Aid Cream, 1gm		5
Insect Sting Wipe-up		3
50 FA-2 First Aid Assortment	1	
Antiseptic BZK Towelette		10
Aspirin Tablets 2/pkg.		5
Antibiotic Cream, Certi-Sporyn, 1gm		3
PVP Iodine Wipe-Ups		3
Ammonia Inhalant 1"x1"	2	
Cold Pack, Certi-Cool Junior	1	
Cotton Swabs 3"	1	
Elastic Bandage, Ace Style 2"	1	
Eye Wash, Certi-Ose 20ml	1	
Forceps, Plastic	1	
Certi-Gauze Roll - 1"x6 yd.	1	
Gloves, Nitrile, Pair M/L	2	
Scissors, Bandage w/Red Hdl. 4"	1	
Trauma Pad 5"x9"	1	
Triangular Bandage w/2 Safety Pins 40"	1	

50 person kits



- 3011192
50 Person Metal
- 3011191
50 Person Poly

- Available in Metal or Poly box.
- Kits Meet ANSI Standard Z308.1-2003.
- Ideal for large businesses, manufacturing plants, office complexes and warehouses.

LARGER SIZES ALSO AVAILABLE



XTN™ SERIES

Built for everyday industrial use and abuse.

Applications: Construction, Manufacturing, Warehousing, Property Management.



XTN Series Two-way Radio

Designed to meet tough Mil Spec 810 F and IP54 standard for dust, water shock and drops. XTN Series (UHF) is compatible with the Spirit M-Series, the Spirit GT, the Spirit HP, the Spirit Pacer and the Spirit S-Series. XTN Series (VHF) is compatible with the Spirit M-Series, the Spirit HP, the Spirit Pacer and the Spirit S-Series. This durable two-way radio is ideally suited for construction, electrical, manufacturing/warehousing, property management and many other industries. **No monthly fees or service contracts required.**

XTN Series UHF Radios – Great for use outdoors and indoors

	Transmit Power	# of Channels	Unique Features	Weight	Range Indoors	Warehouse Range
XU1100	1 Watt	1 Ch.		9.9 oz.	15 Floors	200K sq. ft.
XU2100	2 Watt	1 Ch.	Voice Scramble	9.9 oz.	20 Floors	250K sq. ft.
XU2100Y	2 Watt	1 Ch.	Voice Scramble, Yellow Bezel	9.9 oz.	20 Floors	250K sq. ft.
XU2600	2 Watt	6 Ch.	Voice Scramble, Scan, Ivox	9.9 oz.	20 Floors	250K sq. ft.

XTN Series VHF Radios – Great for use outdoors

	Transmit Power	# of Channels	Unique Features	Weight	Range Indoors	Warehouse Range
XV1100	1 Watt	1 Ch.		9.9 oz.	8 Floors	150K sq. ft.
XV1100Y	1 Watt	1 Ch.	Yellow Bezel	9.9 oz.	8 Floors	150K sq. ft.
XV2100	2 Watt	1 Ch.	Voice Scramble	9.9 oz.	10 Floors	180K sq. ft.
XV2600	2 Watt	6 Ch.	Voice Scramble, Scan, Ivox	9.9 oz.	10 Floors	180K sq. ft.

AX SERIES

Custom programmable high power industrial radio. Compatible with repeaters.

Applications: Construction, Manufacturing, Warehousing, Property Management.



AX Series Radio

Power is the name of the game for the Motorola AX Series. The extra power helps to carry the radio signal through and around physical obstructions such as adjacent buildings, campus settings and multi-story buildings. At the touch of a button, the AX Series provides one-to-one or group communication. You'll be able to respond more quickly to daily workplace issues, track your projects more efficiently, and keep up with your workforce. Additionally, every AX Series radio offers a variety of useful features designed to keep even the busiest workforce operating effectively. **No monthly fees or service contracts required.**

AX Series VHF Radios – Great for use indoors

	Transmit Power	# of Channels	Unique Features	Weight	Range Indoors	Warehouse Range
AXV5100	5 or 2 Watt	10 Ch.	Hi/Low Power	11.5 oz.	20 Floors	200K sq. ft.

AX Series UHF Radios – Great for use indoors and outdoors

	Transmit Power	# of Channels	Unique Features	Weight	Range Indoors	Warehouse Range
AXU4100	4 or 2 Watt	10 Ch.	Hi/Low Power	11.5 oz.	30 Floors	300K sq. ft.

For Roll-up Signs



H-320 - Steel



C-102 - Steel



C-202 - Steel



C-902 - Aluminum

Typical Users:	Model:	Where used:	Roll-up Signs:		Rigid Signs:
			C-Signs™	Standard	Alum. or Plywood
Municipal DPWs Municipal Utilities Construction Crews Maintenance Crews Public Utilities Telephone Companies Survey Crews	H-320	In town, on local streets at lower speeds.	Up to 36"	Up to 36"	-
	C-102	2-Lane highway up to 65 mph wind conditions for 36" sign and up to 50 mph with 48" sign.	Up to 48"	-	-
	C-202	2-Lane and 4-lane highways up to 70 mph wind conditions with 36" sign and up to 65 mph with 48" sign.	Up to 48"	-	-
	C-902	2-Lane and 4-lane highways up to 70 mph wind conditions with 36" sign and up to 60 mph with 48" sign.	Up to 48"	-	-

We sell and rent signs and sign stands.

For Roll-up and/or Rigid Signs



E-380 - Steel



X-500 - Aluminum



X-600 - Aluminum

Bridge Maintenance Highway Maintenance State DOTs Highway Contractors Heavy Equipment Contractors	E-380	2-Lane and 4-lane highways. Economical, rugged stand for 36" or 48" signs (any type).	Up to 48"	Up to 48"	Up to 48"
	X-500 Series*	2-Lane and 4-lane highways up to 70 mph wind conditions with 36" or 48" sign (holds a 48" sign 18" above grade).	Up to 48" Model X-501	Up to 48" Model X-501	Up to 48" Model X-502
	X-600 Series	2-Lane and 4-lane highways up to 70 mph wind conditions with 36" or 48" sign (holds 48" sign 5 foot above grade).	Up to 48" Model X-601	Up to 48" Model X-601	Up to 48" Model X-602

*Includes economical X-550 Galvanized Steel Series: X-551 and X-552.

Traffic Control Products

Sizes:

Standard Sizes – as shown in your Federal or State *MUTCD*.

Special Sizes – also available.

Legends:

Standard Legends – from *MUTCD*.†

Special Legends – also available.

Colors:

Standard Colors – as shown in your Federal or State *MUTCD*.†

Custom Colors must be specified correctly and may not be cancelled or returned after order is placed.

Finishes:

BE Baked Enamel (non-reflective).

EG Engineer Grade (reflective).

HI High Intensity (reflective).

DG Diamond Grade (reflective).

Aluminum Thickness:

.063" 1/16" (approx.).

.080" 5/64" (approx.).

.090" 3/32" (approx.).

.125" 1/8".

Special Thickness – request quote.

Special Alloy – request quote.

Mounting Holes:

Industry Standard – 3/8" mounting holes (1" on center) – all panels.

Special Holes – must be specified correctly and may not be cancelled or returned once ordered.

No Holes – specify on order.

Corner Radii:

Industry Standard corner radii on all panels (radius determined by panel size).

Special Corner Radius must be specified correctly and may not be cancelled or returned once ordered.

Square corners – specify on order.

Note: All custom requirements subject to additional charges.

†*MUTCD* – *Manual of Uniform Traffic Control Devices for Streets and Highways*.

– the perfect reference tool.

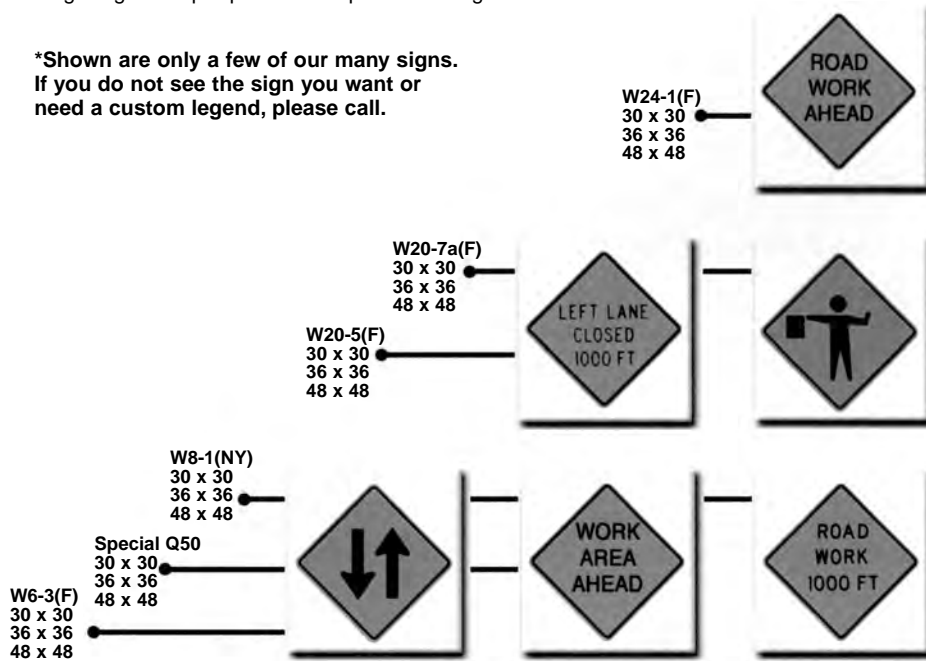
To confirm your specification requirements consult State or Local Government Representative.

Construction Signs

Rigid Warning Signs™ "Rigid" aluminum construction warning signs do not "fold in half," or "roll up," like our "portable-type" sign.
†Rigid signs are pre-punched for post mounting.

***Shown are only a few of our many signs.**

If you do not see the sign you want or need a custom legend, please call.

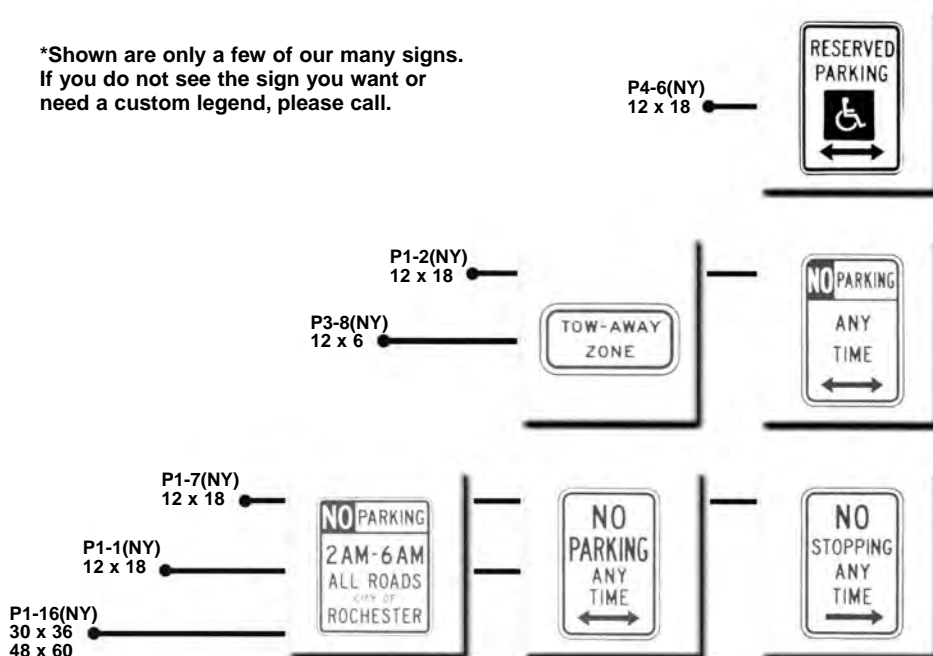


Parking Signs

Parking Signs are available in standard and non-standard (custom) legends. Parking series signs may also be ordered in either reflective or nonreflective finish. Eastern Metal/ USA-SIGN has what you've been looking for!

***Shown are only a few of our many signs.**

If you do not see the sign you want or need a custom legend, please call.





heavy-duty knitted warning flags

- Vinyl trim.
- Standard pack 50 only.

0102822	KNITTED VINYL WARNING FLAG (18" FLAG / 24" DOWEL)
0102734	KNITTED VINYL WARNING FLAG (18" FLAG / 30" DOWEL)
0102846	KNITTED VINYL WARNING FLAG (18" FLAG / 36" DOWEL)
2057629	KNITTED VINYL WARNING FLAG (18" FLAG ONLY)
0102858	KNITTED VINYL WARNING FLAG (24" FLAG / 30" DOWEL)
0102860	KNITTED VINYL WARNING FLAG (24" FLAG / 36" DOWEL)



standard vinyl warning flags

- Heat sealed hem.
- Standard pack 50 only.
- Non-Fouling feature and Imprinting available.

0117152	VINYL WARNING FLAG (18" FLAG / 24" DOWEL)
0117217	VINYL WARNING FLAG (18" FLAG / 24" DOWEL WITH STAY)
0117229	VINYL WARNING FLAG (18" FLAG / 30" DOWEL)
0103230	VINYL WARNING FLAG (18" FLAG / 30" DOWEL WITH STAY)
0117176	VINYL WARNING FLAG (18" FLAG / 36" DOWEL)
0103354	VINYL WARNING FLAG (18" FLAG / 36" DOWEL WITH STAY)
0117164	VINYL WARNING FLAG (18" FLAG ONLY)
0103266	VINYL WARNING FLAG (24" FLAG / 30" DOWEL)
0117205	VINYL WARNING FLAG (24" FLAG / 36" DOWEL)
0103292	VINYL WARNING FLAG (24" FLAG / 36" DOWEL WITH STAY)



plain weave mesh warning flags

- 18" x 18".

0102896	MESH WARNING FLAG (18" FLAG / 24" DOWEL)
0102913	MESH WARNING FLAG (18" FLAG / 30" DOWEL)
0102925	MESH WARNING FLAG (18" FLAG / 36" DOWEL)
0102951	MESH WARNING FLAG (18" FLAG ONLY)



throw away warning flags

- Economy style.
- Nail/Staple to overhanging load.
- 12", 16" or 18".
- No hems or grommets.
- Packed 100 per bag.

0102729	THROW AWAY FLAG – 12" FLAG
0102731	THROW AWAY FLAG – 16" FLAG
0117243	THROW AWAY FLAG – 18" FLAG



airport flags

- 36" x 36" nylon flag with pocket to mount on your existing staff.
- Alternating checkerboard 12" x 12" squares in orange and white.
- Sleeve opening is 2-3/4" W.

0103644	AIRPORT TRUCK SIGNAL FLAG, 36" X 36"; ORANGE WHITE CHECKERBOARD
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safety flares

- Visible in fog, rain or snow.
- Easy to ignite with self-contained striker.
- Approved by Underwriters Labs.
- Available in 20- or 30-minute duration.
- Spike, spikeless and wire flares.

windsocks

- Strong vinyl-coated nylon fabric in dayglow orange color.
- Reinforced at both ends with extra stitching.
- Windsock hardware sold separately.
- Available in 2' x 8' x 11".

0119239	AIRPORT WINDSOCK 8'.
0118209	WINDSOCK HARDWARE FOR 8'.



barrier tape

- 3" x 1000".
- Poly barricade tape provides warning of temporary safety hazards.
- Economical, strong and disposable.
- Special legends available with minimums and plate charge.



0110843	BARRIER TAPE - CAUTION - YELLOW
0111029	BARRIER TAPE - POLICE LINE DO NOT CROSS - YELLOW
0110972	BARRIER TAPE - FIRE LINE DO NOT CROSS - YELLOW
0110805	BARRIER TAPE - DANGER DO NOT ENTER - RED
0110817	BARRIER TAPE - DANGER - RED
0110867	BARRIER TAPE - CAUTION DO NOT ENTER - YELLOW
0110855	BARRIER TAPE - CAUTION CONSTRUCTION AREA - YELLOW
26434	BARRIER TAPE - CAUTION WET FLOOR - YELLOW

pennants

- Made of low density polyethylene.
- 9" x 13" triangular pennants on a 60' or 100' string.
- 60' string has approximately 36 flags, a 100' string has approximately 64 flags.
- 8" between each flag.
- Tensile strength - 107 lbs.
- Sold in standard package of 50 only.
- Alternating legends of: Danger Keep Out, Be Careful, Safety First, Danger Ahead and Safety Always on 0111744 ONLY.



0111744	PENNANT – PERIMETER MARKER YELLOW W/ALTERNATING LEGENDS, 60'
0118883	PENNANT – PERIMETER MARKER RED (DANGER KEEP OUT), 60'
0118895	PENNANT – PERIMETER MARKER MULTI-COLOR, 60'
0118871	PENNANT – PERIMETER MARKER ORANGE, 60'
0118845	PENNANT – PERIMETER MARKER RED, 60'
0111615	PENNANT – PERIMETER MARKER MULTI-COLOR, 100'
2058336	PENNANT – PERIMETER MARKER ORANGE, 100'
0111653	PENNANT – PERIMETER MARKER RED, 100'
0111665	PENNANT – PERIMETER MARKER YELLOW, 100'

barricades



type 1

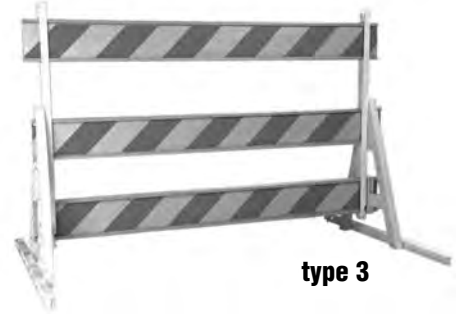
- NCHRP-350 Certified with/without barricade lights.
- Meets MUTCD standards.
- Weighs only 15 lbs.
- Low Profile – Folded dimensions are 2.5" H x 24" W x 45.5" L.
- 12" x 24" top panels and 8" x 24" bottom panels afford maximum panel area for reflective sheeting, logos or stenciling.
- Engineer Grade or Hi Intensity Grade reflective sheeting available.
- Built-in bracket accommodates barricade light.
- Optional plastic Sand Ballast Bar for additional weight.
- Closed hinge feature prevents pinched fingers during placement and retrieval.

- | | |
|---------|--|
| 2181000 | ALL-PLASTIC TYPE I, 24" x 8" x 8", EG SHEETING |
| 2181001 | ALL-PLASTIC TYPE I, 24" x 8" x 8", HI SHEETING |
| 2181002 | ALL-PLASTIC TYPE I, 24" x 12" x 8", EG SHEETING |
| 2181003 | ALL-PLASTIC TYPE I, 24" x 12" x 8", HI SHEETING |
| 2181005 | ALL-PLASTIC TYPE II, 24" x 8" x 8", EG SHEETING |
| 2181006 | ALL-PLASTIC TYPE II, 24" x 8" x 8", HI SHEETING |
| 2181007 | ALL-PLASTIC TYPE II, 24" x 12" x 8", EG SHEETING |
| 2181008 | ALL-PLASTIC TYPE II, 24" x 12" x 8", HI SHEETING |



type 2

- NCHRP-350 Certified with and without barricade lights.
- Meets MUTCD standards.
- Easy assembly – simply lower the barricade uprights into the receivers on the base.
- Modular design includes upright stand, 63" tall, and (3) 1" x 8-1/4" deep plastic boards in 48", 72" or 96" lengths.
- Lightweight and durable all-plastic construction.
- Reinforced boards eliminate bowing when bolted to upright.
- Upright weight is 3.5 lbs. and base weight is 9 lbs.
- Accommodates flashing barricade light.
- Available with Engineer Grade or Hi Intensity Grade sheeting, single or double sided.



type 3

- | | | | |
|---------|---|---------|---|
| 2181010 | ALL-PLASTIC TYPE III, 1" x 8" x 48", NO SHEETING | 2181019 | ALL-PLASTIC TYPE III, 1" x 8" x 72", HI Rt SHEETING |
| 2181011 | ALL-PLASTIC TYPE III, 1" x 8" x 48", EG Rt SHEETING | 2181063 | ALL-PLASTIC TYPE III, 1" x 8" x 72", HIX2 R/Lt SHEETING |
| 2181060 | ALL-PLASTIC TYPE III, 1" x 8" x 48", EGX2 R/Lt SHEETING | 2181021 | ALL-PLASTIC TYPE III, 1" x 8" x 96", NO SHEETING |
| 2181013 | ALL-PLASTIC TYPE III, 1" x 8" x 48", HI Rt SHEETING | 2181022 | ALL-PLASTIC TYPE III, 1" x 8" x 96", EG Rt SHEETING |
| 2181065 | ALL-PLASTIC TYPE III, 1" x 8" x 48", HIX2 R/Lt SHEETING | 2181062 | ALL-PLASTIC TYPE III, 1" x 8" x 96", EGX2 R/Lt SHEETING |
| 2181015 | ALL-PLASTIC TYPE III, 1" x 8" x 72", NO SHEETING | 2181024 | ALL-PLASTIC TYPE III, 1" x 8" x 96", HI Rt SHEETING |
| 2181017 | ALL-PLASTIC TYPE III, 1" x 8" x 72", EG Rt SHEETING | 2181061 | ALL-PLASTIC TYPE III, 1" x 8" x 96", HIX2 R/Lt SHEETING |
| 2191064 | ALL-PLASTIC TYPE III, 1" x 8" x 72", EGX2 R/Lt SHEETING | | Note: EG/Hi Sheeting left side also available. |

channelizer drum

- Tested and certified to meet the crashworthy requirements of NCHRP-350 with and without lights.*
 - Meets or exceeds all MUTCD specifications.
 - Accommodates barricade Type A or C lights.
 - Anti-Roll Drum design.
 - Base incorporates waffle pattern on bottom to eliminate "walking" or "creeping."
 - Tapered design enables nesting for storage or transport.
 - 1500 is constructed of impact-resistant, Linear Low-Density Polyethylene.
 - 1510 is constructed of Hi-Density Polyethylene.
- *As confirmed by independent testing agency.

- | | | | |
|---------|--|---------|--|
| 2054457 | 1500 TOP ONLY PLAIN | 2054471 | 1510 TOP ONLY PLAIN |
| 2070188 | 1500 TOP ONLY WITH 4 ENGINEER GRADE 4" STRIPES, 3M | 2070229 | 1510 TOP ONLY WITH 4 ENGINEER GRADE 4" STRIPES, 3M |
| 2070190 | 1500 TOP ONLY WITH 4 ENGINEER GRADE 6" STRIPES, 3M | 2070231 | 1510 TOP ONLY WITH 4 ENGINEER GRADE 6" STRIPES, 3M |
| 2070164 | 1500 TOP ONLY WITH 4 HI INTENSITY 4" STRIPES | 2070205 | 1510 TOP ONLY WITH 4 HI INTENSITY 4" STRIPES |
| 2070176 | 1500 TOP ONLY WITH 4 HI INTENSITY 6" STRIPES | 2070217 | 1510 TOP ONLY WITH 4 HI INTENSITY 6" STRIPES |
| 2204703 | 1500 TOP ONLY WITH 4 DIAMOND GRADE 4" STRIPES* | 2204727 | 1510 TOP ONLY WITH 4 DIAMOND GRADE 4" STRIPES* |
| 2204715 | 1500 TOP ONLY WITH 4 DIAMOND GRADE 6" STRIPES* | 2204739 | 1510 TOP ONLY WITH 4 DIAMOND GRADE 6" STRIPES* |
| 2070165 | 1500 TOP ONLY WITH 4 HI INTENSITY 4" STRIPES, 3M | 2070206 | 1510 TOP ONLY WITH 4 HI INTENSITY 4" STRIPES, 3M |
| 2070177 | 1500 TOP ONLY WITH 4 HI INTENSITY 6" STRIPES, 3M | 2070218 | 1510 TOP ONLY WITH 4 HI INTENSITY 6" STRIPES, 3M |
| 2070413 | 1500 BASE ONLY | 2070425 | 1510 BASE ONLY |
| | | 2173459 | 25 LB. RECYCLED RUBBER BASE |
| | | 2088262 | 35 LB. RECYCLED RUBBER BASE |

*CALL FOR LEAD TIMES

3M



Safety Vests

SOFT & HEAVY MESH

Soft Mesh Safety Vest (Part Number 16300)

Still the most popular vest material, Mutual's blaze orange knit poly mesh is the industry standard.

Available in the following:

- Plain
- 3/4" lime yellow
- 1" lime yellow
- HG 1-3/8" lime yellow
- LSL 1-1/2"
- LSL 2"
- MISS 1"
- MISS 3/4"
- Vertical Stripe Front, X-Pattern on Back, R3m 1" lime yellow in XL-XXL
- Double Horizontal Stripes (front & back) 2" LSL-2H
- Double Vertical Stripes (front & back) LSL 2"



ANSI Class 2 Lime Vest (Part Number 16327)

- 3.65 oz. breathable, extra durable 100% knit polyester high visibility lime material
- Matching high visibility trim all around
- 2" high gloss white reflective tape on front and back
- Full velcro front closure
- Stock sizes: L-4XL, other sizes made to order



Heavy Weight Safety Vest (Part Number 16301)

Our 7.5 oz. vinyl coated nylon mesh. Popular where a heavier, firmer vest is desirable. Also popular in colder climate areas in winter.

Available in the following:

- Plain
- HG 1-3/8" lime yellow
- RMISS 1-3/8"
- LSL 1-1/2"
- LSL 2"
- Double Horizontal 2" LSL



BARRICADE LIGHTS

SUNDOWNER®

- Available in 6V or 12V battery configuration.
- 3-way or flashing models available.
- Photocell for automatic on-off by light conditions.
- Theft-proof bolts with custom socket.
- 360 degrees lens rotation.
- Improved lens for better visibility.
- Meets MUTCD requirements.
- ITE Certified.



NIGHTFLASHER®

- Meets MUTCD requirements and ITE specs in 12 volt configuration.
- 7" polycarbonate lens with advanced optics.
- Dependable circuitry coated for protection against weather.
- High-density polyethylene case, UV stabilized, available in blue, green, orange, red, black, white and yellow.
- Lens colors available in red, green, amber, clear and blue.
- Optional solar cell extends battery life.



TRAILBOSS™ CHANNELIZER DRUM

- Tested and certified to meet the crashworthy requirements of NCHRP-350 with and without lights (As confirmed by independent testing agency).
- Meets or exceeds all MUTCD specifications.
- Five panels available for sheeting.
- Accommodates barricade Type A or C lights.
- Patented handle design allows for easy pickup, even with barricade light attached.
- Choice of three bases: 25 lb. and 35 lb. recycled rubber or plastic snap-on for use with sandbag.
- Bases incorporate a waffle pattern on bottom to eliminate "walking" or "creeping."
- Anti-roll foot design.
- Tapered design enables nesting for storage or transport.
- Dimensions - 39.7" H x 20.5" W at base.

NOTE: TrailBoss™ Channelizer Drum Base sold separately.



SIGNAL LIGHT

MV-2-IND

Heavy-Duty, Industrial Quality

- Single 25 watt incandescent bulb.
- 90 to 100 flashes per minute.
- Single-point shock resistant mounting.
- Quiet belt drive for simplified maintenance.
- Anodized aluminum base.
- 10' Red power lead for easy installation.
- Available in 6, 12, 24, 36, 48 or 72 Volts DC. 2.2 amps @ 12 Vdc.
- Available in red, amber, blue, green, purple or clear acrylic dome.
- 7-5/8" high, 6" diameter, shipping weight - 3 lbs.



MV-LP

Low Profile Rotating Reflector Beacon

- Model MV-LP-P - Permanent 1-point bolt mount or 3-point screw mount.
- Model MV-LP-MAG - Magnetic mount with 10' cord and cigarette lighter plug.
- Single 25 watt incandescent bulb.
- 90 to 100 flashes per minute.
- Quiet belt drive for simplified maintenance.
- ABS corrosion proof base.
- 12 Volt DC available. 2.2 amps @12 Vdc.
- Available in red, amber, blue, green, purple or clear dome.
- 6-1/2" high, 5-1/2" diameter, shipping weight - 2 lbs.



MULTI-PURPOSE DRY CHEMICAL (ABC)

Pro-Line Multi-Purpose Dry Chemical Features:

- Strong aluminum valve body for standard commercial applications.
- Designed to meet most commercial and industrial specifications.
- Seamless aluminum and steel cylinders have chip resistant epoxy finish.
- Reliable pressure gauge for fast and easy pressure checks.
- Handle made from pressed heavy gauge metal for added strength.
- Fits all standard cabinets.
- Six-year warranty.

Approvals and Listings

ANSI/UL (Underwriters Laboratories, Inc.)

DOT (Department of Transportation)

OSHA (Occupational Safety and Health Administration)

USCG (United States Coast Guard)

BMC (Bureau of Motor Carrier Safety Regs Pat. 393 95)



PRO2.5 MP

- Ideal for vehicles, apartments and trailers.
- Standard compact commercial design.
- UL 1-A:10-B:C Rating.



PRO5 MP

- Ideal for low business hazards: offices, churches, assembly halls, classrooms and hotel guest areas.
- Ideal for medium business hazards: light manufacturing, dining areas, auto showrooms, parking garages and storage areas.
- UL 3-A:40-B:C Rating.



PRO10 MP

- Ideal for high business hazards: vehicle repair shops, manufacturing processes involving flammable liquids, boat servicing and woodworking processing.
- Commercial design meets industrial requirements.
- UL 4-A:60-B:C Rating.
- Seamless steel cylinder is superior to welded designs.



PRO20 MP

- Ideal for high hazard industrial applications.
- Highest UL rating for multi-purpose models.
- Seamless steel cylinder is superior to welded designs.
- UL 10-A:80-B:C Rating.

UL Rating	1-A:10-B:C	3-A:40-B:C	40-A:60-B:C	10-A:80-B:C
Effective against class	ABC	ABC	ABC	ABC
Model	PRO2.5 MP	PRO5 MP	PRO10 MP	PRO20 MP
Part No.	466227K	466112K	466204K	466206K
Contents (lb./kg)	2.60/1.20	5.00/2.30	10.00/4.50	18.00/8.20
Filled (lb./kg)	3.90/1.80	7.90/3.60	17.00/7.70	30.00/13.60
Shipping (lb./kg)	4.20/1.90	8.50/3.90	19.50/8.80	30.44/13.83
Diameter (in./cm)	3.30/8.30	4.50/11.40	5.12/13.00	7.00/17.80
Height (in./cm)	15.00/38.10	16.00/40.60	21.18/53.80	21.60/54.690
Width (in./cm)	5.30/13.50	7.80/19.70	8.22/20.90	8.30/21.10
Discharge Time (sec.)	8-10	13-15	19-21	19-22
Discharge Range (ft.)	6	18	20	20
Optional Metal Strap	466401	466400	366242	292474
Operating Pressure (psi)	100	195	195	195
Cylinder material	Aluminum	Aluminum	Steel	Steel
Units/Overpack	6	4	1	1
Bracket Provided	Wall hanger	Wall hook	Wall hook	Wall hook
Operable Temperature range all models: -40°F to 120°F (-40°C to 48°C)				
Brackets: Units are equipped with a wall hanger for mounting in standard applications. Heavy-duty vehicle brackets are available for high traffic and vibration areas as well as US Coast Guard. Bureau of Motor Carrier Approvals.				



REBAR SAFETY CAPS

Carnie Cap™ Rebar Protective System

WORKING AROUND REBAR JUST GOT SAFER

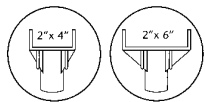
The Carnie Cap System is superior to any other rebar impalement protection available today. Unlike traditional rebar caps, which provide little or no impalement protection, the Carnie Cap System, when used properly, will withstand a 250-pound weight dropped from 10 feet without the rebar protruding.

PUTTING A CAP ON COSTS

- Economical.
- Packaged 100 per box for additional savings.
- Made of rugged, sturdy and reusable plastic.
- Quick and easy to install.
- Eliminates costs associated with injuries and downtime from rebar impalement.

CAP DANGEROUS REBAR ENDS

- Available for use on 2x4s and 2x6s.
- Fits rebar sizes #3-#9 and #5-#18.



APPLICATIONS

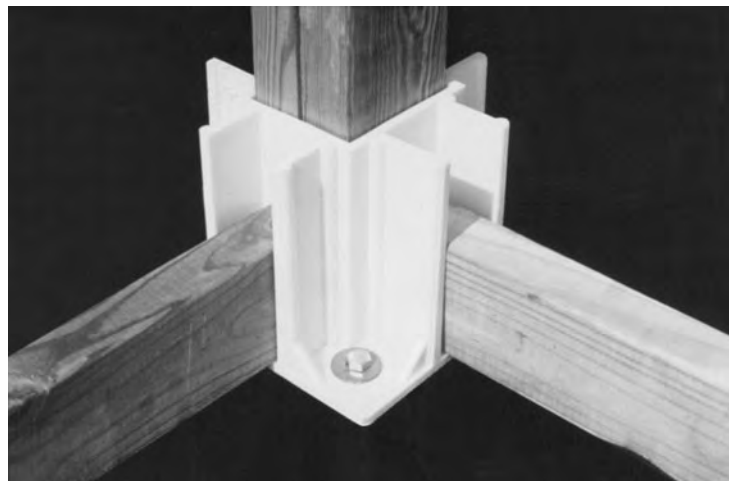
- Works in vertical, incline and horizontal applications.
- Uses only 2 caps per each 8-foot span.
- Enables contractors to more efficiently use concrete blankets by utilizing the lumber as protective support so blankets don't become torn.



GUARDRAIL SYSTEM

The Safety Boot® is a reusable base for constructing free-standing temporary guardrail and stair rail systems that exceeds OSHA standards.

- Free-standing and will remain in place throughout construction including drywall installation and inside finishing operations. No bracing is required.
- Anchors into most common subflooring materials, including concrete.
- Two 2x4's are inserted into the center core of the reusable base to form a strong, rigid post.
- Toeboards, which are required by OSHA, need no fasteners and drop directly into the slots on each Safety Boot.
- Reusable. When the permanent railings are installed, the posts with Safety Boots attached can be easily removed and reused at the next project.
- Design test data accompanies each order — ready for review by OSHA inspectors. Certified and signed by a professional engineer, documenting that the Safety Boot exceeds OSHA's guardrail strength standards.
- The one-piece molded construction of durable high-impact safety yellow polymer stands on a one-year replacement guarantee.



Easy-to-read text and illustrations in Spanish and English, enables the prime contractor/builder to have safe, dependable temporary guardrail systems constructed that meet OSHA standards on every jobsite, even when using different work crews.

AMEBA™ Moves with the wearer for extra comfort

The Ameba features a special non-elastic helical yarn webbing that stretches and moves with wearers for non-binding mobility. Unlike competitive harnesses that utilize elastic blend webbing, the Ameba harness maintains its shape and structural integrity, wear after wear, and most importantly, during a fall. It is the best of both worlds, comfort and quality.

Ameba 1311 Worksafe Harness

- Back D-ring.
- Waist D-rings.
- Lanyard Clip.
- Adjustable chest strap.
- Adjustable 6" back pad.
- Grommet leg straps.

Sizes: S, M, L, XL, XXL



Ameba 1450 Harness

- Back D-ring.
- Lanyard Clip.
- Adjustable chest/leg straps.
- Grommet leg straps.

Sizes: S-M, L-XL, XXL



Ameba 1451 Harness

- Same as 1450, but includes 2 waist D-rings.
- Sizes: S-M, L, XL, XXL

FEATHER™ The "Original" tangle-free harness

The Feather was the original SafeWaze harness. Today, it remains a popular choice and features a tangle-free D-ring assembly that lays flat on the back for added comfort and mobility.

1011 Feather Harness

- Back D-ring.
- 2 Waist D-rings.
- Adjustable chest/leg straps.

Sizes: S, M, L, XL, XXL



1010 Feather Harness

- Back D-ring.
 - Adjustable chest/leg straps.
- Sizes: S-M, L-XL

SAFELIGHT™ Value price, quality construction

SafeLight™ Fall Protection provides the same high quality as all of the SafeWaze products, but is lightweight for added comfort. This enables the SafeLight series to be an excellent value for any fall protection application. As with all SafeWaze products, the SafeLight series meets or exceeds all OSHA and ANSI standards and regulations.

10651 SafeLight Harness

- Front D-ring.
 - Back D-ring.
 - 2 Waist D-rings.
- Sizes: Universal S-XL



10910 SafeLight Harness

- Back D-ring.
- Sizes: Universal S-XL



SAFELIGHT™ Shock absorbing lanyards

All SafeLight™ Lanyards use double locking snaphooks.

SHOCK ABSORBING LANYARDS

- **209712** 6' low profile combination shock absorber and lanyard reduces fall forces and brings worker to a smooth stop.
- **209712-0241** Same as 209712 with 2-3/4" rebar hook.



SHOCK ABSORBING LANYARDS

- **209750** 6' low profile combination shock absorber and lanyard reduces fall forces and brings worker to a smooth stop. 100% tie-off dual leg.
- **209750-0241** Same as 209750 with 2-3/4" rebar hooks.



POSITIONING LANYARD

All Positioning lanyards use 2 double locking snaphooks.

ROPE LANYARDS

- **3112** 6' nylon rope, 1/2" diameter.



EXTENDER

D-RING EXTENSION

- **5550** Double locking snaphook on one end, D-ring on the other, 18" length.



CHAIN ASSEMBLIES

PF3710-S CHAIN ASSEMBLY

- **PF3710-S** 13-link swivel assembly designed to fit a Peri Form. Peri Form hook and locking snap hooks.



SP3710-S CHAIN ASSEMBLY

- **SP3710-S** 13-link swivel assembly with new swivel rebar hook and standard locking snap hooks.



CARABINERS

- **99-0210** Large steel Autolock carabiner with 1" opening.



THOR™ Retractable Lifelines

Patented housing construction delivers increased housing strength and reduces weight of the product. Thor Lifelines feature 3/16" galvanized steel cable for increased durability.

Additional lengths available, carabiner included.



ITEM	LENGTH	WEIGHT
M-20	20'	7.3 lbs.



ITEM	LENGTH	WEIGHT
RLD-30	30'	8.0 lbs.
RLD-50	50'	15.8 lbs.

THUNDERBOLT™ Retractable Lifelines

The Thunderbolt series of Retractable Lifelines is constructed with a high impact antishock polymer casing, which prevents denting and is durable yet lightweight. The unique ratcheting design ensures reliability and longevity under even the most difficult environments. Available in 3/16" galvanized steel cable. The compact size and lightweight features of the Thunderbolt series ensure Ergonomic solution to difficult equipment handling.

Additional lengths available, carabiner included.

MS SERIES™ Retractable Lifelines

The lightweight MS-11 utilizes the tangle-free swivel top and comes with a lightweight aluminum snaphook.

Additional lengths available, carabiner included.

ITEM	LENGTH	WEIGHT	HOUSING
MS-11	11'	3.5 lbs.	Metal Alloy



TYPHOON™ Fall Limiter

Designed and engineered to ensure maximum movement with the lightest weight. The Kevlar polyester webbing has proven abrasion resistance and permits additional capacity over any other brand of lightweight limiter.

*Carabiner included.



ITEM	LENGTH	WEIGHT
3300	20'	3.0 lbs.

LIFELINE Assemblies

Constructed of 5/8" low elasticity SafeCom® polydac blended rope. Double locking snap hook on one end and back spliced on the other end.

ITEM	LENGTH
0221-50	50'



SAFECLAW™ Reusable Anchor

The only removable/reusable anchor point for concrete applications. The SafeClaw™ is a state-of-the-art single-point fall protection removable anchor point. The SafeClaw is ideal for quick and easy tie-off applications where no suitable alternatives are available.

Additional features include:

- Greater freedom of movement and durability than competitive products.
- Easy-to-use and remove.
- Safe, portable and reusable.
- Made of heavy-duty stainless steel and other non-corrosive materials.
- High load capacity.
- Designed for a wide range of applications, including lifting, vertical and overhead ceilings, as well as an array of lifeline usage.

4015 Fall Protection Anchor

- 5/8" drill hole, 3" deep.
- Trigger release.
- Tie-off eye.
- Meets ANSI Z359.1.
- Strength: 5,000 lbs.



BEAMWALK™ Anchor

The BeamWalk™ is the newest generation of single-point anchorage for I and H beam applications. The system is lightweight and extremely portable. This unit can be mounted either on top or below the beam.



4650-2 BEAMWALK

- Double action release for safety "No Slips".
- Easy one-hand adjustable feature.
- Low friction design.
- Lightweight.
- User friendly.
- Ergonomic hand position.
- Fits I and H beam 3-1/2" to 14", beam thickness up to 1-1/4".
- Tie-off eye.
- Double side adjustment enables centering of attachment ring which enables unit to move more smoothly.
- Stainless steel locking springs.

Anchor Points

**RATED AT
5000 LBS.**

4000 REUSABLE ROOF ANCHOR

- Constructed of heavy gauge steel, ideally suited for roofing applications. Hinge construction gives flexibility to any pitch angle.
- Approved for use on sheet metal decking.



4007 GIRDER GRIP

- Mobile anchorage point for metal structures. Can be used vertically or horizontally. Fits 3/4" diameter hole.



4651X ROOF GRIP™

- Disposable roof anchor is easy to install and use.



Rope / Cable Grabs

122 COMBO ROPE GRAB

- 5/8" and 3/4" rope (synthetic only).
- Stainless steel construction.



99-0120 SELF-TRAILING CABLE GRAB

- Stainless steel construction.
- Fits 3/8" and 5/16" cable (galvanized or stainless).
- Extremely durable.



ROOFING KITS

SafeWaze has developed a creative assortment of Fall Protection Roofing Kits. Portable and convenient, these safety kits are designed to meet any roofing application. The handy tool bags can be customized with individual distributor or end-user information.



20058



10000

Kit	Harness	Connector	Anchor	Hardware	Bag	Notes
20058	10910	209512	4000	0221-50rg	5000	SafeLight harness with lanyard, 50' lifeline with attached rope grab and reusable anchor.
10000	1010	3512	4000	0221-50, 0110	4700	Feather harness with lanyard, 50' lifeline with removable and reusable anchor.

TEMPORARY HORIZONTAL LIFELINE

2 MAN SYSTEM SWHR-60 — 60' SYSTEM

- Manual tensioning device provides for quick and easy installation.
- Includes: (2) Cross arm straps, shocker shock absorber, 60' rope, 2 connector rings, 3 carabiners, tensioner and carry bag.



CONFINED SPACE SYSTEMS Confined space 3-way system

M2050 RECOVERY SYSTEM ENTRY, RETRIEVAL AND RESCUE

Fall protection and rescue systems for confined space utilize a self-contained retractable lifeline with a built-in winch for retrieval and lowering. Tripod is aluminum with adjustable telescopic legs.

- M10 Tripod.
- M2050G-50 3-way Unit.

Individual Components

- 205G-50 50' 3-way Unit
- 205G-75 75' 3-way Unit
- 205G-100 100' 3-way Unit



CROSS ARM STRAP

4550 6' CROSS ARM STRAP

- 6' cross arm strap with 1-3/4" webbing.



SOCKS AND PILLOWS *Excellent for both everyday use and emergency spill response.*

Sock:

- Contains liquids before spreading to floors and walkways.
- Conforms easily around equipment and between surfaces.
- Durable skin withstands rough handling.



Oil-Only Socks
Absorb Oils, Repel Water

For oil-only cleanup, choose these Socks. By selectively absorbing only oil and not water, these 100% polypropylene Socks absorb more oil and can be left on the job longer.



HazMat Socks
for Caustic Fluids

These 100% polypropylene Socks soak up nearly any type of caustic or unknown fluid—acids, bases, solvents and chemicals. Color-coded yellow so you know exactly what you're reaching for in an emergency spill situation.



Universal Socks
A Solid Performer in a Variety of Situations

These durable, universal-application, 100% polypropylene Socks absorb oils, coolants, solvents and water. Use wherever you have a variety of spills and only want to stock one sock to cover everything. Socks easily mold to almost any shape.



Reusable Socks
Just Wring it Out and Re-Use at Least 40 Times

Because this sock can be used over and over again, it provides more than just great leak and spill containment—it's cost-effective as well. With its long service life, it can do the work of up to 80 regular socks. For universal application in situations with oils, coolants, solvents and water.



CornCob Socks
Tackle Tough Jobs and Provide an Affordable Alternative to Messy Clay

These economical and highly efficient Socks can tackle even the toughest jobs. With a tough polypropylene skin and finely ground corn cob filler, these Socks absorb 1/2 gallon of oil, coolants, solvents and water—nearly twice as much as clay, but without the dust or the mess to clean up afterward. Plus they can be incinerated. Unlike clay, you won't need a shovel for this cleanup!



Super-Absorbent Cellulose Socks
Soak Up to One Gallon per 4'

These are very thirsty Socks—a single 4' sock can absorb up to a gallon of liquid, making this a true top-performer. Very flexible construction allows you to place this Sock in a variety of positions around spills or leaking machinery.

Pillow:

- Highly absorbent.
- Thick construction enables it to remain stationary for extended periods.
- Ideal for placement under leaky equipment or drum!

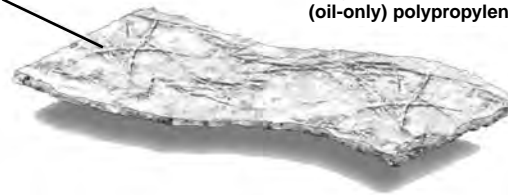


MeltBlown polypropylene fibers in their natural state are hydrophobic. Hydrophobic fibers repel water (and float) while only absorbing oils and other hydrocarbons. Loose-stacked weave construction increases surface area and begins to absorb on contact. Ideal for quick, effective clean-up of large oil spills on land or water. MeltBlown pads and rolls are available in three weights and six sizes.



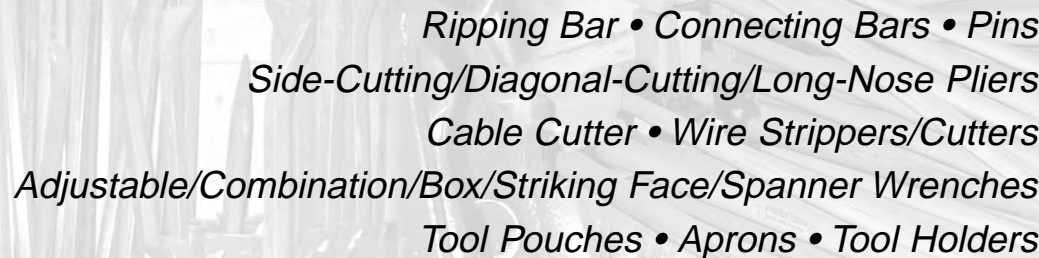
MeltBlown

Single layer of hydrophobic (oil-only) polypropylene.



Specifications for White Oil-Only, MeltBlown Pads and Rolls for oil only, not water

Part #	Description	Size	Units/Pkg.	Absorbs/Pkg.
WP100H	Heavyweight Pads	17" x 19"	100	37.9 gal.
WPK50H	Heavyweight Pads	34" x 38"	50	75.7 gal.
WP100M	Medium weight Pads	17" x 19"	100	30.3 gal.
WP200S	Single weight Pads	17" x 19"	200	40.5 gal.
WR144H	Heavyweight Roll	38" x 144'	1	77.0 gal.
WR144M	Medium weight Roll	38" x 144'	1	61.6 gal.
WR288S	Single weight Roll	38" x 288'	1	82.2 gal.
WRS144H	Heavyweight Rolls	19" x 144'	2	77.0 gal.
WRS144M	Medium weight Rolls	19" x 144'	2	61.6 gal.
WRS288S	Single weight Rolls	19" x 288'	2	82.2 gal.



*Ripping Bar • Connecting Bars • Pins
Side-Cutting/Diagonal-Cutting/Long-Nose Pliers
Cable Cutter • Wire Strippers/Cutters
Adjustable/Combination/Box/Striking Face/Spanner Wrenches
Tool Pouches • Aprons • Tool Holders*

Hand Tools

4

*Tool Belts • Suspenders • Canvas Buckets
Pole/Tree Climbers
Wire Pulling Grips • Rebar Tools
Drive Tools • Sockets • Impact Drive Tools
Torque Wrenches • Clamps
Eye Bolts • Hand Saws • Framing Squares • Hammers
Extension/Reel/Return Tapes
Cutters • Benders • Soldering Irons
Utility Knives • Pry Bars • Squares
Hex Keys • Punches • Chisels • Awls
Packing Tools • Hog Ring Pliers
Mallets • Hooks • Scrapers
Chalk Reels • Levels
Wrecking Bars • Sawhorses
Replacement Handles
Shovels • Rakes • Loppers • Forks • Scoops
Sledges • Tampers • Picks
Mattocks • Axes • Mauls
Bars • Pullers
Timber Carries • Peavies • Logger Style Tong*



Ripping Bar

Carbon-Steel Ripping Bar

- Strong, high-carbon forged steel construction.
- Heat-treated claws for extra strength.
- Efficient, double-claw design.
- Baked-on black finish for rust resistance.
- Heavy 90° claw gets into tight spaces.
- Includes one "V" nail puller.
- Thinner straight claw for ripping has both "V" and keyhole nail pullers.



Cat. No.	Overall Length	Weight (lbs.)
66380	18" (457mm)	2.50

Spring-Steel Ripping Bar

- Forged spring steel 1/4" (6mm) thick and 1-1/2" (38mm) wide.
- Fully heat-treated with sandblasted finish for better gripping.
- Both ends with pry edge and "V" nail puller; one end curved, the other at 90° angle.
- Keyhole nail-puller in body.



Cat. No.	Overall Length	Weight (lbs.)
66384	14" (356mm)	1.60

Connecting Bars

Hex Bars and Round Bars

- Provides extra leverage when positioning steel members and aligning bolt holes.
- Forged fit-up bar is pointed on one end.
- Chisel-end is at a 15° angle to give greater leverage.



Hex Bars

Cat. No.	Hex Diameter	Length	Weight (lbs.)
3242	3/4" (19mm)	30" (762mm)	3.50
3243	7/8" (22mm)	36" (914mm)	6.00
3244	3/4" (19mm)	24" (610mm)	2.50

Straight Chisen-End

3240	3/4" (19mm)	30" (762mm)	3.80
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Round Bars

Cat. No.	Hex Diameter	Length	Weight (lbs.)
3245	3/4" (19mm)	30" (762mm)	3.30
3246	7/8" (22mm)	36" (914mm)	5.50
3247	3/4" (19mm)	34" (610mm)	2.50
3248	7/8" (22mm)	30" (762mm)	4.30

Straight Chisel-End

3241	3/4" (19mm)	30" (762mm)	3.20
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Pins

Standard Bull Pins

- Machined from quality alloy steel.
- Standard design offers greater initial economy but no added protection against mushrooming.
- Heat-treated for strength.
- Black finish for rust resistance.



Cat. No.	Top Diameter	Point Diameter	Length	Weight (lbs.)
3251	1-1/16" (27mm)	3/8" (10mm)	15" (381mm)	2.50
3252	1-3/16" (30mm)	7/16" (11mm)	15" (381mm)	3.10
3257	1-1/16" (27mm)	3/8" (10mm)	12" (305mm)	1.70
3258	1-3/16" (30mm)	7/16" (11mm)	12" (305mm)	2.10
3259	1-5/16" (33mm)	7/16" (11mm)	12" (305mm)	2.50
3265	1-1/4" (32mm)	7/16" (11mm)	12" (305mm)	2.50

Note: OSHA 1926.301 (c) specifically states: "Impact tools, such as drift pins, wedges and chisels, shall be kept free of mushroomed heads."

Broad Head Bull Pins

- Forged, heat-treated bull pin increases efficiency by providing a larger striking surface.
- Head design also reduces chance of pin slipping from the hand when aligning holes.
- Angled head and smooth blending of radii increase strength and reduce the danger of chipping.
- Below the head, squared-off shoulders have been forged to provide a surface for applying wrench to loosen wedged bull pins.
- Long, even taper reduces binding and hang-up.
- Added resistance to "mushrooming" permitting much longer use than is possible with conventional designs.
- Heat-treated for strength.
- Black finish for rust resistance.



Cat. No.	Top Diameter	Point Diameter	Length	Weight (lbs.)
3255	1-1/4" (32mm)	5/16" (8mm)	13-3/4" (349mm)	2.90
3256	1-1/16" (27mm)	1/4" (6mm)	10" (254mm)	1.60

Note: OSHA 1926.301 (c) specifically states: "Impact tools, such as drift pins, wedges and chisels, shall be kept free of mushroomed heads."

Barrel-Type Drift Pins

- Machined from quality alloy steel.
- Tapers are uniform and blend into body diameter.
- Tough, drop-forged steel will properly end-pein in use.
- Heat-treated for strength.
- Black finish for rust resistance.



Cat. No.	Maximum Diameter	Point Diameter	Overall Length	Weight (lbs.)
3260	11/16" (18mm)	5/16" (8mm)	7-1/2" (191mm)	.60
3261	13/16" (21mm)	7/16" (11mm)	8" (203mm)	.85
3262	15/16" (24mm)	1/2" (13mm)	8" (203mm)	1.10
3263	1-1/16" (27mm)	9/16" (14mm)	8" (203mm)	1.50



Side-Cutting Pliers

Common Features:

- Custom, US-made tool steel.
- Hot-riveted joint ensures smooth action and no handle wobble.
- Induction hardened cutting knives for long life.
- Unique handle tempering helps absorb the "snap" when cutting wire.
- 2000 Series pliers available. Cuts ACSR, screws, nails and most hardened wire.

- "Handform" handles for full gripping and cutting power.
- Precision-hardened plier head for on-the-job toughness.
- Sure-gripping cross-hatched knurled jaws.
- Plastic-dipped handles* for comfort and ease of identification.

*Journeyman™ pliers available. State-of-the-art, dual-material handles, which provide a better grip without sacrificing tool strength or durability.

High-Leverage Side-Cutting Pliers – Heavy-Duty Cutting

- Cuts ACSR, screws, nails and most hardened wire.
- High-leverage design. Rivet is closer to the cutting edge for 46% greater cutting and gripping power than other plier designs.
- Streamlined design with sure-gripping, cross-hatched knurled jaws.
- Features combination polished and black-oxide finish.

2000 SERIES®



D2000-7

Cat. No.	Nose Type	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Knife Length	Handle Finish	Handle Color	Weight (lbs.)
D2000-7	New England	7-7/8" (200mm)	1-9/32" (33mm)	1-1/32" (26mm)	1/2" (13mm)	3/4" (19mm)	plastic-dipped	royal blue	.66
D2000-8	New England	8-11/16" (221mm)	1-7/16" (37mm)	1-7/64" (28mm)	5/8" (16mm)	3/4" (19mm)	plastic-dipped	royal blue	.85
D2000-9NE	New England	9-3/8" (238mm)	1-19/32" (41mm)	1-1/4" (32mm)	5/8" (16mm)	25/32" (20mm)	plastic-dipped	royal blue	1.09
HD2000-9NE	New England	9-1/2" (241mm)	1-19/32" (41mm)	1-1/4" (32mm)	5/8" (16mm)	25/32" (20mm)	heavy-duty, oversized, plastic-dipped	light red	1.15

Journeyman 2000 Series – Dual-material handles

J2000-9NE	New England	9-1/2" (241mm)	1-19/32" (41mm)	1-1/4" (32mm)	5/8" (16mm)	25/32" (20mm)	Journeyman	light blue/black	1.13
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High-Leverage Side-Cutting Pliers

- High-leverage design. Rivet is closer to the cutting edge for 46% greater cutting and gripping power than other plier designs.
- Streamlined design with sure-gripping, cross-hatched knurled jaws.



D213-9NE

Cat. No.	Nose Type	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Knife Length	Handle Finish	Handle Color	Weight (lbs.)
D213-8NE	New England	8-11/16" (221mm)	1-7/16" (37mm)	1-3/16" (30mm)	5/8" (16mm)	23/32" (18mm)	plastic-dipped	dark blue	.90
HD213-8NE	New England	8-3/4" (222mm)	1-7/16" (37mm)	1-3/16" (30mm)	5/8" (16mm)	23/32" (18mm)	heavy-duty, oversized, plastic-dipped	light red	.97
213-9NE	New England	9-1/4" (235mm)	1-19/32" (41mm)	1-1/4" (32mm)	5/8" (16mm)	25/32" (20mm)	plain	n/a	1.05
D213-9NE	New England	9-3/8" (238mm)	1-19/32" (41mm)	1-1/4" (32mm)	5/8" (16mm)	25/32" (20mm)	plastic-dipped	dark blue	1.14
HD213-9NE	New England	9-1/2" (241mm)	1-19/32" (41mm)	1-1/4" (32mm)	5/8" (16mm)	25/32" (20mm)	heavy-duty, oversized, plastic-dipped	light red	1.15

Journeyman Series – Dual-material handles

J213-9NE	New England	9-1/2" (241mm)	1-19/32" (41mm)	1-1/4" (32mm)	5/8" (16mm)	25/32" (20mm)	Journeyman	dark blue/black	1.13
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High-Leverage Side-Cutting Pliers

- High-leverage design. Rivet is closer to the cutting edge for 46% greater cutting and gripping power than other plier designs.
- Sure-gripping, cross-hatched knurled jaws.



D213-9

Cat. No.	Nose Type	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Knife Length	Handle Finish	Handle Color	Weight (lbs.)
D213-9	Square	9-3/8" (238mm)	1-19/32" (41mm)	1-1/4" (32mm)	5/8" (16mm)	25/32" (20mm)	plastic-dipped	dark blue	1.07

High-Leverage Side-Cutting Pliers – Fish Tape Pulling

- Quickly and easily pulls 1/8" or 1/4" flat steel fish tape without damaging the tape.
- High-leverage design. Rivet is closer to the cutting edge for 46% greater cutting and gripping power than other plier designs.
- Streamlined design with sure-gripping, cross-hatched knurled jaws.



D213-j9NETP

Cat. No.	Nose Type	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Knife Length	Handle Finish	Handle Color	Weight (lbs.)
D213-9NETP	New England	9-3/8" (238mm)	1-19/32" (41mm)	1-1/4" (32mm)	5/8" (16mm)	25/32" (20mm)	plastic-dipped	dark blue	1.06

Journeyman Series – Dual-material handles

J213-9NETP	New England	9-1/2" (241mm)	1-19/32" (41mm)	1-1/4" (32mm)	5/8" (16mm)	25/32" (20mm)	Journeyman	dark blue/black	1.11
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2000 Series* – Heavy-duty cutting knives

D2000-9NETP	New England	9-3/8" (238mm)	1-19/32" (41mm)	1-1/4" (32mm)	5/8" (16mm)	25/32" (20mm)	plastic-dipped	royal blue	1.09
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Journeyman 2000 Series* – Dual-material handles

J2000-9NETP	New England	9-1/2" (241mm)	1-19/32" (41mm)	1-1/4" (32mm)	5/8" (16mm)	25/32" (20mm)	Journeyman	light blue/black	1.14
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*Cuts ACSR, screws, nails and most hardened wire. Features combination polished and black-oxide finish.





High-Leverage Side-Cutting Pliers – Lineman's Bolt-Thread Holding

- Hinge opening holds and cleans 5/8" pole line and hardware bolts or threaded rods.
- High-leverage design. Rivet is closer to the cutting edge for 46% greater cutting and gripping power than other plier designs.
- Streamlined design with rounded nose and sure-gripping, cross-hatched knurled jaw.



HD213-9NETH

Cat. No.	Nose Type	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Knife Length	Handle Finish	Handle Color	Weight (lbs.)
D213-9NETH	New England	9-3/8" (238mm)	1-19/32" (41mm)	1-1/4" (32mm)	5/8" (16mm)	25/32" (20mm)	plastic-dipped	dark blue	1.18
HD213-9NETH	New England	9-1/2" (241mm)	1-19/32" (41mm)	1-1/4" (32mm)	5/8" (16mm)	25/32" (20mm)	heavy-duty, oversized, plastic-dipped	light red	1.12

2000 Series* – Heavy-duty cutting knives

D2000-9NETH	New England	9-3/8" (238mm)	1-19/32" (41mm)	1-1/4" (32mm)	5/8" (16mm)	25/32" (20mm)	plastic-dipped	royal blue	1.18
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High-Leverage Side-Cutting Pliers – Connector Crimping

- Crimping die behind hinge for superior leverage crimping non-insulated connectors, lugs and terminals.
- High-leverage design. Rivet is closer to the cutting edge for 46% greater cutting and gripping power than other plier designs.
- Streamlined design with rounded nose and sure-gripping, cross-hatched knurled jaws.



D213-9NECR

Cat. No.	Nose Type	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Knife Length	Handle Finish	Handle Color	Weight (lbs.)
D213-9NECR	New England	9-3/8" (238mm)	1-19/32" (41mm)	1-1/4" (32mm)	5/8" (16mm)	25/32" (20mm)	plastic-dipped	yellow	1.08

Journeyman Series – Dual-material handles

J213-9NECR	New England	9-1/2" (241mm)	1-19/32" (41mm)	1-1/4" (32mm)	5/8" (16mm)	25/32" (20mm)	Journeyman	yellow/black	1.13
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2000 Series* – Heavy-duty cutting knives

D2000-9NECR	New England	9-3/8" (238mm)	1-19/32" (41mm)	1-1/4" (32mm)	5/8" (16mm)	25/32" (20mm)	plastic-dipped	royal blue	1.08
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Journeyman 2000 Series* – Dual-material handles

J2000-9NECR	New England	9-1/2" (241mm)	1-19/32" (41mm)	1-1/4" (32mm)	5/8" (16mm)	25/32" (20mm)	Journeyman	light blue/black	1.12
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Side-Cutting Pliers

- Sure-gripping, cross-hatched knurled jaws.



D201-8

Cat. No.	Nose Type	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Knife Length	Handle Finish	Handle Color	Weight (lbs.)
D201-6NE	New England	6-5/16" (160mm)	1-3/32" (28mm)	29/32" (23mm)	1/2" (13mm)	9/16" (14mm)	plastic-dipped	dark blue	.39
D201-7NE	New England	7-7/16" (189mm)	1-9/32" (33mm)	1-1/16" (27mm)	1/2" (13mm)	5/8" (16mm)	plastic-dipped	dark blue	.55
D201-8NE	New England	8-11/16" (221mm)	1-7/16" (37mm)	1-3/16" (30mm)	5/8" (16mm)	23/32" (18mm)	plastic-dipped	dark blue	.92
D201-9NE	New England	9-3/8" (238mm)	1-19/32" (41mm)	1-5/16" (33mm)	5/8" (16mm)	25/32" (20mm)	plastic-dipped	dark blue	1.09
Square Nose									
D201-8	Square	8-11/16" (221mm)	1-7/16" (37mm)	1-7/32" (31mm)	5/8" (16mm)	23/32" (18mm)	plastic-dipped	dark blue	.93
D201-9	Square	9-3/8" (238mm)	1-19/32" (41mm)	1-5/16" (33mm)	5/8" (16mm)	25/32" (20mm)	plastic-dipped	dark blue	1.10

Universal Side-Cutting Pliers – Connector Crimping

- Crimping die behind hinge for superior leverage crimping non-insulated connectors, lugs and terminals.
- Toothed pipe grip for greater gripping power.



12098

Cat. No.	Nose Type	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Knife Length	Handle Finish	Handle Color	Weight (lbs.)
12098	Universal	8-5/8" (219mm)	1-25/32" (45mm)	1-1/32" (26mm)	17/32" (13mm)	3/4" (19mm)	plastic-dipped	dark blue	.72

Ironworker's Work Pliers – High-Leverage

- Twists and cuts soft annealed rebar tie wire.
- High-leverage design. Rivet is closer to the cutting edge for 46% greater cutting and gripping power than other plier designs.
- Hook bend handle.
- Spring-loaded action for self-opening.
- Heavy-duty knurled jaws.



D213-9ST

Cat. No.	Nose Type	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Knife Length	Handle Finish	Handle Color	Weight (lbs.)
213-9ST	Square	9-1/4" (235mm)	1-19/32" (41mm)	1-1/4" (32mm)	5/8" (16mm)	25/32" (20mm)	plain	n/a	1.02
D213-9ST	Square	9-3/8" (238mm)	1-19/32" (41mm)	1-1/4" (32mm)	5/8" (16mm)	25/32" (20mm)	plastic-dipped	dark blue	1.10
2000 Series* – Heavy-duty cutting knives									
D2000-9ST	Square	9-3/8" (238mm)	1-19/32" (41mm)	1-1/4" (32mm)	5/8" (16mm)	25/32" (20mm)	plastic-dipped	royal blue	1.10

*Cuts ACSR, screws, nails and most hardened wire. Features combination polished and black-oxide finish.



Ironworker's Work Pliers

- Twists and cuts soft annealed rebar tie wire.
- Hook bend handle.
- Spring-loaded action for self-opening.
- Heavy-duty knurled jaws.



D201-7CST

Cat. No.	Nose Type	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Knife Length	Handle Finish	Handle Color	Weight (lbs.)
D201-7CST	Square	9-1/8" (232mm)	1-9/32" (33mm)	1-5/32" (29mm)	1/2" (13mm)	5/8" (16mm)	plain	n/a	.67
D201-7CST	Square	9-1/4" (235mm)	1-9/32" (33mm)	1-5/32" (29mm)	1/2" (13mm)	5/8" (16mm)	plastic-dipped	dark blue	.63
2000 Series* – Heavy-duty cutting knives									
D2000-7CST	Square	9-1/4" (235mm)	1-9/32" (33mm)	1-5/32" (29mm)	1/2" (13mm)	5/8" (16mm)	plastic-dipped	royal blue	.63

Diagonal-Cutting Pliers

Common Features:

- Custom US-made tool steel.
- Induction hardened cutting knives for long life.
- Hot-riveted joint ensures smooth action and no handle wobble.
- Short jaws and beveled cutting edges permit close cutting of wire.

- 2000 Series® pliers available. Cuts ACSR, screws, nails and most hardened wire.
- Plastic-dipped handles for comfort and ease of identification.

*Journeyman™ pliers available. State-of-the-art, dual-material handles, which provide a better grip without sacrificing tool strength or durability.

High-Leverage Diagonal-Cutting Pliers

- High-leverage design. Rivet is closer to the cutting edge for 36% greater cutting power than other plier designs.



D2000-28

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Cutting Knives	Handle Finish	Handle Color	Weight (lbs.)
D228-7	7-1/8" (181mm)	13/16" (21mm)	1-3/16" (30mm)	7/16" (11mm)	standard	plastic-dipped	red	.54
D228-8	8-1/16" (205mm)	13/16" (21mm)	1-3/16" (30mm)	7/16" (11mm)	standard	plastic-dipped	red	.60
Journeyman Series – Dual-material handles								
J228-8	8-1/8" (206mm)	13/16" (21mm)	1-3/16" (30mm)	7/16" (11mm)	standard	Journeyman	red/black	.67
2000 Series* – Heavy-duty cutting knives								
D2000-28	8-1/16" (205mm)	13/16" (21mm)	1-3/16" (30mm)	7/16" (11mm)	standard	plastic-dipped	royal blue	.60
Journeyman 2000 Series* – Dual-material handles								
J2000-28	8-1/8" (206mm)	13/16" (21mm)	1-3/16" (30mm)	7/16" (11mm)	standard	Journeyman	light blue/black	.67

High-Leverage Diagonal-Cutting Pliers – Angled Head

- Angled head design for easy work in confined spaces.
- High-leverage design. Rivet is closer to the cutting edge for 36% greater cutting power than other plier designs.



D2000-48

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Cutting Knives	Handle Finish	Handle Color	Weight (lbs.)
D248-8	8-1/16" (205mm)	13/16" (21mm)	1-3/16" (30mm)	7/16" (11mm)	standard	plastic-dipped	red	.60
D238-8	8-1/16" (205mm)	13/16" (21mm)	1-3/16" (30mm)	7/16" (11mm)	semi-flush**	plastic-dipped	red	.59
Journeyman Series – Dual-material handles								
J248-8	8-1/8" (206mm)	13/16" (21mm)	1-3/16" (30mm)	7/16" (11mm)	standard	Journeyman	red/black	.61
2000 Series* – Heavy-duty cutting knives								
D2000-48	8-1/16" (205mm)	13/16" (21mm)	1-3/16" (30mm)	7/16" (11mm)	standard	plastic-dipped	royal blue	.60
Journeyman 2000 Series* – Dual-material handles								
J2000-48	8-1/8" (206mm)	13/16" (21mm)	1-3/16" (30mm)	7/16" (11mm)	standard	Journeyman	light blue/black	.61

High-Leverage Diagonal-Cutting Pliers – Stripping Holes

- Cleanly strips 12 and 14 AWG wire.
- High-leverage design. Rivet is closer to the cutting edge for 36% greater cutting power than other plier designs.



D243-8

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Cutting Knives	Handle Finish	Handle Color	Weight (lbs.)
D243-8	8-1/16" (205mm)	13/16" (21mm)	1-3/16" (30mm)	7/16" (11mm)	standard	plastic-dipped	red	.60

*Cuts ACSR, screws, nails and most hardened wire. Features combination polished and black-oxide finish.

**Semi-flush cutting knives cut Cherry Burrel rivets. For use on non-ferrous wire only.



DIAGONAL-CUTTING PLIERS

High-Leverage Diagonal-Cutting Pliers

- Angled head design for easy working in confined spaces.
- Hooked handle for improved grip.
- High-leverage design. Rivet is closer to the cutting edge for 36% greater cutting power than other plier designs.



D248-9ST

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Cutting Knives	Handle Finish	Handle Color	Weight (lbs.)
D248-9ST	9-3/16" (233mm)	13/16" (21mm)	1-3/16" (30mm)	7/16" (11mm)	standard	plastic-dipped	red	.68

Heavy-Duty Diagonal-Cutting Pliers – Tapered Nose

- Heavy-duty tapered nose design.
- One-inch jaws easily reach into confined spaces.



D220-7

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Cutting Knives	Handle Finish	Handle Color	Weight (lbs.)
D220-7	7-11/16" (195mm)	1" (25mm)	31/32" (25mm)	1/2" (13mm)	standard	plastic-dipped	red	.54

Heavy-Duty Diagonal-Cutting Pliers – All Purpose

- Heavier design for all-purpose use.
- Tapered nose for easy working in confined areas.



D252-6

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Cutting Knives	Handle Finish	Handle Color	Weight (lbs.)
D252-6	6-1/8" (156mm)	13/16" (21mm)	3/4" (19mm)	7/16" (11mm)	standard	plastic-dipped	red	.38
Bell System Type "W" Notches – Slit insulation cleanly								
D252-6SW	6-1/8" (156mm)	13/16" (21mm)	3/4" (19mm)	7/16" (11mm)	standard	plastic-dipped	red	.33

Standard Diagonal-Cutting Pliers – Tapered Nose

- Easy working in confined areas.



D202-5C

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Cutting Knives	Handle Finish	Handle Color	Weight (lbs.)
D202-5	5-9/16" (142mm)	13/16" (21mm)	11/16" (18mm)	7/16" (11mm)	standard	plastic-dipped	red	.28
D202-5C*	5-9/16" (142mm)	13/16" (21mm)	11/16" (18mm)	7/16" (11mm)	standard	plastic-dipped	red	.27
D202-6	6-1/8" (156mm)	13/16" (21mm)	11/16" (18mm)	7/16" (11mm)	standard	plastic-dipped	red	.29
D202-6C*	6-1/8" (156mm)	13/16" (21mm)	11/16" (18mm)	7/16" (11mm)	standard	plastic-dipped	red	.31
Bell System Type "W" Notches – Slit insulation cleanly								
D202-6SW	5-9/16" (142mm)	13/16" (21mm)	11/16" (18mm)	7/16" (11mm)	standard	plastic-dipped	red	.28

Standard Diagonal-Cutting Pliers – Tapered Nose

- Tapered nose for easy working in confined areas and close tip cutting.



D245-5

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Cutting Knives	Handle Finish	Handle Color	Weight (lbs.)
D245-5	5-1/16" (129mm)	11/16" (18mm)	9/16" (14mm)	3/8" (10mm)	standard	plastic-dipped	red	.20
D245-5C*	5-1/16" (129mm)	11/16" (18mm)	9/16" (14mm)	3/8" (10mm)	standard	plastic-dipped	red	.20

Standard Diagonal-Cutting Pliers – Semi-Flush Cutting

- Trims plastic or printed circuit boards.
- Spring-loaded for self-opening action.



D210-6C

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Cutting Knives	Handle Finish	Handle Color	Weight (lbs.)
D210-5C	5-9/16" (142mm)	13/16" (21mm)	11/16" (18mm)	7/16" (11mm)	semi-flush	plastic-dipped	red	.27
D210-6C	6-1/8" (156mm)	13/16" (21mm)	11/16" (18mm)	7/16" (11mm)	semi-flush	plastic-dipped	red	.29

*Spring-loaded action for self-opening.



Standard Diagonal-Cutting Pliers – Stripping Hole

- Cleanly strips 16-gauge (1.0mm) wire.
- Tapered nose for easy working in confined areas.



D240-6

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Cutting Knives	Handle Finish	Handle Color	Weight (lbs.)
D240-6	6-1/8" (156mm)	13/16" (21mm)	11/16" (18mm)	7/16" (11mm)	standard	plastic-dipped	red	.30

Long-Nose Pliers

Common Features:

- Custom US-made tool steel.
- Hot-riveted joint ensures smooth action and no handle wobble.
- Slim head design for working in confined areas.
- Plastic-dipped handles* for comfort and ease of identification.

*Journeyman™ pliers available. State-of-the-art, dual-material handles, which provide a better grip without sacrificing tool strength or durability.

Heavy-Duty Long-Nose Pliers – Side-Cutting

- Induction hardened cutting knives for long life.
- Heavier design for greater cutting power.
- Extended handles provide added reach and leverage.



D203-8NCR

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Knife Length	Point Thickness	Handle Finish	Handle Color	Weight (lbs.)
D203-8	8-7/16" (214mm)	2-5/16" (59mm)	1" (25mm)	1/2" (13mm)	5/8" (16mm)	1/8" (3mm)	plastic-dipped	yellow	.60
Journeyman Series – Dual-material handles									
J203-8	8-9/16" (218mm)	2-5/16" (59mm)	1" (25mm)	1/2" (13mm)	5/8" (16mm)	1/8" (3mm)	Journeyman	yellow/black	.63
Wire Stripping – Cleanly strips 12 AWG wire									
D203-8N	8-7/16" (214mm)	2-5/16" (59mm)	1" (25mm)	1/2" (13mm)	5/8" (16mm)	1/8" (3mm)	plastic-dipped	yellow	.59
Journeyman Series – Dual-material handles									
J203-8N	8-9/16" (218mm)	2-5/16" (59mm)	1" (25mm)	1/2" (13mm)	5/8" (16mm)	1/8" (3mm)	Journeyman	yellow/black	.64
Wire Stripping and Crimping – Cleanly strips 12 AWG wire; crimps connectors, lugs and terminals									
D203-8NCR	8-7/16" (214mm)	2-5/16" (59mm)	1" (25mm)	1/2" (13mm)	5/8" (16mm)	1/8" (3mm)	plastic-dipped	yellow	.61

Standard Long-Nose Pliers – Side-Cutting

- Induction hardened, long-lasting cutting knives.
- Knurled jaws for sure wrapping and looping.
- Curved handles provide greater tool control.



D203-6C

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Knife Length	Point Thickness	Handle Finish	Handle Color	Weight (lbs.)
D203-5	5-5/8" (143mm)	1-1/2" (38mm)	11/16" (18mm)	3/8" (10mm)	1/2" (13mm)	3/32" (2mm)	plastic-dipped	yellow	.23
D203-5C*	5-5/8" (143mm)	1-1/2" (38mm)	11/16" (18mm)	3/8" (10mm)	1/2" (13mm)	1/16" (1.6mm)	plastic-dipped	yellow	.23
D203-6	6-5/8" (168mm)	1-7/8" (48mm)	11/16" (18mm)	3/8" (10mm)	1/2" (13mm)	3/32" (2mm)	plastic-dipped	yellow	.27
D203-6C*	6-5/8" (168mm)	1-7/8" (48mm)	11/16" (18mm)	3/8" (10mm)	1/2" (13mm)	1/16" (1.6mm)	plastic-dipped	yellow	.27
D203-7	7-3/16" (183mm)	2-7/16" (62mm)	11/16" (18mm)	3/8" (10mm)	1/2" (13mm)	3/32" (2mm)	plastic-dipped	yellow	.29
D203-7C*	7-3/16" (183mm)	2-7/16" (62mm)	11/16" (18mm)	3/8" (10mm)	1/2" (13mm)	1/16" (1.6mm)	plastic-dipped	yellow	.29
Journeyman Series – Dual-material handles									
J203-6	6-3/4" (171mm)	1-7/8" (48mm)	11/16" (18mm)	3/8" (10mm)	1/2" (13mm)	3/32" (2mm)	Journeyman	yellow/black	.30
J203-7	7-5/16" (186mm)	2-7/16" (62mm)	11/16" (18mm)	3/8" (10mm)	1/2" (13mm)	3/32" (2mm)	Journeyman	yellow/black	.33
Heavy-Duty Crimping – Crimps Tel-Splice connectors									
D203-6CR	6-5/8" (168mm)	1-7/8" (48mm)	11/16" (18mm)	3/8" (10mm)	1/2" (13mm)	3/32" (2mm)	plastic-dipped	yellow	.26
Switchboard Work – Cleanly strips 19 and 22 AWG wire									
D203-6H2	6-5/8" (168mm)	1-7/8" (48mm)	11/16" (18mm)	3/8" (10mm)	1/2" (13mm)	3/32" (2mm)	plastic-dipped	yellow	.26

*Spring-loaded action for self-opening.





Standard Long-Nose Pliers

- Knurled jaws for sure wrapping and looping.
- Curved handles provide greater tool control.



D301-6

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Point Thickness	Handle Finish	Handle Color	Weight (lbs.)
D301-5	5-5/8" (143mm)	1-1/2" (38mm)	11/16" (18mm)	3/8" (10mm)	3/32" (2mm)	plastic-dipped	yellow	.25
D301-5C*	5-5/8" (143mm)	1-1/2" (38mm)	11/16" (18mm)	3/8" (10mm)	1/16" (1.6mm)	plastic-dipped	yellow	.25
D301-6	6-5/8" (168mm)	1-7/8" (48mm)	11/16" (18mm)	3/8" (10mm)	3/32" (2mm)	plastic-dipped	yellow	.29
D301-6C*	6-5/8" (168mm)	1-7/8" (48mm)	11/16" (18mm)	3/8" (10mm)	1/16" (1.6mm)	plastic-dipped	yellow	.28
D303-6	6-5/8" (168mm)	1-7/8" (48mm)	11/16" (18mm)	3/8" (10mm)	1/16" (1.6mm)	plastic-dipped	yellow	.28
D301-7	7-3/16" (183mm)	2-7/16" (62mm)	11/16" (18mm)	3/8" (10mm)	3/32" (2mm)	plastic-dipped	yellow	.29
D301-7C*	7-3/16" (183mm)	2-7/16" (62mm)	11/16" (18mm)	3/8" (10mm)	1/16" (1.6mm)	plastic-dipped	yellow	.30

*Spring-loaded action for self-opening.

Long-Nose Pliers – Long Reach

- Knurled jaws for sure wrapping and looping.
- Extended handles provide added reach and leverage.



D314-8

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Point Thickness	Handle Finish	Handle Color	Weight (lbs.)
Rounded Nose Design								
D314-8	8-1/8" (206mm)	1-15/16" (49mm)	11/16" (18mm)	3/8" (10mm)	3/32" (2mm)	plastic-dipped	yellow	.36
Flat Nose Design								
D315-8	7-3/4" (197mm)	1-9/16" (40mm)	11/16" (18mm)	3/8" (10mm)	3/32" x 1/4" (2mm x 6mm)	plastic-dipped	yellow	.35

Long-Nose Pliers – Duck Bill

- Tapered head design for easy working in tight areas.
- Curved handles provide greater tool control.



D305-6

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Point Thickness	Handle Finish	Handle Color	Weight (lbs.)
Flat Nose – Knurled jaws								
D305-6	7-1/16" (179mm)	2-5/16" (59mm)	11/16" (18mm)	3/8" (10mm)	5/16" (8mm)	plastic-dipped	yellow	.30
Rounded Nose – Smooth jaws								
D304-6	7-1/16" (179mm)	2-5/16" (59mm)	11/16" (18mm)	3/8" (10mm)	3/8" (10mm)	plastic-dipped	yellow	.30

Long-Nose Pliers – Concave Jaws

- Concave jaws easily reach into confined areas.
- Jaw width tapers to narrow, rounded tip.
- Polished inside jaws prevent nicking wire.
- Spring-loaded for self-opening action.
- Curved handles provide greater tool control.



D306-5 1/2C

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Point Thickness	Handle Finish	Handle Color	Weight (lbs.)
D306-5 1/2C	5-5/8" (143mm)	1-11/16" (43mm)	1/2" (13mm)	5/16" (8mm)	1/8" (3mm)	plastic-dipped	yellow	.16

Special Use Pliers

End-Cutting Pliers

- Wide throat clearance for clean, even cutting of wire or nails at close range.
- High-leverage design provides greater cutting power at the knives than other plier designs.
- Extended handles for longer reach and increased leverage.



D232-8

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Knife Length	Handle Finish	Handle Color	Weight (lbs.)
D232-8	8-1/2" (216mm)	3/8" (10mm)	1-3/16" (30mm)	19/32" (15mm)	1-3/16" (30mm)	plastic-dipped	red	.71
2000 Series* – Heavy-duty cutting knives								
D2000-32	8-1/2" (216mm)	3/8" (10mm)	1-3/16" (30mm)	19/32" (15mm)	1-3/16" (30mm)	plastic-dipped	royal blue	.71

*Cuts ACSR, screws, nails and most hardened wire. Features combination polished and black-oxide finish.



Cable Cutters

Common Features:

- Custom, US-made tool steel.
- Hot-riveted joint ensures smooth action and no handle wobble.

- Beveled jaw tips provide proper mating and shearing action, which protects leading jaw edges.
- Through-hardened (not case-hardened) for longer-lasting cutting surfaces.

High-Leverage Cable Cutters

- High leverage design for exceptional cutting capability.
- Precision, one-hand shearing action.
- Cable-gripping shear-type jaws.
- Perfect for working in confined spaces.
- Can be carried in most tool pouches.



63050

Cat. No.	Overall Length	Handle Color	Maximum Cable Cutting Capacity	Weight (lbs.)
63050	9-1/2" (241mm)	red	4/0 aluminum, 2/0 soft copper, 100-pair 24 AWG communications wire	.90
Journeyman Series – Dual-material handles				
J63050	9-3/4" (248mm)	red and black	4/0 aluminum, 2/0 soft copper, 100-pair 24 AWG communications wire	.98

Utility Cable Cutter

- Forged steel with black-oxide finish for long life.
- Shear-type hook jaws grab and hold cable while shear-cutting action makes clean cuts.
- Beveled tips for positive mating.
- Hinge bolt with pin-set nut for proper blade tension.
- Non-slip vinyl grips.
- Not designed for cutting steel or ACSR.



63035

Cat. No.	Overall Length	Handle Color	MCM Cable-Cutting Maximum Capacity	Weight (lbs.)
36035	16-3/4" (425mm)	red	350 copper, 350 aluminum	1.70

Standard Cable Cutters

- Lightweight, yet efficient shear-type cable cutters.
- Replaceable hook-jaw blades grab and hold cable while shear-cutting action makes clean cuts.
- Exceptionally strong fiberglass handles with heavy vinyl grips for comfort and slip resistance.
- Heavy-duty pins in head serve as blade-stops.
- Jaws are forged tool steel with black-oxide finish for long life.
- Beveled tips assure positive mating, and hinge on a rugged bolt with a pin-set nut to maintain proper blade tension.
- Makes a clean, even cut for ease in fitting lugs and terminals.
- Not designed for cutting steel or ACSR.

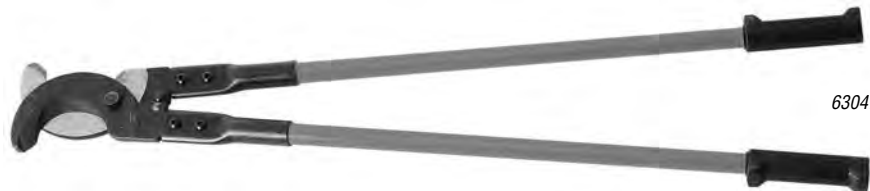


63041

Cat. No.	Overall Length	Soft Cable-Cutting Maximum Capacity	MCM Cable-Cutting Maximum Capacity	Weight (lbs.)
63041	25-1/2" (648mm)	1-3/8" (35mm) diameter	500 copper, 750 aluminum	5.25
63045	32" (813mm)	1-3/4" (44mm) diameter	1000 copper, 1200 aluminum	8.00
Replacement Cable Cutter Heads (complete)			Fits Klein Cat. No.	
63081			63041	2.05
63090			63045	3.30

Communications Cable Cutter

- Same shear-type design and features as Klein Standard Cable Cutters, but will cut lead or rubber-covered communications cable.
- Not designed for cutting steel or ACSR.



63047

Cat. No.	Overall Length	Communications Cable-Cutting Maximum Capacity	Soft Cable-Cutting Maximum Capacity	Weight (lbs.)
63047	37" (940mm)	900-pair soft copper and aluminum	up to 2-1/4" (57mm) diameter	8.55
Replacement Cable Cutter Heads (complete)			Fits Klein Cat. No.	
63110			63047	3.50





Ratcheting Cable Cutter

- Clearly cuts copper up to 400 MCM, as well as aluminum and multi-conductor cables up to 600 MCM.
- Unique ratchet action holds cable tight and allows rapid, straight cuts with minimum effort.
- Hold-open spring speeds cutting action.
- Quick-release lever opens blade at anytime during operation.
- Large, finger-formed handles have limit guards and plastic covering for comfort.
- Compact, lightweight tool can be locked in closed position for pouch carrying.
- Not designed for cutting steel or ACSR.



36060

Cat. No.	Overall Length	Handle Color	MCM Cable-Cutting Maximum Capacity	Weight (lbs.)
36060	10" (255mm)	red	400 copper, 600 aluminum and multi-conductor	1.70

Wire Strippers/Cutters

Common Features:

- **Spring-loaded** for self-opening action.
- **Black-oxide finish** resists corrosion.
- **Easy-to-read wire gauge markings** on both sides for stripping in either direction.

- **Color-coded handles:** red indicates stranded wire, yellow indicates solid wire.
- **Textured handles** provide a firm, comfortable grip.
- **Wire looping and bending holes.**
- **Precision-ground stripping holes** for easy removal of insulation.

Wire Stripper/Cutter — Solid and Stranded Wire

- Strips six standard wire sizes without nicking wire.
- Scissors action of 1/2" (13mm) wide cutter makes clean cuts with little effort.
- Serrated nose jaws to bend, shape or pull wire; holes for looping wire ends.
- Spring-loaded for self-opening action.
- Comfortable, plastic-covered handles.



1011

Cat. No.	Overall Length	Strips and Cuts	Handle Color	Weight (lbs.)
1011	6-1/8" (156mm)	10 – 20 AWG solid and stranded (4.0mm ² – .50mm ²)	blue	.23

Adjustable Wire Strippers/Cutters — Solid and Stranded Wire

- A handy, light, compact tool for stripping insulation.
- Convenient hole for looping or bending wire.
- Black-oxide finish with plastic-dipped handles.
- Cuts, strips and loops 12-26 solid and stranded wire.
- Adjustable slide stop with set screw for repeat stripping work.



1004

Cat. No.	Hold-Open Spring	Overall Length	Strips and Cuts	Handle Color	Weight (lbs.)
1004	yes	5" (127mm)	12 – 26 AWG solid and stranded (2.5mm ² – 0.14mm ²)	yellow	.18
1003	no	5" (127mm)	12 – 26 AWG solid and stranded (2.5mm ² – 0.14mm ²)	yellow	.14

Multi-Purpose Electrician's Tool — 8-22 AWG

- Two wire cutters—one at tip, the other halfway back near stripping holes—double the utility of this tool.
- Crimps 7-8mm insulated and non-insulated terminals, lugs and splices.
- Cuts and strips 8-22 AWG solid and 10-26 AWG stranded wire.
- Cleanly shears bolts.
- Pivot nut adjusts tension.
- Left- and right-hand wire-looping holes near tip.
- Full-sized, plastic-covered cushioned handles for comfort.
- Wire cutter in nose and below pivot.
- Crimping dies color-coded for easy identification.



1001

Cat. No.	Overall Length	Strips and Cuts	Bolt Sizes	Handle Color	Weight (lbs.)
1001	8-1/2" (216mm)	10 – 26 AWG stranded (4.0mm ² – .14mm ²) 8 – 22 AWG solid (6.0mm ² – .34mm ²)	4-40, 6-32, 8-32, 10-24, 10-32	red	.47



Specialty Wrenches

Lineman's Wrenches

- Forged from special bar steel and heat-treated for long life.
- Each end has two different size openings.
- Hole is provided at larger end for turning-in standard pole steps.
- Wrench is suited for use on heavy three-bolt guy clamps on which clearance is limited.
- Dark blue painted finish (small end is painted silver on Cat. No. 3146A).



Cat. No.	Description	Length	Weight (lbs.)
3146	For 5/8" hardware. Large end has 29/32" and 1-3/32" openings. Small end has 5/8" and 13/16" openings.	13" (330mm)	1.85
3146A	For 3/4" hardware. Large end has 1-1/16" and 1-5/16" openings. Small end has 5/8" and 7/8" openings.	13" (330mm)	1.70

Bell System Type

- Similar to standard lineman's wrench, but with end openings sized to NEMA hardware specifications.
- Silver painted finish.



Cat. No.	Description	Length	Weight (lbs.)
3146B	Large end has 1-1/16" and 1-3/16" openings. Small end has 11/16" and 7/8" openings.	13" (330mm)	1.76

Adjustable-Head Construction Wrench

- Versatile wrench fits nuts and bolts to 1-1/2" (38mm).
- Eliminates the need for carrying several fixed-size wrenches.
- Forged from select alloy steel with continuous-taper handle.
- Industrial black finish for corrosion resistance.



Cat. No.	Max. Size Capacity	Length	Weight (lbs.)
3239	1-1/2" (38mm)	16" (406mm)	2.36

1/2"-Drive Ratcheting Construction Wrench

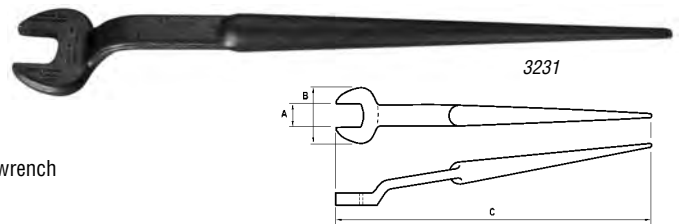
- Accepts 1/2" square-drive hex socket.
- Reversible ratchet.
- Eliminates the need for carrying several fixed-size wrenches.
- Forged from select alloy steel with continuous-taper handle for aligning bolt holes.
- Industrial black finish for corrosion resistance.



Cat. No.	Overall Length	Weight (lbs.)
3238	15" (381mm)	2.10

Erection Wrenches

- Forged from select alloy steel to withstand high-leverage and heavy loads.
- Extra-heavy-duty head area gives maximum strength and durability.
- Continuous taper of handle makes lining-up bolt holes easy and works on a range of bolt-hole sizes without binding.
- Extra-large hub area works on larger diameter holes than other wrenches.
- Catalog number, bolt size and nominal opening size are stamped on every wrench for easy identification.
- American Bridge design.



Cat. No.	Nut Type	Bolt Size (A)	Nom. Opening (A)	Head Width (B)	Taper Diameter	Overall Length (C)	Weight (lbs.)
3210	U.S. heavy	1/2"	7/8"	2-1/4"	7/8" to 3/16"	14-3/4"	1.36
3211	U.S. heavy	5/8"	1-1/16"	2-1/4"	7/8" to 3/16"	14-3/4"	1.31
3212	U.S. heavy	3/4"	1-1/4"	2-1/2"	1" to 1/4"	16-5/8"	1.98
3213	U.S. heavy	7/8"	1-7/16"	3"	1-1/8" to 9/32"	17-3/8"	2.72
3214	U.S. heavy	1"	1-5/8"	3-5/8"	1-1/8" to 1/4"	18"	3.36
3219	U.S. regular	1/2"	3/4"	2-1/4"	7/8" to 3/16"	14-3/4"	1.36
3220	U.S. regular	1/2"	13/16"	2-1/4"	7/8" to 3/16"	14-3/4"	1.35
3221	U.S. regular	5/8"	1"	2-1/4"	7/8" to 3/16"	14-3/4"	1.31
3222	U.S. regular	3/4"	1-1/8"	2-1/2"	1" to 1/4"	16-5/8"	2.00
3223	U.S. regular	7/8"	1-5/16"	3"	1-1/8" to 9/32"	17-3/8"	2.87
3224	U.S. regular	1"	1-1/2"	3-5/8"	1-1/8" to 1/4"	18"	3.37
3231	utility	5/8"	15/16"	2-1/4"	7/8" to 3/16"	14-3/4"	1.31
3232	utility	3/4"	1-1/16"	2-1/2"	1" to 1/4"	16-5/8"	2.00



Insulated Pliers

Common Features:

- Custom, US-made tool steel.
- Two layers of insulation provide protection against electric shock.
- Integral guards help prevent hand contact with conductive parts.

- Klein insulated tools exceed the IEC 60900 and ASTM F1505 standards for insulated tools, and are clearly marked with the official 1000-volt rating symbol.

Insulated High-Leverage Side-Cutting Pliers

- Individually tested to exceed standards.
- High-leverage design provides 46% greater cutting and gripping power than other plier designs.
- Streamlined design with sure-gripping, cross-hatched knurled jaws.



D213-9NE-INS

Cat. No.	Nose Type	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Knife Length	Handle Finish	Handle Color	Weight (lbs.)
D213-9NE-INS	New England	9-5/8" (245mm)	1-19/32" (41mm)	1-5/16" (33mm)	5/8" (16mm)	25/32" (20mm)	insulated	orange	1.25
2000 Series* – Heavy-duty cutting knives									
D2000-9NE-INS	New England	9-5/8" (245mm)	1-19/32" (41mm)	1-5/16" (33mm)	5/8" (16mm)	25/32" (20mm)	insulated	orange	1.25

*Cuts ACSR, screws, nails and most hardened wire. Features combination polished and black-oxide finish.

Insulated High-Leverage Side-Cutting Pliers – Connector Crimping

- Individually tested to exceed standards.
- Crimping die behind hinge for superior leverage.



D213-9NECR-INS

Cat. No.	Nose Type	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Knife Length	Handle Finish	Handle Color	Weight (lbs.)
D213-9NECR-INS	New England	9-5/8" (245mm)	1-19/32" (41mm)	1-5/16" (33mm)	5/8" (16mm)	25/32" (20mm)	insulated	orange	1.24

Insulated High-Leverage Diagonal-Cutting Pliers

- Individually tested to exceed standards.
- High-leverage design. Rivet is closer to the cutting edge for 36% greater cutting power than other plier designs.



D228-8-INS

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Cutting Knives	Handle Finish	Handle Color	Weight (lbs.)
D228-8-INS	8-1/4" (210mm)	13/16" (21mm)	1-3/16" (30mm)	7/16" (11mm)	standard	insulated	orange	.74
2000 Series* – Heavy-duty cutting knives								
D2000-28-INS	8-1/4" (210mm)	13/16" (21mm)	1-3/16" (30mm)	7/16" (11mm)	standard	insulated	orange	.74

*Cuts ACSR, screws, nails and most hardened wire. Features combination polished and black-oxide finish.

Insulated High-Leverage Diagonal-Cutting Pliers – Angled Head

- Individually tested to exceed standards.
- Angled head for easier work in confined spaces.
- High-leverage design. Rivet is closer to the cutting edge for 36% greater cutting power than other plier designs.



D248-8-INS

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Cutting Knives	Handle Finish	Handle Color	Weight (lbs.)
D248-8-INS	8-1/4" (210mm)	13/16" (21mm)	1-3/16" (30mm)	7/16" (11mm)	standard	insulated	orange	.74
2000 Series* – Heavy-duty cutting knives								
D2000-48-INS	8-1/4" (210mm)	13/16" (21mm)	1-3/16" (30mm)	7/16" (11mm)	standard	insulated	orange	.74

*Cuts ACSR, screws, nails and most hardened wire. Features combination polished and black-oxide finish.



Tool Pouches

7-Pocket Tool Pouch

- Soft, pliable, white leather.
- Moisture-resistant to retain flexibility even after being wet and dried.
- Riveted to assure long life.

Cat. No.	Pockets (Total Number)	Specialty Add-Ons	Belt Connection	Belt Width	Overall Size	Weight (lbs.)
5166	7	chain tape thong	tunnel loop	2-1/4" (57mm)	7" x 9-1/2" (178mm x 241mm)	.92



5166

8-Pocket Tool Pouch

- Roomy pouch for electricians, service men and maintenance workers.
- Riveted and stitched for extra durability.
- Heavy-duty chain tape thong securely fastened with a rivet.

Cat. No.	Pockets (Total Number)	Specialty Add-Ons	Belt Connection	Belt Width	Overall Size	Weight (lbs.)
5178	8	knife snap, chain tape thong, metal tape measure holder	tunnel loop	2-1/2" (64mm)	11" x 10" (279mm x 254mm)	1.03



5178

4-Pocket Tool Pouch

- **Leather** construction.
- Riveted and stitched for extra durability.

Cat. No.	Pockets (Total Number)	Specialty Add-Ons	Belt Connection	Belt Width	Overall Size	Weight (lbs.)
5119	4	knife snap	slotted	2" (51mm)	6-1/2" x 8-1/2" (165mm x 216mm)	.39



5119

5-Pocket Tool Pouch

- **Leather** construction.
- Riveted to assure long life.

Cat. No.	Pockets (Total Number)	Specialty Add-Ons	Belt Connection	Belt Width	Overall Size	Weight (lbs.)
5126	5	knife snap	slotted	2" (51mm)	6" x 8-3/4" (152mm x 222mm)	.74



5126

6-Pocket Tool Pouch

- **Leather** construction.
- Riveted to assure long life.



5127



5127T

Cat. No.	Pockets (Total Number)	Specialty Add-Ons	Belt Connection	Belt Width	Overall Size	Weight (lbs.)
5127	6	knife snap	slotted	2" (51mm)	7" x 10" (178mm x 254mm)	.79
5127T	6	knife snap	tunnel loop	2-1/2" (64mm)	7" x 10" (178mm x 254mm)	.87





Tool Combination Aprons



42242

One-Piece Nail/Screw and Tool-Pouch Apron

- **Leather** construction.
- Versatile, roomy double-pouch apron for construction workers, carpenters and other professionals.
- Double-pouch design allows unrestricted leg movement.
- Apron is reinforced throughout with rust-proof rivets.
- Heavy-duty 2-1/4" (57mm) wide web belt has army-style buckle, snap and slides.
- The large pockets and nail/bolt pockets have rolled-over, doubled edges for long wear.
- Four slots for punches or nail sets.
- Two heavy hammer loops.
- Riveted and stitched for extra durability.

Cat. No.	Pockets (Total Number)	Size Adjustable	Weight (lbs.)
42242	10	32" – 48" (813mm – 1219mm)	1.81

Nail/Screw and Tool-Pouch Combinations

- **Leather** construction.
- Large pockets have rolled-over doubled edges for extra-long life.
- All pouches slide along belt for convenient working position.
- Left- and right-hand nail-and-tool pouches.
- Fully adjustable poly-web belt (32" – 48").
- Tape-rule holder for 20" and 25" tape measures with belt clips.
- Heavy hammer loops.



42244

Cat. No.	Description	Weight (lbs.)
42244	complete combination: belt (Cat. No. 5225mm), left-hand (Cat. No. 42246mm) and right-hand (Cat. No. 42245mm) nail-and-tool pouches and tape-rule holder (Cat. No. 5195mm).	2.02
42245	right-hand nail-and-tool pouch only. Tunnel loop fits any belt up to 3" (76mm) width.	.70
42246	left-hand nail-and-tool pouch only. Tunnel loop fits any belt up to 3" (76mm) width.	.72
5225	poly-web belt only. Adjustable from 32" (813mm) to 48" (1219mm). Tunnel loop fits any belt up to 3" (76mm) width.	.42
5195	tape rule holder only for 20" and 25" tapes.	.18



Tool Holders

Scissors Holder — Tunnel Loop

- **Leather** construction.
- Designed for Klein electrician's scissors, Cat. Nos. 2100-5 and 2100-7.
- Riveted and stitched for extra durability.

Cat. No.	Belt Connection	Belt Width	Overall Size	Weight (lbs.)
5100	tunnel	up to 1-3/4" (44mm)	3-3/8" x 7-1/4" (86mm x 184mm)	.10



5100

Scissors Holder — Slotted

- **Leather** construction.
- Riveted with clip on back for attaching to belt.
- Designed to hold Klein electrician's scissors, Cat. Nos. 2100-5 and 2100-7.
- Riveted to assure long life.

Cat. No.	Belt Connection	Belt Width	Overall Size	Weight (lbs.)
5101	slotted and metal clip	up to 1-1/2" (38mm)	2" x 7" (51mm x 178mm)	.11



5101

Scissors and Cable-Splicer's Knife Holders

- **Leather** construction.
- Specially designed to hold a pair of Klein electrician's scissors (Cat. Nos. 2100-5 or 2100-7), and Cat. No. 44200 cable-splicer's knife.
- Riveted and stitched for extra durability.

Cat. No.	Belt Connection	Belt Width	Overall Size	Weight (lbs.)
5187	slotted	up to 2-1/4" (57mm)	2" x 7-1/4" (51mm x 184mm)	.11
5187T	tunnel	up to 2-1/4" (57mm)	2" x 7-1/4" (51mm x 184mm)	.13



5187



5187T

Lineman's Knife Holder

- **Leather** construction.
- Designed for Klein skinning knives, Cat. Nos. 1570-3, 1570-3LR, and 1560-3.
- Riveted to assure long life.

Cat. No.	Belt Connection	Belt Width	Overall Size	Weight (lbs.)
5163	slotted	up to 2" (51mm)	3-1/2" x 9-3/8" (89mm x 238mm)	.21



5163

Knife Holder

- **Leather** construction.
- Designed for utility knives and Klein Cat. Nos. 44100 and 44105.
- Corners riveted and stitched for extra durability.

Cat. No.	Belt Connection	Belt Width	Overall Size	Weight (lbs.)
5185	slotted	up to 2-1/2" (64mm)	2-5/8" x 8-1/4" (67mm x 210mm)	.11



5185

Pocket-Knife Holder

- **Leather** construction.
- Designed for sportsman knives and Klein Cat. No. 44137.
- Snap closure.
- Corners riveted and stitched for extra durability.

Cat. No.	Belt Connection	Belt Width	Overall Size	Weight (lbs.)
5186	loop on back	up to 2-1/2" (64mm)	2-1/4" x 5-3/4" (57mm x 146mm)	.18



5186

Cable-Splicer's Knife Holders

- **Leather** construction.
- Designed to hold Cat. No. 44200 cable-splicer's knife.
- Riveted and stitched for extra durability.

Cat. No.	Belt Connection	Belt Width	Overall Size	Weight (lbs.)
5188	slotted	up to 2-1/4" (57mm)	2-1/8" x 7-3/4" (54mm x 197mm)	.08
5188T	tunnel	up to 2-1/4" (57mm)	2-1/8" x 7-1/4" (54mm x 184mm)	.11



5188



5188T



Pliers Holders — Open Bottom

- Leather construction.
- Long-nose pliers may protrude through opening at bottom.
- Riveted to assure long life.
- Cat. No. 5107-6 holds 6" (152mm) or 7" (178mm) long-nose or diagonal-cutting pliers.
- Cat. No. 5107-9 holds 8" (203mm) or 9" (229mm) long-nose or diagonal-cutting pliers.

Cat. No.	Belt Connection	Belt Width	Overall Size	Weight (lbs.)
5107-6	slotted	up to belts up to 2" (51mm)	3-1/2" x 8-1/2" (89mm x 216mm)	.17
5107-9	slotted	up to belts up to 2" (51mm)	3-3/4" x 11" (95mm x 279mm)	.26



5107-6

Pliers Holders — Closed Bottom

- Leather construction.
- Nose of pliers does not protrude from closed bottom.
- Bottom is vented to prevent collection of dirt or water.
- Riveted to assure long life.
- Holds 7", 8" or 9" side-cutting pliers.

Cat. No.	Belt Connection	Belt Width	Overall Size	Weight (lbs.)
5112	slotted	up to 2" (51mm) wide or may be riveted to belt	3-1/4" x 11" (83mm x 279mm)	.21



5112

Pliers, Rule, and Screwdriver Holders

- Leather construction.
- 3 pockets for pliers, folding rule and screwdriver.
- S5118PRS has a two-way knife snap.
- Riveted to assure long life.
- Pockets for 7", 8" and 9" side-cutting pliers, most screwdrivers, 6' folding rules and open end wrenches from 9/16" to 13/16".

Cat. No.	Belt Connection	Belt Width	Overall Size	Weight (lbs.)
5118PRS	slotted	up to 2" (51mm)	6-3/4" x 10" (171mm x 254mm)	.49
S5118PRS	slotted	up to 2" (51mm)	6-3/4" x 10" (171mm x 254mm)	.56



5118PRS

Hammer Holders

- Leather construction.
- Heavy-metal hammer loop riveted to panel.
- Riveted and stitched for extra durability.
- Holds all hammers except lineman's.

Cat. No.	Belt Connection	Belt Width	Overall Size	Weight (lbs.)
5456	slotted	up to 2-1/2" (64mm)	4-5/16" x 7-7/8" (110mm x 200mm)	.33
5456T	tunnel	up to 4" (102mm)	4-5/16" x 10" (110mm x 254mm)	.42
5456TS	tunnel	up to 4" (102mm)	4-5/16" x 10" (110mm x 254mm)	.42



5456



5456T



5456TS

Flashlight Holders

- Leather construction.
- Designed for a standard two-cell flashlight.
- Riveted to assure long life.

Cat. No.	Belt Connection	Belt Width	Overall Size	Weight (lbs.)
5129	slotted	up to 2-1/4" (44mm)	3" x 9-1/2" (76mm x 241mm)	.22



5129



Voltage-Tester Holder

- **Leather** construction.
- Holds Voltage Tester Cat. No. 69115 and most standard voltage testers.
- Full top flap with twist-closure keeps tester in holder; keeps out weather and dirt.
- Riveted and stitched for extra durability.

Cat. No.	Belt Connection	Belt Width	Overall Size	Weight (lbs.)
5137	slotted	up to 2-1/4" (57mm)	3-1/2" x 9-1/2" (89mm x 241mm)	.47



5137

Voltage-Tester Holder

- **Leather** construction.
- Designed to hold most standard voltage testers.
- Equipped with a snap to prevent the instrument from falling out of holder.
- Riveted to assure long life.

Cat. No.	Belt Connection	Belt Width	Overall Size	Weight (lbs.)
5138	slotted	up to 2-1/4" (57mm)	3" x 9-1/2" (76mm x 241mm)	.25



5138

Tape-Rule Holder

- **Leather** construction.
- Cut-out sides for easy access to tape.
- Slotted for attaching to belts up to 2-1/2" (63mm) wide.
- Riveted to assure long life.

Klein Tape-Rule Sizing Guide

Small	Medium	Large
922-12	922-16	922-25
908-12	928-16 HV	928-25 HV
	926-5 WE	922-30
	908-16	908-25
	908-16 RE	908-30
		917-25 RE
		916-25 RE
		916-75 MERE
		916-30 RE



5194

Cat. No.	Description	Overall Size	Weight (lbs.)
5194	holds small-sized power return rules	4" x 6" (102mm x 152mm)	.16
5195	holds medium-sized power return rules	4-1/2" x 7" (114mm x 178mm)	.18
5196	holds medium-sized power return rules	5" x 7" (127mm x 178mm)	.21

Tie-Wire Reel Pad

- Worn on the belt under the Klein tie-wire reel.
- Made of 3/16" (5mm) thick rigging **leather**.
- Slots accommodate belts up to 2" (51mm) wide.
- Underside has a sponge-rubber pad to minimize hip fatigue.
- Holds Cat. No. 27400 tie-wire reel.
- To be used with Cat. Nos. 5415 or 5420 belts.

Cat. No.	Length	Width	Weight (lbs.)
27450	7" (178mm)	7" (178mm)	.300



27450

Tie-Wire Reel

- Rugged, lightweight reel is smooth aluminum alloy with wear parts made of steel.
- Feeds pre-coiled wire smoothly, easily and quickly to save time and reduce wasted wire.
- Designed for left- or right-hand use.
- Large, comfortable rewind knob.
- Easily-removed cover plate that permits quick, convenient reloading to handle all types of wire.
- Optional accessory rigging-**leather** belt and hip pad available separately.

Cat. No.	Diameter	Width	Weight (lbs.)
27400	6-1/4" (159mm)	2-25/32" (71mm)	2.35



27400

Heavy-Duty Embossed Tool Belts

- Strong, heavy-duty **leather**.
- Equipped with a double-tongue buckle.

Cat. No.	Size	Width	Weight (lbs.)
5415S	32" - 40" (813mm - 1016mm)	2" (51mm)	.63
5415	36" - 44" (914mm - 1118mm)	2" (51mm)	.64
5415L	40" - 48" (1016mm - 1219mm)	2" (51mm)	.64
5415XL	44" - 52" (1118mm - 1321mm)	2" (51mm)	.65



5415





Lightweight Tool Belt

- **Leather** construction.
- Designed to carry lightweight tool pouches.

Cat. No.	Size	Width	Weight (lbs.)
5201	33" – 45" (838mm – 1143mm)	1" (25mm)	.30



General Purpose Tool Belt

- Strong, heavy-duty **leather**.
- Removable single-tongue buckle held by two heavy-duty snaps.

Cat. No.	Size	Width	Weight (lbs.)
5202M	32" – 40" (813mm – 1016mm)	1-1/2" (38mm)	.40
5202L	38" – 46" (965mm – 1168mm)	1-1/2" (38mm)	.45
5202XL	46" – 54" (1168mm – 1372mm)	1-1/2" (38mm)	.50



Adjustable Web Tool Belt

- Fits waist sizes up to 48".
- Accommodates tunnel loop and slotted tool pouches and holders.
- 2" wide polypropylene webbing.
- Rugged metal buckle for quick release and easy adjustment.
- Corrosion resistant hardware.

Cat. No.	Size	Width	Weight (lbs.)
5225	48" (1219mm)	2" (51mm)	.60



Electrician's Leather Tool Belts

- **Leather** construction.
- Includes tool loops and chain-tape thong.

Cat. No.	Size	Width	Weight (lbs.)
5207M	32" – 40" (813mm – 1016mm)	1-1/2" (38mm)	.50
5207L	38" – 46" (965mm – 1168mm)	1-1/2" (38mm)	.55
5207XL	46" – 54" (1168mm – 1372mm)	1-1/2" (38mm)	.60



Electrician's Web Tool Belts

- Lightweight web belt.
- Includes **leather** tool loops and chain-tape thong.
- Friction buckle.

Cat. No.	Size	Width	Weight (lbs.)
5227M	32" – 40" (813mm – 1016mm)	1-1/2" (38mm)	.39
5227L	40" – 48" (1016mm – 1219mm)	1-1/2" (38mm)	.40
5227XL	48" – 56" (1219mm – 1422mm)	1-1/2" (38mm)	.42



Leather Suspenders

- Soft **leather** work-belt suspenders.
- Adjustable loops at the end of all three straps to permit use on any width Klein belt.
- Fully adjustable front and back for added comfort.



All-Purpose Bag

- Durable, **leather** bag is ideal for carrying loose tools and small parts.
- Adjustable belt strap for attaching to belts.

Cat. No.	Belt Connection	Belt Capacity	Length	Width	Depth	Weight (lbs.)
5146	belt strap	up to 3" (76mm) wide	9" (229mm)	8" (203mm)	3" (76mm)	.60



5146

Canvas Utility Bags

- Heavy No. 8 natural canvas.
- Top edge reinforced with 1/4" (6mm) rope.
- Metal snaps provided on loops for easy attachment to belts up to 3" (76mm) wide.
- Ventilating eyelet in bottom.
- Cat. No. 5142P version includes interior pocket.

Cat. No.	Belt Connection	Belt Capacity	Length	Width	Top Diameter	Weight (lbs.)
5142	loops	up to 3" (76mm) wide	9" (229mm)	10" (254mm)	8" x 3" (203mm x 76mm)	.60
5142P	loops	up to 3" (76mm) wide	9" (229mm)	10" (254mm)	8" x 3" (203mm x 76mm)	.65



5142

Water-Repellent Canvas Pouches

- One-piece tan 12-oz. water-repellent mildew resistant canvas.
- Top edge reinforced with 1/4" (6mm) rope.

Cat. No.	Belt Connection	Belt Capacity	Length	Width	Top Diameter	Weight (lbs.)
5179	loops	up to 4-1/2" (114mm) wide	7-1/2" (191mm)	3-1/2" (89mm)	7" (178mm)	.30
5179S	snap	up to 4-1/2" (114mm) wide	7-1/2" (191mm)	3-1/2" (89mm)	7" (178mm)	.30



5179

Bull-Pin and Bolt Bags

- No. 4 canvas or **leather** with double bottom.
- Bolt bag with bull-pin loop on each side.

Cat. No.	Belt Connection	Belt Capacity	Length	Width	Depth	Weight (lbs.)
Canvas						
5416	loops	up to 3" (76mm) wide	5" (127mm)	9" (229mm)	10" (254mm)	.85
5416T	tunnel	up to 3" (76mm) wide	5" (127mm)	9" (229mm)	10" (254mm)	.90
Leather						
5416L	loops	up to 3" (76mm) wide	5" (127mm)	9" (229mm)	10" (254mm)	1.10



5416

Leather Bolt Bag

- **Leather** construction.
- Bolt bag with bull-pin loop on each side.

Cat. No.	Belt Connection	Belt Capacity	Length	Width	Depth	Weight (lbs.)
42247	tunnel	up to 3" (76mm) wide	5" (127mm)	8-1/2" (216mm)	8-1/2" (216mm)	.75



5416L



42247

Strap-Leather Bag

- **Leather** construction.
- Soft, pliable leather gussets allow expansion to 3-1/4" (83mm).

Cat. No.	Belt Connection	Belt Capacity	Length	Width	Depth	Weight (lbs.)
5140K	latigo thongs	up to 3" (76mm) wide	7" (178mm)	9" (229mm)	3-1/4" (83mm)	.65



5140K

Mason's Tote Bag

- Heavy-duty No. 8 natural canvas.
- Rivet-reinforced for durability.
- Steel-frame mouth with hinge for rugged use.
- Stitched and riveted **leather** handles for comfort and strength.
- Two retaining straps with buckles provide secure closure.
- Moisture-resistant, vinyl bottom and lower sides.
- Non-scratch studs on base protect against wear.
- Retro-fit bags with shoulder strap kit (Cat. No. 5102S). Kit includes **leather** strap with pad and snap hooks, rings and fasteners for attaching rings to bags.

Cat. No.	Length	Width	Depth	Weight (lbs.)
5102-12	12" (305mm)	6" (152mm)	10" (254mm)	2.14
5102-14	14" (356mm)	6" (152mm)	14" (356mm)	2.55
5102-16	16" (406mm)	6" (152mm)	14" (356mm)	3.05
5102-18	18" (457mm)	6" (152mm)	14" (356mm)	2.84
5102-24	24" (610mm)	6" (152mm)	15" (381mm)	4.10



5102-16





Canvas Buckets

Common Features:

- **Polypropylene-rope handle** reinforced with leather for water resistance and strength.
- **Durable, straight-wall and tapered-wall** buckets are made of

heavy-duty canvas.

- **High-density polyethylene top ring** for strength and chemical resistance.
- The No. canvas refers to the canvas weight. No. 1 being the thickest and No. 8 being the thinnest.

Leather-Bottom Buckets

- No. 1 canvas.
- Leather-reinforced bottom extends 3" (76mm) up the sides.
- Inside pocket measures 8" x 8" (203mm x 203mm).
- Rope handle.

Cat. No.	Top Diameter	Bottom Diameter	Height	Extra Features	Weight (lbs.)
5104	12" (305mm)	12" (305mm)	17" (432mm)		2.71
5104S	12" (305mm)	12" (305mm)	17" (432mm)	swivel snap (Cat. No. 2012)	2.93

Straight-Wall Buckets

- No. 6 canvas.
- Black molded polypropylene bottom.
- Rope handle.

Cat. No.	Diameter	Height	Extra Features	Weight (lbs.)
5106	9" (229mm)	14" (356mm)		1.51
5106P	9" (229mm)	14" (356mm)	two 7" x 7" (178mm x 178mm) inside pockets	1.62
5106S	9" (229mm)	14" (356mm)	swivel snap (Cat. No. 2012)	1.80

Wide-Opening Straight-Wall Buckets

- No. 6 canvas.
- Black molded polypropylene bottom.
- Rope handle.

Cat. No.	Diameter	Height	Extra Features	Weight (lbs.)
5109	12" (305mm)	15" (381mm)		2.06
5109P	12" (305mm)	15" (381mm)	one 8" x 8" (203mm x 203mm) inside pocket	2.12
5109S	12" (305mm)	15" (381mm)	swivel snap (Cat. No. 2012)	2.35
5109PS	12" (305mm)	15" (381mm)	one 8" x 8" (203mm x 203mm) inside pocket and swivel snap (Cat. No. 2012)	2.40

Tapered-Wall Buckets

- No. 6 canvas.
- Black molded polypropylene bottom.
- Rope handle.

Cat. No.	Top Diameter	Bottom Diameter	Height	Extra Features	Weight (lbs.)
5113	12" (305mm)	9" (229mm)	13" (330mm)		1.55
5113S	12" (305mm)	9" (229mm)	13" (330mm)	swivel snap (Cat. No. 2012)	1.84

Heavy-Duty Tapered-Wall Bucket

- Riveted leather glove strap.
- Tough No. 4 canvas.
- Comes with Cat. No. 2012 swivel snap.
- Black molded polypropylene bottom.
- Rope handle.

Cat. No.	Top Diameter	Bottom Diameter	Height	Extra Features	Weight (lbs.)
5103S	12" (305mm)	9" (229mm)	12" (305mm)	swivel snap (Cat. No. 2012)	1.95





Tree Climbers with 2-3/4" Gaffs – Complete Set

1907AR Series

- Extra-long gaffs for maximum penetration when climbing trees.
- Includes 8" x 8" (203mm x 203mm) cushioned leather pad, steel sleeve, leg iron, gaff, split ring and nylon calf and ankle straps.
- To determine size needed, measure from instep to 1" (25mm) below knee.
- Sold in pairs only.

Cat. No.	Adjustable Length	Shipping Weight (lbs.)	Replacement Gaff Cat. No.	Replacement Pad Cat. No.	Replacement Calf Strap Cat. No.	Replacement Ankle Strap Cat. No.
CN1907AR	15" – 19" (381mm – 483mm)	6.20	07	8210	5301-18	5301-20
CN1907ARL	17" – 21" (432mm – 533mm)	6.75	07	8210	5301-18	5301-20



CN1907AR

Tree Climbers with 2-3/4" Gaffs – Without Pads and Straps

1907AR Series

- TREE CLIMBERS ONLY. Includes steel sleeve, leg iron, split ring and gaff.
- Extra-long gaffs for maximum penetration when climbing trees.
- To determine size needed, measure from instep to 1" (25mm) below knee.
- Sold in pairs only.

Cat. No.	Adjustable Length	Shipping Weight (lbs.)	Replacement Gaff Cat. No.
1907AR	15" – 19" (381mm – 483mm)	4.85	07
1907ARL	17" – 21" (432mm – 533mm)	4.95	07



1907AR

Snap-On Gaff Guard

- Coil-spring, plastic coated guard quickly snaps onto pole climbers.
- Sold in pairs only.

Cat. No.	Description	Shipping Weight (lbs.)
1972G	Snap-on gaff guards for pole climbers	.10



1972G

Removable Gaff Guard

- Long-lasting leather construction with easy-to-remove Velcro™ strap.
- Sold in pairs only.

Cat. No.	Description	Shipping Weight (lbs.)
1945G	Gaff guards for pole and tree climbers	.10



1945G

Climber Straps for Pole and Tree Climbers

- Durable neoprene-impregnated nylon strap is chemical abrasion resistant and non-conductive.
- Tongue buckle has roller for easy adjustment.
- Sold in pairs only.

Cat. No.	Overall Size	Shipping Weight (lbs.)
5301-18	1" x 22" (25mm x 56cm)	.35
5301-19	1" x 26" (25mm x 66cm)	.40
5301-21	1¼" x 22" (32mm x 56cm)	.50
5301-22	1¼" x 26" (32mm x 66cm)	.46



Climber Strap

5301-18

Ankle Straps for Pole and Tree Climbers

- Durable neoprene-impregnated nylon strap is chemical abrasion resistant and non-conductive.
- Tongue buckle has roller for easy adjustment and a comfortable leather buckle pad.
- Sold in pairs only.

Cat. No.	Overall Size	Shipping Weight (lbs.)
5301-20	1" x 24" (25mm x 61cm)	.50
5301-23	1¼" x 24" (32mm x 61cm)	.70



Ankle Strap

5301-20



Forged-Steel Grips

- Total wire and cable-pulling capability for the power, utility, telecommunication and many other industries.
- Klein Chicago® and Haven's™ Grips are widely used in the power, communications and general construction fields to pull wire and cable, and to maintain temporary tension until it can be permanently terminated.
- Used for pulling up lines to tension only; not to be used as anchors.
- Complete line includes a type and size for every application, and for virtually every type of wire and cable, including:
 - Extra-high-strength cables, messenger, guy strand and conductors
 - Bare wire
 - Large-diameter conductors
 - Bare ACSR, aluminum and stranded-copper cables
 - PVC-covered conductors
 - Weatherproof wire
 - Telephone cable

Chicago® Grips – for Weatherproof Wire

- Round inside jaw contour for weatherproof coated wire.
- Notches in jaw provide firm grip on insulation.

Cat. No.	Minimum Cable	Maximum Cable	Maximum Safe Load	Jaw Length	Approx. Weight Each
1611-20	.20" (5.08mm)	.40" (10.16mm)	4500 lbs. (2045kg)	4-3/16" (106mm)	3 lbs. (1.36kg)
1611-30	.31" (7.87mm)	.53" (13.46mm)	4500 lbs. (2045kg)	4-3/4" (121mm)	3.75 lbs. (1.70kg)
1611-40	.53" (13.46mm)	.74" (18.80mm)	8000 lbs. (3636kg)	5-11/16" (144mm)	7.75 lbs. (3.52kg)
1611-50	.78" (19.81mm)	.88" (22.35mm)	8000 lbs. (3636kg)	5-11/16" (144mm)	7.75 lbs. (3.52kg)

Note: Due to various types of weatherproof coatings available, selection of proper grips is determined by outside diameter of cable.



1611-30

Chicago® Grips – for PVC-Covered Conductors

- Serpentine jaws are specially machined to allow insertion of insulated conductor through the jaws, which reduces danger of slippage which might result in insulation damage.
- Eliminates necessity of stripping insulation from conductor.
- Round inside-jaw contour.

Cat. No.	Minimum Cable	Maximum Cable	Maximum Safe Load	Jaw Length	Approx. Weight Each
1659-20	.20" (5.08mm)	.42" (10.67mm)	4500 lbs. (2045kg)	4-3/16" (106 mm)	3 lbs. (1.36kg)
1659-30	.31" (7.87mm)	.50" (12.70mm)	4500 lbs. (2045kg)	4-3/4" (121mm)	3.75 lbs. (1.70kg)
1659-40	.49" (12.45mm)	.79" (20.07mm)	8000 lbs. (3636kg)	5-11/16" (144mm)	7.75 lbs. (3.52kg)
1659-50	.79" (20.07mm)	1.01" (25.56mm)	8000 lbs. (3636kg)	5-11/16" (144mm)	7.75 lbs. (3.52kg)



1659-30

OSHA Information: OSHA requires that all hand tools and equipment be maintained in good working order and that they be free from damage caused by wear or abuse (OSHA Part 1910, Subpart P, Section 1910.242). In addition, OSHA Part 1926, Subpart V, Section 1926.955, paragraph (C) (7) (ii) and (C) (8) specifically state that: "The manufacturer's load rating shall not be exceeded for stringing lines, pulling lines, sock connectors and all loadbearing hardware and accessories." "Conductor grips shall not be used on wire rope unless designed for this application."

AWG/B&S Wire Gauges

Diameters of American (AWG) or Brown & Sharpe (B&S) Wire Gauges			
No. of Wire Gauge	American (AWG) or Brown & Sharpe (B&S)	No. of Wire Gauge	American (AWG) or Brown & Sharpe (B&S)
0000	.460"	19	.03589"
000	.40964"	20	.031961"
00	.3648"	21	.028462"
0	.32486"	22	.025347"
1	.2893"	23	.022571"
2	.25763"	24	.0201"
3	.22942"	25	.0179"
4	.20431"	26	.01594"
5	.18194"	27	.014195"
6	.16202"	28	.012641"
7	.14428"	29	.011257"
8	.12849"	30	.010025"
9	.11443"	31	.008928"
10	.10189"	32	.00795"
11	.090742"	33	.00708"
12	.080808"	34	.006304"
13	.071961"	35	.005614"
14	.064084"	36	.005"
15	.057068"	37	.004453"
16	.05082"	38	.003965"
17	.045257"	39	.003531"
18	.04030"	40	.003144"

Klein Haven's™ Grips

- Designed for use when light, compact grip is desired and where conductor damage is not a factor.
- Gripping pressure of the knurled jaw is applied to 1/4" (6.35mm) cable area.
- Cat. Nos. 1604-20L and 1625 series have a swing latch to help hold cable in the jaw.



1625-20

Cat. No.	Minimum Cable	Maximum Cable	Maximum Safe Load	Approx. Weight Each
1625-20	1 B&S .28" (7.11mm)	wire rope .75" (19.05mm)	8000 lbs. (3636kg)	4 lbs. (1.81kg)
1625-20 7/8	.38" (9.65mm)	wire rope .88" (22.35mm)	8000 lbs. (3636kg)	4 lbs. (1.81kg)
1625-20 1	.50" (12.70mm)	wire rope 1" (25.40mm)	8000 lbs. (3636kg)	4 lbs. (1.81kg)

WARNING: Grips are to be used for temporary installation, not for permanent anchorage.

WARNING: When used on/or near energized lines, ground, insulate, or isolate grip before pulling.

WARNING: Do not exceed rated capacity.

WARNING: Before each use, clean jaw area and inspect grip for proper operation to avoid slippage.

WARNING: Always match proper size and type of grip to application.



Grizzly® Bar

- A heavy, strong, multi-purpose tool that saves time and effort on the job.
- The 3" (76mm) width protects concrete when stripping forms.
- Efficient blade angle and 55-1/2" (141cm) total length provide high leverage as a crow bar and nail and spike puller.
- Blade is forged and hardened alloy with keyhole nail-pulling slot in center and V-notch in tapered edge.
- Very efficient nail-pulling tool even in awkward positions.
- Can be used to help align walls during tilt-up construction, to roll and align large pipe, to remove shingles and flooring and for many other stripping and prying tasks.



64306

Cat. No.	Overall Length	Weight (lbs.)
64306	55-1/2" (1410mm)	12.00

Rebar Shear

- Top-loading 3/4" (19mm) heavy-duty shear cuts up to and through #6 rebar.
- Easily replaceable tool-steel knives and heavy steel construction for long tool life.
- Includes mounting bolts and removable steel handle.
- Does not include wooden platform.

Cat. No.	Handle Length	Shear Height	Shear Width	Shear Length	Weight (lbs.)
64302K	60" (152cm)	6" (152mm)	6" (152mm)	13" (330mm)	50.00

Replacement Cutting Blades

64321	pair of cutting blades for Cat. No. 64302K				.75
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64302K

Rebar Hickeys

- Lightweight rebar hickey has exceptionally durable steel-alloy head and extra-strong handle to withstand punishing service conditions.



64308

Cat. No.	Hickey Size	Bends Rebar Size	Head Type and Bending Angle	Handle Length	Weight (lbs.)
64308	1	nos. 3 (.375" dia.), 4 (.500" dia.)	single 65°	24" (610mm)	2.50
64309	1a	nos. 3 (.375" dia.), 4 (.500" dia.)	double 65° and 90°	24" (610mm)	3.50
64310	2	no. 5 (.625" dia.)	single 65°	40" (1016mm)	7.50
64311	3	no. 6 (.750" dia.)	single 65°	40" (1016mm)	8.00
64312	4	nos. 7 (.875" dia.), 8 (1.00" dia.), 9 (1.128" dia.)	single 65°	60" (1524mm)	16.40

WARNING: Always wear approved personal protective equipment.

WARNING: Do NOT exceed rated capacity.

WARNING: Always wear approved eye protection.

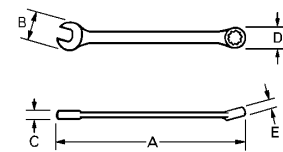




COMBINATION WRENCHES

Combination Wrenches, Black Satin Finish, 12-pt., SAE

Product Code	UPC 662459+	Size (inches)	A	B	C	D	E	Lbs.	Kgs
1210BSC*	900999	5/16	5-3/4	11/16	5/32	1/2	7/32	0.07	0.03
1212BSC+	901002	3/8	6-1/2	13/16	3/16	9/16	1/4	0.10	0.05
1214BSC+	901019	7/16	7-1/4	15/16	11/64	11/16	9/32	0.12	0.05
1216BSC+	901026	1/2	8	1-1/16	1/4	3/4	11/32	0.19	0.09
1218BSC+	901033	9/16	8-3/4	1-1/4	1/4	7/8	3/8	0.25	0.11
1220BSC+	901040	5/8	9-1/2	1-3/8	9/32	15/16	13/32	0.33	0.15
1222BSC+	901057	11/16	10-1/4	1-1/2	5/16	1-1/64	7/16	0.41	0.19
1224BSC+	901064	3/4	11	1-5/8	5/16	1-1/8	31/64	0.48	0.22
1226BSC+	901071	13/16	11-3/4	1-3/4	3/8	1-13/64	33/64	0.63	0.29
1228BSC+	901088	7/8	12-1/2	1-7/8	13/32	1-19/64	35/64	0.75	0.34
1230BSC+	901095	15/16	13-1/4	2	7/16	1-3/8	37/64	0.91	0.41
1232BSC+	901101	1	14	2-1/8	29/64	1-15/32	5/8	1.07	0.49
1234BSC+	901118	1-1/16	14-3/4	2-1/4	31/64	1-35/64	21/32	1.25	0.57
1236BSC+	901125	1-1/8	15-1/2	2-13/32	33/64	1-41/64	11/16	1.41	0.64
1240BSC+	901132	1-1/4	17	2-21/32	9/16	1-13/16	3/4	1.87	0.85
1242B*	901149	1-5/16	17-1/8	2-5/8	19/32	1-31/32	1-3/16	2.10	0.95
1244B*	901156	1-3/8	18-1/2	2-13/16	19/32	2-1/16	1-1/2	2.30	1.04
1246B*	901163	1-7/16	19-1/4	2-15/16	5/8	2-5/32	1-3/4	2.66	1.21
1248B*	901170	1-1/2	20	3-1/16	21/32	2-1/4	1-3/4	2.92	1.32
1178B*	101204	1-9/16	20-3/4	3-3/16	11/16	2-11/32	1-13/16	3.22	1.46
1180B*	101211	1-5/8	21-1/2	3-5/16	11/16	2-7/16	1-7/8	3.62	1.64
1182B*	101228	1-11/16	22-5/16	3-7/16	3/4	2-1/2	1-3/4	5.08	2.30
1184B*	101235	1-3/4	22-7/8	3-9/16	25/32	2-5/8	2	5.69	2.58
1186B*	101242	1-13/16	23-1/2	3-11/16	13/16	2-23/32	2	6.35	2.88
1188B*	101259	1-7/8	24	3-13/16	13/16	2-13/16	2	6.76	3.07
1190B*	101267	2	25-1/4	4-1/16	25/32	2-7/8	2	8.46	3.84
1191B*	101273	2-1/16	25-13/16	4-3/16	3/4	2-3/4	2	8.95	4.06
1192B*	101280	2-1/8	26-3/8	4-5/16	7/8	3-1/16	2	10.25	4.65
1193B*	101295	2-3/16	27	4-7/16	13/16	3-1/4	2-1/2	10.30	4.67
1194B*	101301	2-1/4	27-9/16	4-9/16	15/16	3-7/32	2-1/2	11.24	5.10
1195B*	101310	2-3/8	28-3/4	4-13/16	1-1/32	3-13/32	2-1/2	13.29	6.03
1197B*	101327	2-1/2	29-15/16	5-1/16	1-5/16	3-9/16	2-1/2	14.88	6.75
1198BL	101341	2-5/8	31-1/2	6-1/2	1-7/32	4-7/8	2-3/4	22.88	10.38
1198ABL	101334	2-3/4	31-1/2	6-1/2	1-7/32	4-7/8	2-3/4	21.77	9.87
1198BBL	101356	2-7/8	31-1/2	6-1/2	1-7/32	4-7/8	2-3/4	21.16	9.60
1198CBL	101365	2-15/16	31-1/2	6-1/2	1-7/32	4-7/8	2-3/4	21.73	9.86
1199BL	101372	3	31-1/2	6-1/2	1-7/32	4-7/8	2-7/8	21.42	9.72
1199ABL	101389	3-1/8	31-1/2	6-1/2	1-7/32	4-7/8	2-7/8	21.07	9.56
1199BBL	101396	3-3/8	31-1/2	6-1/2	1-7/32	4-7/8	2-7/8	18.86	8.55



*SUPERTORQUE® Opening

†SUPERCOMBO® Open End / SUPERTORQUE® Box End

Fed. Spec.: ANSI B107.6; SAE AS 954

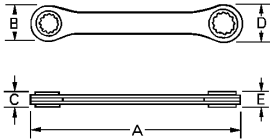
- SUPERCOMBO® open end has specially designed grooves that direct wrench force away from fastener corners.
- SUPERTORQUE® box opening design allows application of higher torque without rounding or deforming hex fastener points. No contact is made at the corners. Instead, wrenching forces are placed on the flat surfaces behind the points.
- Open end continuous arc design minimizes spreading and is stronger than “V” designs.
- Excellent choice of wrenches where users require the high quality of a Williams wrench, but with a lower price range.
- Box and open end openings are identical.



WARNING

- Wear safety goggles. (Users and bystanders)
- Do not over-torque, no pipes or lever extensions.
- Use only moderate force on crowfoot and flare nut wrenches.

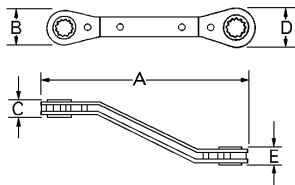
Double Head Ratcheting Box Wrenches, Chrome Finish, 6- and 12-pt., SAE



Product Code	UPC 662459+	Size (inches)	Points	A	B	C	D	E	Lbs.	Kgs
RB-810	107107	1/4 x 5/16	6	4-1/4	19/32	3/8	11/16	3/8	.12	.05
RB-1214	107114	3/8 x 7/16	6	5-1/2	25/32	3/8	7/8	3/8	.18	.08
RB-1618	107121	1/2 x 9/16	6	6-3/4	1	1/2	1-5/32	1/2	.30	.14
RB-1820	107138	9/16 x 5/8	12	8-1/8	1-5/16	1/2	1-7/16	1/2	.46	.21
RB-2022	107145	5/8 x 11/16	12	8-1/8	1-5/16	1/2	1-7/16	1/2	.44	.20
RB-2024	107152	5/8 x 3/4	12	8-1/8	1-5/16	1/2	1-7/16	1/2	.42	.19
RB-2428	107169	3/4 x 7/8	12	9-1/4	1-13/32	1/2	1-9/16	1/2	.48	.22
RB-3036	107176	15/16 x 1-1/8	12	15-1/8	1-21/32	9/16	2-9/32	9/16	1.4	.64
RB-3440	107183	1-1/16 x 1-1/4	12	15-1/8	1-29/32	9/16	2-9/32	9/16	1.3	.59

- Allows turning of fastener without removal of wrench.
- A must for applications where access is limited.
- Different opening sizes in each end.

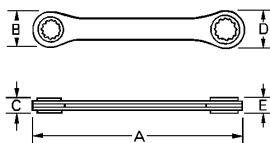
Double Head Offset Ratcheting Box Wrenches, Chrome Finish, 12-pt., SAE



Product Code	UPC 662459+	Size (inches)	A	B	C	D	E	Lbs.	Kgs
RBO-810	107206	1/4 x 5/16	4-1/4	19/32	3/8	21/32	3/8	.12	.05
RBO-1214	107213	3/8 x 7/16	5-7/16	25/32	3/8	7/8	3/8	.18	.08
RBO-1618	107220	1/2 x 9/16	6-3/4	1	1/2	1-5/32	1/2	.30	.14
RBO-2022	107237	5/8 x 11/16	8	1-5/16	1/2	1-7/16	1/2	.46	.21
RBO-2024	107244	5/8 x 3/4	8	1-5/16	1/2	1-7/16	1/2	.56	.26
RBO-2226	107251	11/16 x 13/16	9-1/8	1-13/32	1/2	1-9/16	1/2	.54	.25
RBO-2428	107268	3/4 x 7/8	9-1/8	1-13/32	1/2	1-9/16	1/2	.52	.24
RBO-2630	107275	13/16 x 15/16	9-1/8	1-13/32	1/2	1-9/16	1/2	.64	.29

- Box ends offset 25°.
- Different opening sizes in each end.

Ratcheting Box End Wrenches, Chrome Finish, 6- and 12-pt., Metric



Product Code	UPC 662459+	Size (mm)	Points	A	B	C	D	E	Lbs.	Kgs
RBM-0708	107602	7 x 8	6	4-1/2	11/16	3/8	11/32	3/8	.12	.05
RBM-0910	107619	9 x 10	6	5-1/2	7/8	3/8	7/8	3/8	.16	.07
RBM-1112	107626	11 x 12	6	6-7/8	1-3/16	1/2	1-1/8	1/2	.30	.14
RBM-1314	107633	13 x 14	6	6-7/8	1-3/16	1/2	1-1/8	1/2	.30	.14
RBM-1517	107640	15 x 17	12	8-1/8	1-7/16	1/2	1-7/16	1/2	.44	.20
RBM-1618	107657	16 x 18	12	8-1/8	1-7/16	1/2	1-7/16	1/2	.44	.20
RBM-1921	107644	19 x 21	12	9-1/4	1-9/16	1/2	1-9/16	1/2	.50	.23

Fed. Spec.: ANSI B107.9M

- Allows turning of fastener without removal of wrench.
- A must for applications where access is limited.
- Different opening sizes in each end.



WARNING

- Wear safety goggles. (Users and bystanders)
- Do not over-torque, no pipes or lever extensions.
- Use only moderate force on crowfoot and flare nut wrenches.

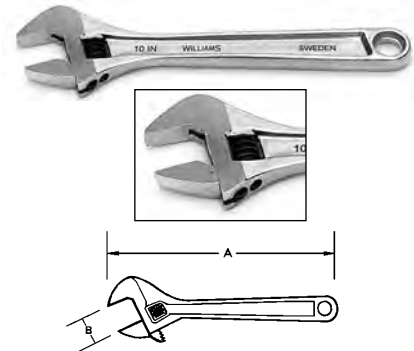


ADJUSTABLE WRENCHES

Adjustable Wrenches, Chrome Finish

Product Code	UPC 662459+	A	B	Head Thickness (inches)	Lbs.	Kgs
AP-4A	227447	4	1/2	11/32	.13	.06
AP-6A	227669	6	3/4	7/16	.31	.14
AP-8A	227881	8	1	1/2	.57	.26
AP-10A	227102	10	1-11/64	39/64	.88	.40
AP-12A	227126	12	1-5/16	23/32	1.48	.67
AP-15A	227157	15	1-11/16	51/64	2.29	1.04
AP-18A	227188	18	2-1/16	57/64	3.68	1.67
AP-24A	227249	24	2-7/16	1-9/64	6.99	3.17

- Chrome-plated finish allows for easy cleaning after each use.
- Serrated knurl is designed for quick and smooth adjustments.
- I-Beam designed handle provides strength and durability.
- Inch (SAE) scale is laser-etched on head face for easy determination of bolt head width.
- Field serviceable – repair parts are available on request.

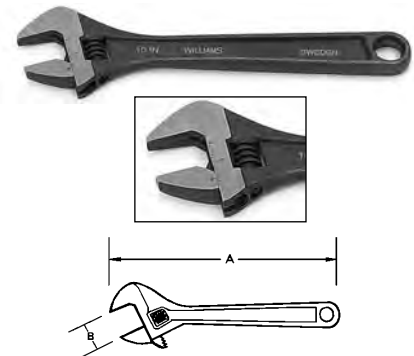


Adjustable Wrenches, Black Finish

Product Code	UPC 662459+	A	B	Head Thickness (inches)	Lbs.	Kgs
AB-4A	227492	4	1/2	11/32	.13	.06
AB-6A	227690	6	3/4	7/16	.31	.14
AB-8A	227898	8	1	1/2	.57	.26
AB-10A	228109	10	1-11/64	39/64	.88	.40
AB-12A	228123	12	1-5/16	23/32	1.48	.67
AB-15A	228154	15	1-11/16	51/64	2.29	1.04
AB-18A	228185	18	2-1/16	57/64	3.68	1.67
AB-24A	228246	24	2-7/16	1-9/64	6.99	3.17

Fed. Spec.: ANSI B107.8M

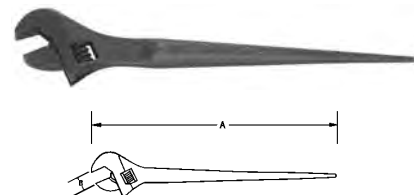
- Drop forged, heat-treated industrial finish with satin finish handles for firm, safe grip.
- Inch (SAE) scale is laser-etched on head face for easy determination of bolt head width.



Adjustable Construction Wrench, Black Finish

Product Code	UPC 662459+	Size (inches)	A	B	Head Thickness (inches)	Lbs.	Kgs
ABCN-12A	105288	1-1/2	15	1-1/2	23/32	1.94	.88

- One wrench covers a wide range of fastener sizes up to 1-1/2".
- Tapered (spud) handle designed to locate and align bolt and rivet holes.



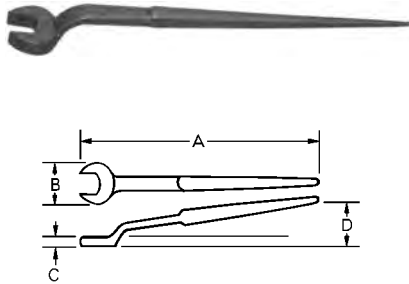
WARNING

- Wear safety goggles. (Users and bystanders)
- Do not over-torque, no pipes or lever extensions.
- Use only moderate force on crowfoot and flare nut wrenches.



STRUCTURAL AND CONSTRUCTION WRENCHES

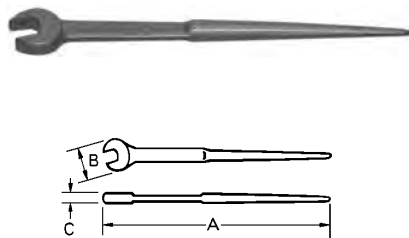
Single Head Structural Wrenches, Black Finish, SAE



Product Code	UPC 662459+	Size (inches)	A	B	C	D	Lbs.	Kgs
1904A	103703	3/4	12-5/16	2	7/16	7/8	1.39	.63
1905	103710	7/8	14-1/2	2-3/16	17/32	1	1.42	.64
1906	103727	15/16	14-1/2	2-1/2	17/32	1	1.41	.64
1906B	103734	1	14-1/2	2-3/16	17/32	1	1.36	.62
1907	103741	1-1/16	17-1/4	2-5/8	5/8	1-1/8	2.38	1.08
1907A	103758	1-1/8	17-1/16	2-3/8	5/8	1-1/8	2.12	.96
1908	103765	1-1/4	17-1/4	2-1/2	11/16	1-1/4	2.75	1.25
1908A	103772	1-5/16	19	2-7/8	11/16	1-1/4	2.74	1.24
1909	103789	1-7/16	21-5/16	3-3/16	3/4	1-3/4	4.18	1.90
1909A	103796	1-1/2	21-1/4	3-1/4	3/4	1-3/4	4.22	1.91
1910	103802	1-5/8	21-5/16	3-3/16	7/8	1-1/2	4.16	1.89
1911	103819	1-13/16	23-1/4	3-3/4	1	1-5/8	6.39	2.90
1911A	103826	1-7/8	23-1/8	3-5/8	1	1-5/8	6.14	2.79
1912	103833	2	23	3-3/4	1	1-5/8	6.52	2.96

- Long offset handle designed for clearance of obstructions while providing greater leverage.
- Tapered (spud) handle designed to locate and align bolt and rivet holes.

Single Head Construction Wrenches, Black Finish, SAE



Product Code	UPC 662459+	Size (inches)	A	B	C	Lbs.	Kgs
204A	103901	3/4	12	1-5/8	7/16	.58	.26
205	103918	7/8	14-1/2	2	17/32	1.50	.68
206	103925	15/16	14-1/2	2-1/16	17/32	1.47	.67
206B	103932	1	14-1/2	2-1/16	17/32	1.93	.88
207	103949	1-1/16	17	2-1/2	5/8	1.89	.86
207A	103956	1-1/8	17	2-1/2	5/8	1.89	.86
208	103963	1-1/4	19	2-13/16	11/16	2.32	1.05
208A	103970	1-5/16	19	2-13/16	11/16	2.34	1.06
209	103987	1-7/16	21-1/8	3-5/16	3/4	4.00	1.81
209A	103994	1-1/2	21-1/8	3-5/16	3/4	4.22	1.91
210	104007	1-5/8	25-1/4	4-7/16	27/32	4.68	2.12
211	104014	1-13/16	25-1/4	4-1/2	15/16	7.94	3.61
211A	104021	1-7/8	25-1/4	4-1/2	15/16	8.95	4.06

- 15° angled open end with straight tapered (spud) handle.
- Tapered (spud) handle designed to locate and align bolt and rivet holes.



WARNING

- Wear safety goggles. (Users and bystanders)
- Do not over-torque, no pipes or lever extensions.
- Use only moderate force on crowfoot and flare nut wrenches.



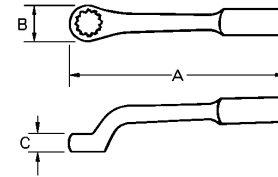


STRIKING FACE WRENCHES

Striking face wrenches are designed to be struck by a hammer on the anvil area in order to loosen frozen fasteners or to set and tighten fasteners. Anvils are proportional to opening sizes. Special heat treating provides maximum durability for long life.

Offset Pattern Striking Face Wrenches, Black Finish, 12-pt., SAE

Product Code	UPC 662459+	Size (inches)	Size (mm)	A	B	C	Lbs.	Kgs
8807W	104304	1-1/16	27	10-1/4	1-1/2	7/8	2.36	1.07
8807AW	104311	1-1/8	—	11	1-1/2	7/8	3.00	1.36
8808BW	104328	1-3/16	30	11	1-3/4	7/8	2.85	1.29
8808W	104335	1-1/4	32	11	1-5/8	7/8	2.84	1.29
8808AW	104342	1-5/16	33	11	1-1/2	7/8	2.67	1.21
8808CW	104359	1-3/8	35	11-9/16	2	1-3/16	3.56	1.61
8809W	104366	1-7/16	—	11-9/16	2	1-3/16	3.43	1.56
8809BW	104373	—	36	11-9/16	2	1-3/16	3.46	1.57
8809AW	104380	1-1/2	38	11-3/16	2-3/8	1-3/16	4.40	2.00
8810W	104397	1-5/8	41	12-1/4	2-1/4	1-3/16	4.47	2.03
8810AW	104403	1-11/16	43	12-5/8	2-3/4	1-3/16	5.22	2.37
8811BW	104410	1-3/4	44	12-3/4	2-3/4	1-3/16	5.09	2.31
8811W	104427	1-13/16	46	12-1/8	2-5/8	1-3/16	5.09	2.31
8811AW	104434	1-7/8	—	13-3/16	2-3/4	1-3/16	5.69	2.58
8812AW	104441	1-15/16	—	13-1/8	3	1-3/8	5.53	2.51
8812BW	104458	—	50	13-1/8	3	1-3/8	5.59	2.54
8812W	104465	2	51	13-1/8	3	1-3/8	5.56	2.52
8813BW	104472	2-1/8	54	14	3-1/4	1-3/8	7.61	3.45
8813W	104496	2-3/16	55	13-7/8	3-1/4	1-3/8	7.33	3.32
8813AW	104489	2-1/4	57	13-7/8	3-1/4	1-3/8	7.41	3.36
8814AW	104502	2-5/16	59	13-3/8	3-5/8	1-3/8	7.35	3.33
8814W	104519	2-3/8	60	13-3/8	3-1/4	1-3/8	8.68	3.94
8815BW	104526	2-1/2	64	14-3/8	3-5/8	1-3/4	8.41	3.81
8815W	104533	2-9/16	65	15-3/8	3-3/4	1-3/4	8.24	3.74
8815AW	104540	2-5/8	67	15-3/8	3-3/4	1-3/4	10.01	4.54
8816W	104557	2-3/4	70	15-3/8	3-3/4	1-3/4	9.40	4.26
8816CW	104564	2-7/8	73	16-1/2	4-1/4	1-3/4	12.81	5.81
8816BW	104571	2-15/16	75	16-1/2	4-1/4	1-3/4	12.12	5.50
8817AW	104588	3	76	16-1/2	4-5/8	1-3/4	11.90	5.40
8817W	104595	3-1/8	80	16-1/2	4-5/8	1-3/4	11.95	5.42
8818AW	104601	3-3/8	85	18-1/2	6	2	28.95	13.13
8818W	104618	3-1/2	89	18-1/2	6	2	28.38	12.87
8819BW	104625	3-3/4	95	18-1/2	6	2	27.86	12.64
8819W	104632	3-7/8	98	18-1/2	6	2	27.52	12.48
8819CW	104649	4-1/8	105	18-1/2	6	2	25.99	11.79
8819AW	104656	4-1/4	108	18-5/8	6	2	25.68	11.65



- Offset handle designed close to head to provide clearance in confined areas.
- Williams' expanded line of offset striking face wrenches, up to 4-1/4", provides the most extensive line on the market.



WARNING

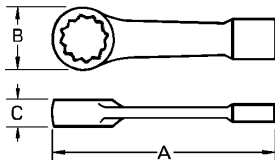
- Wear safety goggles. (Users and bystanders)
- Do not over-torque, no pipes or lever extensions.
- Use only moderate force on crowfoot and flare nut wrenches.



STRIKING FACE WRENCHES

Striking face wrenches are designed to be struck by a hammer on the anvil area in order to loosen frozen fasteners or to set and tighten fasteners. Anvils are proportional to opening sizes. Special heat treating provides maximum durability for long life.

Straight Pattern Striking Face Wrenches, Black Finish, 12-pt., SAE



Product Code	UPC 662459+	Size (inches)	Size (mm)	A	B	C	Lbs.	Kgs
SFH-1808BW	104700	1-3/16	30	7-3/8	1-7/8	1-5/16	2.86	1.30
SFH-1808W	104717	1-1/4	32	7-3/8	1-7/8	1-5/16	2.82	1.28
SFH-1808AW	104724	1-5/16	33	7-3/8	1-7/8	1-5/16	2.80	1.27
SFH-1808CW	104731	1-3/8	—	7-3/8	1-7/8	1-5/16	2.94	1.33
SFH-1809W	104748	1-7/16	—	7-3/8	1-7/8	1-5/16	2.88	1.31
SFH-1809BW	104755	—	36	7-3/8	1-7/8	1-5/16	2.92	1.32
SFH-1809AW	104762	1-1/2	38	7-3/8	1-7/8	1-5/16	2.87	1.30
SFH-1810W	104779	1-5/8	41	7-5/8	2-1/2	1-1/8	3.30	1.50
SFH-1810AW	104786	1-11/16	43	7-7/8	2-1/2	1-1/8	3.19	1.45
SFH-1810BW	104793	1-3/4	—	7-7/8	2-5/8	1-5/16	3.43	1.56
SFH-1811W	104809	1-13/16	46	7-7/8	2-3/4	1-1/4	3.39	1.54
SFH-1811AW	104816	1-7/8	47	7-7/8	2-3/4	1-1/4	3.27	1.48
SFH-1812BW	104823	—	50	11	3	1-3/8	5.33	2.42
SFH-1812W	104830	2	51	11	3	1-3/8	5.26	2.39
SFH-1812AW	104847	2-1/16	—	11	3	1-3/8	5.12	2.32
SFH-1813W	104854	2-3/16	55	11-5/8	3-1/4	1-5/8	6.01	2.73
SFH-1813AW	104861	2-1/4	57	11-5/8	3-1/4	1-5/8	5.89	2.67
SFH-1814W	104878	2-3/8	60	11-5/8	3-1/4	1-5/8	6.43	2.92
SFH-1814BW	104885	2-1/2	—	11-5/8	3-1/2	1-5/8	6.17	2.80
SFH-1815W	104892	2-9/16	65	11-5/8	3-1/2	1-5/8	7.69	3.49
SFH-1815AW	104908	2-5/8	67	12-7/8	3-3/4	1-7/8	7.55	3.42
SFH-1816W	104915	2-3/4	70	14	4	1-7/8	9.92	4.50
SFH-1816BW	104922	2-15/16	75	14-1/4	4-3/8	2-1/4	11.45	5.19
SFH-1817AW	104931	3	76	14-1/4	4-3/8	2-1/4	11.24	5.10
SFH-1817W	104946	3-1/8	80	17-3/8	4-5/8	2-3/16	14.12	6.40
SFH-1818AW	104953	3-3/8	85	17-1/2	4-5/8	2-1/4	13.66	6.20
SFH-1818W	104960	3-1/2	89	17-5/8	5-1/8	2-1/2	17.17	7.79
SFH-1819BWA	104977	3-3/4	95	18	6	2-5/16	23.60	10.70
SFH-1819WA	104984	3-7/8	98	18-1/8	6	2-1/8	21.97	9.97
SFH-1819CWA	104991	4-1/8	105	18-1/4	6	2-3/8	22.97	10.42
SFH-1819AWA	105004	4-1/4	108	18-9/64	6	2-15/16	19.09	8.66
SFH-1820BWA	105011	4-1/2	114	20	6-3/4	2-7/8	30.93	14.03
SFH-1820WA	105028	4-5/8	117	20	6-3/4	2-7/8	30.26	13.73

- Specifically designed for rugged industrial applications.
- Straight handle design resists springing while allowing the fastener to turn easier.



WARNING

- Wear safety goggles. (Users and bystanders)
- Do not over-torque, no pipes or lever extensions.
- Use only moderate force on crowfoot and flare nut wrenches.





SPANNER WRENCHES

Adjustable Pin Spanner Wrenches, Black Finish, SAE

Product Code	UPC 662459+	Span Diameter (inches)	Pin Diameter (inches)	Pin Length (inches)	Overall Length (inches)	Lbs.	Kgs
O-471	104106	3/4 to 2	1/8	1/8	5-3/8	.27	.12
O-471A	104113	3/4 to 2	3/16	5/32	5-3/8	.27	.12
O-472	104120	1-1/4 to 3	3/16	3/16	6-7/8	.49	.22
O-472A	104137	1-1/4 to 3	1/4	7/32	6-7/8	.51	.23
O-474	104144	2 to 4-3/4	1/4	1/4	9-1/2	.93	.42
O-474A	104151	4-1/2 to 6-1/4	3/8	1/4	9-7/8	1.07	.49



- Designed for adjusting collars, lock nut rings and bearings.

Adjustable Hook Spanner Wrenches, Black Finish, SAE

Product Code	UPC 662459+	Span Diameter (inches)	Hook Depth (inches)	Hook Thickness (inches)	Overall Length (inches)	Lbs.	Kgs
471	104168	3/4 to 2	1/8	11/32	5-3/8	.27	.12
472	104175	1-1/4 to 3	5/32	13/32	7-1/4	.49	.22
474	104182	2 to 4-3/4	3/16	15/32	11-1/2	.97	.44
474A	104199	4-1/2 to 6-1/4	1/4	15/32	17-1/2	1.05	.48
474B	104205	6-1/8 to 8-3/4	5/16	15/32	18-1/2	1.23	.56



- Hook is an integral part of the jaw.
- Designed for adjusting collars, lock nut rings, etc. on various types of machine tool equipment.

Adjustable Face Spanner Wrenches, Black Finish, SAE

Product Code	UPC 662459+	Span Diameter (inches)	Pin Diameter (inches)	Pin Length (inches)	Overall Length (inches)	Lbs.	Kgs
482	104212	2	3/16	1/4	6-1/4	.47	.21
483	104229	3	1/4	1/4	8-1/8	.63	.29
484	104236	4	5/16	1/2	10-3/8	1.01	.46



- Adjustable for applications with varying center to center dimensions.
- Designed for servicing adjusting collars, lock nut rings and bearings.



WARNING

- Wear safety goggles. (Users and bystanders)
- Do not over-torque, no pipes or lever extensions.
- Use only moderate force on crowfoot and flare nut wrenches.

Chrome Narrow Head Ratchet



Product Code	UPC 662459+	Length	Lbs.	Kgs
B-52EHA	210012	8	.72	.33
B-52EHLA	210029	10-3/4	.89	.40

Fed. Spec.: ANSI B107.10M

- Forged one-piece ratchet provides strength and safety for industrial applications.
- 32-tooth gear with 11-degree of engagement – allows engagement in tight working areas.
- Nickel/Chrome plating provides increased protection from rust and corrosion.
- Single Pawl ratchet design:
 - 1) Designed for tighter tolerances between pawl and gear which reduces metal fatigue and slippage under load.
 - 2) Does not require as many working parts, reducing possible breakage and parts to repair.
- Easy access reverse lever allows user to change working direction quickly and easily with only one hand.
- Repair Kit is Product Code B-52EHRK.

Black Narrow Head Ratchet



Product Code	UPC 662459+	Length	Lbs.	Kgs
BB-52EHA	210067	8	.76	.34

Fed. Spec.: ANSI B107.10M

- Same features as Chrome Narrow Head Ratchet.
- Black oxide finish.
- Repair Kit is Product Code B-52EHRK.

Chrome Flex Narrow Head Ratchet



Product Code	UPC 662459+	Length	Lbs.	Kgs
B-52EHF	210036	9-11/16	.90	.41

Fed. Spec.: ANSI B107.10M

- Same features as Chrome Narrow Head Ratchet.
- Flex head swings in either direction 90 degrees.
- Repair Kit is Product Code B-52EHRK.

Chrome Round Head Ratchet



Product Code	UPC 662459+	Length	Lbs.	Kgs
B-52A	210005	7-5/8	.62	.25
B-53A	210043	10-1/2	.81	.37

Fed. Spec.: ANSI B107.10M

- Single pawl design with 72-tooth action provides a 5° ratcheting angle.
- Shift lever reverses action instantly.
- Knurled handle provides a non-slip grip.
- Chrome plating provides increased protection from rust and corrosion.
- Repair Kit is Product Code B-52ARK.



WARNING

- Wear safety goggles. (Users and bystanders)
- Do not use chrome or industrial finish hand tools with power drivers.
- Use only impact sockets and accessories with impact wrenches.
- Use only power sockets and accessories with power wrenches.
- Do not use on live electrical circuits.



3/8" DRIVE TOOLS AND ACCESSORIES

Black Round Head Ratchet

Product Code	UPC 662459+	Length	Lbs.	Kgs
BB-52A	210050	7-5/8	.64	.29

Fed. Spec.: ANSI B107.10M

- Same features as Chrome Round Head Ratchet.
- Black oxide finish.
- Repair Kit is Product Code B-52ARK.



PALMSTER® Ratchet

Product Code	UPC 662459+	Open Length	Open Length	Closed Length	Lbs.	Kgs
BSP-52	210081	3-3/16	2-11/32	1-11/16	.34	.15

Fed. Spec.: ANSI B107.10M

- For work in confined areas.
- Pocket sized ratchet with industrial strength durability.
- Maximum portability weighing only 5 ounces.
- Double pawl design with 82-tooth action provides less than a 4-1/2° ratcheting angle.
- Torque capacity for ratchet assembly is +1,800 inch pounds.



Chrome Flex Handle with Knurled Grip

Product Code	UPC 662459+	Length	Lbs.	Kgs
B-40A	210128	8-9/16	.66	.30

Fed. Spec.: ANSI B107.10M

- Repair Kit is Product Code B-40RK.
- Flex member flexes more than 110° in either direction from upright position.
- Knurled handle provides a non-slip grip.



Chrome Extensions

Product Code	UPC 662459+	Length	Lbs.	Kgs
B-101	210135	1-1/2	.24	.11
B-108	210197	3	.20	.12
B-110	210203	6	.34	.15
B-115	210210	11	.62	.28
B-118	210227	18	.93	.42

Fed. Spec.: ANSI B107.10M

- Designed to be used with a ratchet and socket to access hard to reach areas.
- Broad range of lengths provide the user a wide choice.
- Provided with ball and spring holding mechanism.



Flexible Extension

Product Code	UPC 662459+	Length	Lbs.	Kgs
BFE-8	210258	7-7/8	.18	.08

Fed. Spec.: ANSI B107.10M

- Designed for low torque applications which require access to obstructed areas.



Chrome Speeder

Product Code	UPC 662459+	Length	Lbs.	Kgs
B-15	210302	18	1.36	.62

Fed. Spec.: ANSI B107.10M

- Designed for increased speed in turning nuts or fasteners.
- Knurled handle provides a non-slip grip



WARNING

- Wear safety goggles. (Users and bystanders)
- Do not use chrome or industrial finish hand tools with power drivers.



- Use only impact sockets and accessories with impact wrenches.
- Use only power sockets and accessories with power wrenches.
- Do not use on live electrical circuits.



3/8" DRIVE TOOL ACCESSORIES

Chrome Ratchet Spinner



Product Code	UPC 662459+	Length	Lbs.	Kgs
B-70	210319	1-1/4	.14	.06

Fed. Spec.: ANSI B107.10M

- Designed for use between ratchet and socket to spin nuts faster by hand.

Chrome Sliding T Handle



Product Code	UPC 662459+	Length	Lbs.	Kgs
B-20A	210326	7-15/16	.34	.15

Fed. Spec.: ANSI B107.10M

- Designed to provide additional leverage in turning nuts or fasteners.
- 3/8" male adapter slides on bar for flexibility.

Chrome Universal Joint



Product Code	UPC 662459+	Length	Lbs.	Kgs
B-140A	210333	2	.15	.07

Fed. Spec.: ANSI B107.10M

- Designed to drive sockets at offset angles.

Adapters



Product Code	UPC 662459+	Length	Male End	Female End	Lbs.	Kgs
<i>Chrome</i>						
BS-130	210449	1-5/16	1/2	3/8	.10	.05
BS-131	210456	1-5/16	3/8	1/2	.15	.07
<i>Black</i>						
BS-130B	210463	1-5/8	1/2	3/8	.08	.04

Fed. Spec.: ANSI B107.10M

- Black adapters have a black oxide finish.
- Adapters make it possible to use drivers of one drive size with sockets of the next larger drive size.

Repair Kits

Product Code	UPC 662459+	Repair Kit For	Description
B-52ARK	210104	Round Head Series	Drive Body, Pawl, Spring, Reverse Cap, Screw, O-Ring & Lubricant
B-52EHRKA	210111	Narrow Head Series	Screws, Gear, Pawl, Reverse Lever, Plunger Assembly, Washers & Lubricant



WARNING



- Wear safety goggles. (Users and bystanders)
- Do not use chrome or industrial finish hand tools with power drivers.



- Use only impact sockets and accessories with impact wrenches.
- Use only power sockets and accessories with power wrenches.
- Do not use on live electrical circuits.



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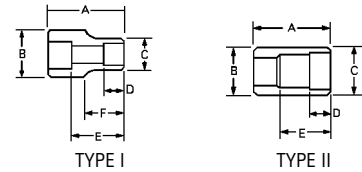
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3/8" DRIVE SOCKETS

3/8" Drive Standard Sockets, Chrome Finish, 4- and 6-pt., SAE

Product Code	UPC 662459+	Socket Size in.	Socket					Bolt Clearance				Lbs.	Kgs
			A	Type	B	C	D	E	Dia.	F			
B-409*	210555	9/32	31/32	II	3/4	3/4	5/16	13/16	3/16	—	.04	.02	
B-608	210609	1/4	29/32	I	11/16	13/32	7/32	7/16	7/32	13/32	.04	.02	
B-610	210616	5/16	29/32	I	11/16	15/32	9/32	7/16	9/32	5/32	.04	.02	
B-611	210623	11/32	29/32	I	11/16	1/2	9/32	7/16	15/16	1/2	.04	.02	
B-612	210630	3/8	29/32	I	11/16	9/16	9/32	11/32	11/32	9/16	.04	.02	
B-614	210647	7/16	15/16	I	11/16	5/8	9/32	11/32	11/32	5/8	.05	.02	
B-616	210654	1/2	15/16	II	23/32	23/32	5/16	11/32	11/32	—	.05	.02	
B-618	210661	9/16	15/16	II	25/32	25/32	3/8	17/32	17/32	—	.07	.03	
B-620	210678	5/8	1-1/8	II	27/32	27/32	1/2	5/8	5/8	—	.08	.04	
B-622	210685	11/16	1-1/8	II	15/16	15/16	1/2	5/8	21/32	—	.12	.05	
B-624	210692	3/4	1-5/16	II	1	1	1/2	23/32	23/32	—	.14	.06	
B-626	210708	13/16	1-1/4	II	1-1/16	1-1/16	1/2	3/4	25/32	—	.16	.07	
B-628	210715	7/8	1-1/4	II	1-1/4	1-5/32	17/32	27/32	27/32	—	.21	.10	
B-630	210722	15/16	1-1/4	II	1-1/4	1-1/4	9/16	29/32	29/32	—	.25	.11	
B-632	210739	1	1-5/16	II	1-5/16	1-5/16	19/32	29/32	31/32	—	.28	.13	



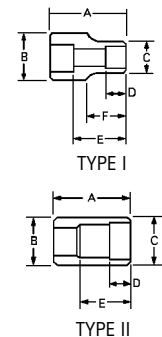
*4 Pt.

Fed. Spec.: ANSI B107.1

- Designed for close, confined areas with hex fasteners.
- 4-point socket designed for use on 1/8" pipe and drain plugs.

3/8" Drive Standard Sockets, Chrome Finish, 8-pt., SAE

Product Code	UPC 662459+	Socket Size in.	Socket					Bolt Clearance				Lbs.	Kgs
			A	Type	B	C	D	E	Dia.	F			
BD-808	210807	1/4	1-7/32	II	11/16	11/16	3/8	3/4	5/32	—	.09	.04	
BD-810	210814	5/16	1-7/32	II	11/16	11/16	5/16	3/4	1/4	—	.09	.04	
BD-812	210821	3/8	1-7/32	II	11/16	11/16	5/16	3/4	5/16	—	.08	.04	
BD-814	210838	7/16	1-7/32	II	27/32	27/32	13/32	25/32	5/16	—	.10	.05	
BD-816	210845	1/2	1-7/32	II	15/16	15/16	3/8	3/4	13/32	—	.14	.06	
BD-818	210852	9/16	1-7/32	II	1-1/32	1-1/32	21/32	3/4	17/32	—	.15	.07	
BD-820	210869	5/8	1-7/32	II	1-1/16	1-1/16	1/2	3/4	19/32	—	.20	.09	



Fed. Spec.: Style A, ANSI B107.1

- 8-point socket designed for both square and double square fasteners.

3/8" Drive Standard Sockets, Chrome Finish, 12-pt., SAE

Product Code	UPC 662459+	Socket Size in.	Socket					Bolt Clearance				Lbs.	Kgs
			A	Type	B	C	D	E	Dia.	F			
B-1208	210906	1/4	29/32	I	11/16	13/32	7/32	15/32	7/32	13/32	.04	.02	
B-1210	210913	5/16	29/32	I	11/16	15/32	1/4	15/32	9/32	13/32	.04	.02	
B-1211	210922	11/32	29/32	I	11/16	1/2	9/32	15/32	5/16	13/32	.04	.02	
B-1212	210937	3/8	29/32	I	11/16	9/16	9/32	15/32	11/32	13/32	.05	.02	
B-1214	210944	7/16	29/32	I	11/16	5/8	9/32	15/32	11/32	13/32	.05	.02	
B-1216	210951	1/2	5/16	II	23/32	23/32	5/16	3/4	11/32	—	.06	.03	
B-1217	210968	17/32	1	II	25/32	25/32	3/8	3/4	1/2	—	.06	.03	
B-1218	210975	9/16	1	II	25/32	25/32	3/8	17/32	17/32	—	.06	.03	
B-1219	210982	19/32	1-1/32	II	25/32	25/32	3/8	9/16	9/16	—	.08	.04	
B-1220	210999	5/8	1-3/32	II	27/32	27/32	1/2	5/8	5/8	—	.08	.04	
B-1222	211002	11/16	1-3/32	II	15/16	15/16	17/32	5/8	21/32	—	.11	.05	
B-1224	211019	3/4	1-3/16	II	1	1	15/32	23/32	23/32	—	.14	.06	
B-1226	211026	13/16	1-7/32	II	1-1/16	1-1/16	1/2	3/4	25/32	—	.16	.07	
B-1228	211033	7/8	1-5/16	II	1-3/32	1-3/32	17/32	27/32	27/32	—	.20	.09	
B-1230	211040	15/16	1-3/8	II	1-1/4	1-1/4	9/16	29/32	29/32	—	.23	.11	
B-1232	211057	1	1-13/32	II	1-5/16	1-5/16	19/32	29/32	31/32	—	.26	.12	



Fed. Spec.: ANSI B107.1



WARNING

- Wear safety goggles. (Users and bystanders)
- Do not use chrome or industrial finish hand tools with power drivers.



- Use only impact sockets and accessories with impact wrenches.
- Use only power sockets and accessories with power wrenches.
- Do not use on live electrical circuits.



3/8" DRIVE SOCKETS

3/8" Drive Deep Sockets, Chrome Finish, 6-pt., SAE

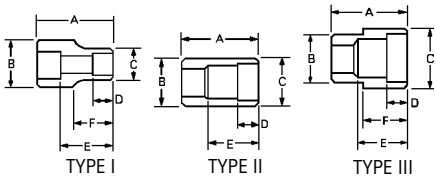


Product Code	UPC 662459+	Socket Size in.	A	Type	B	C	D	E	Bolt Clearance		Lbs.	Kgs
									Di.	F		
BD-608	211101	1/4	2-1/8	I	11/16	13/32	7/32	1-11/16	7/32	1-5/8	.07	.03
BD-610	211118	5/16	2-1/8	I	11/16	15/32	9/32	1-11/16	5/16	1-5/8	.08	.04
BD-611	211125	11/32	2-1/8	I	11/16	1/2	9/32	1-11/16	11/32	1-5/8	.08	.04
BD-612	211132	3/8	2-1/8	I	11/16	9/16	5/16	1-11/16	3/8	1-5/8	.09	.04
BD-614	211149	7/16	2-1/8	I	11/16	5/8	3/8	1-11/16	7/16	1-5/8	.12	.05
BD-616	211156	1/2	2-1/8	II	23/32	23/32	7/16	1-11/16	15/32	—	.13	.06
BD-618	211163	9/16	2-3/8	II	25/32	25/32	7/16	1-5/16	17/32	—	.16	.07
BD-620	211170	5/8	2-3/8	II	27/32	27/32	15/32	1-5/16	19/32	—	.20	.09
BD-622	211187	11/16	2-5/8	II	15/16	15/16	17/32	2-3/16	21/32	—	.27	.12
BD-624	211194	3/4	2-5/8	II	1	1	5/8	2-3/16	23/32	—	.30	.14
BD-626	211200	13/16	2-3/4	II	1-1/16	1-1/16	21/32	2-5/16	25/32	—	.34	.16
BD-628	211217	7/8	2-3/4	II	1-5/32	1-5/32	23/32	2-5/16	27/32	—	.42	.19
BD-630	211224	15/16	2-3/4	II	1-1/4	1-1/4	25/32	2-5/16	27/32	—	.50	.23
BD-632	211231	1	2-3/4	II	1-5/16	1-5/16	25/32	2-5/16	31/32	—	.50	.23

Fed. Spec.: ANSI B107.1

- Designed for maximum clearance on long hex bolts.

3/8" Drive Deep Sockets, Chrome Finish, 12-pt., SAE



Product Code	UPC 662459+	Socket Size in.	A	Type	B	C	D	E	Bolt Clearance		Lbs.	Kgs
									Di.	F		
BD-1208	211309	1/4	2-1/8	I	11/16	13/32	7/32	1-11/16	7/32	1-5/8	.07	.03
BD-1210	211316	5/16	2-1/8	I	11/16	15/32	9/32	1-11/16	5/16	1-5/8	.08	.04
BD-1212	211323	3/8	2-1/8	I	11/16	9/16	5/16	1-11/16	3/8	1-5/8	.10	.05
BD-1214	211330	7/16	2-1/8	I	11/16	5/8	3/8	1-11/16	7/16	1-5/8	.11	.05
BD-1216	211347	1/2	2-1/8	II	23/32	23/32	7/16	1-11/16	15/32	—	.13	.06
BD-1218	211354	9/16	2-3/8	II	25/32	25/32	7/16	1-15/16	17/32	—	.17	.08
BD-1220	211361	5/8	2-3/8	II	27/32	27/32	15/32	1-15/16	19/32	—	.19	.09
BD-1222	211378	11/16	2-5/8	II	15/16	15/16	17/32	2-3/16	21/32	—	.27	.12
BD-1224	211385	3/4	2-5/8	II	1	1	5/8	2-3/16	23/32	—	.30	.14
BD-1226	211392	13/16	2-3/4	II	1-1/16	1-1/16	21/32	2-5/16	25/32	—	.32	.15
BD-1228	211408	7/8	2-3/4	II	1-5/32	1-5/32	23/32	2-5/16	27/32	—	.40	.18
BD-1230	211415	15/16	2-3/4	II	1-1/4	1-1/4	25/32	2-5/16	27/32	—	.48	.22
BD-1232	211422	1	2-3/4	II	1-5/16	1-5/16	25/32	2-5/16	31/32	—	.49	.22

Fed. Spec.: ANSI B107.1

3/8" Drive Spark Plug Sockets, Chrome Finish, 6-pt., SAE



Product Code	UPC 662459+	Skt. Size in.	Male Hex	A	B	C	D	E	F	Lbs.	Kgs
BD-626P	211460	13/16	7/8	2-11/32	7/8	1-1/16	7/32	1	1-15/16	.32	.15

Fed. Spec.: ANSI B107.1

- Rubber insert holds plug and prevents damage to spark plug insulator.
- External hex allows socket to be turned by wrench in confined applications.



WARNING

- Wear safety goggles. (Users and bystanders)
- Do not use chrome or industrial finish hand tools with power drivers.



- Use only impact sockets and accessories with impact wrenches.
- Use only power sockets and accessories with power wrenches.
- Do not use on live electrical circuits.



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1/2" DRIVE TOOLS

Chrome Narrow Head Ratchet

Product Code	UPC 662459+	Length	Lbs.	Kgs
S-52EHA	220011	10-3/8	1.58	.72
S-52EHLA	220028	15	2.01	.91

Fed. Spec.: ANSI B107.10M

- Forged one-piece ratchet provides strength and safety for industrial applications.
- 32-tooth gear with 11-degree of engagement – allows engagement in tight working areas.
- Nickel/Chrome plating provides increased protection from rust and corrosion.
- Single Pawl ratchet design:
 - 1) Designed for tighter tolerances between pawl and gear which reduces metal fatigue and slippage under load.
 - 2) Does not require as many working parts, reducing possible breakage and parts to repair.
- Easy access reverse lever allows user to change working direction quickly and easily with only one hand.
- Repair Kit is Product Code S-52EHRK.



Black Narrow Head Ratchet

Product Code	UPC 662459+	Length	Lbs.	Kgs
SB-52EHA	220073	10-5/16	1.59	.72

Fed. Spec.: ANSI B107.10M

- Same features as Chrome Narrow Head Ratchet.
- Black oxide finish.
- Repair Kit is Product Code S-52EHRK.



Chrome Flex Head Ratchet

Product Code	UPC 662459+	Length	Lbs.	Kgs
S-52EHF	220035	14-1/4	1.68	.76

Fed. Spec.: ANSI B107.10M

- Same features as Chrome Narrow Head Ratchet.
- Flex head swings in either direction 90 degrees.
- Repair Kit is Product Code S-52EHRK.



Chrome Round Head Ratchet

Product Code	UPC 662459+	Length	Lbs.	Kgs
S-52A	220004	11-5/16	1.52	.69
S-53A	220059	15	1.85	.84

Fed. Spec.: ANSI B107.10M

- Single pawl design with 72-tooth action provides a 5° ratcheting angle.
- Shift lever reverses action instantly.
- Knurled handle provides a non-slip grip.
- Chrome plating provides increased protection from rust and corrosion.
- Repair Kit is Product Code S-52ARK.



Chrome Round Head Lineman's Ratchet

Product Code	UPC 662459+	Length	Lbs.	Kgs
S-52LAB	220042	11-5/16	1.59	.72
S-53LAB	220066	15	1.68	.76

Fed. Spec.: ANSI B107.10M

- Same features as Chrome Round Head Ratchet.
- Large shift lever allows users to change working directions while wearing work gloves.
- Repair Kit is Product Code S-52ARK.



WARNING

- Wear safety goggles. (Users and bystanders)
- Do not use chrome or industrial finish hand tools with power drivers.



- Use only impact sockets and accessories with impact wrenches.
- Use only power sockets and accessories with power wrenches.
- Do not use on live electrical circuits.

Black Round Head Ratchet



Product Code	UPC 662459+	Length	Lbs.	Kgs
BS-52A	220097	11-5/16	1.57	.71

Fed. Spec.: ANSI B107.10M

- Same features as Chrome Round Head Ratchet.
- Black oxide finish.
- Repair Kit is Product Code S-52ARK.

Black Pear Head Construction Ratchet



Product Code	UPC 662459+	Length	Lbs.	Kgs
BS-71CBA	220110	15-13/16	1.64	.75

Fed. Spec.: ANSI B107.10M

- Black oxide finish.
- Tapered handle designed for lining up bolt holes.
- Shift lever reverses action instantly.
- Repair Kit is Product Code BS-71ARK.

Flex Handle



Product Code	UPC 662459+	Length	Lbs.	Kgs
<i>Chrome</i>				
S-40AA	220240	10-7/16	1.34	.61
S-41AA	220257	15-1/2	2.07	.94



Product Code	UPC 662459+	Length	Lbs.	Kgs
<i>Black</i>				
SB-40AA	220264	10-13/16	1.65	.75
BS-41AA	220301	15-11/16	2.06	.93

Fed. Spec.: ANSI B107.10M

- Flex member flexes more than 110° in either direction from upright position.
- Knurled handle provides a non-slip grip.
- Black handle has a black oxide finish.
- Repair Kit is Product Code S-41RK.

Chrome Extensions



Product Code	UPC 662459+	Length	Lbs.	Kgs
S-102P	220318	2	.38	.17
S-110P	220325	5	.50	.23
S-115P	220332	10	.93	.42
S-121P	220400	20	1.76	.80

Fed. Spec.: ANSI B107.10M

- Designed to be used with a ratchet and socket to access hard to reach areas.
- Broad range of lengths provide the user a wide choice.
- Provided with ball and spring holding mechanism.

Chrome Speeder



Product Code	UPC 662459+	Length	Lbs.	Kgs
S-10A	220417	13-5/8	1.36	.62
S-15A	220424	18-1/16	1.55	.70

Fed. Spec.: ANSI B107.10M

- Designed for increased speed in turning nuts or fasteners.
- Knurled handle provides a non-slip grip.



WARNING

- Wear safety goggles. (Users and bystanders)
- Do not use chrome or industrial finish hand tools with power drivers.



- Use only impact sockets and accessories with impact wrenches.
- Use only power sockets and accessories with power wrenches.
- Do not use on live electrical circuits.



1/2" DRIVE TOOL ACCESSORIES

Chrome Sliding T Handle

Product Code	UPC 662459+	Length	Lbs.	Kgs
S-20A	220431	12	.40	.18

Fed. Spec.: ANSI B107.10M

- Designed to provide additional leverage in turning nuts or fasteners.
- 1/2" male adapter slides on bar for flexibility.



Chrome Universal Joint

Product Code	UPC 662459+	Length	Lbs.	Kgs
S-140A	220493	12-11/16	.29	.13

Fed. Spec.: ANSI B107.10M

- Designed to drive sockets at offset angles.



Stud Remover

Product Code	UPC 662459+	Length	Lbs.	Kgs
S-60D	220516	2-7/16	1.31	.59

Fed. Spec.: ANSI B107.10M

- Knurled wheel grips studs.
- Designed to allow the driving shank to extend through both sides of housing for bearing surface on each side of wheel.
- Capacity: 1/4" to 3/4".



Chrome Ratchet Spinner

Product Code	UPC 662459+	Length	Lbs.	Kgs
S-70	220523	1-9/16	.32	.15

Fed. Spec.: ANSI B107.10M

- Designed for use between ratchet and socket to spin nuts faster by hand.



Black Extension Adapters

Product Code	UPC 662459+	Length	Male End	Female End	Lbs.	Kgs
BS-05B	210426	5	3/8	1/2	.34	.15
BS-12B	210432	12	3/8	1/2	.72	.33

Fed. Spec.: ANSI B107.10M

- Black oxide finish.
- Adapter and extension in one tool.



Adapters

Product Code	UPC 662459+	Length	Male End	Female End	Lbs.	Kgs
<i>Chrome</i>						
SH-130	220530	1-15/16	3/4	1/2	.36	.16
SH-131	220547	2-5/16	1/2	3/4	.53	.24
<i>Black</i>						
SH-130B	220554	1-15/16	3/4	1/2	.34	.15
SH-131B	220561	2-5/16	1/2	3/4	.54	.24

Fed. Spec.: ANSI B107.10M

- Adapters make it possible to use drivers of one drive size with sockets of the next larger drive size.
- Black adapters have a black oxide finish.



WARNING

- Wear safety goggles. (Users and bystanders)
- Do not use chrome or industrial finish hand tools with power drivers.



- Use only impact sockets and accessories with impact wrenches.
- Use only power sockets and accessories with power wrenches.
- Do not use on live electrical circuits.



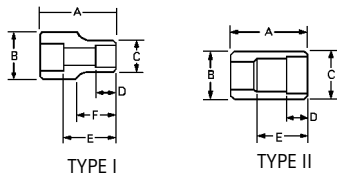


1/2" DRIVE SOCKETS

Repair Kits

Product Code	UPC 662459+	Repair Kit For	Description
S-52ARK	220219	Round Head Series	Drive Body, Pawl, Spring, Reverse Cap, Screw, O-Ring & Lubricant
S-52EHRK	220226	Narrow Head Series	Screws, Gear, Pawl, Reverse Lever, Plunger Assembly, Washers & Lubricant
S-52LARK	220233	S-52LAB, S-53LAB	Drive Body, Pawl, Spring, Reverse Cap, Screw, O-Ring & Lubricant
BS-71ARK	220127	BS-71CB	Screws, Gear, Pawl, Reverse Lever, Plunger Assembly, Washers & Lubricant
S-41RK	220134	S-40AA, S-41AA	Drive Tang, Spring & Hinge Pin

1/2" Drive Standard Sockets, Chrome Finish, 6-pt., SAE



Product Code	UPC 662459+	Socket Size in.	A	Type	B	C	D	E	Bolt Clearance			Lbs.	Kgs
									Dia.	F			
ST-612	220707	3/8	1-1/2	I	7/8	19/32	5/16	29/32	5/16	11/16	.12	.05	
ST-614	220714	7/16	1-1/2	I	7/8	21/32	7/16	29/32	3/8	11/16	.12	.05	
ST-616	220720	1/2	1-1/2	I	7/8	3/4	13/32	29/32	7/16	11/16	.13	.06	
ST-618	220738	9/16	1-1/2	I	7/8	25/32	7/16	29/32	1/2	11/16	.13	.06	
ST-619	220745	19/32	1-17/32	I	7/8	13/16	7/16	15/16	17/32	11/16	.13	.06	
ST-620	220752	5/8	1-17/32	II	7/8	7/8	7/16	15/16	9/16	—	.14	.06	
ST-622	220776	11/16	1-17/32	II	1	1	5/8	15/16	5/8	—	.15	.08	
ST-624	220783	3/4	1-17/32	II	1-1/32	1-1/32	9/16	31/32	11/16	—	.18	.08	
ST-625	220790	25/32	1-17/32	II	1-3/16	1-1/16	1/2	29/32	23/32	—	.24	.11	
ST-626	220806	13/16	1-9/16	II	1-1/8	1-1/8	21/32	1	11/16	—	.25	.11	
ST-628	220813	7/8	1-3/4	II	1-5/32	1-5/32	13/16	1-1/8	3/4	—	.27	.12	
ST-630	220820	15/16	1-3/4	II	1-1/4	1-1/4	13/16	1-3/16	13/16	—	.31	.14	
ST-632	220837	1	1-3/4	II	1-11/16	1-11/16	23/32	1-5/32	7/8	—	.39	.18	
ST-634	220844	1-1/16	1-3/4	II	1-7/16	1-7/16	26/32	1-3/16	15/16	—	.47	.21	
ST-636	220851	1-1/8	1-3/4	II	1-1/2	1-1/2	26/32	1-5/32	1	—	.50	.23	
ST-640	220868	1-1/4	1-31/32	II	1-3/4	1-3/4	7/8	1-5/32	1-1/8	—	.78	.36	

Fed. Spec.: ANSI B107.1

- Designed for close, confined areas with hex fasteners.

1/2" Drive Standard Sockets, Chrome Finish, 8-pt., SAE



Product Code	UPC 662459+	Socket Size in.	A	Type	B	C	D	E	Bolt Clearance			Lbs.	Kgs
									Dia.	F			
ST-810	220905	5/16	1-1/2	I	7/8	5/8	11/32	15/16	9/32	11/16	.12	.05	
ST-812	220912	3/8	1-1/2	I	7/8	23/32	13/32	15/16	11/32	11/16	.13	.06	
ST-814	220929	7/16	1-1/2	I	7/8	13/16	11/32	29/32	13/32	11/16	.15	.07	
ST-816	220936	1/2	1-1/2	II	7/8	7/8	3/8	15/16	15/32	—	.16	.07	
ST-818	220943	9/16	1-1/2	II	1-1/32	1-1/32	13/32	15/16	17/32	—	.23	.10	
ST-820	220950	5/8	1-5/8	II	1-3/32	1-3/32	15/32	1-1/32	5/8	—	.28	.13	
ST-822	220967	11/16	1-5/8	II	1-1/4	1-1/4	9/16	1-3/32	21/32	—	.32	.15	
ST-824	220974	3/4	1-11/16	II	1-9/32	1-9/32	5/8	1-1/8	23/32	—	.39	.18	
ST-826	220981	13/16	1-23/32	II	1-1/2	1-1/2	5/8	1-1/4	3/4	—	.51	.23	
ST-828	220998	7/8	1-27/32	II	1-1/2	1-1/2	9/16	1-1/4	15/16	—	.61	.28	
ST-830	221000	15/16	1-27/32	II	1-9/16	1-9/16	5/8	1-7/32	23/32	—	.70	.32	
ST-832	221018	1	1-31/32	II	1-5/8	1-5/8	11/16	1-7/16	15/16	—	.76	.34	
ST-834	221025	1-1/16	1-31/32	II	1-13/16	1-25/32	7/8	1-7/16	13/16	—	.96	.44	
ST-836	221032	1-1/8	2-1/16	II	1-7/8	1-7/8	1	1-7/16	7/8	—	1.00	.46	
ST-840	221049	1-1/4	2-1/16	II	2-1/16	2-1/16	1-1/8	1-1/2	15/16	—	1.30	.58	

Fed. Spec.: ANSI B107.1

- Designed for both square and double square fasteners.



WARNING

- Wear safety goggles. (Users and bystanders)
- Do not use chrome or industrial finish hand tools with power drivers.



- Use only impact sockets and accessories with impact wrenches.
- Use only power sockets and accessories with power wrenches.
- Do not use on live electrical circuits.



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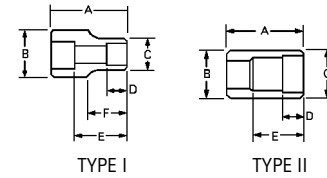
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1/2" DRIVE SOCKETS

1/2" Drive Standard Sockets, Chrome Finish, 12-pt., SAE

Product Code	UPC 662459+	Socket Size in.	Socket							Bolt Clearance			Lbs.	Kgs
			A	Type	B	C	D	E	Di.	F				
ST-1212	221100	3/8	1-1/2	I	7/8	5/8	3/8	15/16	5/16	11/16	.12	.05		
ST-1214	221113	7/16	1-1/2	I	7/8	21/32	3/8	15/16	3/8	11/16	.12	.05		
ST-1216	221124	1/2	1-1/2	I	7/8	23/32	3/8	15/16	7/16	11/16	.12	.05		
ST-1218	221131	9/16	1-1/2	I	7/8	13/16	7/16	15/16	1/2	3/4	.12	.05		
ST-1219	221148	19/32	1-17/32	I	7/8	13/16	7/16	1-1/32	17/32	3/4	.12	.05		
ST-1220	221155	5/8	1-1/2	II	7/8	7/8	1/2	1-1/32	9/16	—	.12	.05		
ST-1221	221162	21/32	1-1/2	II	3/4	3/4	7/16	1-3/32	19/32	—	.12	.05		
ST-1222	221179	11/16	1-17/32	II	1	1	17/32	1-1/16	5/8	—	.18	.08		
ST-1224	221186	3/4	1-17/32	II	1-1/16	1-1/16	19/32	1-1/32	11/16	—	.18	.08		
ST-1225	221193	25/32	1-9/16	II	1-3/32	1-3/32	21/32	1-3/32	11/16	—	.23	.10		
ST-1226	221209	13/16	1-9/16	II	1-5/32	1-5/32	21/32	1-3/32	11/16	—	.30	.14		
ST-1228	221216	7/8	1-3/4	II	1-3/16	1-3/16	23/32	1-1/4	13/16	—	.30	.14		
ST-1230	221223	15/16	1-3/4	II	1-1/4	1-1/4	11/16	1-1/4	13/16	—	.32	.15		
ST-1231	221230	31/32	1-5/8	II	1-5/16	1-5/16	11/16	1-1/8	7/8	—	.34	.15		
ST-1232	221247	1	1-3/4	II	1-11/32	1-11/32	3/4	1-5/32	3/4	—	.37	.17		
ST-1234	221254	1-1/16	1-3/4	II	1-13/32	1-13/32	3/4	1-3/16	15/16	—	.43	.20		
ST-1236	221261	1-1/8	1-3/4	II	1-1/2	1-1/2	3/4	1-3/16	1	—	.48	.22		
ST-1238	221278	1-3/16	1-3/4	II	1-5/8	1-5/8	25/32	1-3/16	1-1/16	—	.62	.28		
ST-1240	221285	1-1/4	1-3/4	II	1-3/4	1-3/4	27/32	1-3/16	1-1/16	—	.70	.32		
ST-1242	221292	1-5/16	1-3/4	II	1-13/16	1-13/16	29/32	1-3/16	1-1/16	—	.75	.34		
ST-1244	221308	1-3/8	2	II	1-7/8	1-7/8	29/32	1-1/4	1-1/4	—	.85	.39		
ST-1246	221315	1-7/16	2	II	2	2	1	1-1/2	1-7/32	—	1.10	.48		
ST-1248	221322	1-1/2	2	II	2-1/16	2-1/16	1-3/32	1-13/32	1-3/8	—	1.10	.50		



Fed. Spec.: ANSI B107.1

1/2" Drive Deep Sockets, Chrome Finish, 6-pt., SAE

Product Code	UPC 662459+	Socket Size in.	Socket							Bolt Clearance			Lbs.	Kgs
			A	Type	B	C	D	E	Di.	F				
SD-616	221353	1/2	3-7/32	I	7/8	3/4	13/32	2-5/8	7/16	1-1/4	.29	.13		
SD-618	221360	9/16	3-7/32	I	7/8	13/16	13/32	2-5/8	1/2	1-1/4	.30	.14		
SD-620	221377	5/8	3-1/4	I	27/32	27/32	1/2	2-3/4	1/2	—	.30	.14		
SD-622	221384	11/16	3-1/4	II	29/32	29/32	19/32	2-23/32	21/32	—	.32	.15		
SD-624	221391	3/4	3-1/4	II	1	1	31/32	2-21/32	5/8	—	.38	.17		
SD-626	221407	13/16	3-1/4	II	1-3/32	1-3/32	31/32	2-21/32	3/4	—	.44	.20		
SD-628	221414	7/8	3-1/4	II	1-5/32	1-5/32	13/32	2-21/32	25/32	—	.53	.24		
SD-630	221421	15/16	3-1/4	II	1-9/32	1-9/32	1-1/8	2-21/32	13/16	—	.65	.30		
SD-632	221438	1	3-1/4	II	1-5/16	1-5/16	1-13/32	2-21/32	29/32	—	.74	.34		
SD-634	221445	1-1/16	3-1/4	II	1-3/8	1-3/8	1-5/32	2-21/32	31/32	—	.84	.38		
SD-636	221452	1-1/8	3-1/4	II	1-1/2	1-1/2	1-3/8	2-21/32	1-1/32	—	.86	.39		

Fed. Spec.: ANSI B107.1

- Designed for maximum clearance on long hex bolts.



1/2" Drive Deep Sockets, Chrome Finish, 12-pt., SAE

Product Code	UPC 662459+	Socket Size in.	Socket							Bolt Clearance			Lbs.	Kgs
			A	Type	B	C	D	E	Di.	F				
SD-1216	221506	1/2	3-1/4	I	27/32	3/4	3/8	2-21/32	15/32	1-1/4	.29	.13		
SD-1218	221513	9/16	3-1/4	I	7/8	13/16	13/32	2-5/8	17/32	1-1/4	.29	.13		
SD-1220	221520	5/8	3-1/4	II	27/32	27/32	15/32	2-11/16	5/8	—	.29	.13		
SD-1222	221537	11/16	3-1/4	II	15/16	5/16	5/8	2-11/16	21/32	—	.31	.14		
SD-1224	221544	3/4	3-1/4	II	1-1/32	1-1/32	27/32	2-5/32	11/16	—	.38	.17		
SD-1225	221551	25/32	3-1/4	II	1-1/16	1-1/16	27/32	2-3/4	3/4	—	.45	.20		
SD-1226	221568	13/16	3-1/4	II	1-3/8	1-3/8	15/16	2-11/16	3/4	—	.45	.20		
SD-1228	221575	7/8	3-1/4	II	1-5/32	1-5/32	15/16	2-25/32	25/32	—	.52	.24		
SD-1230	221582	15/16	3-1/4	II	1-9/32	1-9/32	1	2-3/4	27/32	—	.66	.30		
SD-1232	221599	1	3-1/4	II	1-5/16	1-5/16	1-1/32	2-25/32	29/32	—	.62	.28		
SD-1234	221605	1-1/16	3-1/4	II	1-7/16	1-7/16	1-1/32	2-3/4	31/32	—	.79	.36		
SD-1236	221612	1-1/8	3-1/4	II	1-1/2	1-1/2	1-1/32	2-7/8	1-1/32	—	.81	.37		



WARNING

- Wear safety goggles. (Users and bystanders)
- Do not use chrome or industrial finish hand tools with power drivers.



- Use only impact sockets and accessories with impact wrenches.
- Use only power sockets and accessories with power wrenches.
- Do not use on live electrical circuits.





1/2" DRIVE SOCKETS

1/2" Drive Drag Link Sockets, Chrome Finish, SAE



Product Code	UPC 662459+	Length	Lbs.	Kgs
SB-30	221759	1-1/2	.17	.08
SB-40	221766	1-9/16	.27	.13

Fed. Spec.: ANSI B107.10M

1/2" Drive Hex Bit Sockets, Chrome Finish, SAE



Product Code	UPC 662459+	Bit Size	Socket Length	Socket Dia.	Overall Length	Lbs.	Kgs	Replacement Bits
SA-8A	221803	1/4	1-1/2	7/8	2-5/32	.22	.10	A-8
SA-10A	221810	5/16	1-1/2	7/8	2-5/32	.22	.10	A-10
SA-12A	221827	3/8	1-1/2	7/8	2-5/16	.25	.11	A-12
SA-16A	221834	1/2	1-1/2	1-1/16	2-3/8	.37	.16	A-16
SA-18A	221841	9/16	1-3/4	1-1/16	2-1/2	.40	.18	A-18
SA-20A	221858	5/8	1-3/4	1-1/16	2-13/32	.42	.19	A-20

• *See below.

1/2" Drive Long Hex Bit Sockets, Chrome Finish, SAE



Product Code	UPC 662459+	Bit Size	Socket Length	Socket Dia.	Overall Length	Lbs.	Kgs	Replacement Bits
SA-8LA	221902	1/4	1-1/2	7/8	5	.24	.11	A-8L
SA-10LA	221919	5/16	1-1/2	7/8	5	.28	.13	A-10L
SA-12LA	221926	3/8	1-1/2	7/8	6	.36	.16	A-12L
SA-16LA	221933	1/2	1-1/2	1-1/16	6	.58	.26	A-16L
SA-18LA	221940	9/16	1-3/4	1-1/16	6-11/16	.75	.34	A-18L
SA-20LA	221957	5/8	1-3/4	1-1/16	6-11/16	.82	.37	A-20L

• *See below.

1/2" Drive Slotted Bit Sockets, Chrome Finish, SAE



Product Code	UPC 662459+	Bit Size	Socket Length	Socket Dia.	Overall Length	Lbs.	Kgs	Replacement Bits
SA-10A-3S	222008	23/64 x .061	1-1/2	7/8	2-13/32	.22	.10	ASB-3
SA-12A-4S	222015	27/64 x .075	1-1/2	7/8	2-13/32	.22	.10	ASB-4

• *See below.

1/2" Drive Phillips® Bit Sockets, Chrome Finish, SAE



Product Code	UPC 662459+	Bit Size	Socket Length	Socket Dia.	Overall Length	Lbs.	Kgs	Replacement Bits
SA-10A-3P	222022	#3	1-1/2	29/32	2-1/4	.21	.10	APB-3
SA-12A-4P	222039	#4	1-1/2	29/32	2-1/4	.21	.10	APB-4

*Two piece design allows worn bits to be replaced.

*Sockets are chrome plated.

*Hex bits provided in black industrial finish.



WARNING

- Wear safety goggles. (Users and bystanders)
- Do not use chrome or industrial finish hand tools with power drivers.



- Use only impact sockets and accessories with impact wrenches.
- Use only power sockets and accessories with power wrenches.
- Do not use on live electrical circuits.



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3/4" DRIVE TOOLS AND ACCESSORIES

Chrome Reversible Ratchet

Product Code	UPC 662459+	Length	Lbs.	Kgs
H-51B	230027	20-1/8	6.30	2.86

Fed. Spec.: ANSI B107.10M

- Single pawl provides 24-tooth action.
- Shift lever reverses action instantly.
- Ball and spring provides socket retention.
- Rugged high strength torque capacity.
- Repair Kit is Product Code H-52EHRK.



Black Reversible Ratchet

Product Code	UPC 662459+	Length	Lbs.	Kgs
HB-51B	230041	20-1/8	5.84	2.65

Fed. Spec.: ANSI B107.10M

- Black oxide finish.
- Repair Kit is Product Code H-52EHRK.



Chrome Reversible Ratchet Head w/Handle

Product Code	UPC 662459+	Length	Lbs.	Kgs
H-51A1	230003	24-11/64	6.90	3.13

Fed. Spec.: ANSI B107.10M

- Single pawl provides 24-tooth action.
- Shift lever reverses action instantly.
- Ball and spring provides socket retention.
- Includes H-A1 handle.
- Rugged high strength torque capacity.
- Repair Kit is Product Code H-52EHRK.



Chrome Reversible Ratchet Head

Product Code	UPC 662459+	Length	Lbs.	Kgs
H-51AA	230010	6	3.13	1.42

Fed. Spec.: ANSI B107.10M

- Single pawl provides 24-tooth action.
- Shift lever reverses action instantly.
- Ball and spring provides socket retention.
- For handle, use H-A1 handle.
- Rugged high strength torque capacity.
- Repair Kit is Product Code H-52EHRK.



Chrome Flex Handle with Knurled Grip

Product Code	UPC 662459+	Length	Lbs.	Kgs
H-41AA	230126	22-1/8	4.70	2.14

Fed. Spec.: ANSI B107.10M

- Flex member flexes more than 110° in either direction from upright position.
- Knurled handle provides a non-slip grip.



WARNING

- Wear safety goggles. (Users and bystanders)
- Do not use chrome or industrial finish hand tools with power drivers.



- Use only impact sockets and accessories with impact wrenches.
- Use only power sockets and accessories with power wrenches.
- Do not use on live electrical circuits.





3/4" DRIVE TOOL ACCESSORIES

Chrome Handle with Knurled Grip



Product Code	UPC 662459+	Length	Lbs.	Kgs
H-A1	120287	19-1/4	3.77	1.712

- For use with reversible ratchet head H-51AA.
- Knurled handle provides a non-slip grip.

Extensions



Product Code	UPC 662459+	Length	Lbs.	Kgs
<i>Chrome</i>				
H-104	230157	3	.71	.32
H-110	230164	8	1.75	.79
H-115	230171	16	3.30	1.50
<i>Black</i>				
H-104B	230188	3	.73	.33
H-110B	230195	8	1.70	.77
H-115B	230201	16	3.29	1.49

Fed. Spec.: ANSI B107.10M

- Designed to be used with a ratchet and socket to access hard to reach areas.
- Four-side detent provided in female end and ball and spring in male end.
- Black extensions have a black oxide finish.

Sliding T Handles



Product Code	UPC 662459+	Length	Lbs.	Kgs
<i>Chrome</i>				
H-20A	230218	19-1/4	2.69	1.22
<i>Black</i>				
HB-20A	230256	19-1/4	2.69	1.22

Fed. Spec.: ANSI B107.10M

- Designed to provide additional leverage in turning nuts or fasteners.
- 3/4" male adapter slides on bar for flexibility.
- Adapter provided with ball and spring in male end.
- Chrome plating provides increased protection from rust and corrosion.
- Black sliding T handles have a black oxide finish.

Chrome Universal Joint



Product Code	UPC 662459+	Length	Lbs.	Kgs
H-140A	230263	4-1/16	1.20	.54

Fed. Spec.: ANSI B107.10M

- Designed to drive sockets at offset angles.
- Male end provided with ball and spring.

Chrome Adapters



Product Code	UPC 662459+	Length	Male End	Female End	Lbs.	Kgs
HNX-130	230409	3	1	3/4	.76	.34
HNX-131	230416	3-1/16	3/4	1	1.16	.53

Fed. Spec.: ANSI B107.10M

- Adapters make it possible to use drivers of one drive size with sockets of the next larger drive size.
- HNX-130 provided with four-side detent on 1/2" female end and plunger and spring on 3/4" male end.
- HNX-131 provided with ball and spring on 1/2" male end and drilled hole on 3/4" female end.

Repair Kits

Product Code	UPC 662459+	Repair Kit For	Description
H-52EHRK	230423	H-51B, HB-51B H51A1, H51AA	Screws, Gear, Pawl, Reverse Lever, Plunger Assembly Washers & Lubricant



WARNING

- Wear safety goggles. (Users and bystanders)
- Do not use chrome or industrial finish hand tools with power drivers.



- Use only impact sockets and accessories with impact wrenches.
- Use only power sockets and accessories with power wrenches.
- Do not use on live electrical circuits.



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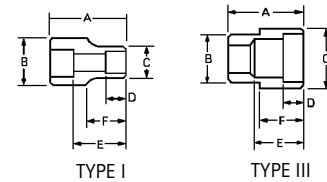
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 Clinton, MD (301) 877-8640



3/4" DRIVE SOCKETS

3/4" Drive Standard Sockets, Chrome Finish, 12-pt., SAE

Product Code	UPC 662459+	Socket Size in.	A	Type	B	C	D	E	Bolt Clearance Dia.	F	Lbs.	Kgs
H-1224	230508	3/4	2	I	1-7/16	1-7/64	17/32	1-1/4	11/16	13/16	.42	.19
H-1226	230515	13/16	2	I	1-7/16	1-7/32	9/16	1-1/4	11/16	13/16	.44	.20
H-1228	230522	7/8	2	I	1-7/16	1-5/16	19/32	1-1/4	11/16	13/16	.48	.22
H-1230	230539	15/16	2	I	1-7/16	1-23/64	21/32	1-1/4	11/16	51/64	.48	.22
H-1231	230546	31/32	2	I	1-7/16	1-13/32	11/16	1-1/4	11/16	51/64	.52	.24
H-1232	230553	1	2-1/16	III	1-7/16	1-15/32	11/16	1-5/16	11/16	49/64	.50	.23
H-1234	230560	1-1/16	2-1/8	III	1-1/2	1-9/16	3/4	1-5/32	1-1/32	55/64	.54	.24
H-1236	230577	1-1/8	2-3/16	III	1-1/2	1-5/8	13/16	1-7/32	1-1/8	29/32	.68	.31
H-1238	230581	1-3/16	2-1/4	III	1-1/2	1-11/16	27/32	1-17/64	1-5/32	31/32	.78	.35
H-1240	230591	1-1/4	2-1/4	III	1-1/2	1-3/4	27/32	1-11/32	1-9/32	15/16	.82	.37
H-1242	230607	1-5/16	2-5/16	III	1-5/8	1-7/8	27/32	1-13/32	1-11/32	1	1.00	.45
H-1244	230614	1-3/8	2-5/16	III	1-5/8	1-15/16	7/8	1-3/8	1-27/64	1	1.08	.49
H-1246	230621	1-7/16	2-3/8	III	1-5/8	2	15/16	1-7/16	1-1/4	1	1.40	.64
H-1248	230638	1-1/2	2-1/2	III	1-5/8	2-1/8	1	1-9/16	1-1/4	1-1/8	1.44	.65
H-1250	230645	1-9/16	2-5/8	III	1-3/4	2-3/16	1-5/32	1-11/16	1-3/8	1-1/4	1.62	.73
H-1252	230652	1-5/8	2-5/8	III	1-3/4	2-1/4	1-5/32	1-11/16	1-3/8	1-1/4	1.57	.72
H-1254	230669	1-11/16	2-3/4	III	1-25/32	2-3/8	1-3/16	1-13/16	1-3/8	1-3/8	1.88	.85
H-1256	230676	1-3/4	2-3/4	III	1-3/4	2-7/16	1-3/16	1-13/16	1-3/8	1-3/8	1.40	.64
H-1258	230683	1-13/16	2-7/8	III	1-3/4	2-1/2	1-1/4	1-61/64	1-5/16	1-7/16	1.32	.60
H-1260	230690	1-7/8	3	III	1-3/4	2-9/16	1-5/16	2-1/16	1-5/16	1-9/16	1.42	.64
H-1264	230720	2	3-1/8	III	1-3/4	2-3/4	1-5/16	2-3/16	1-5/16	1-11/16	1.56	.71
H-1266	230737	2-1/16	3-1/8	III	1-3/4	2-3/4	1-3/8	2-3/16	1-5/16	1-11/16	2.26	1.03
H-1268	230744	2-1/8	3-1/4	III	1-3/4	2-15/16	1-7/16	2-5/16	1-5/16	1-13/16	1.92	.87
H-1270	230751	2-3/16	3-1/4	III	1-3/4	2-15/16	1-1/2	2-5/16	1-5/16	1-13/16	2.41	1.09
H-1272	230768	2-1/4	3-3/8	III	1-3/4	3-1/8	1-1/2	2-7/16	1-1/4	1-7/8	2.48	1.12
H-1274	230775	2-5/16	3-1/2	III	1-3/4	3-1/4	1-5/8	2-9/16	1-1/4	2	2.44	1.11
H-1276	230782	2-3/8	3-5/8	III	1-3/4	3-1/4	1-3/4	2-11/16	1-1/4	2-1/8	2.62	1.19



Fed. Spec.: ANSI B107.1

- Wide range of 12-point openings for the heavy service industry.
- Four-sided detent in drive end provides socket retention.



WARNING

- Wear safety goggles. (Users and bystanders)
- Do not use chrome or industrial finish hand tools with power drivers.
- Use only impact sockets and accessories with impact wrenches.
- Use only power sockets and accessories with power wrenches.
- Do not use on live electrical circuits.





3/4" DRIVE SOCKETS

3/4" Drive Deep Sockets, Chrome Finish, 6-pt., SAE

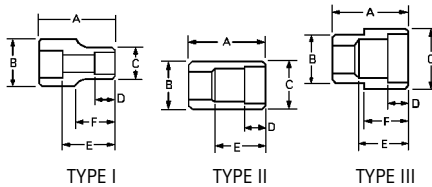


Product Code	UPC 662459+	Socket Size in.	A	Type	B	C	D	E	Bolt Clearance		Lbs.	Kgs
									Dia.	F		
HD-628	230850	7/8	3-1/2	I	1-7/16	1-5/16	3/4	2-1/2	11/16	2-5/16	.82	.37
HD-630	230867	15/16	3-1/2	I	1-7/16	1-3/8	7/8	2-1/2	11/16	2-5/16	.82	.37
HD-632	230874	1	3-1/2	I	1-1/2	1-7/16	1	2-15/32	11/16	2-5/16	.80	.36
HD-634	230881	1-1/16	3-1/2	III	1-1/2	1-9/16	1	2-1/2	3/4	2-7/32	1.12	.51
HD-636	230898	1-1/8	3-1/2	III	1-1/2	1-5/8	1	2-1/2	25/32	2-7/32	1.18	.54
HD-640	230911	1-1/4	3-1/2	III	1-1/2	1-3/4	1	2-1/2	7/8	2-3/16	1.32	.60
HD-642	230928	1-5/16	3-1/2	III	1-5/8	1-7/8	1	2-1/2	15/16	2-3/16	1.44	.65
HD-644	230935	1-3/8	3-1/2	III	1-5/8	1-15/16	1	2-9/16	1-3/8	2-3/16	1.68	.76
HD-646	230942	1-7/16	3-1/2	III	1-5/8	2	1	2-9/16	1-7/16	2-1/8	1.92	.87
HD-648	230959	1-1/2	3-1/2	III	1-5/8	2-1/16	1-1/4	2-9/16	1-1/2	2-1/8	2.04	.93
HD-652	230973	1-5/8	3-1/2	III	1-3/4	2-1/4	1-3/8	2-9/16	1-5/8	2-1/8	2.30	1.04

Fed. Spec.: ANSI B107.1

- Designed for heavy service and maximum clearance on long bolts.
- 6-point openings are essential for use on worn end.
- Four-sided detent in drive end provides socket retention.

3/4" Drive Standard Sockets, Chrome Finish, 12-pt., Metric



Product Code	UPC 662459+	Socket Size (mm)	A	Type	B	C	D	E	Bolt Clearance		Lbs.	Kgs
									Dia.	F		
HM-1219	231000	19	1-3/4	I	1-7/16	1-1/8	1/2	13/16	23/32	3/4	.42	.19
HM-1222	231031	22	1-31/32	I	1-7/16	1-5/16	9/16	1-1/32	13/16	31/32	.50	.23
HM-1224	231055	24	1-31/32	I	1-7/16	1-3/8	5/8	1-1/32	3/4	31/32	.52	.25
HM-1227	231086	27	2	II	1-1/2	1-1/2	11/16	1-1/16	15/16	—	.54	.24
HM-1230	231116	30	2-1/4	II	1-11/16	1-11/16	13/16	1-5/16	1-1/8	—	.77	.35
HM-1232	231130	32	2-1/4	II	1-3/4	1-3/4	7/8	1-1/32	1-3/16	—	.84	.38
HM-1235	231161	35	2-1/4	II	1-15/16	1-15/16	15/16	1-1/4	1-1/4	—	1.08	.49
HM-1236	231178	36	2-1/2	II	2-1/32	2-1/32	15/16	1-9/16	1-1/4	—	1.42	.64
HM-1238	231192	38	2-1/2	II	2-1/8	2-1/8	1-1/16	1-9/16	1-5/16	—	1.50	.68
HM-1241	231222	41	2-1/2	II	2-1/4	2-1/4	1-3/16	1-9/16	1-7/16	—	1.60	.73
HM-1246	231260	46	2-1/2	III	2	2-3/8	1-1/2	1-27/32	—	2-5/23	1.53	.69
HM-1250	231307	50	2-19/32	III	2	2-23/32	1-5/32	1-5/8	—	2-13/16	1.58	.72
HM-1254	231345	54	2-3/4	III	2	2-29/32	1-3/8	1-15/16	—	2-5/8	1.82	.83
HM-1255	231352	55	2-15/16	III	2	2-7/8	1-17/32	2	—	2-7/32	2.06	.93
HM-1260	231406	60	3-5/8	III	2	2-3/16	1-21/32	2-11/16	—	2-29/32	3.90	1.77

Fed. Spec.: ANSI B107.5

- Available in wide size range from 19mm to 60mm designed for heavy-duty service.
- Four-sided detent in drive end provides socket retention.



WARNING



- Wear safety goggles. (Users and bystanders)
- Do not use chrome or industrial finish hand tools with power drivers.
- Use only impact sockets and accessories with impact wrenches.
- Use only power sockets and accessories with power wrenches.
- Do not use on live electrical circuits.



Hardware & Supply Co., Inc.
Supply, Inc. of Virginia
Form Rentals

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1" DRIVE TOOLS AND ACCESSORIES

Chrome Reversible Ratchet

Product Code	UPC 662459+	Length	Lbs.	Kgs
X-51B	240002	20-1/8	5.90	2.68

Fed. Spec.: ANSI B107.10M

- Single pawl provides 24-tooth action.
- Shift lever reverses action instantly.
- Socket retention provided by plunger and spring in male tang.
- I-beam design provides rugged high strength torque capacity.
- Repair Kit is Product Code X-52EHRK.



Flex Handle with Knurled Grip

Product Code	UPC 662459+	Length	Lbs.	Kgs
<i>Chrome</i> X-41C	240071	34-3/16	10.97	4.98
<i>Black</i> X-41CB	240088	34-3/16	10.97	4.98

Fed. Spec.: ANSI B107.10M

- Flex member flexes more than 110° in either direction from upright position.
- Knurled handle provides a non-slip grip.
- Chrome plating provides increased protection from rust and corrosion.



Chrome Sliding T Handle

Product Code	UPC 662459+	Length	Lbs.	Kgs
X-20B	240224	20	4.44	2.01

Fed. Spec.: ANSI B107.10M

- 1" diameter bar handle to be used with 1" male adapter for a T handle.



Chrome Sliding T Adapter

Product Code	UPC 662459+	Length	Lbs.	Kgs
X-20C	240231	1-15/16	1.39	.63

- 1" adapter to be used with 1" diameter bar handle to make into functional T handle.
- Chrome plating provides increased protection from rust and corrosion.



Chrome Extensions

Product Code	UPC 662459+	Length	Lbs.	Kgs
X-110	240101	8	3.52	1.60
X-115	240118	16	5.80	2.63

Fed. Spec.: ANSI B107.10M

- Designed to be used with a ratchet and socket to access hard to reach areas.
- Provided with a drilled hole for positive socket engagement.



Repair Kit

Product Code	UPC 662459+	Repair Kit For	Description
X-52EHRK	240156	X-51B	Screws, Gear, Pawl, Reverse Lever, Plunger Assembly & Lubricant



WARNING

- Wear safety goggles. (Users and bystanders)



1" DRIVE SOCKETS

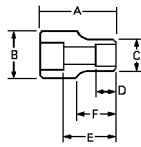
1" Drive Standard Sockets, Chrome Finish, 12-pt., SAE



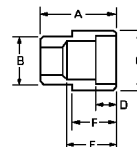
Product Code	UPC 662459+	Socket Size in.	Type	A	B	C	D	E	Bolt Clearance		Lbs.	Kgs
									Dia.	F		
X-1234	240361	1-1/16	I	2-1/4	2	1-5/8	3/4	1-1/16	13/16	1-15/32	1.23	.56
X-1236	240378	1-1/8	I	2-1/4	2	1-3/4	3/4	1-1/16	13/16	7/8	1.28	.58
X-1240	240385	1-1/4	I	2-3/8	2	1-7/8	3/4	1-1/8	13/16	7/8	1.26	.57
X-1242	240392	1-5/16	III	2-1/2	2	2-1/16	13/16	1-9/32	15/16	1-9/16	1.46	.66
X-1244	240408	1-3/8	III	2-1/2	2	2-1/8	7/8	1-11/32	1-25/64	1-9/16	1.40	.64
X-1246	240415	1-7/16	III	2-5/8	2	2-3/16	1	1-15/32	1-31/64	1-11/16	1.54	.70
X-1248	240422	1-1/2	III	2-3/4	2	2-1/4	1	1-19/32	1-9/16	1-13/16	1.64	.74
X-1252	240439	1-5/8	III	2-7/8	2	2-3/8	1-1/8	1-3/4	11/16	1-15/16	2.34	1.06
X-1258	240446	1-13/16	III	3-1/8	2-1/8	2-5/8	1-1/4	1-31/32	1-7/16	2-3/16	2.88	1.31
X-1260	240453	1-7/8	III	3-1/4	2-1/8	2-3/4	1-7/16	1-15/16	1-7/16	2-5/16	2.47	1.12
X-1264	240460	2	III	3-3/8	2-1/8	2-15/16	1-1/2	2-1/4	1-7/16	2-7/16	2.08	.94
X-1268	240477	2-1/8	III	3-1/2	2-1/4	3-1/8	1-1/2	2-11/32	1-7/16	2-9/16	2.36	1.07
X-1270	240484	2-3/16	III	3-5/8	2-1/4	3-1/8	1-17/32	2-1/4	2-1/4	2-11/16	2.52	1.14
X-1272	240491	2-1/4	III	3-3/4	2-1/4	3-1/4	1-5/8	2-5/16	2-21/64	2-7/32	2.72	1.23
X-1276	240507	2-3/8	III	3-7/8	2-1/4	3-3/8	1-5/8	2-3/4	2-23/64	2-1/16	2.78	1.26
X-1280	240514	2-1/2	III	4-1/8	2-1/4	3-1/2	1-3/4	2-11/16	2-1/2	3-1/16	3.32	1.51
X-1282	240521	2-9/16	III	4-1/8	2-1/4	3-9/16	2-13/16	2-3/4	2-9/16	3-3/16	3.44	1.56
X-1284	240538	2-5/8	III	4-1/4	2-1/4	3-5/8	1-7/8	2-3/4	2-39/64	2-25/64	3.30	1.50
X-1288	240545	2-3/4	III	4-1/2	2-1/4	3-3/4	2	3	2-3/4	3-9/16	3.70	1.68
X-1294	240552	2-15/16	III	4-27/32	2-1/4	4	2-1/8	3-9/32	2-15/16	2-31/32	4.20	1.91
X-1296	240569	3	III	4-7/8	2-1/4	4-1/8	2-1/8	3-5/16	3	2-63/64	4.50	2.04
X-12100	240576	3-1/8	III	4-31/32	2-1/4	4-1/4	2-1/8	3-3/8	3-1/8	3-1/16	5.00	2.27

Fed. Spec.: ANSI B107.1

- Drilled hole in drive end provides positive and secure engagement needed for heavier sockets.



TYPE I



TYPE III



WARNING

- Wear safety goggles. (Users and bystanders)





3/8" IMPACT DRIVE TOOL ACCESSORIES

Impact Extensions (Hexagon/Square Shank)

Product Code	UPC 662459+	Male	Length (in.)	Lbs.	Kgs
2-02B	250001	3/8" Square x 1/4" Hex.	2	.04	.02
2-33B	250018	3/8" Square x 7/16" Hex.	2-3/4	.14	.06
2-35B	250025	3/8" Square x 7/16" Hex.	5	.25	.11
2-38B	250032	3/8" Square x 7/16" Hex.	8	.42	.19



- Specially heat treated for long life and durability.
- Spring plunger type retains the extension to the power socket.

Impact Extensions

Product Code	UPC 662459+	Square Male	Square Female	Length	Lbs.	Kgs
2-103A	250049	3/8	3/8	3-1/16	.18	.08
2-106A	250056	3/8	3/8	6	.34	.15



Fed. Spec.: ANSI B107.2

- Supplied with spring plunger retention.

Impact Universal Joint

Product Code	UPC 662459+	Square Male	Square Female	Length	Lbs.	Kgs
2-140B	250063	3/8	3/8	2-1/4	.22	.10

Fed. Spec.: ANSI B107.2

- Unique design supplied with a sleeve over the ball area to provide maximum safety.



Impact Adapter

Product Code	UPC 662459+	Square Male	Square Female	Length	Lbs.	Kgs
2-4A	250070	1/2	3/8	1-1/4	.09	.05

Fed. Spec.: ANSI B107.2

- Supplied with spring plunger.



Hand Impact Driver

Product Code	UPC 662459+	Length	Shank Diameter	Lbs.	Kgs
BHMD-30	210401	5	1-1/4	1.10	.50

- Delivers cam action impact when struck with a hammer for loosening or tightening fasteners.



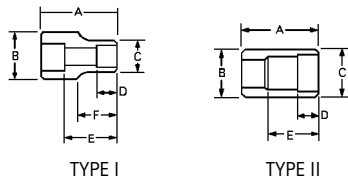
WARNING

- Wear safety goggles. (Users and bystanders)



3/8" DRIVE IMPACT SOCKETS

3/8" Drive Standard Impact Sockets, Black Finish, 6-pt., SAE

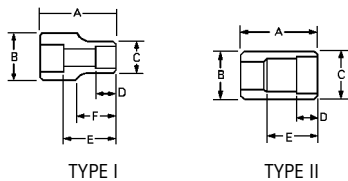


Product Code	UPC 662459+	Size (in.)	Type	A	B	C	D	E	F	Lbs.	Kgs
2-608	250100	1/4	I	1	11/16	7/16	7/32	5/8	7/16	.05	.02
2-610	250117	5/16	I	1	11/16	1/2	7/32	5/8	7/16	.06	.03
2-612	250124	3/8	I	1	11/16	19/32	1/4	5/8	7/16	.06	.03
2-614	250131	7/16	II	1-1/16	11/16	11/16	5/16	3/8	—	.06	.03
2-616	250148	1/2	II	1-1/16	3/4	13/16	5/16	7/16	—	.09	.04
2-618	250155	9/16	II	1-1/16	13/16	27/32	3/8	1/2	—	.12	.05
2-620	250162	5/8	II	1-1/8	7/8	29/32	7/16	9/16	—	.12	.05
2-622	250179	11/16	II	1-1/8	15/16	31/32	15/32	13/16	—	.13	.06
2-624	250186	3/4	II	1-3/16	1-1/16	1-1/32	17/32	29/32	—	.17	.08
2-626	250193	13/16	II	1-1/4	1-1/8	1-1/8	1/2	11/16	—	.20	.09
2-628	250209	7/8	II	1-1/4	1-3/16	1-3/16	1/2	3/4	—	.30	.14
2-630	250216	15/16	II	1-5/16	1-1/4	1-1/4	17/32	13/16	—	.30	.14
2-632	250223	1	II	1-5/16	1-5/16	1-5/16	9/16	13/16	—	.30	.14

Fed. Spec.: ANSI B107.2

- Lobular opening design allows the socket to contact the fastener on the flats of the opening rather than the corners.

3/8" Drive Deep Impact Sockets, Black Finish, 6-pt., SAE



Product Code	UPC 662459+	Size (in.)	Type	A	B	C	D	E	F	Bolt Clearance Dia.	Lbs.	Kgs
12-610	250308	5/16	I	2-1/8	11/16	1/2	11/32	1-1/2	1/4	1	.10	.05
12-612	250315	3/8	I	2-1/8	11/16	1/2	11/32	1-1/2	1/4	1	.11	.05
12-614	250322	7/8	II	2-1/8	11/16	11/16	7/16	1-1/2	13/32	—	.13	.06
12-616	250339	1/2	II	2-1/8	3/4	25/32	15/32	1-1/2	15/32	—	.17	.08
12-618	250346	9/16	II	2-3/8	13/16	7/8	1/2	1-1/2	17/32	—	.20	.09
12-620	250353	5/8	II	2-3/8	7/8	15/16	9/16	1-1/2	19/32	—	.25	.11
12-622	250360	11/16	II	2-5/8	15/16	1	5/8	1-1/2	21/32	—	.30	.14
12-624	250377	3/4	II	2-5/8	1-1/16	1-1/16	21/32	1-1/2	23/32	—	.37	.17
12-626	250384	13/16	II	2-3/4	1-1/8	1-3/16	11/16	1-9/16	25/32	—	.37	.17
12-628	250391	7/8	II	2-3/4	1-3/16	1-3/16	11/16	1-9/16	3/4	—	.35	.16
12-630	250407	15/16	II	2-3/4	1-1/4	1-9/32	23/32	1-9/16	7/8	—	.55	.25
12-632	250414	1	II	2-3/4	1-1/8	1-11/32	23/32	1-9/16	15/16	—	.45	.20

Fed. Spec.: ANSI B107.1

- Lobular opening reduces the possibility of fastener rounding.
- Deep length sockets most commonly used to access recessed fasteners.



WARNING

- Wear safety goggles. (Users and bystanders)



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1/2" IMPACT DRIVE TOOL ACCESSORIES

Impact Extensions

Product Code	UPC 662459+	Length	Square Male	Square Female	Lbs.	Kgs
4-102	252005	3-1/2	1/2	1/2	.33	.15
4-105A	252012	5	1/2	1/2	.60	.27
4-110A	252029	10	1/2	1/2	.97	.44

Fed. Spec.: ANSI B107.2

- Square drive supplied with spring plunger.



Impact Extensions (Hexagon/Square Shank)

Product Code	UPC 662459+	Square Male	Hex Male	Length	Lbs.	Kgs
4-33B	252036	1/2	7/16	2-3/4	.37	.17
4-35B	252043	1/2	7/16	5	.37	.17
4-53B	252050	1/2	5/8	2-3/4	.27	.12

- Square drive supplied with spring plunger.



Impact Universal Joint

Product Code	UPC 662459+	Square Male	Square Female	Length	Lbs.	Kgs
4-140B	252067	1/2	1/2	2-1/2	.43	.20

Fed. Spec.: ANSI B107.2

- Unique design supplied with a sleeve over the ball area to provide maximum safety.



Impact Adapter

Product Code	UPC 662459+	Square Male	Square Female	Length	Lbs.	Kgs
4-2A	252074	3/8	1/2	1-3/4	.15	.07
4-6	252081	3/4	1/2	2	.30	.14

Fed. Spec.: ANSI B107.2

- Supplied with spring plunger retention.



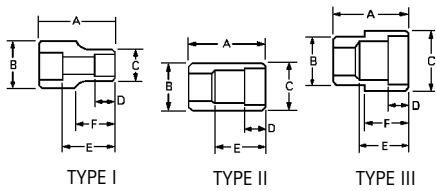
WARNING

- Wear safety goggles. (Users and bystanders)



1/2" DRIVE IMPACT SOCKETS

1/2" Drive Standard Impact Sockets, Black Finish, 6-pt., SAE

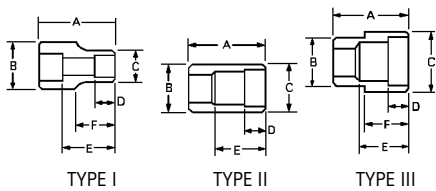


Product Code	UPC 662459+	Size (in.)	Type	A	B	C	D	E	Bolt Clearance		Lbs.	Kgs
									Dia.	F		
4-612	252203	3/8	I	1-1/2	29/32	19/32	1/4	7/8	11/32	11/16	.14	.06
4-614	252210	7/16	I	1-1/2	29/32	23/32	5/16	7/8	13/32	11/16	.14	.06
4-616	252227	1/2	I	1-1/2	29/32	13/16	13/32	7/8	15/32	11/16	.15	.07
4-618	252234	9/16	I	1-1/2	29/32	7/8	13/32	7/8	15/32	11/16	.16	.07
4-620	252241	5/8	II	1-1/2	31/32	31/32	15/32	7/8	5/8	—	.17	.08
4-622	252258	11/16	II	1-1/2	1-1/16	1-1/16	13/16	7/8	5/8	—	.22	.10
4-624	252265	3/4	II	1-1/2	1-1/8	1-1/8	13/16	13/16	11/16	—	.28	.13
4-626	252272	13/16	II	1-1/2	1-1/4	1-1/4	13/16	13/16	25/32	—	.33	.15
4-628	252289	7/8	II	1-1/2	1-5/16	1-5/16	13/16	13/16	7/8	—	.35	.16
4-630	252296	15/16	II	1-3/4	1-3/8	1-3/8	1-1/32	1-1/32	15/16	—	.43	.20
4-632	252302	1	II	1-3/4	1-7/16	1-7/16	1-1/32	1-1/32	1	—	.46	.21
4-634	252319	1-1/16	II	2	1-9/16	1-9/16	1-1/4	1-9/32	1-1/32	—	.64	.29
4-636	252326	1-1/8	II	2	1-5/8	1-5/8	1-1/4	1-9/32	1-7/64	—	.84	.38
4-638	252333	1-3/16	II	2	1-11/16	1-11/16	1-1/4	1-17/64	1-1/8	—	.73	.33
4-640	252340	1-1/4	II	2	1-3/4	1-3/4	13/64	1-1/4	1-3/16	—	.80	.36
4-642	252357	1-5/16	III	2	1-1/2	1-7/8	7/8	1-3/8	1-19/32	1-1/2	.78	.35
4-644	252364	1-3/8	III	2	1-1/2	1-15/16	7/8	1-3/8	1-23/64	1-1/2	.82	.37
4-646	252371	1-7/16	III	2	1-1/2	2	29/32	1-3/8	1-27/64	1-1/2	.91	.41
4-648	252388	1-1/2	III	2	1-9/16	2-1/8	29/32	1-3/8	1-31/64	1-1/2	1.13	.51

Fed. Spec.: ANSI B107.2

- Lobular opening design provides for longer socket life by allowing the fastener to contact the flats rather than the corner of the socket.

1/2" Drive Deep Impact Sockets, Black Finish, 6-pt., SAE



Product Code	UPC 662459+	Size (in.)	Type	A	B	C	D	E	Bolt Clearance		Lbs.	Kgs
									Dia.	F		
14-612	252500	3/8	I	3-1/4	29/32	19/32	5/16	2-5/8	11/32	2-29/64	.21	.10
14-614	252517	7/16	I	3-1/4	29/32	23/32	11/32	2-5/8	13/32	2-29/64	.27	.12
14-616	252524	1/2	I	3-1/4	29/32	13/16	13/32	2-5/8	15/32	2-29/64	.32	.15
14-618	252531	9/16	I	3-1/4	29/32	13/16	13/32	2-5/8	15/32	2-29/64	.35	.16
14-620	252548	5/8	II	3-1/4	31/32	31/32	15/32	2-5/8	5/8	—	.41	.19
14-622	252555	11/16	II	3-1/4	1-1/16	1-1/16	1/2	2	5/8	—	.49	.22
14-624	252562	3/4	II	3-1/4	1-1/4	1-1/4	9/16	2	11/16	—	.56	.25
14-626	252579	13/16	II	3-1/4	1-1/4	1-1/4	5/8	2	25/32	—	.71	.32
14-628	252586	7/8	II	3-1/2	1-5/16	1-5/16	9/16	2-1/4	7/8	—	.83	.38
14-630	252593	15/16	II	3-1/2	1-3/8	1-3/8	3/4	2-1/4	15/16	—	.89	.40
14-632	252609	1	II	3-1/2	1-7/16	1-7/16	3/4	2-1/4	1	—	.95	.43
14-634	252616	1-1/16	II	3-1/2	1-9/16	1-9/16	3/4	2-1/4	1-1/32	—	1.04	.47
14-636	252623	1-1/8	II	3-1/2	1-5/8	1-5/8	13/16	2-1/4	1-7/64	—	1.24	.56
14-638	252630	1-3/16	II	3-1/2	1-11/16	1-11/16	13/16	2-1/4	1-3/16	—	1.30	.59
14-640	252647	1-1/4	II	3-1/2	1-3/4	1-3/4	1	2-5/8	1-11/64	—	1.31	.59
14-642	252654	1-5/16	III	3-1/2	1-1/2	1-7/8	15/16	2-7/8	1-19/32	2-3/16	1.30	.59
14-644	252661	1-3/8	III	3-1/2	1-1/2	2	29/32	2-7/8	1-23/64	2-3/16	1.58	.72
14-646	252678	1-7/16	III	3-1/2	1-1/2	2	29/32	2-7/8	1-27/64	2-3/16	1.45	.66
14-648	252685	1-1/2	III	3-1/2	1-9/16	2-1/8	29/32	2-7/8	1-31/64	2-3/16	1.70	.77

Fed. Spec.: ANSI B107.2

- Lobular opening reduces the possibility of fastener rounding.
- Deep length sockets most commonly used to access recessed fasteners or used on nuts where bolts protrude.



WARNING

- Wear safety goggles. (Users and bystanders)



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3/4" IMPACT SOCKET SETS AND DRIVE TOOL ACCESSORIES

8-pc Standard Socket Set, 6-pt., Metric

#MS-6-8H / UPC#662459324702

Product Code	Description
6M-619A	Standard Impact Socket, 6-pt. 19mm
6M-622A	Standard Impact Socket, 6-pt. 22mm
6M-624A	Standard Impact Socket, 6-pt. 24mm
6M-627A	Standard Impact Socket, 6-pt. 27mm
6M-630A	Standard Impact Socket, 6-pt. 30mm
6M-632A	Standard Impact Socket, 6-pt. 32mm
6M-641A	Standard Impact Socket, 6-pt. 41mm

7.74 Lbs. / 3.47kgs



Impact Extensions

Product Code	UPC 662459+	Square Male	Square Female	Length	Lbs.	Kgs
6-107	255006	3/4	3/4	7	1.51	.68
6-110	255013	3/4	3/4	9-3/4	1.95	.88
6-113	255020	3/4	3/4	12-3/4	2.35	1.07

Fed. Spec.: ANSI B107.2

- Supplied with a thru pin hole for use with retainer pin and O-ring or Williams RET RING®.



Impact Universal Joint

Product Code	UPC 662459+	Square Male	Square Female	Length	Lbs.	Kgs
6-140B	255037	3/4	3/4	3-1/2	1/29	.59

Fed. Spec.: ANSI B107.2



Impact Adapters

Product Code	UPC 662459+	Square Male	Square Female	Length	Lbs.	Kgs
6-4A	255044	1/2	3/4	2-1/2	.74	.34
6-7	255051	1	3/4	2-3/4	1.66	.75

Fed. Spec.: ANSI B107.2

- The 6-4A impact adapter is supplied with a spring plunger in the male drive.
- The 6-7 impact adapter is supplied with a thru hole for use with retainer pin and O-ring or a Williams RET RING®.



Impact O-Ring

Product Code	UPC 662459+	Diameter	Lbs.	Kgs	For Use On
6-1A	255068	1-1/4	.02	.01	All 3/4" Impact Sockets, Universal Joint, Adapters and Extensions



WARNING

- Wear safety goggles. (Users and bystanders)



1" IMPACT DRIVE TOOL ACCESSORIES

Impact Extensions

Product Code	UPC 662459+	Square Male	Square Female	Length	Lbs.	Kgs
7-107	257000	1	1	7-1/4	3.63	1.65
7-113	257017	1	1	13	5.54	2.51

Fed. Spec.: ANSI B107.2

- Supplied with a thru hole on the drive end.
- Must be used with a retainer pin and O-ring or a Williams RET RING®.



Impact Universal Joint

Product Code	UPC 662459+	Square Male	Square Female	Length	Lbs.	Kgs
7-140B	257024	1	1	4-1/2	3.08	1.40

Fed. Spec.: ANSI B107.2

- Provides a range of 55°.
- Should always be used with a retainer pin and O-ring or a Williams RET RING®.



Impact Adapters

Product Code	UPC 662459+	Square Male	Square Female	Length	Lbs.	Kgs
7-6	257031	3/4	1	3	1.48	.67
7-8	257048	1-1/2	1	3-11/32	2.10	.95

Fed. Spec.: ANSI B107.2

- Williams 1" drive adapters are supplied with a thru hole for use with a retainer pin and O-ring or a Williams RET RING®.



Impact O-Rings

Product Code	UPC 662459+	Diameter	Lbs.	Kgs	For Use On
7-1B	257055	2	.01	.005	7-624 thru 7-6116, 17-634 thru 7-676, 1" Universal Adapter, 1" Extension
7-1C	257062	3-1/4	.02	.01	7-6118 thru 7-6184, 17-678 thru 17-6184

- Made of material compounded for resistance to oils.



Impact Retainer Pins

Product Code	UPC 662459+	Diameter	Length	Lbs.	Kgs	For Use On
7-2D	257079	3/16	1-3/4	.02	.01	7-624 thru 7-6116, 17-634 thru 7-676, 1" Universal Adapter, 1" Extension
7-2F	257086	3/16	2-7/8	.02	.01	7-6118 thru 7-6184, 17-678 thru 17-6184



RET RING® One-Piece Impact Socket Retaining Rings

Product Code	UPC 662459+	Inside Diameter	For Use On Sq. Dr.	Lbs.	Kgs	Fits Williams OD Socket Sizes
7-1X	257093	1-3/4	1	.02	.01	—
7-2X	257109	1-15/16	1	.02	.01	2-1/8 to 2-1/4
7-3X	257116	2-1/8	1	.03	.01	2-3/8
7-4X	257123	2-1/2	1	.03	.01	—
7-5X	257130	2-5/8	1	.03	.01	—

- Designed for quick application and positive retention of impact sockets to square or spline drives. Made from oil resistant material.

RET RING® is a trademark of Continental Air Tool.



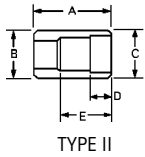
WARNING

- Wear safety goggles. (Users and bystanders)



1" DRIVE IMPACT SOCKETS

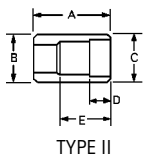
1" Drive Deep Budd® Wheel Socket, Black Finish, 6-pt., SAE



Product Code	UPC 662459+	Length	Type	A	B	C	D	Lbs.	Kgs
17-648BW	257147	3-29/32	II	2-1/4	1-9/32	2-15/16	1-7/16	2.84	1.29

- A double opening socket in which the 13/16" square opening threads shaft onto wheel and then the 1-1/2" hex opening engages and tightens the nut.

1" Drive Standard Impact Sockets, Black Finish, 6-pt., Metric



Product Code	UPC 662459+	Size (mm)	Type	A	B	C	D	E	Lbs.	Kgs
7M-627	258595	27	II	2-1/4	2-1/8	2-11/16	11/16	1	1.35	.61
7M-630	258600	30	II	2-1/4	2-1/8	2-11/16	11/16	1-1/16	1.50	.68
7M-632	258618	32	II	2-3/8	2-1/8	2-11/16	3/4	1-3/16	1.70	.77
7M-635	258625	35	II	2-1/2	2-1/8	2-1/8	7/8	1-3/16	1.50	.68
7M-638	258632	38	II	2-5/8	2-3/8	2-3/8	15/16	1-7/16	1.90	.86
7M-641	258649	41	II	2-3/4	2-3/8	2-3/8	1-1/16	1-5/8	1.85	.84
7M-646	258656	46	II	2-15/16	2-3/4	2-3/4	1-3/16	1-3/4	2.65	1.20
7M-650	258663	50	II	3	2-3/4	2-3/4	1-1/4	1-7/8	2.60	1.18
7M-660	258670	60	II	3-1/2	3-1/2	3-1/2	1-1/2	2-1/8	4.70	2.13
7M-665	258687	65	II	3-5/8	3-5/8	3-5/8	1-5/8	2-1/8	4.75	2.15
7M-670	258694	70	II	3-7/8	3-3/4	3-3/4	1-13/16	2-5/8	5.00	2.27
7M-675	258700	75	II	4-3/16	4-1/8	4-1/8	2-1/16	2-11/16	6.50	2.95



WARNING

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1-1/2" IMPACT DRIVE TOOL ACCESSORIES

1-1/2" Drive Impact Extensions

Product Code	UPC 662459+	Diameter	Length	Lbs.	Kgs
8-108	902597	1-1/2	8	9.10	4.13
8-115	902603	1-1/2	15	14.06	6.38

- Supplied with a thru pin hole for use with retainer pin and O-ring or Williams RET RING®.



1-1/2" Impact Universal Joint

Product Code	UPC 662459+	Diameter	Length	Lbs.	Kgs
8-140B	902610	3-5/8	6-1/16	9.35	4.24

- Supplied with a thru pin hole for use with retainer pin and O-ring or Williams RET RING®.



1-1/2" Impact Adapter

Product Code	UPC 662459+	Diameter	Length	Internal Sq. Dr. (in.)	External Sq. Dr. (in)	Lbs.	Kgs
8-8	902627	5	6-3/8	2-1/2	1-1/2	16.85	7.64

- Supplied with a thru pin hole for use with retainer pin and O-ring or Williams RET RING®.



1-1/2" Impact Sliding T Handle

Product Code	UPC 662459+	Diameter	Length	Lbs.	Kgs
8-20	902634	2-1/2	36	15.00	6.80

- Designed to provide additional leverage in turning nuts or fasteners.
- 1-1/2" Drive male adapter slides on bar for flexibility.
- Adapter provided with plunger and spring in male end.



WARNING

- Wear safety goggles. (Users and bystanders)





1-1/2" IMPACT DRIVE TOOL ACCESSORIES

Impact Adapter



Product Code	UPC 662459+	Square Male	Square Female	Length	Lbs.	Kgs
8-7	258755	1	1-1/2	4-1/4	1.55	.70

- Male drive end utilizes a thru hole which should be used with a retainer pin and O-ring or a Williams RET RING®.

Impact O-Ring



Product Code	UPC 662459+	Diameter	Lbs.	Kgs	For Use On
7-1C	257062	3-1/4	.02	.01	Fits all sizes

- Must be used with 1-1/2" drive impact sockets and drive tools.
- Made of material compounded for resistance to oils.

Impact Retainer Pin



Product Code	UPC 662459+	Diameter	Length	Lbs.	Kgs	For Use On
8-2E	258776	1/4	2-7/8	.04	.02	Fits all sizes

RET RING® One-Piece Impact Socket Retaining Rings



Product Code	UPC 662459+	Inside Diameter	For Use On Sq. Dr.	Lbs.	Kgs	Fits Williams OD Socket Sizes
8-1X	258789	2-7/8	1-1/2	.04	.02	3-1/4
8-2X	258793	3-3/8	1-1/2	.03	.01	—
8-3X	258809	3-7/8	1-1/2	.04	.02	—
8-4X	258816	4-3/8	1-1/2	.05	.02	—

- Designed for quick application and positive retention of impact sockets to square or spline drives.
 - Made from oil resistant material.
- RET RING® is a trademark of Continental Air Tool.



WARNING

- Wear safety goggles. (Users and bystanders)

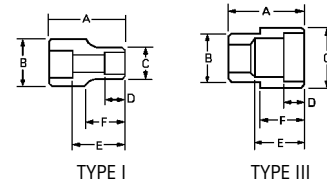




1-1/2" DRIVE IMPACT SOCKETS

1-1/2" Drive Standard Impact Sockets, Black Finish, 6-pt., SAE

Product Code	UPC 662459+	Size (in.)	Type	Bolt Clear.								Lbs.	Kgs
				A	B	C	D	E	F				
8-644*	258908	1-3/8	I	3	3-1/4	2-7/8	7/8	1-3/8	1-11/32	1-3/16	4.65	2.11	
8-646*	258915	1-7/16	I	3-1/32	3-1/4	2-7/8	57/64	1-25/64	1-7/16	1-7/32	4.24	1.92	
8-648*	258922	1-1/2	I	3-3/32	3-1/4	2-7/8	29/32	1-7/16	1-31/64	1-17/64	4.33	1.96	
8-652*	258939	1-5/8	I	3-3/16	3-1/4	2-29/32	1-1/32	1-9/16	1-5/8	1-21/64	4.44	2.01	
8-654*	258946	1-11/16	I	3-1/4	3-1/4	2-31/32	1-1/16	1-9/16	1-11/16	1-39/64	4.53	2.05	
8-656*	258953	1-3/4	I	3-9/32	3-1/4	3-1/32	1-1/32	1-21/32	1-21/32	1-9/16	4.75	2.15	
8-658*	258960	1-13/16	I	3-21/64	3-1/4	3-3/32	1-5/32	1-11/64	1-13/16	1-5/8	4.78	2.17	
8-660*	258977	1-7/8	I	3-3/8	3-1/4	3-5/32	1-7/32	1-3/4	1-7/8	1-23/32	5.01	2.27	
8-664*	258984	2	III	3-7/16	3-1/4	3-1/2	1-9/32	1-13/16	2	1-51/64	5.68	2.58	
8-666*	258991	2-1/16	III	3-1/2	3-1/4	3-1/2	1-13/32	1-55/64	2-1/16	1-55/64	5.62	2.55	
8-668*	259004	2-1/8	III	3-9/16	3-1/4	3-1/2	1-27/64	1-59/64	2-1/8	1-59/64	5.76	2.61	
8-670*	259011	2-3/16	III	3-21/32	3-1/4	3-1/2	1-7/16	2	2-3/16	2-1/64	5.71	2.59	
8-672*	259028	2-1/4	III	3-3/4	3-1/4	3-9/16	1-17/32	2-1/8	2-1/4	2-1/8	5.99	2.72	
8-676*	259035	2-3/8	III	3-7/8	3-1/4	3-25/32	1-9/16	2-1/4	2-3/8	2-17/64	5.45	2.47	
8-678*	259042	2-7/16	III	3-15/16	3-1/4	3-25/32	1-9/16	2-19/64	2-7/16	2-5/16	6.59	2.99	
8-680*	259059	2-1/2	III	4	3-1/4	3-7/8	1-19/32	2-3/8	2-31/64	2-1/64	7.15	3.24	
8-682*	259066	2-9/16	III	4-1/32	3-1/4	3-29/32	1-5/8	2-13/32	2-9/16	2-3/64	7.10	3.22	
8-684*	259073	2-5/8	III	4-3/32	3-1/4	4	1-11/16	2-15/32	2-5/8	2-7/64	7.30	3.31	
8-688*	259080	2-3/4	III	4-7/32	3-1/4	4-5/32	1-13/16	2-7/16	2-3/4	2-15/64	7.76	3.52	
8-692*	259097	2-7/8	III	4-5/16	3-1/4	4-5/16	1-7/8	2-11/16	2-5/8	2-9/32	8.65	3.92	
8-694*	259103	2-15/16	III	4-3/8	3-1/4	4-3/8	1-29/32	2-3/4	2-5/8	2-23/64	8.96	4.06	
8-696*	259110	3	III	4-7/16	3-1/4	4-7/16	1-5/16	2-27/32	2-5/8	2-13/32	9.30	4.22	
8-698*	259127	3-1/16	III	4-1/2	3-1/4	4-9/16	1-31/32	2-7/8	2-5/8	2-15/32	9.75	4.42	
8-6100*	259134	3-1/8	III	4-9/16	3-1/4	4-5/8	2	3	2-5/8	2-1/2	10.29	4.67	
8-6104*	259141	3-1/4	III	4-21/32	3-1/4	4-25/32	2-1/8	3	2-5/8	2-19/32	11.00	4.99	
8-6108*	259158	3-3/8	III	4-3/4	3-1/4	4-15/16	2-7/32	3-1/8	2-5/8	2-43/64	11.78	5.34	
8-6110*	259165	3-7/16	III	4-27/32	3-1/4	5	2-9/32	3-7/32	2-5/8	2-3/4	12.20	5.53	
8-6112*	259172	3-1/2	III	4-29/32	3-1/4	5-1/16	2-5/16	3-1/4	2-5/8	2-13/16	14.20	6.44	
8-6116*	259189	3-5/8	III	5-1/8	3-1/4	5-1/4	2-13/32	3-7/16	2-5/8	3	13.90	6.30	
8-6120*	259196	3-3/8	III	5-1/8	3-1/4	5-3/8	2-15/32	3-1/2	2-5/8	3-1/32	13.60	6.17	
8-6122*	259202	3-13/16	III	5-3/16	3-1/4	5-3/8	2-17/32	3-7/8	2-5/8	3-3/32	13.20	5.99	
8-6124*	259219	3-7/8	III	5-1/4	3-1/4	5-17/32	2-9/16	3-5/8	2-5/8	3-5/32	14.33	6.50	
8-6128*	259226	4	III	5-13/32	3-1/4	5-21/32	2-5/8	3-25/32	2-5/8	3-9/32	17.59	7.98	
8-6132*	259233	4-1/8	III	5-9/16	3-1/4	5-13/16	2-3/4	3-59/64	2-5/8	3-7/16	17.09	7.75	
8-6136*	259240	4-1/4	III	5-11/16	3-1/4	5-31/32	2-13/16	4-1/16	2-5/8	3-9/16	18.03	8.18	
8-6138*	259257	4-5/16	III	5-25/32	3-1/4	6-1/32	2-7/8	4-5/32	2-5/8	3-21/32	17.80	8.07	
8-6140*	259264	4-3/8	III	5-27/32	3-1/4	6-3/32	2-29/32	4-7/32	2-5/8	3-21/32	19.36	8.78	
8-6144*	259271	4-1/2	III	6	3-1/4	6-1/4	3-1/32	4-3/8	2-5/8	3-15/16	24.13	10.95	
8-6148*	259288	4-5/8	III	6-1/16	3-1/4	6-13/16	3-1/16	4-7/16	3-1/2	4-3/32	24.59	11.15	
8-6152*	259295	4-3/4	III	6-1/8	3-1/4	6-9/16	3-1/8	4-1/2	2-5/8	4	25.84	11.72	
8-6156*	259301	4-7/8	III	6-3/4	3-1/4	7	3-1/8	5-7/64	3-1/2	4-19/32	26.88	12.19	
8-6160*	259318	5	III	6-3/4	3-1/4	7-1/8	3-1/16	5-7/64	3-1/2	4-9/16	36.02	16.34	
8-6172*	259325	5-3/8	III	7	3-1/4	7-5/16	3-1/4	5-1/8	4	4-29/32	36.08	16.37	
8-6184*	259330	5-3/4	III	7	3-1/4	7-5/8	3-1/2	5-1/8	3-3/4	4-7/8	39.62	17.97	
8-6196	259349	6-1/8	III	7-1/4	5	8-1/2	3-11/16	5-3/8	4-1/2	5-1/16	37.50	17.01	
8-6208	259356	6-1/2	III	7-1/2	5	9-1/4	3-1/2	5-5/8	5	5-9/64	72.37	32.83	
8-6220	259363	6-7/8	III	7-7/8	5	9-1/4	3-7/8	6	4-3/4	5-33/64	71.50	32.43	
8-6232	259370	7-1/4	III	8-1/8	5	10	4-1/2	6-1/4	5-1/2	5-49/64	71.77	32.55	
8-6244	259387	7-5/8	III	8-1/4	5	10-3/4	4-13/16	6-3/8	6-1/2	5-57/64	95.82	43.46	
8-6256	259394	8	III	8-3/8	5	11	5-1/16	6-1/2	7	6-1/64	93.00	42.18	



*Uses RET RING® 8-1X.

Fed. Spec.: ANSI B107.2

- Industrially tested alloy, forged and heat-treated to withstand the constant shock associated with electric and air powered drive tools provides a complete line of 1-1/2" drive impact sockets.



WARNING

- Wear safety goggles. (Users and bystanders)



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TORQUE WRENCHES

Adjustable Click-Style Torque Wrenches

The metal handle series offers the user a rugged, industrial strength torque wrench able to withstand the rigors of professional use. Handles are lightly knurled for a tough, non-slip grip. There are 15 models of metal handle micrometer adjustable torque wrenches available.

Features:

- Single scale, calibrated single direction.
- Positive Lock with spring loaded pull down lock ring.
- Fast, accurate and easy to set.
- Easy-to-read Laser marked scale.
- Most feature Quick Release buttons which provide good socket retention as well as easy socket removal.
- Accuracy +/- 3% Clockwise direction, from 20-100% full scale.
- Meets or exceeds ASME B107.14M-1994, ISO 6789 Standards.
- Individually serialized with matching certificate of calibration traceable to N.I.S.T.



INCH-POUNDS

Part Number	UPC 662459+	Drive Size	Range in.-lbs.	Increments in.-lbs.	Length (in.)	Weight	
						Lbs.	Kgs
501MRMHSS	261427	1/4	10-50	1.0	9.90	0.85	.38
1501MRMHSS	261434	1/4	20-150	1.0	10.15	0.90	.40
1502MRMHSS	261526	3/8	20-150	1.0	10.15	0.90	.40
2002MRMHSS	261533	3/8	30-200	1.0	10.15	0.85	.38
2502MRMHSS	261540	3/8	30-250	1.0	11.25	0.95	.43
7502MRMHSS	261557	3/8	100-750	5.0	15.50	2.50	1.13
10002MRMHSS	261564	3/8	150-1000	5.0	15.75	2.55	1.15
25003MRMHSS	261731	1/2	300-2500	10.0	18.00	3.20	1.45

FOOT-POUNDS

Part Number	UPC 662459+	Drive Size	Range in.-lbs.	Increments in.-lbs.	Length (in.)	Weight	
						Lbs.	Kgs
752MFRMHSS	261588	3/8	5-75	0.5	15.50	2.50	1.13
1002MFRMHSS	261595	3/8	10-100	0.5	15.50	2.55	1.15
1503MFRMHSS	261748	1/2	20-150	1.0	19.00	3.15	1.42
2503MFRMHSS	261762	1/2	30-250	1.0	24.40	3.15	1.42
6004MFRMHSS	261892	3/4	100-600	5.0	42.00	8.95	4.05
10005MFRMHSS*	261946	1	200-1000	5.0	70.00	25.10	11.38

* 10005MFRMHSS supplied with one extension handle and is packed in a metal box.



WARNING



- Wear safety goggles. (Users and bystanders)
- Do not exceed rated torque.
- Do not use a torque wrench to break fasteners loose.
- Do not force head of flex head torque wrenches against stops.
- Periodic recalibration is necessary to maintain accuracy.





TORQUE MULTIPLIERS

Torque Multipliers with Handles

Product Code	UPC 662459+	Max. Output Ft. Lbs.	Multi-plication Ratio*	Apprx. Ft. Lbs. Rq'd For Max Output	Input Female Sq.	Output Male Sq.	Head Thk Inc. Tang	Head Dia.	Ovl. Inc. Re-action Bar	Lgth. Lbs.	Kgs
TM-750LW	261151	1000	3.6 to 1	275	1/2	3/4	3-9/32	3-1/2	22-1/2	5.9	2.7
TM-1000	261168	2000	3.6 to 1	550	3/4	1	4-3/8	3-17/32	24	11.4	5.2
TM-1500	261175	4000	3.9 to 1	1150	1	1-1/2	6-1/8	5-3/16	28-7/8	23.1	10.5
TM-2000	261182	8000	4.6 to 1	1915	1	1-1/2	6-1/4	6-1/2	31	45.8	20.8
TM-2500	261199	12000	5.4 to 1	2200	1	2-1/2	7-1/4	8-1/2	30	69.2	31.4



*Multipliers are mechanical devices which have frictional losses. A 10% factor was included in the multiplication ratio. For high accuracy of multiplication ratio, output of unit should be checked on torque tester.

- Provides the operator with nut-turning power that requires only a fraction of the force required when using conventional tools.
- Input and output rotation is in the same direction.
- Reaction bar rotation is opposite to input direction and must rest securely against a rigid object to withstand the generated reaction force.
- By removing 4 screws, heads may be easily disassembled for inspection, cleaning and lubrication.

Torque Multipliers with Planetary-gear Mechanism

Product Code	UPC 662459+	Output Ft. Lbs.	Input Cap.	Gear Ratio	Torque Ratio	Input Female Sq.	Output Sq. Size	Ovl. Lgth.	Head Height Sq. to Top	Head Dia.	Lbs.	Kgs
TM-290	261250	750	227	4:1	3:3:1	1/2	3/4	8-1/2	3-1/4	2-13/16	4.0	1.8
TM-391	261267	1200	200	6:3:1	6:0:1	1/2	3/4	19-39/64	4	3-15/16	9.1	4.1
TM-392	261274	2200	162	15:0:1	13:6:1	1/2	1	19-39/64	5-3/4	4-1/16	15.2	6.9
TM-393	261281	3200	173	20:25:1	18:5:1	1/2	1	19-39/64	6-1/2	4-1/16	18.3	8.3
TM-394	261298	5000	189	29:25:1	26:5:1	1/2	1-1/2	14-29/32	8-3/4	5-5/8	34.0	15.4
TM-395	261304	8000	154	60:1	52:0:1	1/2	1-1/2	15-13/64	10-3/4	5-13/16	50.3	22.8
TM-396	261311	12000	171	81:1	70:0:1	1/2	2-1/2	19-13/16	12-3/8	7-11/16	74.0	33.6



- Designed for use where high torques are necessary for fastening or breaking out stubborn fasteners.
- Allows operator safe and easy means of producing torque for job requirements.
- Precision Planetary gear multiplies the operator's input from standard torque wrenches.
- Can also multiply the torque from air-driven (non-impact) wrenches.

Plate Reaction Torque Multipliers

Product Code	UPC 662459+	Max. Output Ft. Lbs.	Input Cap.	Gear Ratio	Torque Ratio	Output Male Sq.	Ovl. Lgth.	Head Height Sq. to Top	Head Dia.	Lbs.	Kgs
TM-491	261205	1000	196	5:57:1	5:1:1	3/4	13-1/2	4-1/2	4-3/8	10.5	4.8
TM-492	261212	2200	162	15:1	13:6:1	1	14	5-1/2	4-7/8	17.2	7.8
TM-493	261229	3200	173	20:25:1	18:5:1	1	14	6-7/16	4-7/8	19.5	8.8



- Input Torque Holding Ratchet – holds multiplier in place during torquing.
- Needle Bearing for high efficiency.
- Standard Reaction plate meets most job applications.
- Shearable Output Squares – to protect tool during overload.
- 1/2" Drive Square Female input.



WARNING



- Wear safety goggles. (Users and bystanders)
- Do not exceed rated torque.
- Do not use a torque wrench to break fasteners loose.
- No not force head of flex head torque wrenches against stops.
- Periodic recalibration is necessary to maintain accuracy.



REGULAR DUTY STEEL BAR CLAMPS



- The ideal clamps for the metalworker, woodworker and craftsman.
- Long, woodscrew handles (4-1/8") for secure hold and easy gripping.
- Protective caps included to prevent marring of work.
- Ratcheting clutch provides quick adjustment at any point.
- 5/16" x 1" zinc plated steel bar, 1" swivel pad, 3-1/2" throat depth.
- Ductile frame with baked enamel finish.

STOCK NUMBER	SIZE (IN.)	THROAT DEPTH (IN.)	LOAD CAPACITY (LBS.)	SHIP WEIGHT (LBS.)	CARTON PACK
53306	6"	3-1/2	1,000	2.5	6
53312	12"	3-1/2	1,000	3.0	6
53318	18"	3-1/2	1,000	3.5	6
53324	24"	3-1/2	1,000	4.0	6
53336	36"	3-1/2	1,000	5.1	6

COLUMBIAN® 140 SERIES CARRIAGE C-CLAMPS



- Most popular C-clamp style for over 50 years.
- Rugged ductile iron frames with black-oxide screws, swivels and sliding crosspin handles.
- The "original" carriage clamp designed for the home craftsman, woodworker and light industrial service.

STOCK NUMBER	MODEL	OPENING CAPACITY (IN.)	THROAT DEPTH (IN.)	MIN. PROOF TEST (LBS.)	SPINDLE DIAMETER (IN.)	SHIP WEIGHT (LBS.)	CARTON PACK
41405	143C	0 - 3	2	1,430	7/16	1	12
41406	144C	0 - 4	2-3/4	1,535	1/2	2	6
41407	145C	0 - 5	3	1,225	5/8	3	6
41408	146C	0 - 6	3-1/4	1,400	5/8	3	6
41409	148C	0 - 8	4	1,700	3/4	4	6
41411	141C	0 - 1	1-1/16	645	1/4	1	12
41416	141-1/2C	0 - 1-1/2	1-1/2	820	5/16	1	12
41421	142C	0 - 2	1-1/8	800	5/16	1	12
41423	1422C	0 - 2-1/2	1-7/16	850	3/8	1	12
41426	142-1/2C	0 - 2-1/2	2-1/2	1,005	3/8	1	12

PORTA-VICE CLAMPS

Utilizing a revolutionary new patented design in clamping technology, the Porta-Vise features the power of a vise, the action of a press and the portability of a clamp. The non-rotating shaft and pad allow for precision placement without deflection, and the hex handle allows for use of a socket or wrench for speed and power. All can be completely disassembled for cleaning, lubricating or repair. Applications include: welding, woodworking, auto repair, construction and plumbing. Limited lifetime warranty.

PVAPC Series



Lightweight, aluminum construction resists weld spatter.

	PVAPC-3	PVAPC-6	PVAPC-8
Clamping Force	2,200 PSI	2,200 PSI	2,200 PSI
Overall Length	11.25"	18.5"	22.5"
Overall Width	4.5"	6.25"	6.25"
Throat Depth	2.5"	3.5"	3.5"
Throat Opening	3"	6"	8"
Weight	1.5 lbs.	3.5 lbs.	4.0 lbs.

PVAPC-DR Series



Lightweight, aluminum construction resists weld spatter

	PVAPC-3-DR	PVAPC-8-DR
Clamping Force	2,200 PSI	2,200 PSI
Overall Length	11.25"	22.5"
Overall Width	6"	9.25"
Throat Depth	4"	6"
Throat Opening	3"	8"
Weight	1.75 lbs.	5.0 lbs.

PVAPC-DR-J Series

Step over clearance.



Lightweight, aluminum construction resists weld spatter.

	PVAPC-3-DR-J	PVAPC-8-DR-J
Clamping Force	2,200 PSI	2,200 PSI
Overall Length	13.25"	24.5"
Overall Width	6.0"	9.25"
Step Over	2.25"	2.25"
Throat Depth	4.0"	6"
Throat Opening	3"	8"
Weight	1.75 lbs.	5.5 lbs.

V-Claws



Add the Porta-Vise Small V-Claws to a PVAPC, PVAPC-DR or a PVAPC-DR-J clamp to give it superior holding power on round objects such as pipe or tube.

PV-HD Series

Drop-forged steel frame



Copper plated shaft and pad to resist weld spatter.

	PV-4	PV-6
Load Limit	6,200 lbs.	6,600 lbs.
Overall Length	14"	18.5"
Overall Width	6.0"	7.0"
Throat Depth	3.25"	4.25"
Throat Opening	4"	6"
Weight	4.0 lbs.	8.6 lbs.

PVF Sliding Bar Series

Sliding bar for quick adjustment



Copper plated shaft and pad to resist weld spatter.

	PVF-8	PVF-10	PVF-12
Clamping Force	2,400 PSI	2,400 PSI	2,400 PSI
Throat Depth	5.5"	5.5"	5.5"
Throat Opening	8"	10"	12"
Weight	6.5 lbs.	7.0 lbs.	7.5 lbs.

C-Clamps with Copper Screw



Product Code	UPC 662459+	Capacity Max.	Capacity Min.	Depth of Throat From Center	Extreme Body Dim. Length	Extreme Body Dim. Width	Screw Diameter	Lbs.	Kgs
CC-402C	268181	2	0	2-11/32	5-5/16	4	1/2	1.30	.59
CC-403C	268198	3	0	2-3/4	6-3/4	4-5/8	1/2	2.04	.93
CC-404C	268204	4	0	3-3/16	8-3/8	5-3/8	3/4	3.50	1.59
CC-406C	268211	6	0	4-1/8	11	6-1/4	3/4	5.42	2.46
CC-408C	268228	8	0	5-3/16	13-1/2	7-1/2	3/4	6.90	3.13
CC-410C	268235	10	0	6	16-1/4	8-5/8	3/4	11.66	5.29
CC-412C	268242	12	0	6-1/2	18-3/4	9-1/2	7/8	15.04	6.82

Williams CC-400C series deep throat C-Clamps are manufactured to the highest standards of the industry. Ideal for welding as well as general purpose applications.

- I-beam design for added strength.
- Drop-forged and heat-treated for maximum strength and greater rigidity.
- Highly resistant to “springing.”
- Copper plated screw to resist welding splatter.

C-Clamps with Standard Screw



Product Code	UPC 662459+	Capacity Max.	Capacity Min.	Depth of Throat From Center	Extreme Body Dim. Length	Extreme Body Dim. Width	Screw Diameter	Lbs.	Kgs
CC-402S	268259	2	0	2-11/32	5-5/16	4	1/2	1.30	.59
CC-403S	268266	3	0	2-3/4	6-3/4	4-5/8	1/2	2.04	.93
CC-404S	268273	4	0	3-3/16	8-3/8	5-3/8	3/4	3.50	1.59
CC-406S	268280	6	0	4-1/8	11	6-1/4	3/4	5.42	2.46
CC-408S	268297	8	0	5-3/16	13-1/2	7-1/2	3/4	6.90	3.13
CC-410S	268303	10	0	6	16-1/4	8-5/8	3/4	11.66	5.29
CC-412S	268310	12	0	6-1/2	18-3/4	9-1/2	7/8	15.04	6.82

Williams CC-400S series deep throat C-Clamps are manufactured to the highest standards of the industry. Ideal for general purpose applications.

- I-beam design for added strength.
- Drop-forged and heat-treated for maximum strength and greater rigidity.
- Highly resistant to “springing.”
- Black threaded screw with T handle.



WARNING

- Wear safety goggles. (Users and bystanders)



C-CLAMPS

Heavy Service C-Clamps

Product Code	UPC 662459+	Capacity Max.	Capacity Min.	Dpt. of Throat From Center	Ext. Body Dim. Length	Ext. Body Dim. Width	Screw Dia-meter	Screw Lgt. Und. Hd.	Lbs.	Kgs
CC-1AAW	268013	1-3/8	0	1-1/8	3-15/32	2-23/32	13/32	2-7/16	.80	.36
CC-1½AAW	268020	1-7/8	0	1-21/32	4-5/8	3-19/32	5/8	3-1/4	1.98	.90
CC-2AAW	268037	2-11/32	0	1-7/8	5-15/16	4-1/4	23/32	4-1/8	3.74	1.70
CC-3AAW	268044	3-7/16	1/8	2-13/32	7-1/2	5-3/4	27/32	4-7/8	5.95	2.70
CC-3LAAW	268051	3-7/16	0	2-1/2	7-1/2	5-3/4	27/32	5-3/4	7.40	3.36
CC-4AAW	268068	4-21/32	17/32	2-7/8	9-3/4	6-1/4	27/32	6	10.50	4.76
CC-4LAAW	268075	4-21/32	0	2-7/8	9-3/4	6-1/4	27/32	7-1/4	10.82	4.91
CC-5AAW	268082	5-5/8	1/2	3-1/8	11-1/4	7	27/32	7-1/4	13.80	6.26
CC-5LAAW	268099	5-5/8	0	3-1/8	11-1/4	7	27/32	8-7/8	14.00	6.35
CC-6AAW	268105	6-1/2	1-5/32	3-1/2	12-1/2	7-1/2	1-3/32	8	18.72	8.49
CC-6LAAW	268112	6-1/2	0	3-1/2	12-1/2	7-1/2	1-3/32	10	19.44	8.82
CC-8AAW	268129	8-1/2	4	3-11/16	14-1/2	8-1/2	1-3/32	7-1/8	23.92	10.85
CC-8LAAW	268136	8-1/2	0	3-11/16	14-1/2	8-1/2	1-3/32	11-5/8	25.84	11.72
CC-10AAW	268143	10-3/8	5-3/8	4-3/8	16-3/4	8-1/2	1-3/32	7-3/4	33.76	15.31
CC-10LAAW	268150	10-3/8	0	4-5/16	15-3/4	8-1/2	1-3/32	14-3/8	36.70	16.64
CC-12AAW	268167	12-3/8	7-1/4	4-7/16	19-1/2	9-1/2	1-3/32	8-1/4	39.10	17.73
CC-12LAAW	268174	12-3/8	0	4-1/4	19-1/2	9-1/2	1-3/32	16-7/16	43.84	19.88



Especially designed for heavy-duty service, frames are drop-forged and heat-treated for maximum strength and reduced "springing." Screws are made of special grade steel and are heat-treated for added strength not found in case hardened screws. To tighten, the square headed screw must be turned with a wrench. Where zero capacity is desired, clamps should be ordered with long screws.

- Ideal for the most demanding applications such as construction and heavy industry.
- Square head screw allows tightening with wrench for extra heavy-duty clamping requirements.
- Greater anvil surface for gripping larger work pieces and for greater stability.

Flange-Jacks

Product Code	UPC 662459+	* 125 Pound Cast Iron	* 150 Pound Steel	* 250 Pound Cast Iron	* 300 Pound Steel	Lbs.	Kgs
FJ-20 (1 pair)	306005	2 to 20	2 to 20	1 to 12	3/4 to 12	13.00	5.90
FJ-30 (1 pair)	306012	16 to 48	18 to 24	12 to 30	12 to 24	45.00	20.40

*Diameter Capacity in Inches-Standard Raised Face Flanges.

Williams Flange Jacks exert tremendous pressure with minimum effort.

- Ideal for working on pipe lines and other applications involving flanges.
- Makes gasket removal fast and easy.
- Flanges are separated smoothly and evenly without damage to flange faces.
- Flange Jacks are sold only in pairs.
- Eliminates danger from flying wedges and sparks caused by hammer blows.
- Ideal for hard to get at locations.



WARNING

- Wear safety goggles. (Users and bystanders)



Chain Pipe Tongs



Product Code	UPC 662459+	Pipe Min.	Dia. Max.	Tong Length	Chain Length	Loading Cap. (lbs.)	Lbs.	Kgs
CT-12	306029	1/4	2-1/2	27	18-1/2	13,800	9.48	4.30
CT-13	306050	3/4	4	38-1/8	25	17,600	17.42	7.90
CT-13½	306081	1	6	46-1/4	33	20,000	23.98	10.82
CT-14	306111	1-1/2	8	50-1/2	40-3/4	22,000	31.00	14.10
CT-15	306142	2	12	67	56	31,000	52.00	23.60

The “original” Williams Chain Pipe Tong is still the favorite tong for general work. Chain swings from the center and can be used on either side of the jaws, which reduces tooth wear. Flat link chains are heat-treated for greater strength and reliability.

- Fully adjustable to fit any shape pipe.
- Heat-treated chains for greater strength.

Chain Pipe Tong Assembly



Product Code	UPC 662459+	Length inches	Loading Capacity	Used On	Lbs.	Kgs
CT-12-1	306036	18-1/2	13,800	CT-12, CT-32, CT-2	1.76	.80
CT-13-1	306074	25	17,600	CT-13, CT-33, CT-3	4.00	1.81
CT-13½-1	306098	33	20,000	CT-13-1/2, CT-33-1/2, CT-3-1/2	5.32	2.41
CT-14-1	306128	40-3/4	22,000	CT-14, CT-34, CT-4	7.86	3.56
CT-15-1	306159	56	31,000	CT-15, CT-35, CT-5	13.92	6.31

Chain is heat-treated after assembly which results in a 40% increase in strength as well as extended chain life and improved performance.

Pipe Tong Replacement Jaw Sets



Product Code	UPC 662459+	Description	Used On
CT-12-4	306043	Jaw Set	CT-12
CT-13-4	306067	Jaw Set	CT-13
CT-13½-4	306105	Jaw Set	CT-13-1/2
CT-14-4	306135	Jaw Set	CT-14
CT-15-4	306166	Jaw Set	CT-15

Jaws are drop forged from carbon steel and heat treated to provide the strength and reliability expected from Williams pipe tools.

Pipe Chain Wrench



Product Code	UPC 662459+	Cap. Pipe Diam. Min.	Cap. Pipe Diam. Max.	Handle Length	Chain Length	Weight Lbs.	Kgs
CW-4	306173	3/8	4	11	15	1.74	.79

Forged handle is fully heat-treated. Ideal for use in close quarters and where space is at a premium. Successive “bites” can be taken without removal of wrench from the work piece.

- Fully adjustable to fit any shape pipe.
- Forged handle for greater strength.



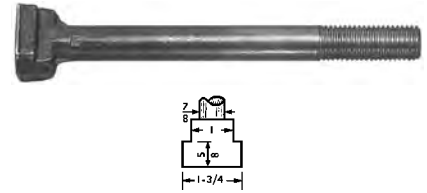
WARNING

- Wear safety goggles. (Users and bystanders)



T-Slot Bolts - 1"

Product Code	UPC 662459+	Length	Lbs.	Kgs
TS8-5	306661	5	1.46	.66
TS8-6	306678	6	1.61	.73
TS8-8	306685	8	1.97	.89
TS8-10	306692	10	2.30	1.04



Hex Nuts for T-Slot Bolts

Product Code	UPC 662459+	Bolt Diameter	Threads Per Inch	Thickness Inches	Distance Across Flats	Lbs.	Kgs
HN-3	306180	3/8	16	11/32	11/16	.03	.01
HN-5	306197	5/8	11	19/32	1-1/16	.11	.05
HN-6	306203	3/4	10	23/32	1-1/4	.27	.13
HN-7	306210	7/8	9	7/8	1-7/16	.27	.13



- Designed for use with Williams' T-Slot bolts.
- Threaded unified coarse.
- Case hardened.

Washers for T-Slot Bolts

Product Code	UPC 662459+	Bolt Diameter	Outside Diameter	Thickness	Lbs.	Kgs
W-3	306227	3/8	7/8	1/8	.02	.01
W-4	306234	1/2	1	3/16	.03	.01
W-5	306241	5/8	1-1/4	1/4	.06	.03
W-6	306258	3/4	1-1/2	1/4	.09	.04
W-7	306265	7/8	1-3/4	1/4	.12	.05



- Designed for use with Williams' T-Slot bolts.
- Extra thick to resist bending.
- Beveled edge on one side.

T-Slot Nuts for T-Slot Bolts

Product Code	UPC 662459+	T-Slot Size	Stud Diameter	Threads				Lbs.	Kgs	
				Per Inch	A *	B *	C *			D *
TN-5	306272	5/8	1/2	13	1-3/32	3/8	1-7/32	3/4	.14	.07
TN-6	306289	3/4	5/8	11	1-9/32	1/2	1-1/2	7/8	.29	.13
TN-7	306296	7/8	3/4	10	1-7/16	17/32	1-23/32	1	.41	.18
TN-8	306302	1	7/8	9	1-1/8	5/8	2	1-1/8	.62	.28
TN-10	306319	1-1/4	1	8	2	7/8	2-11/32	1-11/32	1.13	.51



*See Diagram.

- For setting up work on planers, shapers, milling machines, etc., where studs are to be used in place of T-Slot bolts.
- Threaded unified coarse.
- Case hardened.

Set-Up Wedges

Product Code	UPC 662459+	Length	Width	Thick End	Lbs.	Kgs
WG-3	306708	3	1	1/4	.13	.06
WG-5	306715	5	1	1/2	.33	.15
WG-6	306722	6	1-1/4	3/4	.60	.27



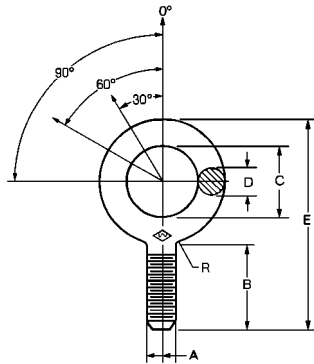
- Set-up wedges are used for setting up work on planers, shapers, milling machines and other similar applications.



WARNING

- Wear safety goggles. (Users and bystanders)

Eyebolts - Plain Pattern

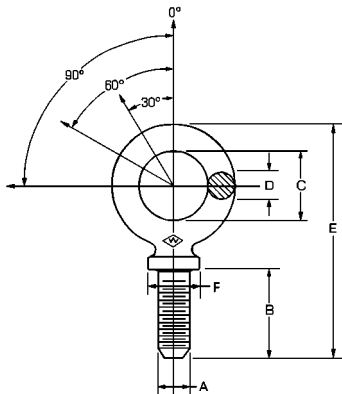


Product Code	UPC 662459+	Threads per Inch					Ultimate Strength			
		A	B	C	D	E	(Lbs.)	Lbs.	Kgs	
EB-1T	307002	1/4	20	1	3/4	7/32	2-1/4	2,500	.05	.02
EB-2T	307019	5/16	18	1-1/8	27/32	9/32	2-5/8	4,500	.10	.04
EB-3T	307026	3/8	16	1-1/4	1-1/32	5/16	2-29/32	6,500	.15	.07
EB-4T	307033	7/16	14	1-3/8	1-1/16	3/8	3-1/4	9,000	.20	.09
EB-5T	307040	1/2	13	1-1/2	1-1/8	5/32	3-5/8	12,000	.32	.15
EB-6T	307057	9/16	12	1-5/8	1-1/4	1/2	3-31/32	15,000	.42	.19
EB-7T	307064	5/8	11	1-3/4	1-5/16	9/16	4-3/8	20,000	.63	.29
EB-8T	307071	3/4	10	2	1-17/32	5/8	4-25/32	25,000	.90	.41
EB-9T	307088	7/8	9	2-1/4	1-5/8	13/16	5-9/16	35,000	1.44	.65
EB-10T	307095	1	8	2-1/2	1-3/4	29/32	6-1/8	45,000	2.00	.91
EB-11T	307101	1-1/8	7	2-3/4	1-15/16	1-1/16	6-7/8	60,000	2.66	1.21
EB-12T	307118	1-1/4	7	3-1/2	2-5/32	1-5/32	7-1/2	75,000	3.92	1.78
EB-14T	307125	1-1/2	6	3-3/4	2-7/16	1-13/32	8-13/16	105,000	6.68	3.03
EB-15T	307132	1-3/4	5	3-3/4	2-25/32	1-21/32	9-7/8	140,000	10.42	4.73
EB-16T	307149	2	4-1/2	4	3-5/32	1-27/32	11	190,000	15.50	7.03
EB-17T	307156	2-1/2	4	5	4	2-1/4	13-1/2	280,000	28.82	13.07

Fed. Spec.: ANSI B18.15 1985

- Forged from the best quality carbon steel, hardened and tempered to ensure increased strength and toughness and reduce liability or breakage.
- Each lot is tested and inspected to insure conformance to specifications.
- Available with UNC Class 2A thread only.
- Plain pattern eyebolts **must never** be used to lift an angular load.
- Eyebolt shanks should never be undercut or eyebolt shank diameters reduced.
- To obtain greatest strength from an eye bolt, it must fit reasonably tight in the hole into which it is screwed to prevent unscrewing due to twist of cable. Tightness and seating must be checked after initial load.

Eyebolts - Shoulder Pattern



Product Code	UPC 662459+	Threads per Inch					Ultimate Strength				
		A	B	C	D	E	F	(Lbs.)	Lbs.	Kgs	
EB-21T	307163	1/4	20	1	3/4	9/32	2-7/16	9/16	2,500	.06	.03
EB-22T	307170	5/16	18	1-1/8	27/32	9/32	2-7/8	19/32	4,500	.10	.04
EB-23T	307187	3/8	16	1-1/4	1	5/16	3-11/32	21/32	6,500	.18	.08
EB-24T	307194	7/16	14	1-3/8	1-1/16	3/8	3-23/32	27/32	9,000	.27	.12
EB-25T	307200	1/2	13	1-1/2	1-5/32	7/16	4-1/32	29/32	12,000	.37	.17
EB-26T	307217	9/16	12	1-5/8	1-11/32	7/32	4-13/32	15/16	15,000	.52	.24
EB-27T	307224	5/8	11	1-3/4	1-11/32	9/16	4-3/4	1-1/32	20,000	.68	.31
EB-28T	307231	3/4	10	2	1-1/2	11/16	5-11/32	1-5/16	25,000	1.00	.45
EB-29T	307248	7/8	9	2-1/4	1-5/8	13/16	6	1-7/16	35,000	1.61	.73
EB-30T	307255	1	8	2-1/2	1-13/16	7/8	6-3/4	1-5/8	45,000	2.44	1.11
EB-31T	307262	1-1/8	7	2-3/4	1-15/16	1-1/16	7-1/2	1-3/4	60,000	3.35	1.52
EB-32T	307279	1-1/4	7	3	2-1/8	1-3/16	8-3/8	2-1/32	75,000	4.52	2.05
EB-34T	307286	1-1/2	6	3-1/2	2-19/32	1-1/2	9-3/8	2-3/16	105,000	8.28	3.75
EB-35T	307293	1-3/4	5	3-3/4	2-27/32	1-19/32	10-3/4	2-1/2	140,000	11.59	5.26
EB-36T	307309	2	4-1/2	4	3-5/32	1-7/8	12	2-29/32	190,000	16.78	7.61

Fed. Spec.: ANSI B18.15 1985

- Forged from the best quality carbon steel, hardened and tempered to ensure increased strength and toughness and reduce liability or breakage.
- Each lot is tested and inspected to insure conformance to specifications.
- Available with UNC Class 2A thread only.
- Eyebolt shanks should never be undercut or eyebolt shank diameters reduced.
- Shoulder eye bolts must be properly seated (should bear firmly against the mating part) otherwise the working loads must be reduced substantially. A steel washer or spacer may be required for proper seating.
- To obtain greatest strength from an eye bolt, it must fit reasonably tight in the hole into which it is screwed to prevent unscrewing due to twist of cable. Tightness and seating must be checked after initial load.



WARNING

- Wear safety goggles. (Users and bystanders)



26" Handsaw - Wood handle

High carbon steel blade, precision set teeth, rigidly fastened to wood handle. 8-point aggressive tooth design. Packed in individual sleeve, wood handle.

Product #	Description	Unit Pck.	Mast Cr.	Cube
P 26	26" - 8 Pt.	6	24	2.22



Bow Saws

Chrome alloy extra hard steel bow saw blades. Tubular steel frames have action blade tightener release.

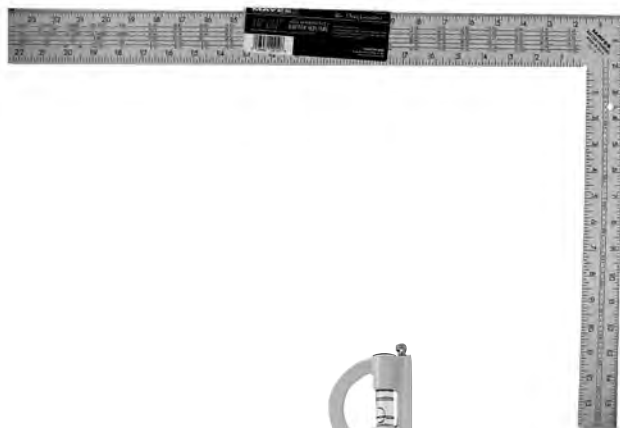
Product #	Description	Unit Pck.	Mast Cr.	Cube
BB21	21"	5	5	0.58
BB24	24"	5	5	0.58
BB30	30"	5	5	0.76
BB36	36"	5	5	0.92



Mechanics Heavy-Duty Frame

Professional 3-1/2" depth cut hacksaw. Plated to resist rust. Heavy-duty steel, hi-impact plastic pistol grip handle and adjusts to 4 cutting positions. Fits 10" and 12" blades.

Product #	Description	Unit Pck.	Mast Cr.	Cube
100	3-1/2" depth 11/16" x 3/16" stock Piston grip handle	1	36	2.40



Rafter and Framing Square

Body 24" x 2", tongue 16" x 1-1/2".

Product #	Description	Unit Pck.	Mast Cr.	Cube
10219	Painted black steel with printed markings	12	12	0.25



Combination Square

Extra-strong stainless steel engraved ruler, precision machined for accuracy. Meets or exceeds ANSI specifications. All carded.

Product #	Description	Unit Pck.	Mast Cr.	Cube
CS12C	12" ruler, English markings	6	48	1.09



Ball Peen Hammer

Drop forged heads; hickory handle. Lifetime warranty.

Product #	Description	Unit Pck.	Mast. Crt.	Cube
BP8	8 oz.	4	48	1.26
BP12	12 oz.	4	24	1.26
BP16	16 oz.	4	24	2.29
BP24	24 oz.	4	24	2.29
BP32	32 oz.	4	24	2.29



BP32

Adjustable Wrenches

Drop forged, professional quality.

Product #	Description	Unit Pck.	Mast. Crt.	Cube
AW4C	4"	6	72	1.08
AW6C	6"	6	72	1.08
AW8C	8"	6	72	1.26
AW10C	10"	6	48	1.20
AW12C	12"	6	24	1.26



AW12C

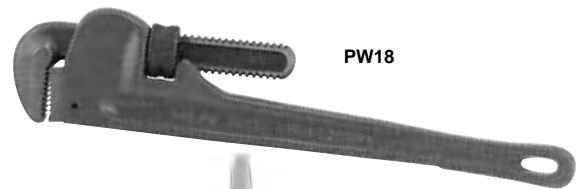
Combination Wrenches

Raised panel ruggedly constructed chrome plated with mirror finish.

Product #	Description	Unit Pck.	Mast. Crt.	Cube
CO25C	1/4"	6	48	0.30
CO56C	5/16"	6	48	0.39
CO1C	3/8"	6	48	0.39
CO2C	7/16"	6	48	0.39
CO3C	1/2"	6	48	0.39
CO4C	9/16"	6	48	0.89
CO5C	5/8"	6	48	0.89
CO6C	11/16"	6	48	0.90
CO7C	3/4"	6	48	0.30
CO78C	7/8"	6	48	0.90
CO8C	15/16"	6	48	0.90
CO10C	1"	6	48	0.90
C116C	1-1/16"	3	24	0.61
C118C	1-1/8"	3	24	0.74
C125C	1-1/4"	3	24	0.85
CO150	1-1/2"	3	24	1.00



CO4C



PW18

Heavy-duty Pipe Wrenches

Made of the finest quality steel construction. Precision milled movable jaws. Perfectly balanced.

Product #	Description	Unit Pck.	Mast. Crt.	Cube
PW8	8"	6	36	0.35
PW10	10"	6	36	0.66
PW14	14"	6	24	0.66
PW18	18"	2	12	0.52
PW24	24"	2	12	2.19

Screwdriver Set

Shock resistant handle. 1 ea. of the following sizes: G10 - 3" x 1/8", G448 - 4" x 1/4", G22 - 1-1/2" x 1/4", GR33- 3" x No. 1 Pt., G43 - 4" x 3/16", GR44 - 4" x No. 2 Pt., G56 - 5" x 5/16".

Product #	Description	Unit Pck.	Mast. Crt.	Cube
G6K	7-Piece Set in Vinyl Pouch	6	24	1.26

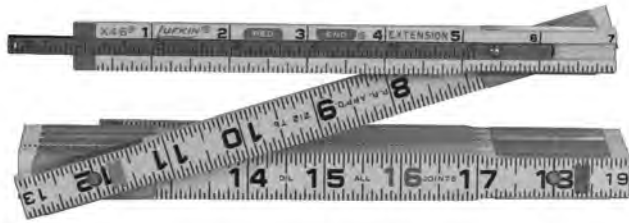


G6K

FOLDING WOOD RULES

Lufkin®

Red End® Extension



- 6' and 8' wood rules available.
- Graduated slide rule extends up to 6".
- Slide rule runs under friction in T-slot and stops at each end to prevent slide from falling out.
- X46X has two 6" extension slides; an extension is ready for use on the first section.
- HX46 has hook; zero falls at inside of hook, for distance measuring.
- Marked both sides and both edges.
- X46F has flat, inside markings; numbering begins on inside of rule.
- Graduated to 1/16ths of an inch, 16" stud centers in red, regular outside markings.

Cat. No.	UPC No.	Packed	Blade Size		Pack Wt.		Shelf Pack
			Width	Length	lb.	kg	
X46	037103450623	Boxed	5/8"	6'	2.27	1.03	6
HX46	037103450654	Boxed	5/8"	6'	2.30	1.04	6
X48	037103450661	Boxed	5/8"	8'	2.95	1.34	6
X46F	037103450630	Boxed	5/8"	6'	2.28	1.03	6
X46X	037103450647	Boxed	5/8"	6'	2.39	1.08	6

LONG TAPES, SURVEYING

Peerless



- Designed for engineers and surveyors who prefer a 4-arm reel.
- Chrome Clad® and yellow clad blade.
- 1/4"/6mm wide and .016" thick.
- Subdivided line removes easily from reel.
- Long, easy-action winding handle that locks line in any position.
- Reel is nickel plated, 4-arm with rollers in each arm for smooth winding.
- Open design construction aids in drying line and clearing out dirt.
- A pair of 580 finger rings and a 579 engineer's conversion rule are furnished with tape or replacement line.
- Reel available separately.

Cat. No.	UPC No. 037103	Packed	Blade Size		Blade Style	Pack Wt.		Shelf Pack	Repl. Blade	UPC No. 037103	Repl. Reel	UPC No. 037103
			Width	Length		lb.	kg					
C1276	453822	Boxed	1/4"	100'	E3	2.33	1.06	1	OC1276	453839	11100 or 31100	450272 450517
C1278	453860	Boxed	1/4"	200'	E3	3.66	1.66	1	OC1278	453877	11200	450289
C1276D	453846	Boxed	1/4"	100'	E1	2.33	1.06	1	OC1276D	453853	11100	450272
C1278D	453884	Boxed	1/4"	200'	E1	3.66	1.66	1	OC1278D	453891	11200	450289
C2730MM	060297	Boxed	6mm	30m	E11	2.33	1.06	1	OC2730MM	063748	11100	450272
C2730DMM	060204	Boxed	1/4"/6mm	100'/30m	E12	2.33	1.06	1	OC2730DMM	063755	11100	450272
C2730MME	060280	Boxed	1/4"/6mm	100'/30m	E13	2.33	1.06	1	OC2730MME	063724	11100	450272
C2750MM	060303	Boxed	6mm	50m	E11	3.29	1.49	1	OC2750MM	063731	11200	450289
C2750DMM	060181	Boxed	1/4"/6mm	164'/50m	E12	3.29	1.49	1	OC2750DMM	063762	11200	450289
C2750MME	001351	Boxed	1/4"/6mm	164'/50m	E13	3.29	1.49	1	-	-	11200	450289
Y1276	457790	Boxed	1/4"	100'	E3	2.03	.92	1	RY1276	457813	11100 or 31100	450272 450517
Y1278	457837	Boxed	1/4"	200'	E3	3.03	1.37	1	RY1278	457851	11200	450289
Y1279	457875	Boxed	1/4"	300'	E3	4.02	1.82	1	RY1279	467899	11300	450296
Y1276D	457806	Boxed	1/4"	100'	E1	2.03	.92	1	RY1276D	457820	11100 or 31100	450272 450517
Y1278D	457844	Boxed	1/4"	200'	E1	3.03	1.37	1	RY1278D	457868	11200	450289
Y1279D	457882	Boxed	1/4"	300'	E1	4.02	1.82	1	RY1279D	457905	11300	450296

General Information

Lufkin®

- Designed for rugged field use by the surveyor, engineer or contractor.
- More accurate than tolerances established by the National Bureau of Standards when fully supported with standard tension of 4.5 lbs.
- Tape stretches 0.0011"/ feet per additional pound of tension over 4.5 lbs.
- Durable, waterproof and able to withstand breakage and abrasion under extreme conditions.
- Non-conductive construction material allows safe use around electrical hazards.

FIBERGLASS TAPES



Hi-Viz® Linear

- Lightweight high impact ABS case.
- Durable 1/2"/13mm wide fiberglass tape is encapsulated in flexible plastic.
- Non-conductive material with easy-to-read black and red marking on yellow background.
- Lightweight high impact ABS winding drum provides smooth tape recovery.
- Hi-Viz® orange case.

Cat. No.	UPC No.	Packed	Blade Size		Blade Style	Pack Wt.		Shelf Pack	Repl. Blade	UPC No.
			Width	Length		lb.	kg			
703	037103453525	Carded	1/2"	50'	C1	5.3	2.4	6	D703L	037103453532
706L	037103453563	Carded	1/2"	100'	C1	8.1	3.67	6	0706L	037103453570
703D	037103453549	Carded	1/2"	50'	C2	5.3	2.4	6	0703D	037103453556
706D	037103453587	Carded	1/2"	100'	C2	8.1	3.67	6	0706D	037103453594



1706



1703

Hi-Viz® Linear Reel

- Line does not collect dirt in case.
- Lightweight open reel is easy to handle and rewind.
- Hi-Viz® orange case.

Cat. No.	UPC No.	Packed	Blade Size		Blade Style	Pack Wt.		Shelf Pack	Repl. Blade	UPC No.
			Width	Length		lb.	kg			
1703	037103454621	Carded	1/2"	50'	C1	0.75	.34	1	0703L	037103453532
1703D	037103454638	Carded	1/2"	50'	C2	0.75	.34	1	0703D	037103453556
1706	037103454645	Carded	1/2"	100'	C1	1.2	.54	1	0706L	037103453570
1706D	037103454652	Carded	1/2"	100'	C2	1.2	.54	1	0706D	037103453594
HY1715CME	037103458254	Carded	1/2"(13mm)	50'(15m)	C4	.75	.34	1	-	-
HY1730CM	037103458209	Carded	13mm	30m	C3	1.2	.54	1	-	-
HY1730CME	037103458261	Carded	1/2"(13mm)	100'(30m)	C4	1.2	.54	1	-	-
HY1730DM	037103127624	Carded	1/2"(13mm)	100'(30m)	C7	6.00	2.72	6	-	-

POWER RETURN TAPES

Lufkin®



Hi-Viz® Series 1000 Power Return Tapes

- Hi-Viz® case – easy to find on the job.
- Case designed to fit perfectly in the hand.
- Lightweight, high strength case.
- Fits easily into most tape hoisters.
- Bright yellow blade has clear easy-to-read numerals.
- Toggle lock is positioned for convenient operation and holds the blade securely in any position.
- Virtually unbreakable Quad Hook™; four rivets for extra strength (1" blade only).
- Cushioned blade return.
- Removable belt clip.
- All shelf pack power tapes on this page are carded.

Orange and Yellow Cases

Cat. No.	UPC No.	Color	Blade Size		Blade Style	Pack Wt.		Shelf Pack	Repl. Blade	UPC No.
			Width	Length		lb.	kg			
HV1435	037103169273	Orange	1"	35'	A14	8.25	3.74	6	-	-
HV1433	037103108494	Orange	1"	33'	A14	7.04	3.19	6	RXL33	037103459978
HV1433DM	037103108562	Orange	1' (25mm)	33' (10m) Eng.	A29	7.18	3.26	6	-	-
HV1410CME	037103108548	Orange	1' (25mm)	33' (10m)	A30	7.18	3.26	6	-	-
HV1409CME	037103141552	Orange	1' (25mm)	30' (9m)	A30	6.26	2.84	6	-	-
HV1430	037103063342	Orange	1"	30'	A5	6.26	2.84	6	RY430	037103459862
HV1425	037103039545	Orange	1"	25'	A5	5.4	2.45	6	RY425	037103457042
HV1425D	037103063359	Orange	1"	25' Eng.	A4	5.4	2.45	6	-	-
HV1425ED	037103142009	Orange	1"	25'	A35	5.4	2.45	6	-	-
HV1048CM	037103105547	Orange	25mm	8m	A9	5.5	2.50	6	-	-
HV1048CME	037103105554	Orange	1" (25mm)	26' (8m)	A30	5.5	2.50	6	-	-
HV1048DM	037103085122	Orange	1" (25mm)	25 (7.6m) Eng.	A29	5.5	2.50	6	-	-
HV1325	037103045881	Orange	3/4"	25'	A2	4.33	1.96	6	RY325	037103452351
HV1325D	037103063328	Orange	3/4"	25' Eng.	A4	4.33	1.96	6	-	-
HV1316	037103045898	Orange	3/4"	16'	A2	2.9	1.29	6	RW316	037103452337
HV1035CM	037103089588	Orange	19mm	5m	A9	3.00	1.36	6	-	-
HV1035CME	037103089595	Orange	3/4" (19mm)	16' (5m)	A13	3.00	1.36	6	RY35CME	037103461018
HV1312	037103045904	Orange	3/4"	12'	A2	2.36	1.07	6	R2312	037103060389
HV1312D	037103063335	Orange	3/4"	12' Eng.	A4	2.36	1.07	6	-	-
HV1034CME	037103141545	Orange	3/4" (19mm)	13' (4m)	A13	2.80	1.27	6	-	-
HV1034DM	037103085139	Orange	3/4" (19mm)	12' (3.7m) Eng.	A29	2.36	1.07	6	-	-
HV1038CME	037103181046	Orange	3/4"	26' (8m)	A30	4.33	1.96	6	-	-
HV1012	037103063311	Orange	1/2"	12'	A1	1.9	0.85	6	RY212	037103450388
HV1024CME	037103141638	Orange	1/2" (13mm)	13' (4m)	A13	2.2	1.00	6	-	-
HV1010	037103063304	Orange	1/2"	10'	A1	1.8	0.80	6	RY210	037103450234
HV1023CM	037103089564	Orange	13mm	3m	A9	1.8	0.80	6	-	-
HV1023CME	037103089571	Orange	1/2" (13mm)	10' (3m)	A13	1.8	0.80	6	RY23CME	037103450241
HY1430	037103084033	Yellow	1"	30'	A5	6.3	2.81	6	RY430	037103459862
HY1425	037103084040	Yellow	1"	25'	A5	5.4	2.40	6	RY425	037103457042
HY1048CM	037103105707	Yellow	25mm	8m	A9	5.4	2.40	6	-	-
HY1048CME	037103105530	Yellow	1" (25mm)	8m	A30	5.5	2.50	6	-	-
HY1316	037103084064	Yellow	3/4"	16	A2	2.9	1.29	6	RW316	037103452337
HY1035CM	037103089700	Yellow	19mm	5m	A9	3.00	1.36	6	-	-
HY1035CME	037103089717	Yellow	3/4" (19mm)	16' (5m)	A13	3.00	1.36	6	RY35CME	037103461018
HY1312	037103084019	Yellow	3/4"	12	A2	2.36	1.07	6	R2312	037103060389
HY1023CME	037103089670	Yellow	1/2" (13mm)	10' (3m)	A13	1.8	0.80	6	RY23CME	037103450241

HICKORY HANDLES

Plumb®



Ball Pein Hammer

- Ground, black head.
- Polished poles and peins.
- Quality, hickory handle.
- PermaBond® construction between head and handle.

Cat. No.	UPC No.	Head wt.		Overall Length		Shelf Pack wt.		Shelf Pack	Replacement Handle No.
		oz.	g	Inch	mm	lb.	k		
11494	037103114945	4	113	10-1/2	267	2.4	1.09	6	-
11495	037103114952	6	170	10-1/2	267	3.6	1.63	6	-
11496	037103114969	8	227	11-1/4	286	4.8	2.18	6	-
11497	037103114976	12	340	11-1/4	286	6.0	2.72	6	-
11498	037103114983	16	454	12-3/4	324	7.8	3.54	6	11006(A)
11499	037103114990	20	567	12-3/4	324	10.2	4.63	6	11006(A)
11520	037103115201	24	681	15	377	12.0	5.44	6	11811(A)
11521	037103115218	32	908	15	377	15.0	6.80	6	11811(A)
11622	037103115225	40	1135	15	377	18.0	8.16	6	11811(A)



Warning – Wear Safety Goggles (User and Bystander)

Ball pein hammers of the proper size are designed for striking chisels and punches, and for riveting, shaping and straightening unhardened metal. The striking face should have a diameter at least 3/8" larger than the struck face of the tool. Never strike one hammer with or against another hammer or other hardened objects as chipping may occur, possibly resulting in eye or other serious injury. Replace any tool immediately upon chipping, mushrooming or other damage.

STEEL HANDLES

Solid Steel Anti-shock Premium Ripping Claw



- Patent pending anti-vibration shock absorbing technology.
- Anti-vibration feature absorbs shock and minimizes muscle fatigue.
- One-piece forged solid steel construction.
- Co-molded contoured handle for increased comfort and control.
- High-luster, full polished finish.

Cat. No.	UPC No.	Head wt.		Overall Length		Shelf Pack wt.		Shelf Pack	Face
		oz.	g	Inch	mm	lb.	k		
SS16R	037103184375	16	454	12.875	327	7.08	3.21	4	Polished
SS20R	037103184405	20	567	13.75	349	8.0	3.63	4	Polished
SS22R	037103184412	22	624	15.875	403	8.93	4.05	4	Polished
SS22RCF	037103184429	22	624	15.875	403	8.93	4.05	4	Checkered
SS28R	037103184443	28	794	16	406	9.72	4.41	4	Polished
SS28RCF	037103184450	28	794	16	406	9.72	4.41	4	Checkered

FIGERGLASS HANDLES

Plumb®

Premium Curved Claw



- High-luster, full-polished finish.
- Octagon-shaped neck.
- Virtually unbreakable fiberglass handle; solid fiberglass core covered with a molded nylon jacket to resist breakage due to overstrike.
- Contoured handle for increased comfort and reduced fatigue.
- Enlarged handle base for butting material.
- New grip material reduces handle slickness.
- Factory balanced for maximum striking power.
- PermaBond® construction between head and handle.
- 11410 is a plain-pole English style nail hammer.

Cat. No.	UPC No.	Head wt.		Overall Length		Shelf Pack wt.		Shelf Pack	Face
		oz.	g	Inch	mm	lb.	k		
11400	037103114006	20	567	13	330	8.0	3.63	4	Polished
11402	037103114020	16	454	13	330	6.8	3.08	4	Polished
11403	037103114037	13	369	12-1/2	318	6.0	2.72	4	Polished
11410	037103114105	20	567	13	330	8.0	3.63	4	Polished

Premium Ripping Claw



- High-luster, full-polished finish.
- Octagon-shaped neck.
- Virtually unbreakable fiberglass handle; solid fiberglass core covered with a molded nylon jacket to resist breakage due to overstrike.
- Contoured handle for increased comfort and reduced fatigue.
- Enlarged handle base for butting material.
- New grip material reduces handle slickness.
- Factory balanced for maximum striking power.
- PermaBond® construction between head and handle.

Cat. No.	UPC No.	Head wt.		Overall Length		Shelf Pack wt.		Shelf Pack	Face
		oz.	g	Inch	mm	lb.	k		
11414	037103114143	22	624	13-1/2	343	8.8	3.99	4	Polished
11415	037103114150	16	454	13	330	7.2	3.27	4	Polished
11416	037103114167	22	624	15	377	9.2	4.17	4	Polished
11417	037103114174	22	624	15	377	9.2	4.17	4	Checkered
11420	037103114204	20	567	13	330	8.0	3.63	4	Polished



Warning – Wear Safety Goggles (User and Bystander)

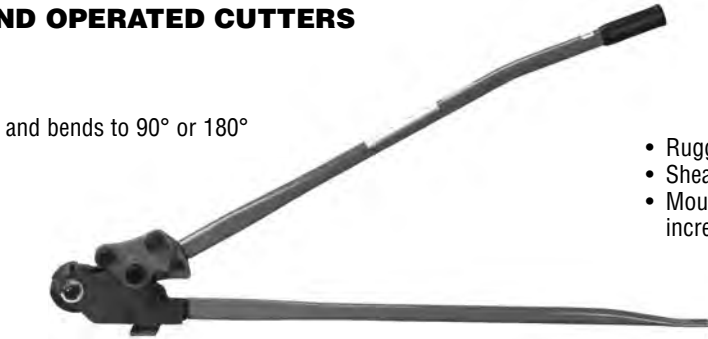
Nail hammers are designed for driving and pulling common, unhardened nails only, and for ripping apart wooden structures. Never strike one hammer with or against another hammer or other hardened objects as the face may chip, possibly resulting in eye or other serious injury. Replace any tool immediately upon chipping, mushrooming or other damage.

HAND OPERATED CUTTERS

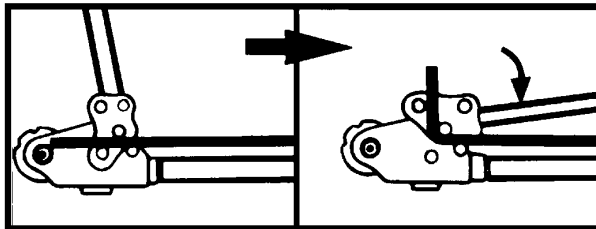
H.K.Porter®

Rebar Cutter and Bender

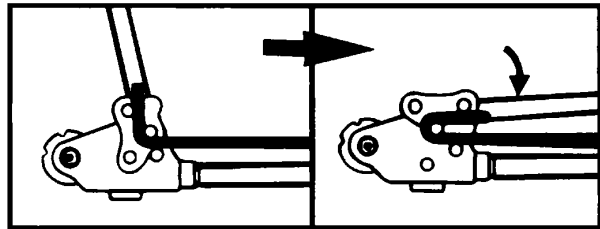
Cuts and bends to 90° or 180°



- Rugged contractor's tool.
- Shear-cut blades.
- Mounts easily on most flat surfaces to enhance leverage and increase safety.



90° Bend



180° Bend

Cat. No.	UPC No.	Approx. Weight		Length		Maximum Capacity		Replacement Jaws	
		lbs.	k	Inch	mm	Inch	mm	Cat. No.	UPC No.
0590RBJ	037103910882	31	14	52	1320	5/8	16	0513RBJ	037103086242

Pocket Wire Rope and Cable Cutter

- Top-quality, pocket-size cutter.
- Shear-cut blades.
- Excellent cutter for 3/16" hard - 1/4" soft wire rope or cable, piano wire or aircraft cable.
- Packaged for easy point-of-purchase display.

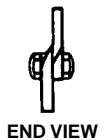


Cat. No.	UPC No.	Approx. Weight		Length		Cable Capacity		Rod Capacity	
		lbs.	k	Inch	mm	Inch	mm	Inch	mm
0690TN	037103911315	1	0.454	7-1/2	190	3/16	5	3/32	2.4

For Wire Rope to 3/4" (19mm)

Shear Type Cable Cutters

- Notched, shear-cut blades hold and lock cable in cutting position.
- Cuts steel cable, coarse- or fine-stranded cable or wire rope with minimal distortion.
- Toggle joints turn 50 lbs. hand pressure to 4000 lbs. cutting pressure.
- Screw-type adjustment realigns edges.



END VIEW

Cat. No.	UPC No.	Approx. Weight		Length		Wire Rope		Hard Stainless Steel Cable		Aircraft Cable		Replacement Cutterhead	
		lbs.	k	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Cat. No.	UPC No.
1490MTN	037103913807	2-3/4	1	14	356	1/4	6	1/4	6	1/4	6	1413TN	037103913494
0190MTN	037103907219	5	2	24	610	3/8	10	3/8	10	3/8	10	0113TN	037103906342
0390MTN	037103909435	12	6	36	914	5/8	16	5/8	16	5/8	16	0313TN	037103908704
0590MTN	037103910875	17	8	42	1067	3/4	19	3/4	19	3/4	19	0513TN	037103910035

Never use any H.K. Porter cutters on energized circuits, wire or cable.

! DANGER

HAND OPERATED CUTTERS

H.K.Porter®

ACSR, Wire Rope and Cable Cutter

- An economical tool for general cutting.
- Shear-cut blades.
- Cuts soft and hard steel cable, wire rope and small ACSR cable.

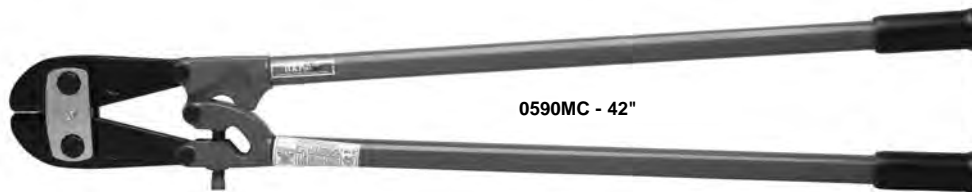


Cat. No.	UPC No.	Approx. Weight		Length		Copper, Aluminum		Wire Rope		ACSR	
		lbs.	k	Inch	mm	Inch	mm	Inch	mm	Inch	mm
0290FHJ	037103908070	4-3/4	2.2	28	710	1	25	1/2	13	7/16	120

Industrial Grade, Center Cut Cutters



- General plant maintenance tool.
- Drop-forged, precision ground, alloy tool steel jaws with center-cut blades.
- Cuts soft, medium or hard materials.
- Maximum hardness of material to be cut: Brinell 455/Rockwell C48.
- Lockplate keeps jaws from loosening.
- Toggle joints turn 50 lbs. hand pressure to 4000 lbs. cutting pressure.
- Screw-type adjustment realigns edges.
- Steel handles with rubber grips.



END VIEW

Cat. No.	UPC No.	Approx. Weight		Length		Soft and Medium Hard Materials (Up to Brinell 300, Rockwell C31)		Hard Materials (Up to Brinell 455, Rockwell C48)		Replacement Cutterhead	
		lbs.	k	Inch	mm	Inch	mm	Inch	mm	Cat. No.	UPC No.
1490MC	037103913777	2-3/4	1	14	356	5/16	8	3/16	5	1413C	037103913456
0090MC	037103905529	3-1/2	2	18	457	3/8	10	1/4	6	0013C	037103904850
0190MC	037103907134	5-1/4	3	24	610	7/16	11	5/16	8	0113C	037103906205
0290MC	037103908094	8-1/2	4	30	762	1/2	13	3/8	10	0213C	037103907578
0390MC	037103909336	12-7/8	6	36	914	9/16	14	7/16	11	0313C	037103908599
0590MC	037103910790	17-1/8	8	42	1067	11/16	18	1/2	13	0513C	037103909930

Never use any H.K. Porter cutters on energized circuits, wire or cable.

! DANGER

Marksman® Iron (120 Watt)

Weller®



- Fine quality, heavy-duty iron.
- 11-3/8" (289mm) long.
- Ideal for home workshop, repairs, stained glass and hobbies.
- Soldering iron rest included.
- MTG30 1/2" (13mm) diameter replaceable iron-plated copper tip.
- Develops 900°F (482°C).
- Stainless steel barrel and heat and impact resistant handle.
- IMPORTANT: Use only Weller® tips. Use of non-Weller components may void product warranty if the non-Weller component causes damage to the unit.
- UL Listed.
- cUL Listed model available.

Cat. No.	UPC No.	Description	Packed	Watts	Volts	Pack Wt.		Shelf Pack
						lb.	kg	
SP120	037103474537	Marksman Soldering Iron	Card	120	120	3.5	1.58	3

Marksman® Iron (175 Watt)



- Fine quality, heavy-duty consumer iron.
- 12-1/2" (318mm) long.
- Extra heavy-duty for demanding jobs like sheet metal work.
- Soldering iron rest included.
- MTG40 5/8" (16mm) diameter replaceable iron-plated copper tip.
- Develops 900°F (482°C).
- Stainless steel barrel and heat and impact resistant handle.
- UL Listed.
- cUL Listed model available.
- IMPORTANT: Use only Weller® tips. Use of non-Weller components may void product warranty if the non-Weller component causes damage to the unit.

Cat. No.	UPC No.	Description	Packed	Watts	Volts	Pack Wt.		Shelf Pack
						lb.	kg	
SP175	037103474674	Marksman Soldering Iron	Card	175	120	4.0	1.81	3

10-499 - 6" Quick Change Retractable Utility Knife

Features and Benefits:

- Change blades quickly – no screwdriver required.
- Three-position, retractable blade slide.
- Swing-out blade storage magazine.
- Integrated string cutter even when blade is retracted.

Handle Length: 6", 152mm
Number of Blades: 3



10-079 - 5-3/8" Retractable Utility Knife

Features and Benefits:

- Patented interlocking nose to hold blade securely.
- Three-position, retractable blade.
- Contoured handle with diagonal ribs for a slip-resistant grip.
- Blade storage in handle.

Handle Length: 5-3/8", 149mm
Number of Blades: 3



10-189C - 5-5/8" Self-Retracting Safety Utility Knife

Features and Benefits:

- Spring-loaded blade retracts automatically when pressure on slide button is released.
- Designed to be used for opening cartons.
- A safer knife since the blade is only exposed when the knife is in use.
- Patented interlocking nose secures blade safely between knife halves.
- Safety orange color for high visibility.

Handle Length: 5-5/8", 144mm
Number of Blades: 1



10-099 - 6" Classic 99® Retractable Utility Knife

Features and Benefits:

- Patented interlocking nose to hold blade securely.
- Three-position, retractable blade.
- Blade storage in handle.

Length: 6", 152.4mm
Number of Blades: 3



55-515 - 12" Wonderbar® Pry Bar

Features and Benefits:

- Forged, high-carbon steel for increased strength and durability.
- Heat-treated for increased durability.
- Polished and beveled cutting edges.
- Contoured bar makes pulling nails, prying, lifting and scraping easier.
- Beveled nail slot at both ends.
- High-visibility, powder-coated finish.

Blade Width: 1-3/4", 44mm
Overall Length: 12-3/8", 314mm



Combination Square

Features and Benefits:

- Durable etched, hard-chrome-plated blades are rust resistant and made to last.
- 12" square has precision-machined working surfaces for improved accuracy.
- Built-in scribe comes in handy for surface marking.
- Easy-to-read vial.
- High-visibility yellow, die-cast handle with brass hardware for durability.

Product #	Overall Length
46-323	7", 178mm
46-028 <i>English/Metric</i>	12", 305mm
46-123	12", 305mm
46-131	16", 407mm



Wood Ball Pein Hammer

Features and Benefits:

- High-carbon, steel forged head, hardened and tempered.
- Rim-tempered face minimizes chipping, assures greater safety.
- Select clear lacquered hickory handle.
- Polished face and pein.



Product #	Overall Length	Size
54-004 - 4 oz.	10-7/8", 275mm	Sizes 5/0
54-008 - 8 oz.	12-1/4", 311mm	Sizes 3/0
54-012 - 12 oz.	13", 345mm	Sizes 2/0
54-016 - 16 oz.	14", 355mm	Size 0
54-024 - 24 oz.	15", 381mm	Size 2
54-032 - 32 oz.	16", 405mm	Size 4
54-040 - 40 oz.	16", 405mm	Size 6
54-048 - 48 oz.	16", 405mm	Size 8

SteelMaster™ Hammer

Features and Benefits:

- Heat-treated, high-carbon steel head for improved durability.
- Rim temper reduces incidences of chipping or spalling.
- Fully polished head is laser-marked with hammer weight.
- Steel shaft is chromed and shot-blasted to resist rust.
- Rubber grip is textured to provide comfort and control.
- Flared grip end helps to prevent hammer from slipping out of user's hand.



Curved Claw



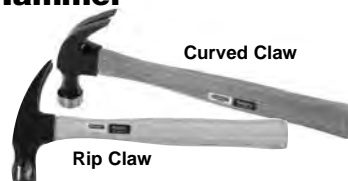
Rip Claw

Product #	Overall Length
51-031 - 16 oz. Curved Claw	13-3/8", 340mm
51-517 - 16 oz. Rip Claw	13-3/8", 340mm
51-033 - 20 oz. Curved Claw	13-3/8", 340mm

Wood Handle Nail Hammer

Features and Benefits:

- Forged high-carbon steel head.
- Fully heat-treated and polished bell face.
- Hickory handle.



Curved Claw

Rip Claw

Product #	Overall Length
51-613 - 7 oz. Curved Claw	11-1/2", 290mm
51-713 - 13 oz. Curved Claw	13", 330mm
51-616 - 16 oz. Curved Claw	13-1/4", 335mm
51-716 - 16 oz. Rip Claw	13-1/4", 335mm
51-720 - 20 oz. Rip Claw	13-1/4", 335mm
51-620 - 20 oz. Curved Claw	13-1/4", 335mm

FatMax® Tape Rule Reinforced with Blade Armor™ Coating

Features and Benefits:

- 11' tape standout.
- 1-1/4" wide blade for easy readability.
- Blade Armor™ coating on the first 6" maximizes durability of hook end.
- Mylar® polyester film extends life of entire blade.
- High-impact ABS case with rubber over mold is jobsite tough.
- Top-forward blade lock makes locking and unlocking a cinch.
- 16" and 19.2" stud center markings simplify framing jobs.
- Cushion grip provides comfortable, slip-resistant hold.
- Specially designed hook grabs on side, top or bottom for versatility.



Product #	Blade Length	Blade Width
33-710	10'	1-1/4"
33-725	25'	1-1/4"
33-726	26'	1-1/4"
33-730	30'	1-1/4"
33-735	35'	1-1/4"

PowerLock® Tape Rule Reinforced with Blade Armor™ Coating

Features and Benefits:

- 7" tape standout.
- Easy readability with 1" wide blade.
- Blade Armor™ coating on the first 6" maximizes durability of hook end.
- Entire blade coated with Mylar® polyester film for added durability.
- Heat-treated spring stands up to repeated use.
- 16" and 19.2" stud center markings simplify framing jobs.
- Three-rivet, corrosion-resistant hook moves for accurate inside/outside measurements.
- Secure blade lock won't creep during measurements.
- Wear plate protects case from cuts and nicks.
- Special Tru-Zero hook does double-duty as a pivot for drawing circles and arcs.



Product #	Blade Length	Blade Width
33-525 <i>upgrade design</i>	25'	1"
33-425	25'	1"
33-428 <i>cm graduation</i>	25'	1"
33-430	30'	1"
33-835	35'	1"

TONGUE AND GROOVE PLIERS

- Right angle teeth grip in all directions for maximum bite and minimum wear.
- Patented undercut tongue and groove design assures no slip jaw action.
- Distinctive CHANNELLOCK BLUE® comfort grips.
- Patented reinforcing edge minimizes stress breakage.
- Patented PermaLock® fastener eliminates nut and bolt failures.



480 - 20.25 inch
Adjustments: 12
Length (in.): 20-1/4
Capacity (in.): 5-1/2

460 - 16 inch
Adjustments: 8
Length (in.): 16
Capacity (in.): 4-1/4

440 - 12 inch
Adjustments: 7
Length (in.): 12
Capacity (in.): 2-1/4

430 - 10 inch
Adjustments: 7
Length (in.): 10
Capacity (in.): 2

442 - 12 inch V - Jaw
Adjustments: 7
Length (in.): 12
Capacity (in.): 2-1/4

422 - 9.5 inch V - Jaw
Adjustments: 5
Length (in.): 9-1/2
Capacity (in.): 1-1/2

420 - 9.5 inch
Adjustments: 5
Length (in.): 9.5
Capacity (in.): 1-1/2

428 - 8 inch
Adjustments: 4
Length (in.): 8
Capacity (in.): 1-1/2

426 - 6.5 inch
Adjustments: 5
Length (in.): 6-1/2
Capacity (in.): 7/8

424 - 4.5 inch
Adjustments: 3
Length (in.): 4-1/2
Capacity (in.): 1/2

LONG NOSE PLIERS

- Cross-hatching on jaws grabs work tightly.
- Precision made of fine polished, high carbon drop forged steel.
- Perfectly mated cutters, laser heat treated to hold their edge.
- Distinctive CHANNELLOCK BLUE® comfort grips.



317 - 7.5 inch with Side Cutter
Length (in.): 7-1/2



318 - 8 3/8 inch with Side Cutter
Length (in.): 8-3/8



326 - 6 inch with Side Cutter
Length (in.): 6



3017 - 7.5 inch without Side Cutter
Length (in.): 5-1/2



3026 - 6 inch without Side Cutter
Length (in.): 6



386 - Bent 5.5 inch without Side Cutter
Length (in.): 5-1/2

18 PIECE - 3/8" Drive Socket Set

Item Number: 19123 with Quick Release Ratchet
 Item Number: 19136 with Round Head Ratchet

Number	Description	Number	Description
11208	12 Pt. Std. Skt. 3/8"	11262	12 Pt. Dp. Skt. 5/8"
11209	12 Pt. Std. Skt. 7/16"	11263	12 Pt. Dp. Skt. 11/16"
11210	12 Pt. Std. Skt. 1/2"	11264	12 Pt. Dp. Skt. 3/4"
11211	12 Pt. Std. Skt. 9/16"	11412	Spark Plug Skt. 5/8"
11212	12 Pt. Std. Skt. 5/8"	11905	3" Extension
11213	12 Pt. Std. Skt. 11/16"	11910	6" Extension
11214	12 Pt. Std. Skt. 3/4"	11900	Ratchet Quick Release or
11258	12 Pt. Dp. Skt. 3/8"	11913	Round Head Ratchet Metal Box
11259	12 Pt. Dp. Skt. 7/16"		
11260	12 Pt. Dp. Skt. 1/2"		
11261	12 Pt. Dp. Skt. 9/16"		Total Weight: 5.9 lbs.



23 PIECE - 1/2" Drive Socket Set

Item Number: 19210

Number	Description	Number	Description
12029	6 Pt. Std. Skt. 7/16"	12260	12 Pt. Dp. Skt. 1/2"
12030	6 Pt. Std. Skt. 1/2"	12261	12 Pt. Dp. Skt. 9/16"
12031	6 Pt. Std. Skt. 9/16"	12262	12 Pt. Dp. Skt. 5/8"
12212	12 Pt. Std. Skt. 5/8"	12263	12 Pt. Dp. Skt. 11/16"
12213	12 Pt. Std. Skt. 11/16"	12264	12 Pt. Dp. Skt. 3/4"
12214	12 Pt. Std. Skt. 3/4"	12265	12 Pt. Dp. Skt. 13/16"
12215	12 Pt. Std. Skt. 13/16"	12266	12 Pt. Dp. Skt. 7/8"
12216	12 Pt. Std. Skt. 7/8"	12810	6" Extension
12217	12 Pt. Std. Skt. 15/16"	12820	Flex Handle 15"
12218	12 Pt. Std. Skt. 1"	12800	Ratchet Quick Release Metal Box
12219	12 Pt. Std. Skt. 1-1/16"		
12220	12 Pt. Std. Skt. 1-1/8"		Total Weight: 13.25 lbs.
12222	12 Pt. Std. Skt. 1-1/4"		



14 PIECE - 1/2" Drive Impact Socket Set

Item Number: 19504

Number	Description	Number	Description
35008	6 Pt. Std. Skt. 3/8"	35016	6 Pt. Std. Skt. 7/8"
35009	6 Pt. Std. Skt. 7/16"	35017	6 Pt. Std. Skt. 15/16"
35010	6 Pt. Std. Skt. 1/2"	35018	6 Pt. Std. Skt. 1"
35011	6 Pt. Std. Skt. 9/16"	35019	6 Pt. Std. Skt. 1-1/16"
35012	6 Pt. Std. Skt. 5/8"	35020	6 Pt. Std. Skt. 1-1/8"
35013	6 Pt. Std. Skt. 11/16"	35022	6 Pt. Std. Skt. 1-1/4"
35014	6 Pt. Std. Skt. 3/4"		Socket Rail
35015	6 Pt. Std. Skt. 13/16"		Total Weight: 3.9 lbs.



13 PIECE - 1/4" Drive Socket Set

Item Number: 19001 with Quick Release Ratchet
 Item Number: 19009 with Round Head Ratchet

Number	Description	Number	Description
10022	6 Pt. Std. Skt. 3/16"	10902	1/2" Extension
10023	6 Pt. Std. Skt. 7/32"	10910	6" Extension
10024	6 Pt. Std. Skt. 1/4"	10915	Spinner Handle
10025	6 Pt. Std. Skt. 9/32"	10900	Ratchet Quick Release or
10026	6 Pt. Std. Skt. 5/16"	10909	Round Head Ratchet Metal Box
10027	6 Pt. Std. Skt. 11/32"		
10028	6 Pt. Std. Skt. 3/8"		Total Weight: 1.75 lbs.
10029	6 Pt. Std. Skt. 7/16"		
10030	6 Pt. Std. Skt. 1/2"		



WRENCH SET

15 Pc., 12 Pt. Combination Wrench Set, in a Roll

Item Number: 715

Part No.	Description	Part No.	Description	Part No.	Description
1110	5/16"	1122	11/16"	1134	1-1/16"
1112	3/8"	1124	3/4"	1136	1-1/8"
1114	7/16"	1126	13/16"	1140	1-1/4"
1116	1/2"	1128	7/8"	715-Roll	Denim Tool Roll
1118	9/16"	1130	15/16"		Weight 8.69 lbs.
1120	5/8"	1132	1"		



WISE-GRIP® Straight Jaw Locking Pliers



- Straight jaws allow for maximum contact on flat, square or hex work.
- Very popular in welding and other metal work.
- Use for safer grinding or as a portable vise.

Straight Jaw Original™ Handle			
Description	Size	Jaw Adjustment	Stock #
10R®	10" (250mm)	0" - 1-3/4" (0mm - 44mm)	0102L3
7R®	7" (175mm)	0" - 1-5/16" (0mm - 33mm)	0302L3

Straight Jaw ProTouch™ Handle			
Description	Size	Jaw Adjustment	Stock #
10R®	10" (250mm)	0" - 1-3/4" (0mm - 44mm)	01SG
7R®	7" (175mm)	0" - 1-5/16" (0mm - 33mm)	03SG

WISE-GRIP® Curved Jaw Locking Pliers with Wire Cutter



- Convenient wire cutter cuts up to a 1/4" bolt.
- Involute jaw curve permits user to put tremendous pressure on four points of any style nut or bolt head.

Curved Jaw Original™ Handle			
Description	Size	Jaw Adjustment	Stock #
10WR®	10" (250mm)	0" - 1-7/8" (0mm - 48mm)	0502L3
7WR®	7" (175mm)	0" - 1-1/2" (0mm - 38mm)	0702L3
5WR®	5" (125mm)	0" - 1-1/8" (0mm - 29mm)	0902L3
4WR®	4" (100mm)	0" - 15/16" (0mm - 24mm)	1002L3

Curved Jaw ProTouch™ Handle			
Description	Size	Jaw Adjustment	Stock #
10WR®	10" (250mm)	0" - 1-7/8" (0mm - 48mm)	05SG
7WR®	7" (175mm)	0" - 1-1/2" (0mm - 38mm)	07SG
5WR®	5" (125mm)	0" - 1-1/8" (0mm - 29mm)	09SG

Curved Jaw Fast-Release™ Handle			
Description	Size	Jaw Adjustment	Stock #
10WR®	10" (250mm)	0" - 1-7/8" (0mm - 48mm)	05T
7WR®	7" (175mm)	0" - 1-1/2" (0mm - 38mm)	07T
5WR®	5" (125mm)	0" - 1-1/8" (0mm - 29mm)	09T

WISE-GRIP® Locking Clamps with Regular Tips



- Wide-opening jaw provides greater versatility in clamping a variety of shapes.

Original™ Handle				
Description	Size	Jaw Adjustment	Throat Depth	Stock #
24R®	24" (605mm)	0" - 10" (0mm - 254mm)	15-1/2" (394mm)	275
18DR®	18" (455mm)	0" - 7-1/2" (0mm - 190mm)	9-1/2" (241mm)	211
18R®	18" (455mm)	0" - 8" (0mm - 200mm)	9-1/2" (241mm)	21
11R®	11" (275mm)	0" - 3-3/8" (0mm - 85mm)	2-5/8" (67mm)	19
9DR®	9" (225mm)	0" - 4-1/2" (0mm - 112mm)	4-3/4" (121mm)	30
6R®	6" (150mm)	0" - 2-1/8" (0mm - 54mm)	1-1/2" (38mm)	17

Fast-Release™ Handle			
Description	Size	Jaw Adjustment	Stock #
11R®	11" (275mm)	0" - 3-3/8" (0mm - 85mm)	19T
6R®	6" (150mm)	0" - 2-1/8" (0mm - 54mm)	17T

WISE-GRIP® Locking C-Clamps with Swivel Pads



- Swivel pads hold tapered work, awkward fabricating jobs and delicate projects without damaging the work surface.

Original™ Handle				
Description	Size	Jaw Adjustment	Throat Depth	Stock #
24SP™	24" (605mm)	0" - 10" (0mm - 254mm)	15-1/2" (394mm)	28
18SP™	18" (455mm)	0" - 8" (0mm - 200mm)	9-1/2" (241mm)	22
11SP®	11" (275mm)	0" - 3-3/8" (0mm - 85mm)	2-5/8" (67mm)	20
9SP™	9" (225mm)	0" - 4-1/2" (0mm - 112mm)	4-3/4" (121mm)	31
6SP™	6" (150mm)	0" - 2-1/8" (0mm - 54mm)	1-1/2" (38mm)	18
4SP™	4" (100mm)	0" - 1-5/8" (0mm - 41mm)	1-1/4" (32mm)	165

WISE-GRIP® Locking Sheet Metal Tool



- Locks to work, eliminates hand gripping.
- Makes bending, forming and crimping jobs easier.

Original™ Handle				
Description	Size	Jaw Adjustment	Throat Depth	Stock #
8R®	8" (200mm)	3-1/8" (78mm)	1-3/4" (44mm)	23

Ball-Hex-L™ Key Sets

Eklind Ball-Hex-L™ Keys are designed with a ball profile on the long arm. This feature provides 360 degrees of rotation at up to a 35 degree angle. The burr-free short arm allows the user to apply maximum torque in required applications. Four inch sets and two metric sets are available. These sets come in compact molded plastic holders that firmly retain each key in size marked holes. Key holders are color-coded, red for inch sizes and blue for metric sizes.

Ball • Hex • L™ Inch Sets

Item No.	No. of Keys	KEY SIZES													
		.050	1/16	5/64	3/32	7/64	1/8	9/64	5/32	3/16	7/32	1/4	5/16	3/8	
13207	7														
13211	11														
13212	12														
13213	13														
13297	7														

Ball • Hex • L™ Metric Sets

Item No.	No. of Keys	KEY SIZES									
		1.5	2.0	2.5	3.0	4.0	5.0	6.0	8.0	10.0	
13607	7										
13609	9										

Ball / Torx® Sets

Item No.	No. of Keys	KEY SIZES						
		T10	T15	T20	T25	T27	T30	T40
10007	7							

Combination Ball-Hex-L™ Key Sets

Two combinations of Ball-Hex-L™ Key Sets are available in popular inch and metric sizes. These sets are conveniently organized into separate molded plastic holders that are color-coded, red for inch and blue for metric.

Item No.	No. of Keys	KEY SETS					
		13211	13213	13607	13609	25171	25911
13218	18						
13222	22						
29016	16						
29022	22						

Combination Hex-L® Key Sets

Four combinations of Hex-L® Key Sets are available in popular inch and metric sizes. These sets are conveniently organized into separate molded plastic holders that are color-coded, red for inch and blue for metric.

Item No.	Series	No. of Keys	KEY SETS					
			10111	10113	10213	10507	10509	10609
10022	L & S	22						
10222	Long	22						
10122	Short	22						
10518	Short	18						



Hex-L® Key Sets

Seven inch sets and four metric sets are available in short and long arm series. These sets come in compact molded plastic holders with size marked holes. Key holders are color-coded, red for inch sizes and blue for metric sizes.

Hex • L® Inch Sets

Item No.	Series	No. of Keys	KEY SIZES														
			.050	1/16	5/64	3/32	7/84	1/8	9/64	5/32	3/16	7/32	1/4	5/16	3/8		
10018	L & S	18	S	L & S	L & S	L & S	S	L & S	L	L & S	L & S	S	L	L			
10107	Short	7															
10111	Short	11															
10112	Short	12															
10113	Short	13															
10207	Long	7															
10211	Long	11															
10212	Long	12															
10213	Long	13															



Hex • L® Metric Sets

Item No.	Series	No. of Keys	KEY SIZES											
			1.6	2.0	2.5	3.0	4.0	5.0	6.0	8.0	10.0			
10507	Short	7												
10509	Short	9												
10607	Long	7												
10609	Long	9												



Torx® L- Key Sets

Two Torx® Key Sets are available in seven sizes and in both short or long arm series. Torx® L-Key Sets come in a green compact molded plastic holder with size marked holes. Torx® Keys cover a wide range of applications including automotive headlights, taillights and trim; power tools, carbide inserts in cutting tools; appliances and electronics.

Torx® L-Sets

Item No.	Series	No. of Keys	KEY SIZES						
			T10	T15	T20	T25	T27	T30	T40
10807	Short	7							
10907	Long	7							
10707	TR	7							



L-Key Metal Box Sets

Four Ball-Hex-L™ Key Sets, ten Hex-L® Key Sets and six Torx® Key sets make up this extensive line. Sets are housed in sturdy metal cases, which fit compactly into a toolbox or conveniently hang in the workshop. Most sets are contained in a flip-up index for easy access. Each metal box is labeled and is color-coded, red for inch sizes, blue for metric sizes and green for Torx® sizes.



Hex-L® Inch Sets

Item No.	Series	No. of Keys	KEY SIZES																		
			.028	.035	.050	1/16	5/64	3/32	7/64	1/8	9/64	5/32	3/16	7/32	1/4	5/16	3/8	1/2	9/16	5/8	
13216	Long	16																			
13293	Long	13																			
Hex-L® Metric Sets																					
10115	Short	15																			
10118	Short	18																			
10214	Long	14																			
10217	Long	17																			
10294	Long	14																			



Hex-L® Metric Sets










Item No.	Series	No. of Keys	KEY SIZES																		
			0.7	0.9	1.3	1.5	2.0	2.5	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	17.0				
13610	Long	10																			
13613	Long	13																			
Hex-L® Metric Sets																					
10512	Short	12																			
10515	Short	15																			
10610	Long	10																			
10611	Long	11																			
10614	Long	14																			















Torx® -L Sets

Item No.	Series	No. of Keys	KEY SIZES																		
			T6	T7	T8	T9	T10	T15	T20	T25	T27	T30	T40	T45	T50	T55	T60				
10812	Short	12																			
10890	Short	10																			
10984	Short	14																			
10912	Long	12																			
10990	Long	10																			
10994	Long	14																			



INCH SIZES								
Hex Size	CAP SCREWS					Set Screws	Shoulder Screws	Pressure Plug
	Socket Head 1038	Socket Head 1960	Flat Head	Button Head	Low Head			
								
0.20			0	0		0		
0.05			1, 2	1, 2	4	1, 2		
0.50	0, 1	0	1, 2	1, 2	4	3, 4		
1/16	2	1	3, 4	3, 4	5, 6	5, 6		
5/64	3, 4	2, 3	5, 6	5, 6	8	8		
3/32	5, 6	4, 5	8	8	10	10		
7/64		6						
1/8	8		10	10	1/4	1/4	1/4	
9/64	10	8						
5/32	1/4	10	1/4	1/4	5/16	5/16	5/16	1/16
3/16	1/4	1/4	5/16	5/16	3/8	3/8	3/8	1/8
7/32	5/16		3/8	3/8	7/16	7/16		
1/4		5/16	7/16	1/2	1/2	1/2	1/2	1/4
5/16	3/8, 7/16	3/8	1/2	1/2	5/8	5/8	5/8	3/8
3/8	1/2	7/16, 1/2	5/8	5/8		3/4	3/4	1/2
7/16		9/16						
1/2	5/8	5/8	3/4			7/8	1	
9/16	3/4, 7/8		7/8			1, 1-1/8		3/4
5/8	1	3/4	1			1-1/4, 1-3/8	1-1/4	1
3/4	1-1/8, 1-1/4, 1-3/8	7/8, 1	1-1/8			1-1/2	1-1/2	1-1/4
7/8		1-1/8, 1-1/4	1-1/4, 1-3/8					
1	1-1/2	1-3/8, 1-1/2	1-1/2			1-3/4, 2	1-3/4	1-1/2, 2
1-1/4		1-3/4					2	
1-1/2		2						
1-3/4		2-1/4, 2-1/2						
2		2-3/4						

METRIC SIZES						
Hex Size	CAP SCREWS				Set Screws	Shoulder Screws
	Socket Head	Flat Head	Button Head	Low Head		
						
0.7					1.4, 1.6, 1.8	
0.9					2, 2.3	
1.3	1.4				2.5, 2.8	
1.5	1.5, 2				3	
2	2.5	3			4	
2.5	3	4			5	
3	4	5	5	4	5	5
4	5	6	6	6	6	6
5	6	8	8	8	10	8
6	8	10	10	8	12, 14	10
8	10	12	12	10	16	12
10	12	14, 16	14, 16	12	18, 20	16
12	14	18, 20	18, 20	14	22, 24	20
14	15, 16	22, 24	22, 24	16		
17	20, 22			20, 22		
19	24, 27			24		

TORX® SIZES				
Torx® Size	CAP SCREWS			Set Screws
	Socket Head	Flat Head	Button Head	
				
T6				
T7			#4	M3
T8				#5
T9		#4		#8, M4
T10	#4, #5, M3	#5, M3	#5, M3	#10, M5
T15	#8	#8	#8	
T20		#8, M4	M4	1/4, M6
T25	#8, M4	#10, M5	#10, M5	
T27	#10, M5		1/4	5/16, M5
T30	1/4, M6	1/4, M6	M6	3/8
T40		5/16, M8	5/16, M8	M10
T46	5/16, M8	3/8	3/8	1/2, M12
T50	3/8, M10	M10	M10	M14
T55	M12	5/8, M12	1/2, M12	M16
T60	M14	3/4, M16	5/6, M16	M20

Precision Ground and Highly Polished

Top quality, precision ground tools with black handles and brightly polished tapers and cutting edges.

Handy pocket pack rolls up.



#901 Pin Punch Kit

- 3/32" Pin Punch
- 1/8" Pin Punch
- 5/32" Pin Punch
- 3/16" Pin Punch
- 1/4" Pin Punch



#905 Punch and Chisel Kit

- 1/4" Prick Punch
- 3/8" Center Punch
- 3/8" Solid Punch
- 1/2" Cold Chisel
- 5/8" Cold Chisel

#900 Chisel Kit

- 1/4" Cold Chisel
- 3/8" Cold Chisel
- 1/2" Cold Chisel
- 5/8" Cold Chisel
- 3/4" Cold Chisel



Extra Long Cold Chisels

Tool Number	Cutting Edge and Length in Inches	Weight in Lbs. per Package	Tool Number	Cutting Edge and Length in Inches	Weight in Lbs. per Dozen	Tool Number	Cutting Edge and Length in Inches	Weight in Lbs. per Dozen
120	1/2 x 12	6-1/2	132	3/4 x 18	19-1/2	142	1 x 24	51-1/2
121	5/8 x 12	10-1/2	134	1 x 18	38	143	1-1/8 x 24	68
122	3/4 x 12	12-3/4	-	-	-	144	1-1/4 x 24	68
123	7/8 x 12	18	140	3/4 x 24	26-1/2	145	1-1/2 x 24	108
124	1 x 12	24-1/2	141	7/8 x 24	38	-	-	-

12" and 18" standard package six each, except 1/2" size which is twelve. 24" packed in bulk. Blast finish, coated with rust preventative. Polished blade when specified. Order by tool number and size of cutting edge and length.



Cold Chisels

Tool Number	Cutting Edge in Inches	Stock Size and Length in Inches	Weight in Lbs. per Dozen	Standard Package
101	1/4	1/4 x 4-1/2	3/4	12
102	5/16	5/16 x 5	1-1/4	12
103	3/8	3/8 x 5	1-3/4	12
104	1/2	7/16 x 6	3	12
105	5/8	9/16 x 6-1/2	5-1/2	12
106	3/4	5/8 x 7	7	6
107	7/8	7/8 x 7-1/2	11-1/2	6
108	1	1 x 8	17	6



Flat Brick Chisels

Tool Number	Cutting Edge in Inches	Stock Size and Length in Inches	Weight in Lbs. per Dozen	Standard Package
345	1-1/8	3/8 x 7/8 x 12	13	6
346	1-1/8	3/8 x 7/8 x 18	19-1/4	6
347	1-1/8	3/8 x 7/8 x 24	26	6



Hexagon Brick Chisels

Tool Number	Cutting Edge in Inches	Stock Size and Length in Inches	Weight in Lbs. per Dozen	Standard Package
339	1	1 x 12	13	6

Blast finish, coated with rust preventative. Polished blade when specified. Order by tool number and size of cutting edge.



All Steel Wood Chisels

Tool Number	Cutting Edge in Inches	Stock Size and Length in Inches	Weight in Lbs. per Dozen	Standard Package
360	1/2	1/2 x 10	4	12
361	3/4	7/16 x 10	5-3/4	12
362	1	5/8 x 11	11	6
363	1-1/4	5/8 x 12	12-3/4	6



Brick Chisels

Tool Number	Cutting Edge in Inches	Stock Size and Length in Inches	Weight in Lbs. per Dozen	Standard Package
350	3	3/4 x 7	1/2	12
351	3-1/2	3/4 x 7	3/4	12
352	4	3/4 x 7	1-1/4	12



Electrician's Floor Chisels

Tool Number	Cutting Edge in Inches	Stock Size and Length in Inches	Weight in Lbs. per Dozen	Standard Package
940	2	5/8 x 10	11	12
941	2-1/2	5/8 x 10	11	12
942	3	3/4 x 12	19-1/2	6



Cape Chisels

Tool Number	Cutting Edge in Inches	Stock Size and Length in Inches	Weight in Lbs. per Dozen	Standard Package
202	1/4	3/8 x 5	1-3/4	12
203	5/16	5/16 x 6	2-3/4	12
204	3/8	1/2 x 6-1/2	4	12



Hexagon Joint Chisels

Tool Number	Cutting Edge in Inches	Stock Size and Length in Inches	Weight in Lbs. per Dozen	Standard Package
330	3/16	1/2 x 10	7-1/4	12



Prick Punches

Tool Number	Stock Size and Length in Inches	Weight in Lbs. per Dozen	Standard Package
434	5/32 x 4-1/2	1	12
435	7/32 x 5	1-1/2	12
437	9/32 x 6	3-3/4	12



Center Punches

Tool Number	Stock Size and Length in Inches	Weight in Lbs. per Dozen	Standard Package
410	3/32 x 4-1/4	3/4	12
411	1/8 x 4-1/2	1	12
412	5/32 x 5	1-1/2	12
414	1/4 x 6	5-3/4	6
415	5/16 x 6-1/2	9	6



Solid Punches

Tool Number	Point Size in Inches	Stock Size and Length in Inches	Weight in Lbs. per Dozen	Standard Package
400	1/8	3/32 x 4-1/4	1/2	12
401	1/8	5/16 x 4-1/2	1	12
402	3/16	5/32 x 5	1-3/4	12
403	3/16	1/2 x 6	4	12



Aligning or Drift Punches

Tool Number	Point Size in Inches	Stock Size and Length in Inches	Weight in Lbs. per Dozen	Standard Package
440	1/4	3/16 x 9	3-1/2	12
441	1/4	1/2 x 10	5-1/2	12
442	5/16	5/8 x 12	10-1/4	6
443	5/16	3/4 x 12	14	6
444	3/8	7/8 x 15	23-1/2	6
445	3/8	1 x 15	29	6



Pin Punches

Tool Number	Point Size in Inches	Stock Size and Length in Inches	Weight in Lbs. per Dozen	Standard Package
420	3/32	1/4 x 4-1/2	1/2	12
421	1/8	1/4 x 4-1/2	1/2	12
422	1/8	3/8 x 6	1-3/4	12
423	5/32	3/8 x 6	1-3/4	12
424	3/16	3/8 x 6	1-3/4	12
425	7/32	3/8 x 6	1-3/4	12
427	1/4	1/2 x 6	3	12
428	1/4	1/2 x 9	4-3/4	12
429	5/16	1/2 x 9	5	12
430	3/8	1/2 x 9	5-1/2	12

Chisels are blast finish, coated with rust preventative.
Polished blade when specified. Order by tool number and size of cutting edge.

Punches are blast finish, coated with rust preventative. Polished taper.
Order by tool number and size of stock.

Arch Punch - No. 149



Osborne arch punches are drop-forged in one piece from the finest special carbon steel in sizes from 3/16" to 2-1/4" diameter. Larger sizes are made with our properly engineered two-piece welded construction. A unique feature of the Osborne arch punch is the inside taper which permits the punchings to clear easily through the barrel. Punches have fully polished barrel and black enamel handle. The cutting edge is fully tempered all the way through and properly finished to provide long use trouble free punching. There is no other hollow punch that can compare.

MEETS GOVERNMENT STANDARDS

(Stock sizes shown below in inches with black enamel finish.)

Dia. (in.)	Weight (lbs.)	Weight (oz.)	UPC No.	Dia. (in.)	Weight (lbs.)	Weight (oz.)	UPC No.
3/16	-	2	01010	3-5/8	3	15	01120
1/4	-	3	01012	3-11/16	3	12	01121
5/16	-	3	01014	3-3/4	4	2	01124
3/8	-	4	01016	3-13/16	3	6	01126
7/16	-	5	01018	3-7/8	4	1	01128
1/2	-	7	01020	3-15/16	3	12	01129
9/16	-	6	01022	4	4	12	01132
5/8	-	8	01024	4-1/16	4	1	01134
11/16	-	9	01026	4-1/8	3	14	01136
3/4	-	9	01028	4-3/16	4	6	01138
13/16	-	8	01030	4-1/4	5	-	01140
7/8	-	12	01032	4-5/16	5	-	01142
15/16	-	12	01034	4-3/8	5	1	01144
1	-	13	01036	4-7/16	5	1	01146
1-1/16	-	12	01038	4-1/2	5	1	01148
1-1/8	-	15	01040	4-9/16	5	2	01150
1-3/16	-	14	01042	4-5/8	5	4	01152
1-1/4	1	3	01044	4-11/16	5	4	01154
1-5/16	1	3	01046	4-3/4	5	5	01156
1-3/8	1	6	01048	4-13/16	5	6	01158
1-7/16	1	8	01050	4-7/8	5	6	01160
1-1/2	1	15	01052	4-15/16	5	7	01161
1-9/16	1	13	01054	5	8	8	01162
1-5/8	1	9	01056	5-1/16	5	8	01163
1-11/16	1	8	01058	5-1/8	5	10	01164
1-3/4	2	5	01060	5-3/16	5	10	01165
1-13/16	2	3	01062	5-1/4	4	14	01166
1-7/8	2	3	01064	5-5/16	5	11	01167
1-15/16	2	2	01066	5-3/8	5	12	01168
2	3	5	01068	5-7/16	5	12	01169
2-1/16	3	6	01070	5-1/2	5	13	01170
2-1/8	3	7	01072	5-9/16	5	13	01171
2-3/16	1	10	01074	5-5/8	5	14	01172
2-1/4	1	13	01076	5-11/16	5	14	01173
2-5/16	1	15	01078	5-3/4	5	14	01174
2-3/8	2	-	01080	5-13/16	5	15	01175
2-7/16	1	10	01082	5-7/8	5	15	01176
2-1/2	2	4	01084	5-15/16	6	-	01177
2-9/16	1	15	01086	6	6	-	01178
2-5/8	2	4	01088	6-1/16	6	-	01179
2-11/16	2	-	01090	6-1/8	6	1	01185
2-3/4	2	5	01092	6-3/16	6	1	01186
2-13/16	1	13	01094	6-1/4	6	2	01187
2-7/8	2	8	01096	6-5/16	6	2	01188
2-15/16	3	-	01097	6-3/8	6	3	01189
3	2	8	01100	6-7/16	6	3	01190
3-1/16	2	1	01102	6-1/2	6	3	01191
3-1/8	2	9	01104	6-9/16	6	4	01192
3-3/16	2	2	01106	6-5/8	6	4	01193
3-1/4	2	9	01108	6-11/16	6	4	01194
3-5/16	3	-	01109	6-3/4	6	5	01195
3-3/8	3	14	01112	6-13/16	6	5	01196
3-7/16	2	15	01114	6-7/8	6	5	01197
3-1/2	4	1	01116	6-15/16	6	6	01198
3-9/16	2	4	01117	7	6	6	01199

Also available in millimeters with green enamel finish.

Drive Punches - No. 147



These drive or saddlers punches are forged from the best grade tool steel, carefully hardened and tempered, with polished barrel. The hole tapers back from the cutting edge so that the punchings clear freely and require only a light blow with the mallet to cut with ease.

Size No.	Diameter	Weight	UPC No.
0	5/64"	2 oz.	51410
1	7/64"	2 oz.	51412
2	1/8"	2 oz.	51414
3	9/64"	2 oz.	51416
4	5/32"	2 oz.	51418
5	11/64"	2 oz.	51420
6	3/16"	2 oz.	51422
7	7/32"	3 oz.	51424
8	1/4"	3 oz.	51426
9	9/32"	3 oz.	51428
10	5/16"	3 oz.	51430
11	3/8"	4 oz.	51432
12	13/32"	4 oz.	51434
13	7/16"	6 oz.	51436
14	15/32"	6 oz.	51438
15	33/64"	7 oz.	51440
16	9/16"	9 oz.	51442

Grommet Hole Cutter - No. 500



Drop-forged steel cutting punch used in connection with setting Dies to cut the correct size hole in which to insert the Grommet.

Size No.	Diameter of Cut
00-A	3/16"
0-A	1/4"
1-A	9/32"
2-A	11/32"
3-A	3/8"
4-A	15/32"
5-A	5/8"
6-A	3/4"
7-A	7/8"
8-A	1"

Brass Plain Rim Grommets and Washers - No. G1



For best results in setting No. G1 grommets and washers use an Osborne No. 500 hole punch and an Osborne No. 216 setting die with corresponding sizes.

Size No.	Diameter of Hole When Set	Weight Per Gross	UPC No.
00	3/16"	2 oz.	13012
0	1/4"	5 oz.	13014
1	9/32"	8 oz.	13016
2	3/8"	12 oz.	13018
3	7/16"	1 lb. 2 oz.	13020
4	1/2"	1 lb. 8 oz.	13022
5	5/8"	1 lb. 12 oz.	13024
6	13/16"	6 lbs.	13026

Arch Punch Set - No. K-14



This set of seven arch punches includes the sizes most widely used. They are put up in a sturdy, easy to use canvas tool roll as shown.

1 each of the listed sizes Osborne Arch Punch - No. 149

Sizes (in.)	1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1
Weight per set	4 lbs.
UPC No.	01180

Revolving Punch - No. 155



Six-tube punch made with tubes 1, 2, 3, 4, 5, 6 or 0, 1, 2, 3, 5 and 7. This punch is known as the best Revolving Punch made. The frame is made of forged steel, highly polished. Cutting tubes are turned from special carbon tool steel and threaded to allow easy replacement. These tubes are individually hardened. The reach or distance from the cutting tube to the back of jaw is 1-1/2". Weight each is 14 oz. Size 0 to 7 provided unless specified otherwise.

Item No.	Description	UPC No.
155 1-6	Revolving Punch	52010
155 0-7	Revolving Punch	52012
155-A	Extra Anvil	52052
155-HS	Extra Handle Spring	02070
155-SP	Extra Side Spring	02072
155T - (size)	Extra Tubes	See Below
155 0-7	Set of Replacement Tubes	02044
155 1-6	Set of Replacement Tubes	02046

Note: Numbers 155, 153 and 223 tubes are not interchangeable. No. 155 punch takes tubes up to size 6 and 7 as indicated on the cylinder of the punch. Punch tubes measure 3/4" overall.

Scratch Awl - No. 4



Made in four sizes for your convenience. Best quality polished steel blades with rugged amber translucent plastic handles.

Size No.	Blade Length	Weight	UPC No.
1	2-1/2"	1 oz.	62012
2	3-1/2"	2 oz.	62014
3	4-1/2"	3 oz.	62016
4	5-1/2"	4 oz.	62018

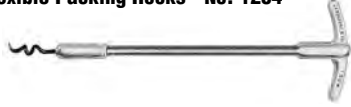
Linoleum Knife - No. 425



Short blade with sure-grip wood handle. The blade is pinned through the handle.

Length of blade	Weight	UPC No.
2-1/2"	3 oz.	60092

Flexible Packing Hooks - No. 1204



These hooks are strongly made of toughest materials. Two spiral steel shafts, one inside the other wound in opposite directions, make up the shank. Handle is solid zinc. Hook is tempered and permanently pointed. Don't struggle with stubborn packings.

Size No.	Length	Shaft Dia.	Spiral Dia.	Spiral Lgth.	Weight	UPC No.
0	7"	3/32"	11/64"	5/16"	1 oz.	58318
1	6-1/4"	3/16"	1/4"	3/4"	1 oz.	58320
2	10-5/8"	1/4"	5/16"	1-1/8"	3 oz.	58322
3	15"	3/8"	3/8"	1-1/2"	6 oz.	58324
3-22	22"	3/8"	3/8"	1-1/2"	9 oz.	58326
3-30	30"	3/8"	3/8"	1-1/2"	12 oz.	58328
4	18"	3/8"	1/2"	1-7/8"	7 oz.	58330
5	22"	3/8"	5/8"	1-7/8"	9 oz.	58332

Flexible Packing Hook Sets - No. 1203



Complete set consisting of listed sizes of Flexible Packing Hook - No. 1204

Size No.	1	2	3
Weight per set	1 lb.		
UPC No.	08310		

Rigid Packing Screw - No. MT10



Length	Diameter	Weight	UPC No.
6"	3/16"	1 oz.	58372
8"	3/16"	1 oz.	58374
10"	1/4"	2 oz.	58376
12"	1/4"	3 oz.	58378
14"	1/4"	3 oz.	58380
18"	5/16"	7 oz.	58382
20"	5/16"	7 oz.	58383

Packing Hook - No. MT32



Length	Diameter	Weight	UPC No.
6"	3/16"	1 oz.	58431
8"	3/16"	1 oz.	58432
10"	1/4"	3 oz.	58434
12"	1/4"	3 oz.	58435
14"	1/4"	3 oz.	58436

Also available is a packing hook with straight point:
 8" 3/16" 1 oz. 58433

Double Ended Packing Tool - No. MT12



Length	Diameter	Weight	UPC No.
6"	1/4"	1 oz.	58412
8"	1/4"	2 oz.	58414
10"	1/4"	2 oz.	58416
12"	5/16"	4 oz.	58418

Rigid Packing Tool Set - No. 906P



Set packed in sturdy kraft box, consists of six rigid packing tools.

Item No.	Diameter	Weight	UPC No.
MT12-12	12" Double End Packing Tool	1-1/2 lbs.	08358
MT32-8	8" Packing Hook	1-1/2 lbs.	08358
MT10-6	6" Rigid Packing Screw	1-1/2 lbs.	08358
MT10-10	10" Rigid Packing Screw	1-1/2 lbs.	08358
MT14-14	14" Rigid Packing Screw	1-1/2 lbs.	08358
MT18-18	18" Rigid Packing Screw	1-1/2 lbs.	08358

Square Point Knife - No. 76



The finest quality knife with round plantation tropical wood handle, brass ferrule. Widely used in industry. Steel blade. Made to last.

Blade Length	Blade Width	Weight	UPC No.
3-3/4"	3/4"	2 oz.	60042

Square Point Knife - No. 76.5



The white hardwood handle is somewhat shorter and heavier than in the Osborne No. 76. Steel Blade.

Blade Length	Blade Width	Weight	UPC No.
3-7/8"	5/8"	2 oz.	60046

Broad Point Knife - No. 78



Round polished hardwood handle. Steel Blade.

Blade Length	Blade Width	Weight	UPC No.
5"	1-1/8"	2 oz.	60054

Sharp Point Knife - No. 79



White hardwood handle, sharp point knife. A popular knife in the shoe and leather industries. Steel Blade.

Blade Length	Blade Width	Weight	UPC No.
3-3/4"	3/4"	2 oz.	60060

Bevel Point Knife - No. 479



Utility and leatherworkers' knife. Excellent for use in shipping and receiving work. Designed especially for skiving leather and edge trimming on leather and similar materials. Hardwood handle, Steel Blade. Exceptionally handy knife.

Blade Length	Weight	UPC No.
3"	2 oz.	60112

Hog Ring Pliers with Vinyl Handles - No. 1440



Nine different styles with straight or angled handles, comes with opening springs, closing springs and no springs. Please specify style. Grooves are the proper depth. Made of forged steel. Use with Osborne hog rings No. 1442 and No. 1443.

Item No.	Description	UPC No.
1440-A	Straight handles 6-3/4" long	
1440-B	Handles bent at 135° angle to jaw	
1440-C	Handles bent to reach difficult spots (Jaws and handles are aligned.)	
Item No.	Type	UPC No.
1440-A	No Spring	54132
1440-B	No Spring	54138
1440-C	No Spring	54144
1440-AO	Opening Spring	54134
1440-BO	Opening Spring	54140
1440-CO	Opening Spring	54146
1440-AC	Closing Spring	54136
1440-BC	Closing Spring	54142
1440-CC	Closing Spring	54148
Replacement Springs		
1440-SC	Closing Spring	54152
1440-SO	Opening Spring	54154

Weight each 8 oz.

Hog Rings - No. 1442



To be used with Osborne Hog Ring Pliers - No. 1440. Polished 3/4" rings sharp points.

Item No.	Description	Quantity (approx.)	UPC No.
1442-5	Weight 5 lbs./box	2,400	14592
1442-25	Weight 25 lbs./box	12,000	14594

Sharp Point Hog Rings - No. 1442-S

Same as No. 1442 but stainless steel. To be used with Osborne Hog Ring Pliers No. 1440, 23.23T.2350 and 2360T. Polished 3/4" rings sharp points.

Item No.	Description	Quantity (approx.)	UPC No.
1444SS-5	Weight 5 lbs./box	2,400	14600

Blunt Point Hog Rings - No. 1443

To be used with Osborne Hog Ring Pliers No. 1440. Polished 3/4" rings sharp points.

Item No.	Description	Quantity (approx.)	UPC No.
1443-5	Weight 5 lbs./box	2,400	14596
1443-25	Weight 25 lbs./box	12,000	14598

Rawhide Mallet with Solid Head - No. 196



The head of this lightweight mallet is made entirely of rolled water buffalo rawhide. Handle is white hickory. It is recommended for many jobs where the user wishes to avoid scarring.

Size No.	Head Length	Face Diameter	Weight	UPC No.
0	2-3/8"	1"	2 oz.	11052
1	3-1/8"	1-1/4"	4 oz.	11054
2	3-1/4"	1-1/2"	6 oz.	11056
3	3-3/8"	1-3/4"	8 oz.	11058
4	3-1/2"	2"	10 oz.	11060
5	4"	2-1/2"	16 oz.	11062
6	4-1/2"	2-1/2"	20 oz.	11064

Black Rubber Mallet - No. 197



Rubber mallets can be used without fear of marring metal parts. An ideal mallet for changing tires without damage to the rims. Many industrial uses. Limited bounce. Head of solid dense black rubber with white hickory handle.

Size No.	Face Diameter	Head Length	Handle Length	Weight	UPC No.
2	2"	3-1/4"	3-1/4"	11 oz.	61162
3	2-1/2"	4-1/2"	4-1/2"	25 oz.	61164

White Rubber Mallet - No. 396



No. 396 extra heavy white rubber mallet will not mar surface. Superior quality. Finest on the Market. Limited bounce. White hickory handle.

Size No.	Face Diameter	Head Length	Handle Length	Weight	UPC No.
2	2"	3-1/4"	3-1/4"	11 oz.	61142
3	2-1/2"	4-1/2"	4-1/2"	25 oz.	61146

Barrel Shaped Hickory Mallet - No. 89.5



Made of second growth hickory, a carefully finished, well balanced, heavy hickory mallet. Laquered.

Size No.	Face Diameter	Head Length	Handle Length	Weight	UPC No.
2-1/2	2-3/8"	5-1/2"	10-1/2"	16 oz.	61014
3	2-1/4"	5-1/2"	10-1/4"	12 oz.	61016
3-1/2	2"	5-1/4"	10-1/4"	12 oz.	61018
4	1-3/4"	5"	10-1/4"	8 oz.	61020

Cotton Hook - No. 1



This hook is made of 3/8" round bright finished steel. Polished oval hard wood handle. Tanged through.

Length	Weight	UPC No.
6"	6 oz.	58062
7"	6 oz.	58064
8"	7 oz.	58066

Box Hook - No. 281



This hook is made of 7/16" round bright finish steel. Polished round hardwood handle. Tanged through.

Length	Weight	UPC No.
9"	12 oz.	58082

Hay Hook - No. 14



Made of 3/8" round bright finish steel. Round polished hardwood handle. Tanged through. Very popular.

Length	Weight	UPC No.
8"	8 oz.	58022

Longshoreman's Hook - No. 284



A popular design for handling cases. Many Longshoreman insist on this 7/16" square blade. Forged from best quality steel.

Length	Weight	UPC No.
8-1/2"	13 oz.	58102
9-1/2"	13 oz.	58104
11"	15 oz.	58106

Wire Rope Marlin Spike - No. 276



Made of high grade carbon steel, carefully hardened and tempered. Fully polished. The finest marlin spike made. Made in the U.S.A.

Length	Weight	UPC No.
6"	6 oz.	68110
8"	7 oz.	68112
10"	9 oz.	68114
12"	16 oz.	68116
14"	1 lb. 1 oz.	68118
16"	2 lbs.	68120
18"	2 lbs. 5 oz.	68122
20"	2 lbs. 5 oz.	68124
24"	2 lbs. 9 oz.	68119

Bearing Scraper Set - No. MT2



The ideal scraper for bearings, valves, babbitt metal, journals, etc. There are six scrapers in each set. They vary in size from 6 to 14 inches. Set of six special hollow ground scrapers comes with a canvas pouch. Can also be purchased separately.

Item No.	Description	Weight Per Set	UPC No.
37A-14	Half Round Scraper	3 lbs. 7 oz.	09052
37B-12	Half Round Scraper	3 lbs. 7 oz.	09052
37C-10	Half Round Scraper	3 lbs. 7 oz.	09052
37D-8	Half Round Scraper	3 lbs. 7 oz.	09052
34E-6	3 Square Scraper	3 lbs. 7 oz.	09052
36B-12	Double End Scraper	3 lbs. 7 oz.	09052

Plumbers' Scraper or Shave Hooks - No. 304



Made so that the blade may be taken off or put on by means of the set screw, and can be furnished with either No. 1, 2 or 3 blades. Furnished with oval blade unless otherwise specified. Hardwood handle.

Item No.	Description	Weight	UPC No.
304-1	Scraper w/oval blade	3 oz.	59112
304-2	Scraper w/half oval blade	3 oz.	59114
304-3	Scraper w/triangular blade	3 oz.	59116

Plumbers' Scrapers or Shave Hooks - No. 305



Extra blades for Osborne No. 304

Item No.	Description	Weight	UPC No.
305-1	Oval blade	1 oz.	59122
305-2	Half oval blade	1 oz.	59124
305-3	Triangular blade	1 oz.	59126

Box or Painters' Scraper - No. 379



Removable forged steel blade, hardened and tempered. Extra blades are obtainable, thus prolonging the life of the tool.

Blade Width	Weight	UPC No.
2-3/4"	6 oz.	59153

379-B Replacement blade - 59154

BERYLCO® SAFETY TOOLS

THE TOOLS YOU'VE TRUSTED WITH YOUR LIFE FOR OVER 60 YEARS.

Nonsparking Berylco® Safety Tools provide excellent protection against fires and explosions in environments where flammable solvents, fuels, materials, gasses and residues are present. While many nonferrous alloys meet nonsparking standards, only beryllium copper has the superior strength and hardness not found in safety tools made from aluminum, bronze and brass. The nonmagnetic and corrosion-resistant properties of our tools are well suited for industrial and high technology applications. Whenever the safety of your workers or plant is a concern, Berylco Safety Tools deliver the durability, performance and value you expect from the industry leader.

Features of Berylco Safety tools:

- Lifetime Warranty. If a Berylco tool breaks or fails to perform under normal use or service, it will promptly be repaired or replaced, free of charge. Exceptions are defects arising from mis-use or abuse and normal wear in service.
- Strong and nonsparking.
- Nonmagnetic as defined by MIL-M-19595.
- Corrosion resistant.
- Free sharpening service - with freight prepaid both ways.

DOUBLE-FACED ENGINEER'S HAMMER



Item No.	Handle	Wt. of Head
H-321	14"	2 lb.
H-322	15"	2lb. 8 oz.

COMBINATION BOX AND OPEN-END WRENCH



Item No.	Opening	O.A.	Wt.
W-60	3/8"	5"	2 oz.
W-61	7/16"	5½"	3 oz.
W-62	1/2"	6"	3 oz.
W-63	9/16"	6¾"	5 oz.
W-64	5/8"	7¾"	7 oz.
W-65	11/16"	8¾"	9 oz.
W-66	3/4"	9½"	10 oz.
W-67	7/8"	11"	15 oz.
W-67S	15/16"	15½"	1 lb. 2 oz.
W-68	1"	12½"	1 lb. 2 oz.
W-69	1-1/16"	14"	1 lb. 5 oz.
W-70	1-1/8"	14½"	1 lb. 10 oz.
W-71	1-1/4"	18¼"	2 lb. 2 oz.

SLEDGE HAMMER



Item No.	Handle	Wt. of Head
H-68	32"	5 lb.
H-69	34"	7 lb. 12 oz.
H-70	36"	10 lb. 8 oz.
H-71	36"	16 lb.

ADJUSTABLE PIPE WRENCH



Item No.	O.A.	Cap.	Wt.
W-216	8"	1/8" to 3/4"	15 oz.
W-217	10"	1/8" to 1"	1 lb. 15 oz.
W-217A	12"	1/4" to 1-3/4"	2 lb. 13 oz.
W-218	14"	1/4" to 1-1/2"	3 lb. 8 oz.
W-219	18"	1/4" to 2"	5 lb. 7 oz.
W-220	24"	1/4" to 2-1/2"	8 lb. 7 oz.
W-221	36"	1/2" to 3-1/2"	18 lb. 12 oz.
W-222	48"	1" to 5"	32 lb. 8 oz.

ROUND POINT SHOVEL



Item No.	Blade	O.A.	Wt.
S-11	10" x 12"	68"	4 lb. 10 oz.
S-13	10" x 12"	39"	4 lb. 4 oz.

SQUARE POINT SHOVEL

Item No.	Blade	O.A.	Wt.
S-12	10" x 12"	68"	5 lb.
S-14	10" x 12"	39"	5 lb.

OTHER NON-SPARKING HAND TOOLS ARE ALSO IN STOCK!

CALL US FOR MORE INFORMATION.

STRAIT - LINE® FAST RETRIEVE Chalk Reels



- Retrieves chalk line 3-1/2 times faster than a standard chalk reel.
- Crank handle clutch release allows release of the line without spinning the crank handle.
- Lightweight ABS impact-resistant case increases durability.
- Patented hook storage and door locking mechanism virtually eliminate spills and line tangles.
- Twisted cotton line holds more chalk for multiple line strikes.
- Holds approximately 2 oz. of chalk.

Item #	Length	Description	Bulk
64310	100'	Fast Retrieve Chalk Reel	64311

Assorted reel and chalk combo packs

Item #	Length	Description
64494	100'	Fast retrieve chalk reel and 4 oz. Blue Chalk
64495	100'	Fast retrieve chalk reel and 4 oz. Red Chalk

STRAIT - LINE® LARGE CAPACITY Chalk Reel

- 180' line reel for large jobs.
- 10 oz. Chalk capacity for maximum uptime.
- Folding handle with lock to prevent line tangles.
- Comfortable ProTouch handle.
- Stronger line for increased durability.

Item #	Length	Description
64320	180'	Large Capacity Chalk Reel



SPEEDBOR® Flat Bits



Standard Length Spade Bits

Item #	Dia.	Length	Shank Size	Pack Qty.	Bulk # Qty.
88804	1/4"	6"	1/4"	1-pk.	99904 24-pk.
88805	5/16"	6"	1/4"	1-pk.	99905 24-pk.
88806	3/8"	6"	1/4"	1-pk.	99906 24-pk.
88807	7/16"	6"	1/4"	1-pk.	99907 24-pk.
88808	1/2"	6"	1/4"	1-pk.	99908 24-pk.
88809	9/16"	6"	1/4"	1-pk.	99909 24-pk.
88810	5/8"	6"	1/4"	1-pk.	99910 24-pk.
88811	11/16"	6"	1/4"	1-pk.	99911 24-pk.
88812	3/4"	6"	1/4"	1-pk.	99912 24-pk.
88813	13/16"	6"	1/4"	1-pk.	99913 24-pk.
88814	7/8"	6"	1/4"	1-pk.	99914 24-pk.
88815	15/16"	6"	1/4"	1-pk.	99915 24-pk.
88816	1"	6"	1/4"	1-pk.	99916 24-pk.
88818	1-1/8"	6"	1/4"	1-pk.	99918 12-pk.
88820	1-1/4"	6"	1/4"	1-pk.	99920 12-pk.
88822	1-3/8"	6"	1/4"	1-pk.	99922 12-pk.
88824	1-1/2"	6"	1/4"	1-pk.	99924 12-pk.

Short Length Spade Bits

- Blue-Groove point and cutting edge for faster chip removal - 4x faster than standard spade bits.
- Double-cutting spurs scribe the outside of the hole reducing breakout.
- 10% larger shank for added durability.
- Grooved hex shank prevents slipping in drill chuck or bit extension.
- Fits all standard quick change chucks.
- Shorter bit length gets into confined spaces (between studs) where standard lengths will not fit.

Item #	Dia.	Length	Shank Size
87908	1/2"	4-3/4"	1/4"
87910	5/8"	4-3/4"	1/4"
87912	3/4"	4-3/4"	1/4"
87916	1"	4-3/4"	1/4"
87920	1-1/4"	4-3/4"	1/4"
87924	1-1/2"	4-3/4"	1/4"

POWER DRILL Long Ship Auger Bits



- Single cutter and side lip effortlessly bore holes in wood where nails may be encountered.
- Cuts through nails without damaging the bit.
- Full-length heat treatment guards against bending in heavy-duty applications and strengthens the twist where the greatest strain occurs.
- Hollow center flutes clear chips quickly out of holes.
- Wide lands help keep bit straight as it bores.
- Medium-fast screw point ideal for general woodboring applications. Bit can be resharpened.
- All bits have a 12" twist length and a 17" overall length.
- Nail cutting tip.

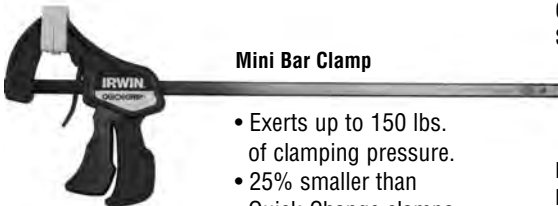
Item #	Diameter	Shank Size	Tubed Stock #
47306	3/8"	5/16" hex	47406
47307	7/16"	5/16" hex	47407
47308	1/2"	5/16" hex	47408
47309	9/16"	7/16" hex	47409
47310	5/8"	7/16" hex	47410
47311	11/16"	7/16" hex	47411
47312	3/4"	7/16" hex	47412
47313	13/16"	7/16" hex	47413
47314	7/8"	7/16" hex	47414
47315	15/16"	7/16" hex	47415
47316	1"	7/16" hex	47416
47317	1-1/16"	7/16" hex	47417
47318	1-1/8"	7/16" hex	47418
47319	1-3/16"	7/16" hex	-
47320	1-1/4"	7/16" hex	47420
47321	1-5/16"	7/16" hex	-
47322	1-3/8"	7/16" hex	47422
47324	1-1/2"	7/16" hex	47424
47326	1-5/8"	7/16" hex	-
47328	1-3/4"	7/16" hex	-
47332	2"	7/16" hex	-

CLAMPS QUICK-GRIP® One Handed Bar Clamp/Spreader



Clamp/Spreader

- Exerts up to 250 lbs. of clamping pressure.



Mini Bar Clamp

- Exerts up to 150 lbs. of clamping pressure.
- 25% smaller than Quick-Change clamps.



Micro Bar Clamp/Spreader

- Quick-Change jaw quickly converts from clamp to spreader and requires no tools.
- Constructed of high-tech reinforced resin for strength and durability.
- Patented pistol grip design enhances comfort and ease of use.
- Non-marring pads grip firmly and protect work.
- Ideal for clamping/gluing, holding work for sawing/drilling and positioning work for fastening.

	Item #	Clamping Capacity	Spreading Capacity	Throat Depth
Clamp/Spreader	506QC	6" (15cm)	7-1/2" - 14-5/8" (195mm - 360mm)	3-1/4" (83mm)
	512QC	12" (30cm)	7-1/2" - 20-5/8" (195mm - 515mm)	3-1/4" (83mm)
	518QC	18" (45cm)	7-1/2" - 26-5/8" (195mm - 665mm)	3-1/4" (83mm)
	524QC	24" (60cm)	7-1/2" - 32-5/8" (195mm - 820mm)	3-1/4" (83mm)
	536QC	36" (91cm)	7-1/2" - 44-5/8" (195mm - 1120mm)	3-1/4" (83mm)
	550QC	50" (126cm)	7-1/2" - 58-5/8" (195mm - 1475mm)	3-1/4" (83mm)
Mini Bar Clamp	5412	12" (30cm)	-	2-7/16" (62mm)
	546	6" (15cm)	-	2-7/16" (62mm)

One-Handed Micro Bar Clamps

- Perfect size for hobby and craft applications.
- Converts to a spreader by reversing the clamp pads.

Item #	Clamping Capacity	Spreading Capacity	Throat Depth
53006	4-1/4" (10cm)	8" (20cm)	1-3/16" (30mm)



Professional Door Jamb Level

Product No.	UPC No. (30553)	Length	Vials
SL MA78R	14009-0	6' (5¾")	8

- Mahogany I-beam.
- Eight Solid Set Cat's eye yellow vials for accuracy.
- Large hand holes and shock absorbent end caps.
- Solid aluminum rollers.
- Handy as a straight edge level and for setting door jams.
- Adjustable rollers for checking plumb of door.
- Heavy-duty aluminum I-beam frame for extra strength.



Professional Cast Aluminum Plumbers Level

Product No.	UPC No. (30553)	Length	Vials
SL 2424P	10211-1	24"	6

- Durable cast aluminum construction.
- Precision milled frame for accurate work surface.
- Will not warp – Will not rust.
- Solid Set top reading vial, 45 degree vial and twin plumb vials.
- Protective glass lenses.
- Graduated 1/10" ruler on working surface.
- Threaded cap screw to adjust pitch.



Strong magnetic strip
Roto-Vial® level – one vial does the work of two.

Quality Magnetic Extruded Aluminum Levels

Product No.	UPC No. (30553)	Length	Vials
SL QML24	14101-1	24"	3
SL QML48	14102-8	48"	3
SL QML72	14103-5	72"	4

- Extruded aluminum I-beam frame.
- Frame is strong and lightweight.
- Roto-Vial® level insures accuracy.
- Shock absorbing protective end caps.
- Full length magnetic strip to hold against metallic surface.
- Protective plastic lenses.



English/Metric rule
Roto-Vial® feature

Quality Roto-Vial® Aluminum Levels

Product No.	UPC No. (30553)	Length	Vials
SL RV218	17110-0	18"	2
SL RV318	17120-9	18"	3
SL RV224	17111-7	24"	2
SL RV324	17112-4	24"	3
SL RV328	17113-1	28"	3
SL RV336	17114-8	36"	3
SL RV348	17115-5	48"	3
SL RV472	17116-2	72"	4

- Extruded anodized aluminum I-beam frame.
- Roto-Vial® level insures accuracy.
- Easy to read English/Metric rule on one edge.
- Shock absorbent end caps.
- Protective plastic lenses.



Full length magnetic strip

Professional Magnetic Aluminum Extruded Levels

Product No.	UPC No. (30553)	Length	Vials
SL PML18	13001-5	18"	3
SL PML24	13002-2	24"	3
SL PML36	13003-9	36"	3
SL PML48	13004-6	48"	3
SL PML72	13005-3	72"	5
SL PML78	13006-0	78"	5
SL PML96	13007-7	96"	5

- Heavy-duty extruded aluminum I-beam frame.
- Roto-Vial® level insures accuracy.
- Full length magnetic strip on one edge.
- Top reading window for level vial and two plumb vials.
- Shock absorbent end caps.
- Protective plastic lenses.





LEVELS



I-Beam Construction, strong and lightweight.

Professional Aluminum Extruded Levels

Product No.	UPC No. (30553)	Length	Vials
SL HD18	12001-6	18"	6
SL HD24	12002-3	24"	6
SL HD28	12003-0	28"	6
SL HD30	12004-7	30"	6
SL HD36	12005-4	36"	6
SL HD42	12006-1	42"	6
SL HD48	12007-8	48"	6
SL HD72*	12008-5	72"	10
SL HD78*	12009-2	78"	10
SL HD96*	12010-8	96"	10

*Does not have end caps.

- Heavy-duty extruded aluminum I-beam frame.
- Strong, lightweight frame with shock absorbent end caps.
- Adjustable Cat's eye yellow double bent vials for accuracy.
- Precision milled frame for accurate work surface.
- "Contractor Red" with machined edges.



Contractor red edge

Double bent vials for accuracy

Professional Cast Aluminum Levels

Product No.	UPC No. (30553)	Length	Vials
SL 1212	10112-1	12"	4
SL 1818	10113-8	18"	6
SL 2424	10114-5	24"	6
SL 2828	10115-2	28"	6
SL 3030	10116-9	30"	6
SL 4848	10111-4	48"	6
SL 18YA18*	10214-2	18"	5
SL 24YA24*	10215-9	24"	5

*45 Degree vial

- Durable cast aluminum construction.
- Precision milled frame for accurate work surface.
- Solid Set Cat's eye yellow, double bent vials for accuracy.
- Will not warp – Will not rust.
- Protective glass lenses.



Angle bound brass binding embedded in wood for extra strength

All Sands vials are easy to read and solid set for accuracy.

Professional Brass Bound Mahogany Levels

Product No.	UPC No. (30553)	Length	Vials
SL 12AB18*	11113-7	18"	6
SL 12AB24	11114-4	24"	6
SL 12AB28	11115-1	28"	6
SL 12AB36	11117-5	36"	6
SL 12AB42	11119-9	42"	6
SL 12AB48	11121-2	48"	6

*18" level comes with hand grooves.

- Made from the finest selection of mahogany wood.
- Angle type brass binding on all edges.
- Two large hand holes and one hang hole.
- Shock absorbent end caps.
- Protective glass lenses.



All Sands vials are easy to read and solid set for accuracy.

Professional Mahogany I-Beam Levels

Product No.	UPC No. (30553)	Length	Vials
SL MA24*	14001-4	24"	6
SL MA36	14002-1	36"	6
SL MA42	14003-8	42"	6
SL MA48	14004-5	48"	6
SL MA72	14005-2	72"	8

*24" level comes with hand grooves.

- Heavy-duty aluminum I-beam frame.
- Made from the finest selection of mahogany wood.
- Six Solid Set Cat's eye yellow, double bent vials for accuracy.
- Two large hand holes and one hang hole.
- Shock absorbent end caps.
- Protective glass lenses.



THE ONLY LEVEL THAT READS ALL ANGLES **SMARTTOOL™**

SmartTool™

SmartTool™ digitally displays degrees, percent slope and pitch to 1/10 degree accuracy. Extremely durable, it will keep its accuracy for years with push button calibration. Features audio sound at level and plumb. Includes standard 9 volt battery.

The **On/Off Button** brings up the display, which can be seen from up to 10 feet away. Display will shut off automatically when not used for five minutes.

The **Mode Button** lets you see angles in three ways – degrees, % slope or pitch (inches of rise per foot of run).

The **Hold Button** “freezes” an angle measurement on the display, and can be used to convert readings from one mode to another.



Powered by a **9-volt Battery** which will supply 500 hours of use.

The **Calibrate Button** keeps SmartTool factory accurate with a quick procedure that doesn't require a level surface.

Durable **Aluminum Rail** and high impact polycarbonate module are jobsite tough.

UPC# SIZE

92288 SENSOR MODULE IN A 60CM RAIL (24")

92296 SENSOR MODULE IN A 120CM RAIL (48")

92346 MODULE - Module can be used alone or with carpentry and construction levels (regular and magnetic)

92395 MAGNET BRACKET (Use with module)



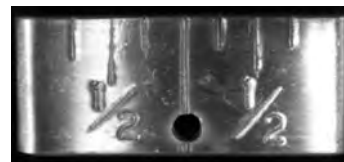
“Nothing is more accurate than gravity.”



What is the ACCU-BOB?

A labor saving device for accurate placement of all vertical steel members, structural columns, metal stud walls and embedded steel in concrete tilt-up walls. Meets OSHA standards for nonconductive equipment.

- 4 Magnets for a secure hold.
- Standard 10 ft. length.
- Folds to 5 ft. for easy storage.
- We will custom build to any length you require.
- Easy to read scale.
- This instrument also has horizontal applications.
- Each one is hand made and tested for accuracy.
- 1-year warranty on workmanship and materials.



△ Accu-Bob™ on the job.

◁ Accu-Bob™ folded.

△ Close-up of scale.

◁ Close-up of scale.

Made in the USA

Accu-Bob™ versus Transit during field erection

- **Transit:** Sensitive, stationary device.
Accu-Bob: Sensitive, mobile device.
- **Transit:** Relatively few, skilled and trained people can use it.
Accu-Bob: Anyone can use it.
- **Transit:** Requires set-up time.
Accu-Bob: Requires no set-up time.
- **Transit:** May require periodic adjustments due to weather or activity going on around it; traffic, digging, tamping, etc.
Accu-Bob: Does not need adjustments.
- **Transit:** May require, at times, the involvement of two people.
Accu-Bob: Does not.
- **Transit and Laser-Level:** Very expensive and delicate.
Accu-Bob: Is not.
- A Transit cannot see through steel. An Accu-Bob™ cannot either, but if the problem is in an interior column you simply carry it to the column and check it. Why would you want to carry an expensive, delicate instrument like a transit up a ladder or three flights of stairs and take the time to set it up when you can quickly check any column with an Accu-Bob™?

Possible Back Charges

- The Accu-Bob™ is useful in the old “whose fault was it” disputes, in that it establishes that the erector was prudent and used correct erection methods. It is easier, safer and less costly to detect any problems as you go than to complete steel erection and discover that it is not plumb. By using the Accu-Bob™ you can quickly determine which column(s) are off, which direction it is off, and how far it is off. Is the problem fabrication or incorrect anchor bolt placement? Now you can answer the big question: How do we correct the problem and who is paying for it?

Advantages

- Almost anyone can understand the function of this instrument and use it effectively.
- The Accu-Bob™ engages the entire span of its length, which is

usually 80 to 90 percent of the iron's critical span. The initial reading while setting the column will bring you within 80% of the acceptable specifications on the job. If the steel is well fabricated and the anchor bolts are correctly placed, it takes little time to set vertical steel “right on target.”

- Using the Accu-Bob™ saves time, aggravation and frustration during steel erection. With poor fabrication being a serious and common problem, and “we got to get the rig out of here!” being the theme song of most erectors, it is important that you find and identify problems as they arise so they can be corrected when the crane is on the jobsite.
- The Accu-Bob™ can be engaged and disengaged with one hand. You may be standing on one foot or on a wobbly bar joist. It can be read and interpreted with no hands. It can be used from column to column as fast as you can walk.

Other Uses

- Because of the Accu-Bob™ design and four 38-pound pull magnets, it can be set upside down on a horizontal member and used as a reference point or used as a stationary plumb-bob; it is useful in setting personnel and rolling doors, miscellaneous steel and brackets to support pre-cast. It can also be useful in placement of rebar and concrete form placement.

Conclusion

- Now with some architects specifying that steel be plumbed with a device designed for that specific purpose as it is erected and the OSHA Sub-Part R that requires the plumbing of steel columns, the Accu-Bob™ is the instrument of choice to meet these specifications.
- This tool was developed and refined several times over the period of a year, under field conditions, by an erection foreman with thirty-six years service to save himself time, labor cost and crane rental time.
- The Accu-Bob™ is a labor saving, accurate, reliable and durable tool for the steel erection trade.

Drill Rod – Oil Hardening - 36"

Size	Dia.	Wgt.	IDA#	Size	Dia.	Wgt.	IDA#	Size	Dia.	Wgt.	IDA#
A	.234	.441	44053	13/32"	.4062	1.311	44101	1-5/16"	1.3125	13.80	44149
B	.238	.450	44054	27/64	.4218	1.416	44102	1-11/32	1.3437	14.45	44150
C	.242	.462	44055	7/16	.4375	1.530	44103	1-3/8	1.3750	15.15	44151
D	.246	.483	44056	29/64	.4531	1.626	44104	1-13/32	1.4062	15.82	44152
E	.250	.501	44057	15/32	.4687	1.748	44105	1-7/16	1.4375	16.54	44153
F	.257	.522	44058	31/64	.4843	1.875	44106	1-15/32	1.4687	17.26	44154
G	.261	.543	44059	1/2	.5000	2.000	44107	1-1/2	1.5000	18.00	44155
H	.266	.554	44060	33/64	.5156	2.13	44108				
I	.272	.584	44061	17/32	.5312	2.25	44109				
J	.277	.615	44062	35/64	.5468	2.39	44110				
K	.281	.636	44063	9/16	.5625	2.53	44111				
L	.290	.675	44064	37/64	.5781	2.67	44112				
M	.295	.699	44065	19/32	.5937	2.81	44113				
N	.302	.726	44066	39/64	.6093	3.00	44114				
O	.315	.813	44067	5/8	.6250	3.13	44115				
P	.323	.831	44068	41/64	.6406	3.31	44116				
Q	.332	.882	44069	21/32	.6552	3.44	44117				
R	.339	.924	44070	43/64	.6718	3.56	44118				
S	.348	.975	44071	11/16	.6875	3.75	44119				
T	.358	1.025	44072	45/64	.7031	3.94	44120				
U	.368	1.086	44073	23/32	.7187	4.13	44121				
V	.377	1.149	44074	47/64	.7343	4.31	44122				
W	.386	1.200	44075	3/4	.7500	4.50	44123				
X	.397	1.263	44076	49/64	.7656	4.69	44124				
Y	.404	1.281	44077	25/32	.7812	4.88	44125				
Z	.413	1.374	44078	51/64	.7968	5.12	44126				
1/16"	.0625	.030	44079	13/16	.8125	5.25	44127				
5/64	.0781	.051	44080	53/64	.8281	5.48	44128				
3/32	.0937	.069	44081	27/32	.8437	5.69	44129				
7/64	.1093	.093	44082	55/64	.8593	5.91	44130				
1/8	.1250	.126	44083	7/8	.8750	6.13	44131				
9/64	.1406	.156	44084	57/64	.8906	6.36	44132				
5/32	.1562	.198	44085	29/32	.9082	6.56	44133				
11/64	.1718	.234	44086	59/64	.9218	6.79	44134				
3/16	.1875	.282	44087	15/16	.9375	7.00	44135				
13/64	.2031	.327	44088	61/64	.9531	7.25	44136				
7/32	.2187	.387	44089	31/32	.9687	7.58	44137				
15/64	.2343	.441	44090	63/64	.9843	7.75	44138				
1/4	.2500	.501	44091	1"	1.0000	8.00	44139				
17/64	.2656	.561	44092	1-1/32	1.0312	8.50	44140				
9/32	.2812	.639	44093	1-1/16	1.0625	9.03	44141				
19/64	.2968	.702	44094	1-3/32	1.0937	9.58	44142				
5/16	.3125	.780	44095	1-1/8	1.1250	10.125	44143				
21/64	.3281	.861	44096	1-5/32	1.1562	10.700	44144				
11/32	.3437	.939	44097	1-3/16	1.1875	11.310	44145				
23/64	.3593	1.032	44098	1-7/32	1.2187	11.900	44146				
3/8	.3750	1.125	44099	1-1/4	1.2500	12.500	44147				
25/64	.3906	1.221	44100	1-9/32	1.2812	13.120	44148				

W1 Water Hardening

Size	IDA #
1/16"	43079
7/64	43082
1/8	43083
9/64	43084
5/32	43085
11/64	43086
3/16	43087
13/64	43088
7/32	43089
15/64	43090
1/4	43091
17/64	43092
9/32	43093
19/64	43094
5/16	43095
21/64	43096
11/32	43097
23/64	43098
3/8	43099
13/32	43101
7/16	43103
15/32	43105
1/2	43107
9/16	43111
5/8	43115
43/64	43118
11/16	43119
3/4	43123
25/32	43125
13/16	43127
7/8	43131
15/16	43135
1	43139
1-1/32	43140
1-1/16	43142
1-1/8	43143
1-3/16	43145
1-1/4	43147
1-5/16	43149
1-3/8	43151
1-7/16	43153
1-1/2	43155



Key Stock

**Rectangular Key Stock
12" Lengths Steel**

Size	IDA#
1/8 x 3/16"	77100
1/8 x 1/4	77110
1/8 x 3/8	77120
3/16 x 1/4	77130
3/16 x 5/16	77140
3/16 x 3/8	77150
3/16 x 1/2	77160
1/4 x 5/16	77170
1/4 x 3/8	77180
1/4 x 1/2	77190
5/16 x 3/8	77200
5/16 x 7/16	77210
5/16 x 1/2	77220
5/16 x 5/8	77230
3/8 x 7/16	77240
3/8 x 1/2	77250
3/8 x 5/8	77260
3/8 x 3/4	77270
7/16 x 1/2	77280
7/16 x 5/8	77290
7/16 x 3/4	77300
1/2 x 5/8	77310
1/2 x 11/16	77320
1/2 x 3/4	77330
1/2 x 7/8	77340
1/2 x 1	77350
9/16 x 5/8	77360
9/16 x 3/4	77370
5/8 x 3/4	77380
5/8 x 7/8	77390
5/8 x 1	77400
11/16 x 3/4	77410
11/16 x 7/8	77420
11/16 x 1	77430
3/4 x 7/8	77440
3/4 x 1	77450
3/4 x 1-1/8	77460
3/4 x 1-1/4	77470
3/4 x 1-1/2	77480
7/8 x 1	77490
7/8 x 1-1/4	77500
1 x 1-1/4	77510
1 x 1-1/2	77520
1-1/4 x 1-1/2	77530
1-1/2 x 1-3/4	77540
1-1/2 x 2	77550

Steel Shim Stock

**1008/1010 Full Hard
AISI 1010, QQS 698**

6" x 100" rolls

Thick	IDA #
.001"	30001
.0015	30805
.002	30002
.0025	30905
.003	30003
.004	30004
.005	30005
.006	30006
.007	30007
.008	30008
.009	30009
.010	30010
.012	30012
.015	30015
.018	30018
.020	30020
.025	30025
.031	30031

6" x 180" rolls

Thick	IDA #
.001"	30601
.0015	30705
.002	30602
.0025	30702
.003	30603
.004	30604
.005	30605
.006	30606
.007	30607
.008	30608
.009	30609
.010	30610
.012	30612
.015	30615
.018	30618
.020	30620
.025	30625
.031	30631

12" x 120" rolls

Thick	IDA #
.001"	32001
.002	32002
.003	32003
.004	32004
.005	32005
.006	32006
.007	32007
.008	32008
.010	32010
.012	32012
.015	32015
.018	32018
.020	32020
.025	32025
.031	32031

Music Wire

Diameter	IDA #
.006"	75006
.008	75008
.010	75010
.012	75012
.013	75013
.014	75014
.016	75016
.018	75018
.020	75020
.022	75022
.024	75024
.026	75026
.029	75029
.031	75031
.033	75033
.035	75035
.037	75037
.039	75039
.041	75041
.043	75043
.045	75045
.047	75047
.049	75049
.051	75051
.055	75055
.059	75059
.063	75063
.067	75067
.071	75071
.075	75075
.080	75080
.085	75085
.090	75090
.095	75095
.100	75100
.118	75118
.125	75125

Also in stock!

Brass Shim Stock

6" x 100" rolls	.001" thru .031"
6" x 180" rolls	.001" thru .031"
12" x 120" rolls	.001" thru .025"

Stainless Shim Stock

6" x 50" rolls	.0005" thru .031"
6" x 60" rolls	.001" thru .031"
12" x 50" rolls	.001" thru .031"



THE WRECKER®

“THE WRECKER” QUALITY ADVANTAGES

- Extra Heavy-Duty.
- Unique Rocker Head for more power without blocking.
- Extra long pull.
- Open claw design works in tight spaces.
- No reversing of the bar necessary.
- Double claw for hard to reach places.
- Wide, thin tapered chisel.
- Push and pull with equal force.
- Welded construction.
- Guaranteed for life.

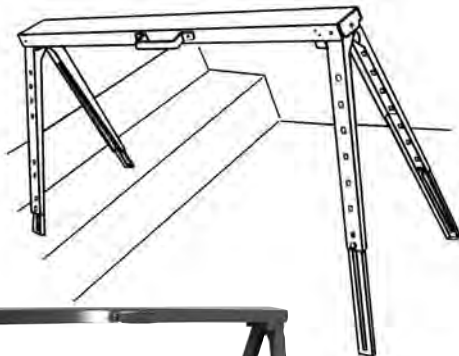


HUNDREDS OF USES

- Unique push/pull action makes even the toughest job simple.
- Shingle removal is a breeze.
- Remove decking without blocking.
- Strip off siding with extra leverage.
- Bring down fencing fast and easy.
- Strip molding in hard to reach places.
- A great all-around household tool.

	Nbr. Pack	Standard Weight lbs.	Cubic Feet	Hex Stock	Rocker Head	Length
TW24WB	6	24	.45	3/4"	6"	24"
TW30WB	6	29	.55	3/4"	6"	30"
TW36WB	4	34	.87	7/8"	9"	36"
TW48WB	4	44	1.13	7/8"	9"	48"

TS-501



ADJUSTABLE LEG TOTE-A-HORSE – Adjusts in height from 25" to 40". Seven variable height adjustments. 25" high x 38" long open, 2" x 4" x 38" closed. Carrying handle. Fully assembled, ready to use. 14-gauge steel with high quality polyester powder coated finish and ultraviolet resistant properties. Lifetime guarantee. Packaged in self-selling carton and in 10-pack floor displays to be used on end caps or side tracks. Made in U.S.A.

Model	Packed	Weight	Cubic Feet
TS-501	2	37 lbs.	.67



TS-101

TOTE-A-HORSE – Load capacity 2,000 lbs. per pair. 25" high x 38" long open, 2" x 4" x 38" closed. Carrying handle. Fully assembled, ready to use. 14-gauge steel with high quality polyester powder coated finish and ultraviolet resistant properties. Lifetime guarantee. Packaged in self-selling carton and in 10-pack floor displays to be used on end caps or side tracks. Made in U.S.A.

Model	Packed	Weight	Cubic Feet
TS-101	2	27 lbs.	.67





HANDLES



RAZORBACK SHOVEL & SPADE

Simple Bend - No Shoulder

Item Number	Length	Dia.	Chuck Length	Chuck Taper	Weight Per Doz.
RB-4	48"	1-1/2"	11"	1-1/2" to 7/8"	19 lb.



WHEELBARROW

Contractor Grade & Size - Unbored - Northern Hardwood - Lacquer Finish (Including Wedge)

Item Number	Length	Dimension
WH-5	5 ft.	1-11/16" x 2" Wedge Included
WH-4	4-1/2 ft.	1-1/4" x 1-3/4" Wedge Included



HOLLOWBACK SHOVEL

Bent with Shoulder, Round & Square Point; Spades, Aluminum Scoops & Utility Shovels

Item Number	Length	Dia.	Chuck Length	Chuck Taper	Weight Per Doz.
SH4	48"	1-1/2"	6-1/2"	1-3/8" to 7/8"	19 lb.
SH45	54"	1-1/2"	6-1/2"	1-3/8" to 7/8"	21 lb.



DEE HANDLE HOLLOWBACK SHOVEL

Bent with Shoulder, Round & Square Point; Spades, Aluminum Scoops & Utility Shovels

Item Number	Length	Dia.	Chuck Length	Chuck Taper	Weight Per Doz.
SH30R	30"	1-1/2"	6-1/2"	1-3/8" to 7/8"	20 lb.
SH42R	42"	1-1/2"	6-1/2"	1-3/8" to 7/8"	28 lb.



SOLID SHANK SHOVEL

Round & Square Point Shovels & Spades

Item Number	Length	Dia.	Chuck Length	Chuck Taper	Weight Per Doz.
TK44	44"	1-1/2"	5"	1-1/2" to 1"	16 lb.
TK46	46"	1-1/2"	5"	1-1/2" to 1"	17 lb.
TK4	48"	1-1/2"	5"	1-1/2" to 1"	18 lb.



LIGHT - RAKE - HOE - CULTIVATOR

Shank Pattern - Light Garden, Meadow, Cotton and Field Hoes - Garden Rakes - Scrapers - Cultivators

Item Number	Length	Dia.	Bore Dia.	Ferrule Length	Weight Per Doz.
H40	4 ft.	1-1/4"	7/16"	3-3/4"	15 lb.



HICKORY STRIKING TOOL HANDLES

Appalachian Mountain Hickory located in Tennessee is used for wood tool handles. Manufactured by skilled craftsmen from logs to beautifully finished handles in a tough lacquer or smooth wax coating.



No. 7100 – Nail or Claw Hammer
Lengths: 12" to 16" – For 7 oz. to 28 oz. Hammers



No. 9100 – Half or Shingling Hatchet
Lengths: 12" to 14" – For all Regular Hatchets



No. 7200 – Machinist's Ball Pein Hammer
Lengths: 10" to 24" – For 2 oz. to 46 oz. Hammers



No. 7300 – Blacksmith's Hammer
Lengths: 12" to 24" – For 1-1/2 lb. to 6 lb. Hammers



No. 1100 – Bent Single Bit Axe
Lengths: 30" to 36" – For 3 lb. to 5 lb. Axes



No. 2100 – Sledge Hammer
Lengths: 24" to 36" – For 6 lb. to 15 lb. Hammers



No. 3100 – Pick & Mattock – No. 6 Eye
Length: 36" – For 5 lb. to 8 lb. Picks and Mattocks



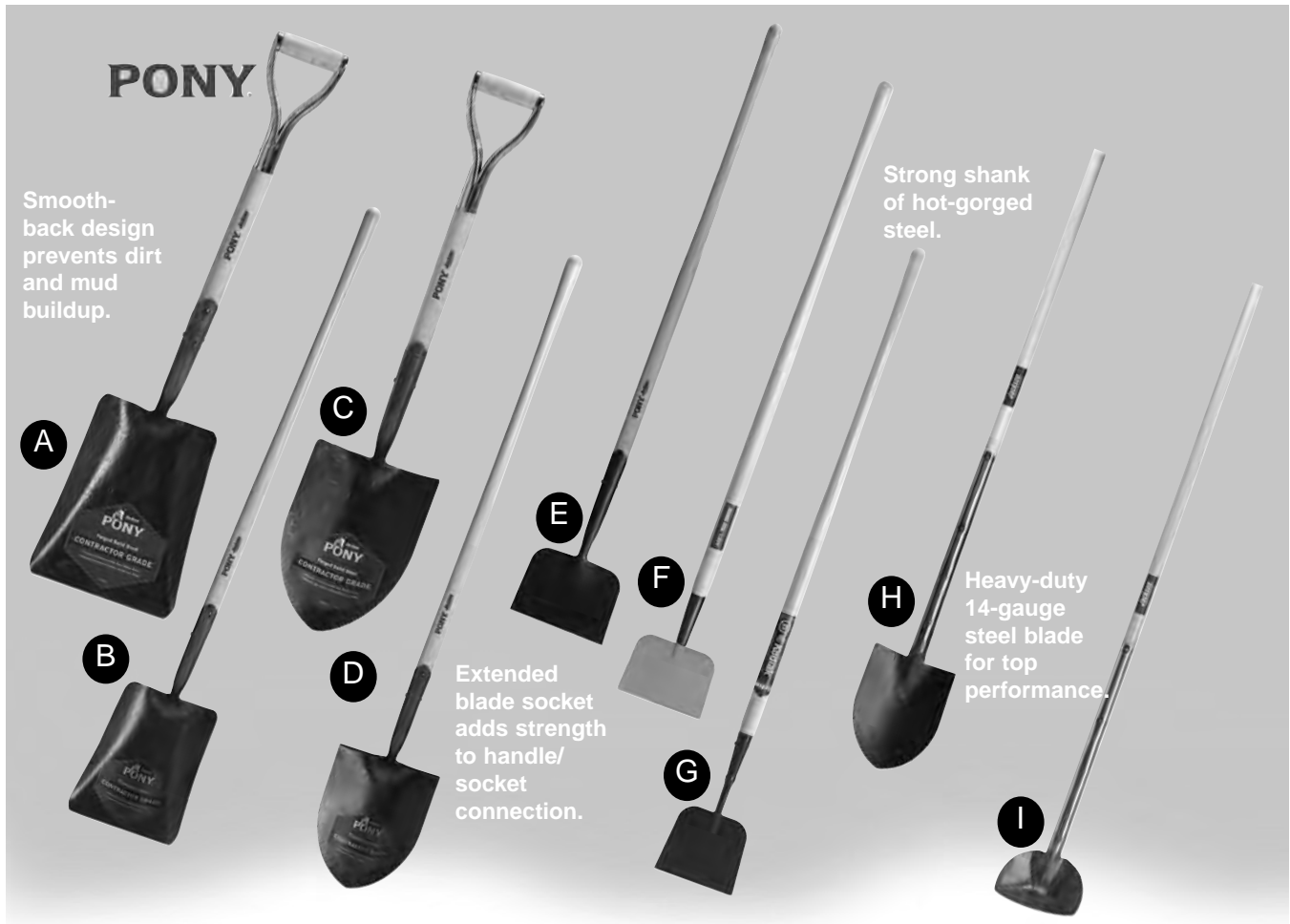
No. 1500 – Double Bit Axe
Lengths: 30" to 36" – For 3 lb. to 5 lb. Axes



No. 3500 – Straight Grub Hoe – No. 8 Eye
Lengths: 36" to 42" – For 3-1/2 lb. to 5-1/2 lb. Hoes



Key	Item No.	Size	Blade Size	Cube	Pk. / Wt. Lbs.	Description
A	1554400	2	9" x 10-1/2"	1.6	6 / 25.8	Eagle square point shovel. Strong poly D grip is engineered for comfort. Hardwood 29" handle for strength and durability. Open-back tempered steel blade for durability. Rolled-shoulder design strengthens blade and provides a step for foot placement.
B	1554500	2	9" x 10-1/2"	1.6	6 / 22.8	Eagle square point shovel. Hardwood 46" handle for strength and durability. Open-back tempered steel blade for durability. Rolled-shoulder design strengthens blade and provides a step for foot placement.
C	1554600	2	8-1/4" x 11"	1.6	6 / 24.0	Eagle round point shovel. Strong poly D grip is engineered for comfort. Hardwood 29" handle for strength and durability. Open-back tempered steel blade for durability. Rolled-shoulder design strengthens blade and provides a step for foot placement.
D	1554300	2	8-1/4" x 11"	1.6	6 / 23.4	Eagle round point shovel. 46" hardwood handle for strength and durability. Open-back tempered steel blade for durability. Rolled-shoulder design strengthens blade and provides a step for foot placement.
E	1348500	2	8-1/4" x 11"	1.6	6 / 27.6	Eagle fiberglass long handle round point shovel. Steel collar for added strength at the handle/socket connection. Lightweight 46" fiberglass handle resists splintering, cracking and weathering. Top cap with hang-up hole for storage. Rolled shoulder. Satisfaction guarantee.
F	1348300	2	9" x 10-1/2"	1.6	6 / 30.0	Eagle fiberglass long handle square point shovel. Steel collar for added strength at the handle/socket connection. Lightweight 46" fiberglass handle resists splintering, cracking and weathering. Top cap with hang-up hole for storage. Rolled shoulder. Satisfaction guarantee.
G	1554000	2	6-7/8" x 12"	1.6	6 / 24.6	Eagle Garden Spade, 29" D handle. Strong poly D grip is engineered for comfort. Hardwood handle for strength and durability. Open-back tempered steel blade for durability. Rolled-shoulder design strengthens blade and provides a step for foot placement.
H	1554700	2	6-7/8" x 12"	1.6	6 / 24.6	Eagle Garden Spade. Open-back steel blade for durability. 46" long handle.



Key	Item No.	Size	Blade Size	Cube	Pk. / Wt. Lbs.	Description
A	1200900	2	9-3/4" x 12"	1.6	6 / 29.4	Pony square point shovel. Exclusive armor D grip encases the wood completely to prevent twisting. Extended blade socket adds strength to handle/socket connection. Smooth-back design prevents dirt and mud buildup. High-grade 27" northern ash handle for maximum strength.
B	1201100	2	9-3/4" x 12"	1.3	6 / 28.8	Pony square point shovel. High-grade 47" northern ash handle for maximum strength. Extended blade socket adds strength to handle/socket connection. Smooth-back design prevents dirt and mud buildup.
C	1201300	2	8-3/4" x 11-1/2"	1.3	6 / 28.2	Pony round point shovel. Exclusive armor D grip encases the wood completely to prevent twisting. Extended blade socket adds strength to handle/socket connection. High-grade 27" northern ash handle for maximum strength. Smooth-back design prevents dirt and mud buildup. Double-tapered, forged blade edge for easy entry into soil.
D	1201900	2	8-3/4" x 11-1/2"	1.3	6 / 26.4	Pony round point shovel. High-grade 47" northern ash handle for maximum strength. Extended blade socket adds strength to handle/socket connection. Smooth-back design prevents dirt and mud buildup. Double-tapered, forged blade edge for easy entry into soil.
E	1645800	-	8-1/2" x 6"	0.8	6 / 21.6	Pony heavy-duty solid shank forged scraper. Forged and sharpened steel blade for breaking ice.
F	1646200	-	7" x 5"	1.0	6 / 17.4	Ames True Temper™ forged shank sidewalk scraper. 48" handle.
G	1646300	-	7" x 6"	0.8	6 / 21.0	Kodiak® Deluxe socket sidewalk scraper. 48" handle.
H	1119400	-	9-1/4" x 11-7/8"	3.2	3 / 33.3	Jackson Three Star Telegraph Spoon. Straight pattern. 24" strap. 10' handle. Straps are seam-welded to blade for increased strength.
I	1117400	-	9-5/8" x 8-3/4"	2.8	3 / 30.0	Jackson Three Star Telegraph Spoon. Western pattern. 24" strap. 10' handle. Straps are seam-welded to blade for increased strength. Heavy-duty 14-gauge steel blade for top performance.

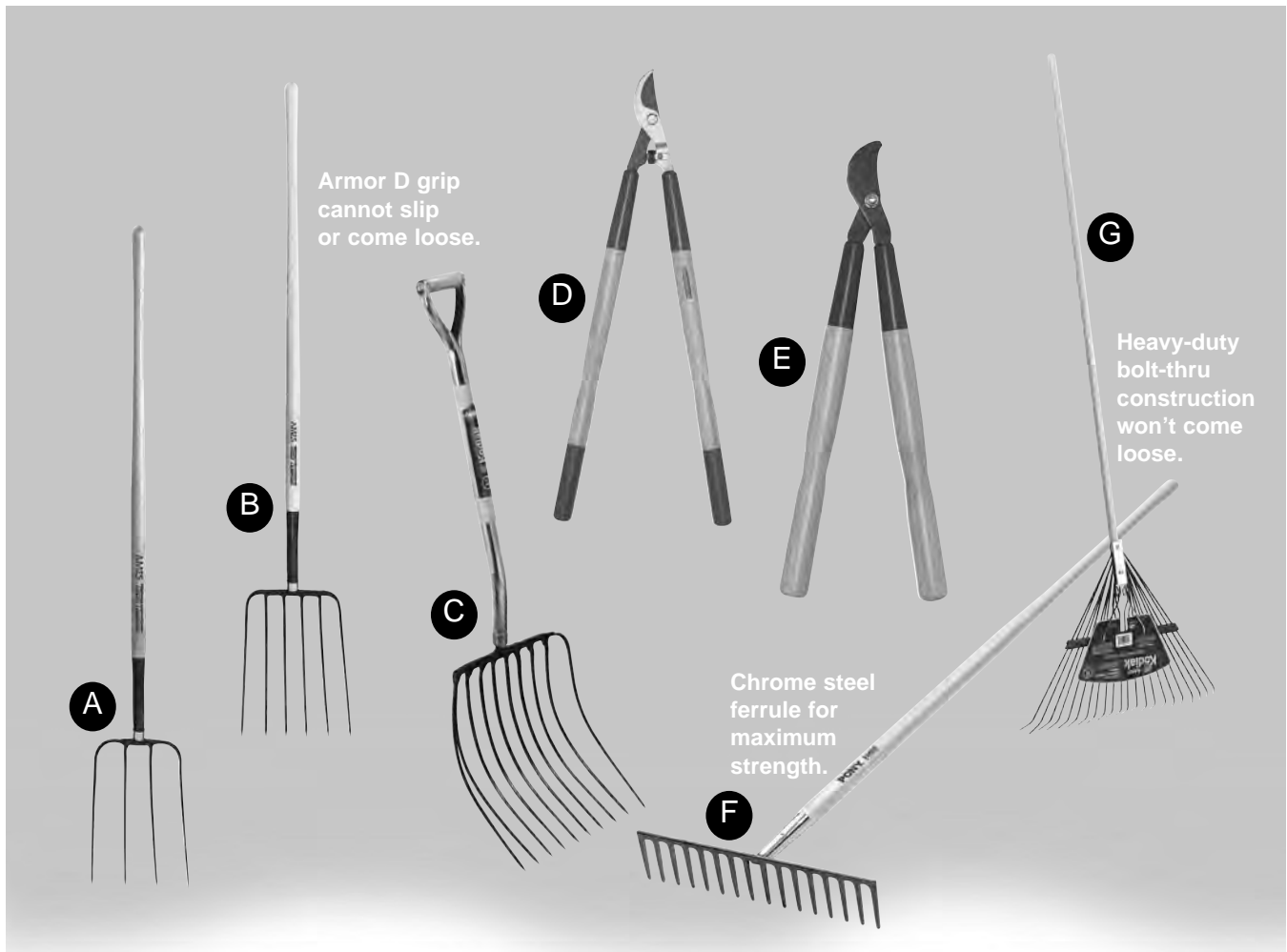


Exclusive armor D grip completely encases the wood to prevent twisting. Cannot come loose.

High-grade northern ash handle for strength and durability.

Aluminum alloy blade for strength and balance.

Key	Item No.	Size	Blade Size	Cube	Pk. / Wt. Lbs.	Description
A	1644200	-	13-1/2" x 18"	3.1	6 / 18.6	18" Aluminum Snow Shovel. Unique contoured rib design on aluminum shovel provides added rigidity. Exclusive lock socket is the deepest in the industry. Overall length 46". Wood D grip handle.
B	1600400	-	13-1/2" x 18"	4.6	6 / 22.0	Ergo 18" Aluminum D handle mountain mover poly shovel. Extra-wide "D" grip for maximum comfort with gloved hands. Ergo handle design minimizes bending and stooping. Deep Mountain Mover blade moves more snow. Overall length 53".
C	1691500	-	12" x 24"	2.5	6 / 45.0	SnoZone® 24" Steel Pusher. Wood handle is durable seal-coated northern ash. Thick steel blade is designed for heavy-duty use. Deep handle socket design for added strength. Overall length 58-1/2".
D	1671000	10	14-3/4" x 18"	4.5	6 / 23.4	Kodiak® Aluminum Scoop. Exclusive armor D grip cannot come loose. Ribbed aluminum alloy blade for strength and balance. 27" handle. Limited lifetime warranty.
	1671200	12	15-1/4" x 19"	4.5	6 / 24.0	
	1671400	14	15-3/4" x 20"	4.5	6 / 25.2	
E	1311700	2	11" x 15"	2.2	6 / 33.6	Kodiak® Eastern pattern steel scoops. Plain blade. 27" high-grade northern ash handle for strength and durability. Exclusive armor D grip completely encases the wood to prevent twisting. Cannot come loose.
	1311800	4	11-1/2" x 16"	2.2	6 / 37.2	
	1311900	6	12" x 17"	2.2	6 / 35.4	
	1411000	2	11" x 15"	3.4	6 / 33.6	Kodiak® Eastern pattern steel scoops. Plain blade. 51" long handle.
	1390900	4	11-1/2" x 16"	3.4	6 / 37.8	
	1412100	6	12" x 17"	4.0	6 / 37.2	
F	1312000	8	14" x 17"	3.4	6 / 40.8	Kodiak® Knoxall Western pattern steel scoops. Exclusive armor D grip completely encases the wood to prevent twisting. Cannot come loose. High-grade 27" northern ash handle for strength and durability. Ribbed blade.
	1312100	10	14-1/2" x 18"	4.5	6 / 45.0	
	1312200	12	15" x 19"	4.5	6 / 43.2	
G	1359600	2	13-1/2" x 14-1/2"	3.4	6 / 37.2	Kodiak® coal or street cleaner shovel. 51" high-grade northern ash handle for strength and durability.



Key	Item No.	Handle Specifications	Cube	Pk. / Wt. Lbs.	Description
A	1838000	48" Good Grade	0.6	3 / 9.6	Ames True Temper™ 4-Tine Manure Fork. Forged oval times, pointed, tempered. Bent pattern. Tines 12" long, 8-3/4" wide.
B	1838200	48" Good Grade	01.6	3 / 10.8	Ames True Temper™ 6-Tine Manure Fork. Forged oval tines, pointed, tempered. Tines 12" long, 10" wide. Bent pattern.
C	1830000	30" Northern Ash	2.0	3 / 21.3	Kodiak® Ensilage Fork. Armor D grip cannot slip or come loose. Long chrome-plated steel ferrule for added strength. Northern Ash handle for strength and durability. 1-1/2" tine spacing. Bent pattern.
Key	Item No.	Cutting Capacity	Cube	Pk. / Wt. Lbs.	Description
D	2342530	1-1/2"	2.8	6 / 20.3	Pruning Solutions® Wood Handle Bypass Lopper. Nonstick blade coating. Cushion comfort grips for improved handling and cutting.
E	2302800	1-1/2"	1.3	12 / 28.2	Pruning Solutions® Bypass Lopper. Contoured ash handles for comfortable grip. Nonstick coated blades for smooth cutting.
Key	Item No.	Head Width	Cube	Pk. / Wt. Lbs.	Description
F	1880600	17-7/8"	2.7	6 / 27.6	Pony® Heavy-Duty Rake. 16 teeth. 66" handle. Chrome steel ferrule for maximum strength.
F	1880500	15-1/2"	2.7	6 / 27.6	Pony® Heavy-Duty Rake. 14 teeth. 66" handle. Chrome steel ferrule for maximum strength.
G	1935900	22"	2.2	12 / 30.0	Kodiak® 22-Tine Spring Brace Rake. 54" handle. Strong and flexible one-piece steel tines can't pull loose. Heavy-duty bolt-thru construction won't come loose. Limited lifetime warranty.
G	1923700	24"	2.5	12 / 32.4	

Round Point Digging Shovels



ITEM #		DESCRIPTION
A	40176	Chrome-Plated Shovel. For ground-breaking ceremonies, sales awards, etc. #2 size. 9-1/2" X 12" chrome-plated blade and D-Grip braces. RS. 11" socket. 28" Northern White Ash handle with chrome/steel and wood D-Grip.
B	43201	Tab Socket. For digging in hard, rocky soil. #2 size. 9-1/2" x 12" tempered steel industrial open-back blade with rolled blade step. RS. 2 rivet, 11" tab socket. 30" Northern White Ash handle with steel and wood D-Grip for added strength.
C	43516	Dura-Torque® Collar. For digging in rocky and drier soils. #2 size. 9-1/4" x 11-1/2" heavy-duty, tempered steel open-back blade with forward-turned step for comfort. 28" Ash wood handle with steel and wood D-Grip.
D	43106	Chucked Socket. For digging in sandy, light soils. #2 size. 9-1/4" x 11-1/2" open-back blade. Rolled step prevents material build-up. 28" Ash wood handle with poly D-Grip.
E	45657	Closed Back. For digging and excavation in hard, rocky soil. #2 size. 9-1/2" x 11" industrial gauge tempered steel blade with forward turned step. 2 rivet, 11" extended tab socket to reduce handle breakage. 48" premium Northern White Ash handle.
F	45519	Tab Socket. For digging and excavation in hard, rocky soil. #2 size. 9-1/2" x 12" industrial gauge tempered steel open-back blade with rolled step. 2 rivet, 11" extended tab socket reduces handle breakage. 48" premium Northern White Ash handle.
G	45000	Round Point Digging Shovel. For digging and excavation in hard, rocky soils. Heavy-duty open-back industrial gauge steel blade with backbone ribbon of steel reinforcement along socket. Crimped steel collar strengthens handle to socket connection. 48" Fiberglass handle with cushion end grip.
H	45106	Dura-Torque® Collar. For digging and excavation in most soil types. #2 size. 9-1/4" x 11-1/2" heavy-duty open-back tempered steel blade with forward turned blade step. 9" socket. 48" Ash wood handle.
I	45107	Round Point Utility Shovel. Gets you out of big trouble! Emergency trunk shovel. Camping shovel.

Square Point Digging Shovels / Roof Ripper



ITEM #		DESCRIPTION
A	44106	Dura-Torque® Collar. For transferring rocky and drier soils. #2 size. 9-1/4" x 11-1/2" heavy-duty, tempered steel open-back blade with forward-turned blade step. 9" socket. 48" White Ash handle for strength. Crimped steel collar for extra strength at the handle/socket connection.
B	44101	Tab Socket. For transferring heavy, loose material. #2 size. 9-1/2" x 12" industrial gauge, tempered steel open-back blade. 2 rivet, 11" tab socket. 48" premium Northern White Ash handle. Rolled step prevents material build-up.
C	44363	Closed Back. For transferring heavy, loose material. #2 size. 9-1/2" x 12" industrial gauge, tempered steel blade with forward-turned blade step. 2 rivet, 11" tab socket. 48" premium Northern White Ash handle.
D	42101	Tab Socket. For transferring heavy, loose material. #2 size. 9-1/2" x 12" industrial gauge, tempered steel open-backed blade. RS. 2 rivet, 11" tab socket. 30" premium Northern White Ash handle. Steel and wood D-Grip for added strength.
E	42162	Square Point Utility Shovel. Gets you out of big trouble! Emergency trunk shovel. Camping shovel.
F	42106	Chucked Socket. For transferring sandy, light soils. #2 size. 9-1/4" x 11-1/2" open-back blade. 9" socket. Rolled step prevents material build-up. 28" Ash wood handle with poly D-grip.
G	42523	Dura-Torque® Collar. For transferring rocky and drier soils. #2 size. 9-1/4" x 11-1/2" open-back blade. 9" socket. 28" handle with steel and wood D-Grip adds strength. Forward-turned step for greater user comfort.
H	46108	Steel Collar Border Spade. For creating defined borders along gardens, walks and drives in most soil types. Heavy-duty 7-3/8" x 12" open-back tempered steel blade with turned step. 9" Chucked socket with steel crimped collar to strengthen handle to socket connection. 28" Ash wood handle with steel and wood D-grip.
I	46135	Straight Edge Roof Ripper. For removing tar and rolled roofing. Open-back, industrial gauge tempered steel blade. 13 strong welds hold fulcrum securely to blade. 48" Ash wood handle.
J	46141	Notched Edge Roof Ripper. For removing roofing shingles. Open-back, industrial gauge tempered steel blade with turned step. 13 strong welds hold fulcrum securely to blade. 48" Ash wood handle.

Some of the above products also available in fiberglass handles.

Drain Spades / Trenching Shovels



ITEM #		DESCRIPTION
A	47171	4" Trenching Shovel. For digging and clearing trenches. 4" Open-back industrial gauge tempered steel blade with rolled step. 48" Ash wood handle.
B	47011	3" Trench Clean Out Shovel. For cleaning out trenches. 3" Blue industrial gauge steel blade with 10-1/2" socket and forward turned step for comfort. 54" Ash wood handle.
C	47116	3" Trenching Shovel. For digging and clearing trenches. 3" Closed-back industrial gauge tempered steel blade with forward turned step. 54" Ash wood handle.
D	47115	Ditching Shovel. For digging and clearing drainage ditches and trenches. 5" Open-back industrial gauge tempered steel blade with rolled step. 48" Ash wood handle.
E	47103	16" Drain Spade. For digging and clearing drainage ditches. 16" Closed-back industrial gauge tempered steel blade with forward turned step. 29" Ash wood handle with steel and wood D-Grip.
F	47108	16" Drain Spade. For digging drainage ditches and trenches in loose soil types. 16" Open back tempered steel blade with forward turned blade step. 27" Ash wood handle with poly D-grip.
G	47107	14" Drain Spade. For digging drainage ditches and trenches. 14" Open back tempered steel blade with forward turned blade step. 27" Ash wood handle with poly D-grip.
H	47110	16" Drain Spade. For digging and clearing drainage ditches and trenches. 16" Solid shank industrial gauge tempered steel blade with forward turned blade step. 27" Ash wood handle with steel and wood D-grip.
I	47202	14" Drain Spade. For digging and clearing drainage ditches. 14" Closed-back industrial gauge tempered steel blade with forward turned blade step. 29" Ash wood handle with steel and wood D-grip.

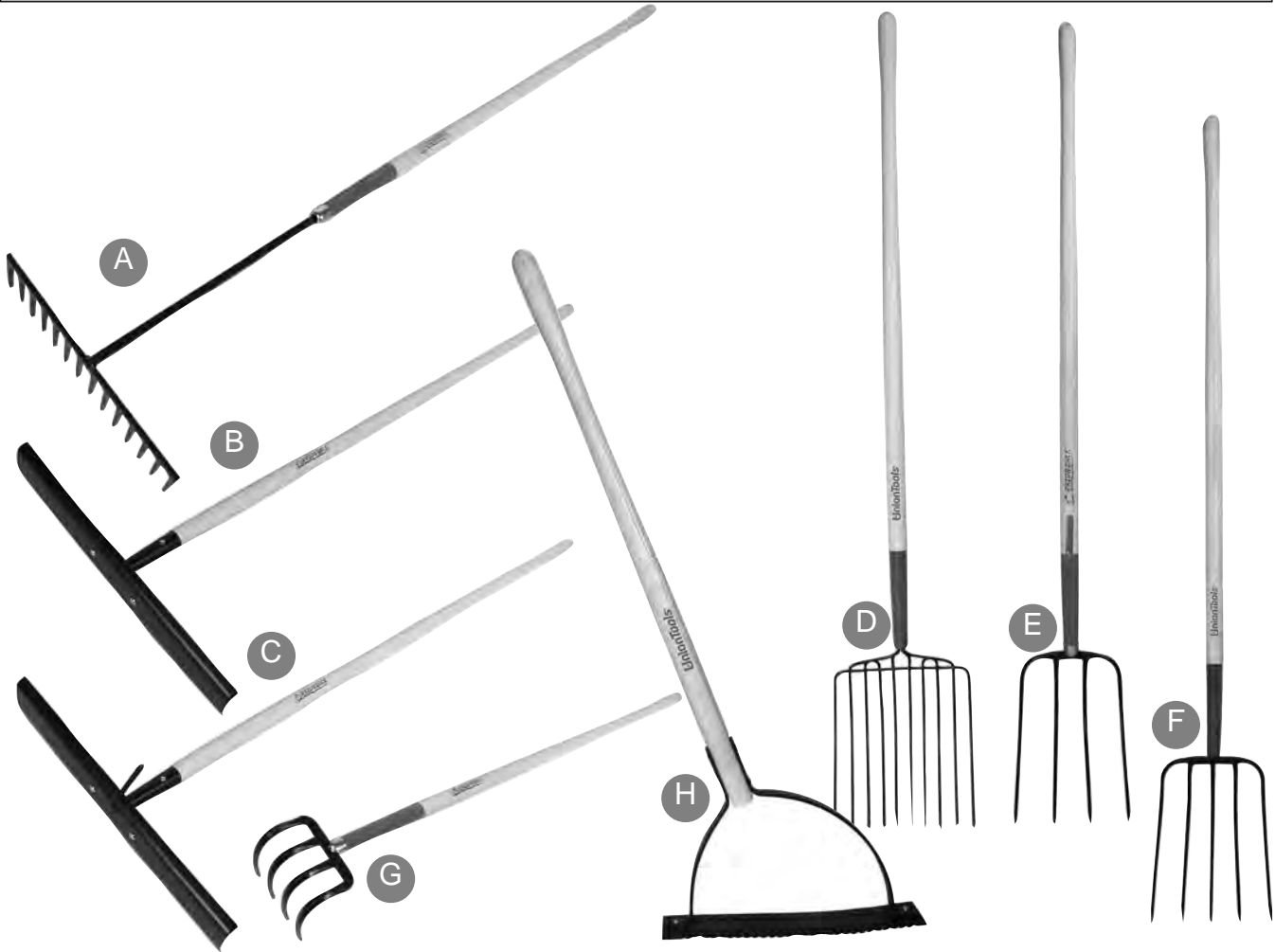
Some of the above products also available in fiberglass handles.

Shovels / Scoops / Scrapers



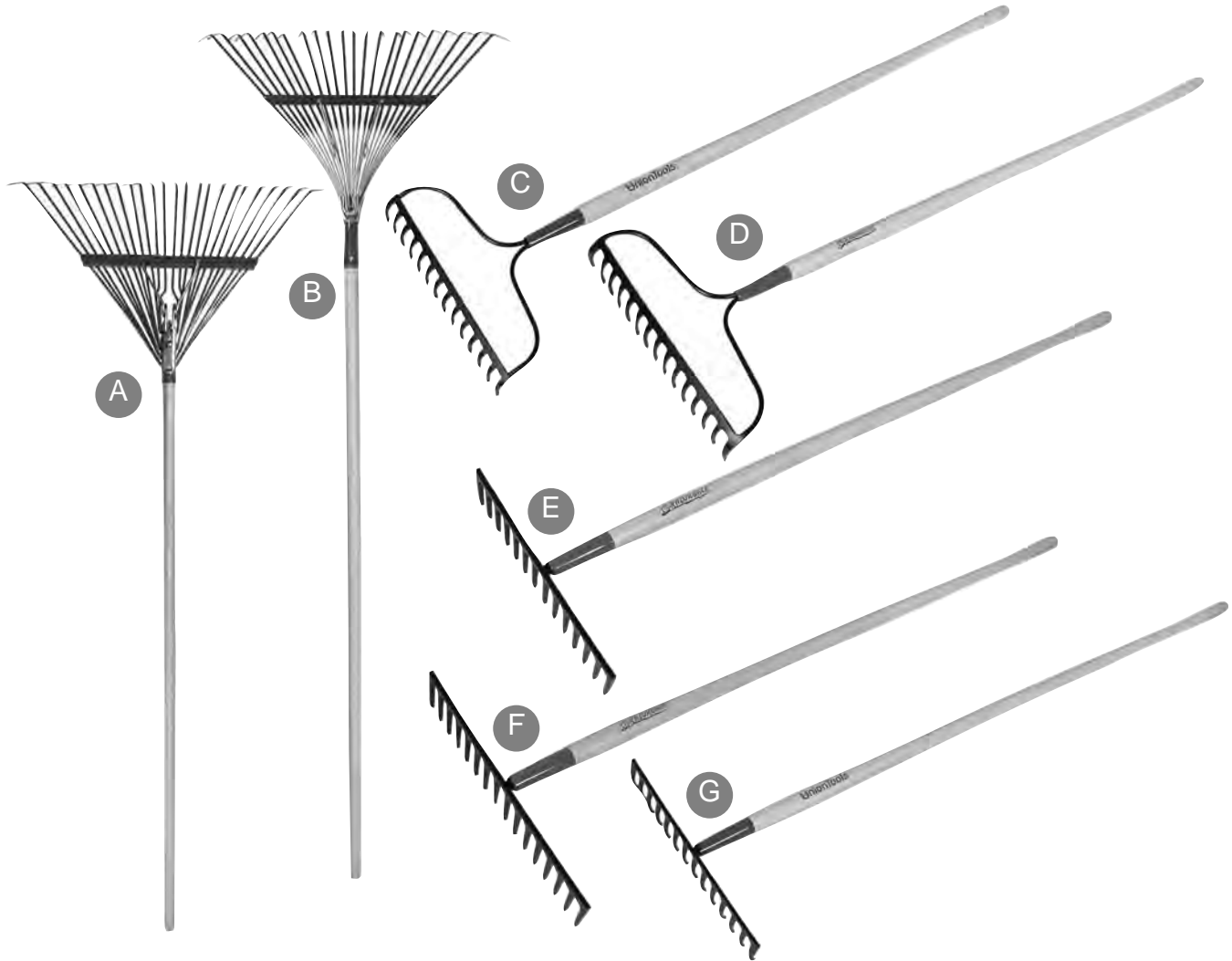
ITEM #		DESCRIPTION
A	53117	Western Steel Scoop. For scooping grain, snow, mulch or general purpose clean-up. #8 sized, 14" x 17" heat-treated carbon steel blade. 27" Ash wood handle with steel and wood D-grip.
B	53121	Western Steel Scoop. For scooping grain, snow, mulch or general purpose clean-up. #12 sized, 15" x 19" heat-treated carbon steel blade. 27" Ash wood handle with steel & wood D-Grip.
C	53132	Western Aluminum Scoop. For transferring grain, sand or snow and general purpose clean up. #10 sized, 14-1/2" x 17-3/4" heavy-duty aluminum blade. 29" Ash wood handle with steel and wood D-grip.
D	78202	Forged Sidewalk and Ice Scraper. Socket pattern. 7" x 6" industrial gauge, forged blade. Heavy reinforced beads. 54" handle.
E	81240	Sidewalk/Ice Scraper. For scraping ice and other encrusted material from hard surfaces. 8-1/2" x 6" socket pattern, industrial gauge, forged steel. 48" Ash wood handle.
F	81104	7" Hog™ Scraper/Chopper. For scraping ice and other encrusted material from hard surfaces. 8" x 4" socket pattern, industrial gauge, cold-forged, sharpened steel blade. 54" Ash wood handle.
G	79759	Poly Snow Shovel. For lifting and throwing light to medium accumulations of snow. 18" x 13-1/2" ribbed poly blade with patented X-brace reinforcement for added durability. 36" Vinyl-coated steel handle with snow poly D-grip.
H	79720	Poly Snow Pusher. For pushing light to medium accumulations of snow. 24" x 12" ribbed poly blade with patented X-brace reinforcement for added durability. 43" Vinyl-coated steel handle with snow poly D-grip.
I	79214	Steel Snow Shovel. For lifting and throwing light accumulations of snow. 18" x 15" Ribbed steel blade for added durability. 38" Hardwood handle with snow poly D-grip.
J	81113	Aluminum Snow Shovel. For lifting and throwing light to medium accumulations of snow. 18" x 15" Aluminum blade with steel wearstrip to prolong blade life. 38" Hardwood handle with snow poly D-grip.

Forks / Specialty Rakes / Weed Cutter



ITEM #	DESCRIPTION
A 63125	Asphalt/Tar Rake. For spreading and leveling asphalt and tar. 14-Tine, 16" x 4" one-piece forged steel head with long steel shank to protect handle from heat. 60" Ash wood handle.
B 83148	Concrete Rake. For spreading and leveling concrete. 20" x 4" Socket pattern steel blade is nailed to the socket. 60" Hardwood handle.
C 83154	Concrete Rake. For spreading and leveling concrete. 20" x 4" Socket pattern steel blade, with rebar hook, is nailed to the socket. 60" Hardwood handle.
D 76200	Manure/Bedding Fork. For bedding and manure removal. 10 round, welded tines, 12-1/2" long. 1-1/4" apart. 10-1/2" head width. 48" Ash handle with 8" steel ferrule.
E 74102	Forged Manure with Flex-Beam[®]. For transferring manure. 4 oval tines, 12-1/2" long. 8-3/4" spread at points. 48" Ash handle with 10" steel ferrule and cap and steel reinforcement.
F 74121	Forged Manure with Flex-Beam[®]. For transferring manure or loose material. 5 oval tines, 12-1/2" long. 9" spread at points. 54" Ash handle with 10" steel ferrule.
G 75138	Forged Potato/Refuse Hook. For harvesting potatoes and dragging refuse. 4 broad oval heavy tines. 7-1/2" long. Diamond point. 7" head width. 8" steel tube with cap. 54" Ash handle.
H 62105	Weed Cutter. For cutting tall grass and weeds. Double-edged, serrated steel blade cuts on forward and return swing. 30" Hardwood handle.

Leaf / Garden / Lawn / Road / Stone Rakes



ITEM#		DESCRIPTION
A	64582	24" Steel Leaf Rake. For large capacity leaf raking. 24 continuous steel tine head with a heavy reinforcing coil spring brace. 54" bolt-thru hardwood handle.
B	64430	22" Steel Lawn Rake. For large capacity leaf raking. 22 continuous steel tine head with a heavy reinforcing coil spring brace. 48" tap-in hardwood handle.
C	63107	Bowhead Garden Rake. For loosening and leveling mulch, peat moss and loose soil. 14 tine, 13-3/4" x 2-3/4" welded steel head. 54" White Ash handle.
D	63141	Bowhead Garden Rake. For loosening and leveling mulch, peat moss and loose or heavy soils. 15-tine, 16" x 3-1/4" one-piece forged steel head. 60" Ash wood handle.
E	63121	Road/Stone Rake. For spreading and leveling gravel. 14-tine, 15-1/2" x 4" one-piece forged steel head. 66" Ash wood handle.
F	63122	Road/Stone Rake. For spreading and leveling gravel. 16-tine, 17-3/4" x 4" one-piece forged head. 66" Ash wood handle.
G	63110	Level Head Garden Rake. For loosening and leveling loose soil, mulch and peat moss. 14-tine, 15" x 3-1/4" one-piece forged steel head. 66" White Ash handle.

Sledges / Hammers / Tampers



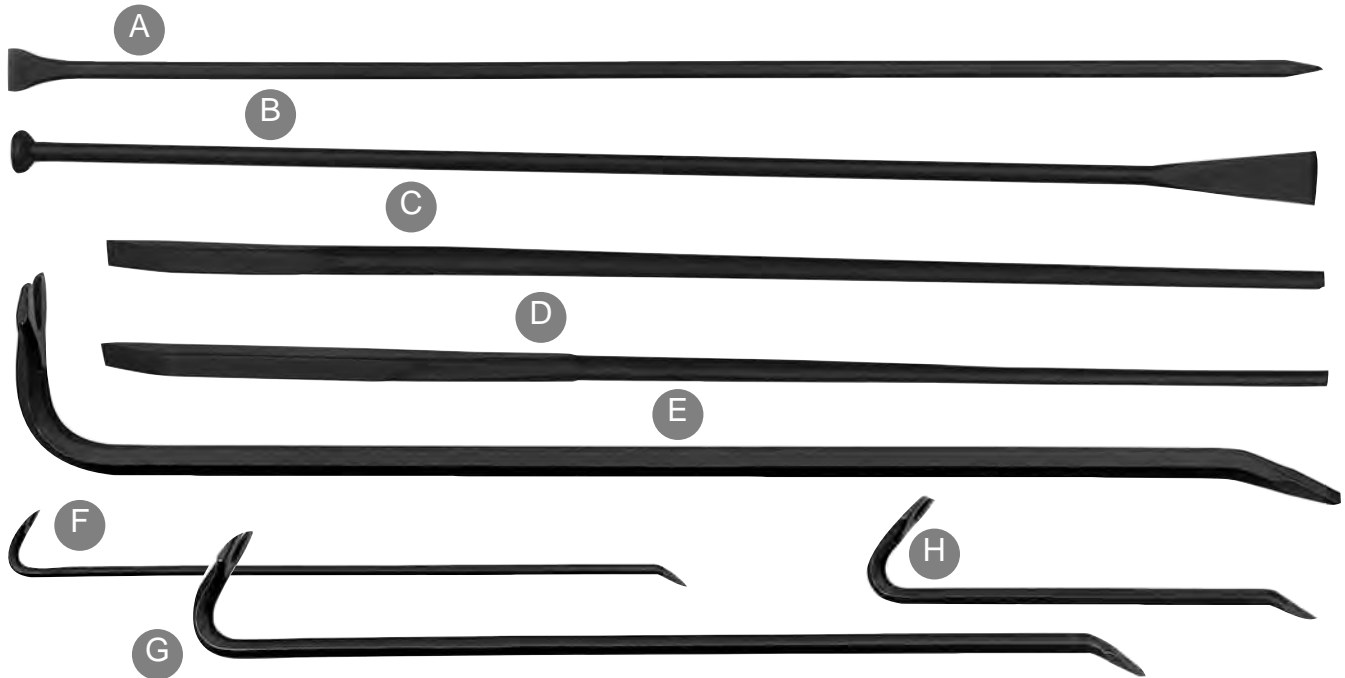
ITEM#	DESCRIPTION
A 30578	6 lb. Double Face Sledge. For heavy pounding jobs. Forged steel head with chamfered edges for added durability. 36" lacquered Hickory handle for strength.
30580	8 lb. Double Face Sledge. For heavy pounding jobs. Forged steel head with chamfered edges for added durability. 36" lacquered Hickory handle for strength.
B 30582	10 lb. Double Face Sledge. For heavy pounding jobs. Forged steel head with chamfered edges for added durability. 36" lacquered Hickory handle for strength.
30584	12 lb. Double Face Sledge. For heavy pounding jobs. Forged steel head with chamfered edges for added durability. 36" lacquered Hickory handle for strength.
30586	16 lb. Double Face Sledge. For heavy pounding jobs. Forged steel head with chamfered edges for added durability. 36" lacquered Hickory handle for strength.
C 30588	20 lb. Double Face Sledge. For heavy pounding jobs. Forged steel head with chamfered edges for added durability. 36" lacquered Hickory handle for strength.
D 30572	2 lb. Engineer's Hammer. For driving stakes and rods. Forged steel head w/chamfered edges for added durability. 16" lacquered Hickory handle for strength.
30574	3 lb. Engineer's Hammer. For driving stakes and rods. Forged steel head w/chamfered edges for added durability. 16" lacquered Hickory handle for strength.
E 30576	4 lb. Engineer's Hammer. For driving stakes and rods. Forged steel head w/chamfered edges for added durability. 16" lacquered Hickory handle for strength.
F 30004	Tamper. For tamping asphalt, gravel and dirt. All steel construction with 8" x 8" tamper head. 10" Handle end grip.
G 30005	Tamper. For tamping asphalt, gravel and dirt. All steel construction with 10" x 10" tamper head. 10" Handle end grip.

Hammers, Picks, Mattocks, Axe and Mauls



ITEM#	DESCRIPTION
A 30125	Pick Mattock. For cutting roots and breaking up soil. 5 lb. forged head. 36" Hardwood handle with overstrike protective mold. (Head only #30134)
B 30126	Cutter Mattock. For cutting roots and breaking up soil. 5 lb. forged head. 36" Hardwood handle with overstrike protective mold. (Head only #30136)
C 30127	5 lb. Railroad Pick. For breaking up hard, rocky soil. 5 lb. Forged steel head. 36" Hardwood handle with overstrike protective mold. (Head only #30138)
30128	6 lb. Railroad Pick. For breaking up hard, rocky soil. 5 lb. Forged steel head. 36" Hardwood handle with overstrike protective mold. (Head only #30140)
D 30336	6 lb. Wood Chopper's Maul. For splitting wood. Sledge eye head design. Drop-forged, tempered carbon steel head. 36" lacquered Hickory handle for strength.
30338	8 lb. Wood Chopper's Maul. For splitting wood. Sledge eye head design. Drop-forged, tempered carbon steel head. 36" lacquered Hickory handle for strength.
E 30340	6 lb. Wood Chopper's Maul. For splitting wood. Axe eye design. Drop-forged, tempered carbon steel head. 36" Harwood handle for strength.
30342	8 lb. Wood Chopper's Maul. For splitting wood. Axe eye design. Drop-forged, tempered carbon steel head. 36" lacquered Hickory handle for strength.
F 30358	3-1/2 lb. Double Bit Axe. For chopping and splitting wood. Popular Michigan Pattern. 3-1/2 lb. Drop-forged, tempered carbon steel head. 36" lacquered Hickory handle for strength.
G 30560	2 lb. Cross Peen Hammer. For shaping block, brick and stone. Forged steel head with chamfered edges for added durability. 16" lacquered Hickory handle for strength.
30566	4 lb. Cross Peen Hammer. For shaping block, brick and stone. Forged steel head with chamfered edges for added durability. 16" lacquered Hickory handle for strength.
H 30568	3 lb. Drilling Hammer. For driving drilling bits and heavy chisels. Forged steel head with chamfered edges for added durability. 10-1/2" lacquered Hickory handle for strength.
30570	4 lb. Drilling Hammer. For driving drilling bits and heavy chisels. Forged steel head with chamfered edges for added durability. 10-1/2" lacquered Hickory handle for strength.

Bars / Pullers



ITEM#		DESCRIPTION
A	30666	17 lb. San Angelo Bar. For clearing rocks and roots from postholes and ditches. Forged carbon steel 72" length for added leverage.
	30664	14 lb. San Angelo Bar. For clearing rocks and roots from postholes and ditches. Forged carbon steel 60" length for added leverage.
B	30670	17 lb. Posthole Digger/Tamping Bar. For clearing rocks and roots from postholes and ditches. Forged carbon steel. 72" length for added leverage.
C	30646	10 lb. Pinch Point Bar. For levering and demolition jobs. Forged carbon steel. 48" length for added leverage.
	30650	18 lb. Pinch Point Bar. For levering and demolition jobs. Forged carbon steel. 60" length for added leverage.
	30652	22 lb. Pinch Point Bar. For levering and demolition jobs. Forged carbon steel. 64" length for added leverage.
D	30658	18 lb. Wedge Point Bar. For levering and demolition jobs. Forged carbon steel. 60" length for added leverage.
E	30674	48" x 1" Hex Stripping Bar with claw. For demolition jobs and pulling nails and spikes. Tempered claw and blade. Ideal for prying, pulling nails.
F	30640	48" x 1" Wrecking Bar. For demolition jobs and pulling nails and spikes. Doubles as crowbar or wedge. 48" length for extra leverage.
G	30638	36" x 3/4" Wrecking Bar. For demolition jobs and pulling nails and spikes. Doubles as crowbar or wedge. 36" length for extra leverage.
	30636	30" x 3/4" Wrecking Bar. For demolition jobs and pulling nails and spikes. Doubles as crowbar or wedge. 30" length for extra leverage.
	30634	24" x 3/4" Wrecking Bar. For demolition jobs and pulling nails and spikes. Doubles as crowbar or wedge. 24" length for extra leverage.
H	30632	18" x 5/8" Wrecking Bar. For demolition jobs and pulling nails and spikes. Doubles as crowbar or wedge. 18" length for extra leverage.



TIMBER CARRIERS



- Item number 09041 meets the requirements for MIL-C-426B Carrier, Timber, Hand for National Stock Number 5120-00-223-8419.
- Duckbill hooks are one-piece drop forged steel construction, ground to a fine point.
- Ductile iron cast clasp provides higher strength.
- Clasp is open at top and drawn tight by a bolt, eliminating the need for a bolt hole through the handle.
- Heavy steel swivel allows free movement, permitting timber passage through narrow areas.
- Finished product is designed to handle logs from 3 to 16 inches in diameter.
- Handles are turned to 2-1/2 inch diameter in 4 foot and 4-1/2 foot lengths of white mountain hickory kiln dried to 18% moisture content.
- Replacement parts and handles are available.
- Painted hardware, clear lacquer handle.

Item Number	UPC # 081767-	Dia. (in.)	Length (ft.)	Wt. Ea. (lbs.)	Package Quantity
09041	09041-1	2-1/2	4	10	1
09341	09341-2	replacement handle		5	1
09051	09051-0	2-1/2	4-1/2	10.5	1
09351	09351-1	replacement handle		5.5	1

PEAVIES



- Handles turned from select White Mountain Hickory, air dried to 18% moisture content.
- Precision fitted with the finest tool available to the industry.
- Duckbill hooks are drop forged high carbon steel with the bill ground to a fine point.
- Our most popular style Peavey features a drawn carbon steel socket and a pick forged from high carbon steel before being solidly driven into the pick.
- The socket is held securely in place with a special retaining tab forged into the pick.
- The DIXIE Rafting/Bangor Style Peavey features a drop forged pick, precision welded into a drawn carbon steel socket.
- This one-piece unit makes field repairs easier.
- Our lightest tool.

Peavies – Solid Socket

Item Number	UPC # 081767-	Dia. (in.)	Length (ft.)	Wt. Ea. (lbs.)	Package Quantity
00120	00120-2	2-1/4	3	5.83	2
00130	00130-1	2-1/4	3-1/2	6.25	2
00140	00140-0	2-1/4	4	6.66	2
00230	00230-8	2-1/2	3	9.5	2
00235	00235-3	2-1/2	3-1/2	10	2
00240	00240-7	2-1/2	4	8.31	2
00250	00250-6	2-1/2	4-1/2	12.38	2
00260	00260-5	2-1/2	5	12.83	2

Peavies – Replacement Handles

Item Number	UPC # 081767-	Dia. (in.)	Length (ft.)	Wt. Ea. (lbs.)	Package Quantity
00122	00122-6	2-1/4	3	3.5	2
00132	00132-5	2-1/4	3-1/2	3.8	2
00142	00142-4	2-1/4	4	4	2
00233	00233-9	2-1/2	3	3.37	2
00237	00237-7	2-1/2	3-1/2	3.37	2
00242	00242-1	2-1/2	4	5	2
00252	00252-0	2-1/2	4-1/2	5	2
00262	00262-9	2-1/2	5	5.5	2

Rafting or Bangor Style Peavey

Item Number	UPC # 081767-	Dia. (in.)	Length (ft.)	Wt. Ea. (lbs.)	Package Quantity
03240	03240-4	2-1/4	4	6.25	2
03250	03250-3	2-1/2	4-1/2	6.66	2
03260	03260-2	2-1/2	5	7.08	2

Rafting or Bangor – Replacement Handles

Item Number	UPC # 081767-	Dia. (in.)	Length (ft.)	Wt. Ea. (lbs.)	Package Quantity
03242	03242-8	2-1/4	4	5	2
03252	03252-7	2-1/2	4-1/2	5.5	2
03262	03262-6	2-1/2	5	6	2





CANT HOOKS



- Handles are top quality White Mountain Hickory hardwood, air dried to 18% moisture content.
- Precision cut to an exact fit.
- Duckbill Hooks are drop forged with the bills ground to a fine point.
- Clasps and extension toe rings are ductile iron castings for long lasting service.
- Heads are painted; handles have a clear lacquer finish.
- Packaged two in a carton.
- Replacement parts available including handles, duckbill hooks, extension toe rings and clasps.
- **Cant Hooks** built to customer specifications are available upon request.

Cant Hook Number	UPC # 081767-	Dia. (in.)	Length (ft.)	Replacement Handle #	UPC # 081767-
06100	06100-8	2-1/4	2	06102	06102-2
06110	06110-7	2-1/4	2-1/2	06112	06112-1
06120	06120-6	2-1/4	3	06122	06122-1
06130	06130-5	2-1/4	3-1/2	06132	06132-9
06140	06140-4	2-1/4	4	06142	06142-8
06220	06220-3	2-1/2	3	06222	06222-7
06230	06230-2	2-1/2	3-1/2	06232	06232-6
06240	06240-1	2-1/2	4	06242	06242-5
06250	06250-0	2-1/2	4-1/2	06252	06252-4
06260	06260-9	2-1/2	5	06262	06262-3

SKIDDING AND LOGGER STYLE TONGS



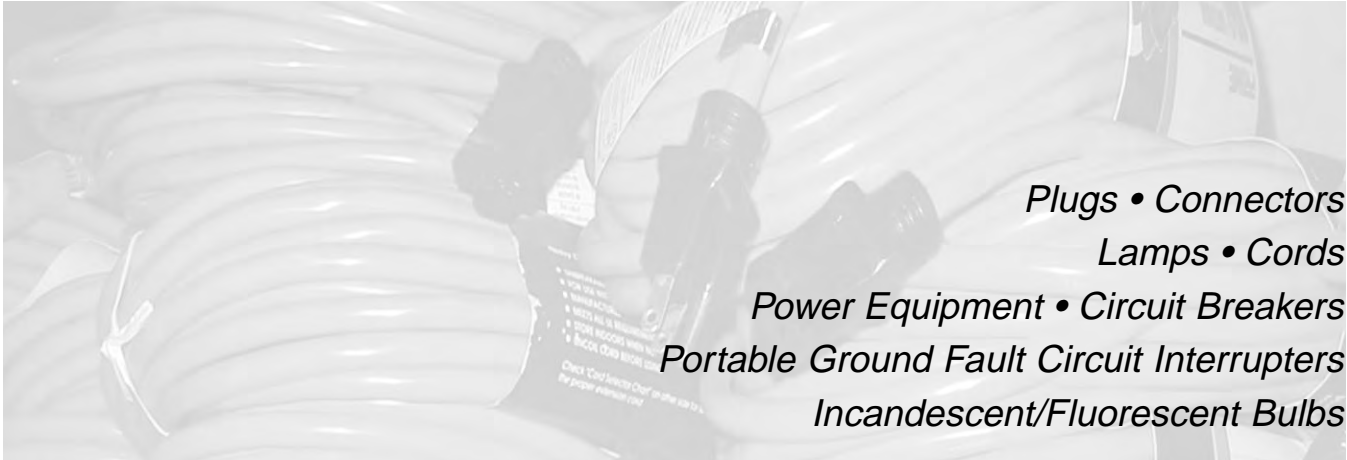
- **Skidding Tongs** are upset forged from round steel to position additional steel at critical stress areas.
- Points are fine ground to assure long lasting sharpness.
- Tong sizes 3/4 and 1 inch are supported by special Tong Shut.
- Tong sizes 1-1/4 and 1-1/2 inch use screw pin anchor shackles.
- Two configurations are available: Tong with forged ring or tong with 3/8" swivel grab hook in sizes 3/4 and 1 inch and 1/2 inch forged swivel grab in size 1-1/4 inch.
- Tongs are specially shaped to grab and hold poles and logs for skidding and dragging operations.

Item Number	UPC # 081767-	Diameter & Max. Opening (in.)	Ring Size (lbs.)	Minimum (in.)	Maximum (in.)	Weight (lbs.)	Package Quantity
Ring Only							
40005	40005-0	3/4 x 16	1/2	3-9/16	16	7.0	3
42315	42315-8	1 x 20	5/8	4	20	12.8	3
40225	40225-2	1 x 25	5/8	4-1/2	25	14.3	3
40455	40455-3	1-1/4 x 32	7/8	7	32	28.8	1
40555	40555-0	1-1/2 x 36	1	2	36	48.0	1
Swivel Grab							
40004	40004-3	3/4 x 16	3/8	3-9/16	16	7.9	3
42314	42314-1	1 x 20	3/8	4	20	13.3	3
40224	40224-5	1 x 25	3/8	4-1/2	25	15.3	3
40454	40454-6	1-1/4 x 32	1/2	7	32	29.7	1
Logger Style Tongs							
42815	42815-3	1 x 14	3/4	5	14	15.5	1
42805	42805-4	1-1/4 x 16	7/8	7	16	24.5	1
42825	42825-2	1-1/2 x 22	1	7-1/2	22	33.8	1

PIKE POLES – ASH AND ALUMINUM

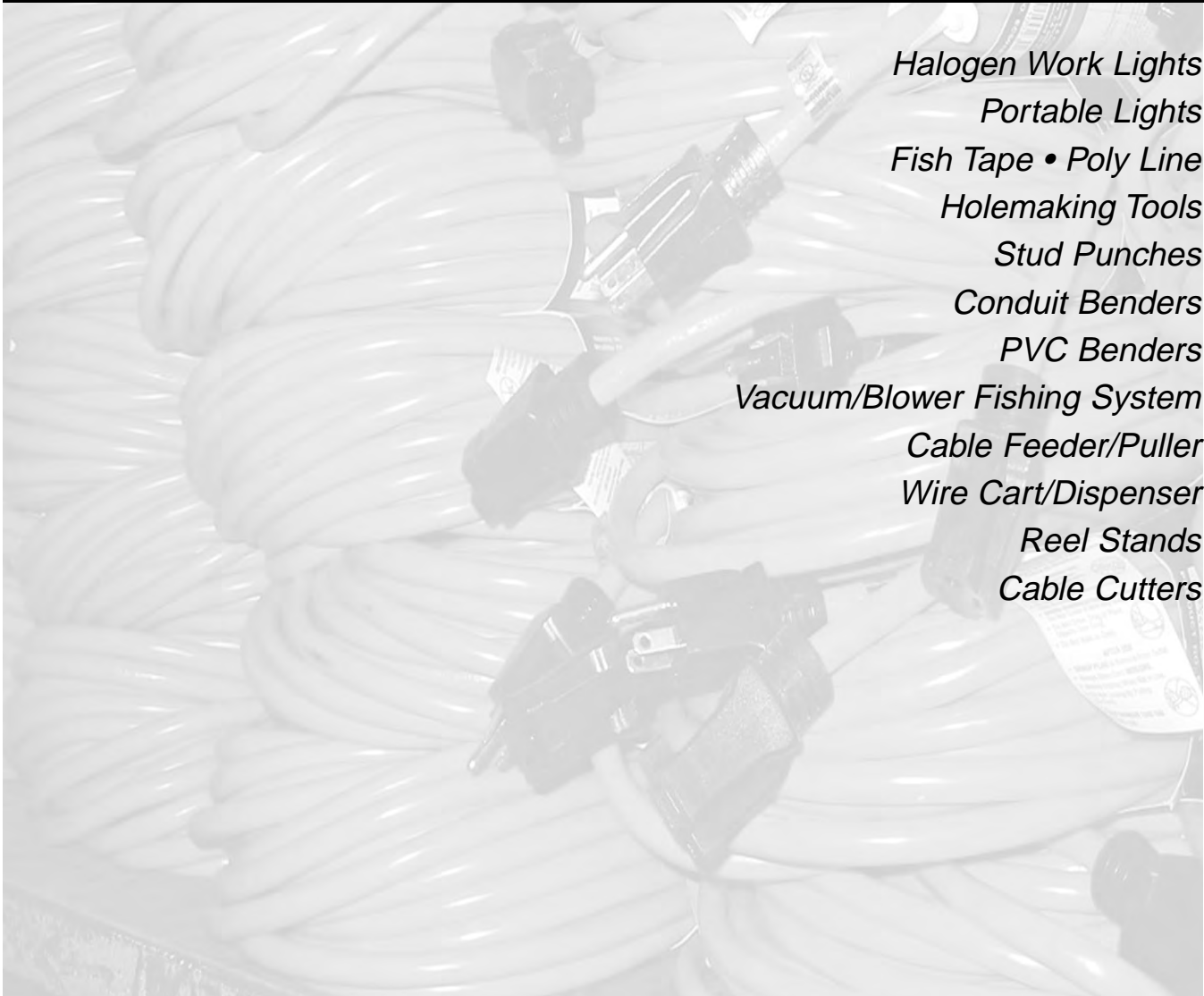
Pike Pole Ash	UPC # 081767-	Dia. (in.)	Length (ft.)	Replacement Handle #	UPC # 081767-
10080	10080-6	1-1/2	6	10680	10680-8
10000	10000-4	1-1/2	8	10600	10600-6
10010	10010-3	1-1/2	10	10610	10610-5
10020	10020-2	1-1/2	12	10620	10620-4
10030	10030-1	1-1/2	14	10630	10630-3
10040	10040-0	1-1/2	16	10640	10640-2

Pike Pole Aluminum	UPC # 081767-	Dia. (in.)	Length (ft.)	Wt. Ea. (lbs.)	Package Quantity
10082	10082-0	1-1/2	6	3.3	3
10002	10002-8	1-1/2	8	4.0	3
10012	10012-7	1-1/2	10	4.8	3
10022	10022-6	1-1/2	12	5.6	3
10032	10032-5	1-1/2	14	6.3	3
10042	10042-4	1-1/2	16	7.0	3
10052	10052-3	1-1/2	18	7.8	3
10062	10062-2	1-1/2	20	8.6	3
10072	10072-1	1-1/2	24	9.9	3



*Plugs • Connectors
Lamps • Cords
Power Equipment • Circuit Breakers
Portable Ground Fault Circuit Interrupters
Incandescent/Fluorescent Bulbs*

Electrical **5**



*Halogen Work Lights
Portable Lights
Fish Tape • Poly Line
Holemaking Tools
Stud Punches
Conduit Benders
PVC Benders
Vacuum/Blower Fishing System
Cable Feeder/Puller
Wire Cart/Dispenser
Reel Stands
Cable Cutters*



Ericson's superior line of high quality low priced plugs and connectors are built to meet demanding environments including submersion. Ericson has a wide variety of NEMA configurations.



Plugs & Connectors		Plugs	Connectors	Plugs	Connectors	Plugs	Connectors
	5-15	1510-P	1610-C	1510-PG	1610-CG	1510-PW6P	1510-CW6P
	5-20	1512-P	1612-C	1512-PG	1612-CG	1512-PW6P	1612-CW6P
	L5-20	2310-P	2410-C	2310-PG	2410-CG	2310-PW6P	2410-CW6P



The XG2 Series of GFCI are rugged and built to last. Water submersible housings. 1.5 HP Motor rated. Many styles to choose from to meet your needs.

XG2	Length (feet)
XG2-14-2S	2
XG2-14-25S	25
XG2-12-2TT	2
XG2-12-50TT	50



Cordsets and cord protection are second nature to Ericson. Choose from light duty 12/3 cords with lighted ends to 6/4 heavy-duty power cords for our Oscar™ series. Our CP5-36 cable protectors can handle heavy traffic up to 10,000 lbs. per axle.



Ericson has been producing high quality, long lasting hand-lamps since 1940. From low priced rubber handles to submersible fluorescent. VaporGard™ to Explosion-Proof. Low voltage versions available. Our molded plug cordset on each lamp has super sealing rings for watertight connections. We have the handlamp to meet your needs and in stock.



Hand lamps*	Volts**	Bulb	Cord Length***
7425	120 or 12	Up to 150W Incandescent	25
9425	120 or 12	Up to 150W Incandescent	25
70NGQL-25	120 or 12	Up to 150W Incandescent	25
900-25	120	13W PL-13 Fluorescent	25
926-25	120 or 12	26W Dual Fluorescent	25

*Many guard/reflector and switch options available **Bulb determines voltage ***50' also standard or no cord attached.



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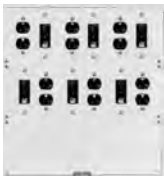
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Ericson offers the largest selection of portable power equipment from the Oscar™ Series up to the heavy duty e-Cart™ series (up to 112KVA 480V 3 Phase). Call us to help you select the right product for your application.



Ericson P/N	Electrical Rating	Receptacle Flip Covers	GFCI & C.B. Protected 20A Circuits	NON-GFCI 30A C.B.	GFCI C.B. For 30A Circuit	5-20R Duplexes	L6-30R Single Recept.	5-20R Straight Recepts. (Single)	L5-20R Recepts. (Single)	Daisy Chain Feed Thru Recept. W/ Flip Cover
1066	125/250V 1PH 4W 50A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	*	6	1			<input checked="" type="checkbox"/>
1066FS	125/250V 1PH 4W 50A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	*	6	1			<input checked="" type="checkbox"/>
1067-LC	125/250V 1PH 4W 50A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	*		1	6		<input checked="" type="checkbox"/>
1067-ALC	125/250V 1PH 4W 50A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	*		1		6	<input checked="" type="checkbox"/>
Accessories						* 30A GFCI optional - not required by OSHA or NEC				
63BSO	Cordset, 50', #6/3 - 8/1 SO 50A 125V/250V		63DSO cordset 100' #6/3 - 8/1 SO 50A 125/250V							
SR50	Power Outlet CS6369 Receptacle in weatherproof box with lift cover and 24" leads 50A 125V/250V									



6 duplexes (5-20R) with GFCI circuit breakers

GFCI circuit breakers

480 volt 1Ø or 3Ø Up to 112.5 KVA

Outdoor NEMA 3R Rated



Model: EJR 480V3-06 L-15K BOX



Model: EJR 480V3-06 WL-15K



Model: e-Cart™ 2



Outdoor NEMA 3R Rated



Model: e-Cart™ Up to 45 KVA

e-Cart™ Jr. Selection Guide

Catalog Number	Description
EJR 480V3-06 L-15K Box	e-Cart™, Jr. 480 VOLT 3 PH, 208Y/120V, 15KVA (6) GFCI C.B.(6) DUPLEX
EJR 480V3-06W L-15K	e-Cart™, Jr. 480 VOLT PH, 208Y/120V, 15KVA (6) GFCI C.B. (6) 5-20R Connector

e-Cart™ Selection Guide

Catalog Number	Description
EIN 480V3-12L - 30K Box	e-Cart™, Industrial frame 480V 3PH (12) 5-20 Duplex GFCI protected 30KVA

1. Contact Wharton Hardware for custom assemblies.



Arctic/Tropic™ Oil Resistant TPE-Rubber Cord Set

Arctic/Tropic cords are made of oil resistant TPE-Rubber (SJEOW) which provides maximum flexibility year-round. Cords retain strength in temperatures as high as 212°F and flexibility in temperatures as low as -58°F. Superior resistance to sunlight, ozone, cracking and chemicals, makes it great for use in garages and industrial applications where extra protection is needed. Yellow jacket color is a highly visible safety color for work sites.

Three Conductor Grounded Arctic/Tropic Yellow Cord - 300V

ITEM NUMBER	GA./COND.	LENGTH (FT.)	125V RATING	PACK	WT. (LBS.)	UPC CODE 0-44882-
86010	16/3	10	13A	24	17	10000-7
86025	16/3	25	13A	12	18	10002-1
86050	16/3	50	13A	12	36	10004-5
86100	16/3	100	10A	6	36	10006-9
87025	14/3	25	15A	6	12	10008-3
87050	14/3	50	15A	4	16	10010-6
87100	14/3	100	13A	2	15	10012-0
88025	12/3	25	15A	2	8	10014-4
88050	12/3	50	15A	2	8	10016-8
88100	12/3	100	15A	2	24	10018-2
90050	10/3	50	15A*	2	20	10030-4
90100	10/3	100	15A*	2	36	10032-8

*Plugs rated 15A



Standard Hard Service Vinyl Cord Sets

Three Conductor Grounded Orange Triple Outlet Pow-R-Block - 300V

SJTW, Heavy-duty female plug allows for connection of three separate cords.

ITEM NUMBER	GA./COND.	LENGTH (FT.)	125V RATING	PACK	WT. (LBS.)	UPC CODE 0-44882-
62010	14/3	10	15A	6	12	43000-5
62025	14/3	25	15A	6	18	43002-9
62050	14/3	50	15A	4	21	43004-3
62100	14/3	100	13A	2	20	43006-7
64002	12/3	2	15A	12	12	43008-1
64050	12/3	50	15A	2	2	43010-4
64100	12/3	100	15A	2	2	43012-8



Three Conductor Grounded Orange Cord - 300V

SJTW, medium flexibility vinyl cord set.

ITEM NUMBER	GA./COND.	LENGTH (FT.)	125V RATING	PACK	WT. (LBS.)	UPC CODE 0-44882-
60010	16/3	10	13A	24	21	42535-3
60025	16/3	25	13A	12	24	42540-7
60050	16/3	50	13A	12	43	42545-2
60100	16/3	100	10A	6	43	42550-6
63025	14/3	25	15A	6	17	42555-1
63050	14/3	50	15A	4	22	42560-5
63100	14/3	100	13A	2	20	42565-0
65025	12/3	25	15A	2	8	42570-4
65050	12/3	50	15A	2	16	42575-9
65100	12/3	100	15A	2	31	42580-3





RIGHT ANGLE GFCI PLUG AND TRIPLE TAP

UL, CUL 125V/15A
NEMA 5-15P and (3) 5-15 R
12/3 AWG SJTW Cord
Power "On" LED indicator

MODEL #30334008 2 Ft.
MODEL #30334008-08(M) 2 Ft.
MODEL #30334304 25 Ft.
MODEL #30334305 50 Ft.
MODEL #30334311 100 Ft.



INLINE GFCI CORD SETS WITH SINGLE CONNECTORS

UL, CUL 125V/15A
12/3 AWG SJTW Cord

MODEL #30338018 18 In.
MODEL #30338018-18(M) 18 In.
MODEL #30338022 6 Ft.
MODEL #30338022-08(M) 6 Ft.
MODEL #30338052 25 Ft.
MODEL #30338052-08(M) 25 Ft.
MODEL #30338036 50 Ft.



GFCI PROTECTED QUAD(4) OUTLET BOX

UL, CUL 125V/15A
Right Angle GFCI Plug with
Power "ON" LED
(4) NEMA 5-15 R Outlets with
Separate Covers for Each Outlet
6 Ft., 12/3 AWG SJTW Cord
15A Circuit Breaker

MODEL #30334052



GFCI DUPLEX WITH 2 NEMA 5-15 R GFCI OUTLETS

UL, CUL 125V/15A
6 Ft., 12/3 AWG SJTW Cord
with NEMA 5-15 P Plug
15 A Circuit Breaker

MODEL #30322001A



INLINE GFCI AND TRIPLE TAP CORD SETS

UL, CUL 125V/15A
NEMA 5-15P and (3) 5-15 R
12/3 AWG SJTW Cord

MODEL #30338024 3 Ft.
MODEL #30338024-08(M) 3 Ft.
MODEL #30338302 25 Ft.
MODEL #30338303 50 Ft.
MODEL #30338306 100 Ft.

As the North American Division of a global lighting manufacturer, SLI Lighting offers a wide range of incandescent, halogen, fluorescent and high intensity discharge products to meet the specialized operating and performance requirements of each lighting task.

- Longer lamp life.
- Increased light quality.
- Energy and maintenance cost SAVINGS.
- Improved lumen maintenance.
- Greater productivity and comfort.



INCANDESCENT STANDARD

SLI Incandescent light sources provide the user with a wide choice of options when low initial cost, warm color and good color rendering are desired.

Features:

- A variety of wattages from 4 Watt night lights to 500 Watt industrial bulbs.
- Many shapes including Standard Household, Indoor Reflector, PAR for both indoor and outdoor, as well as Indicator and Tubular.
- A range of finishes including Clear, Frosted, Soft White and Protected.
- Different life ratings - many products are offered in 5,000, 10,000 and 20,000 hour life ratings. These are designed for applications where the labor cost to change lamps is very high and lower light output is acceptable.

TOUGHCOAT


SLI Lighting Toughcoat shatter-resistant bulbs, Toughcoat shatter-resistant fluorescent tubes and tube guards reduce liability risks and enable you to comply with FDA and OSHA requirements.

Features:

- Toughcoat shatter-resistant Heat Lamps - prevent glass fragments if broken or dropped. Also prevent thermal shock burnouts from water or grease splatter.
- Toughcoat shatter-resistant lamps - used in automotive drop cords, mechanic trouble lights, extension cords, and anywhere else the risk of severe shock may be encountered.
- Toughcoat shatter-resistant fluorescents.
- Fluorescent Tube Guards and End Caps - plastic safety shield provides protection against dirt, dust and minimizes tube replacement due to breakage.





CEP's lights designated , are UL Listed portable work lights "approved for use in set locations." Built to last, CEP's heavy-duty quartz lights have been designed to endure the harshest of jobsite conditions. These portable light stands are made of heavy wall tube steel and have no plastic parts. The Hubbell style fixtures emit 11,000 lumens of color-correct light and provide the user with much more light efficiency than the traditional imports.

Cat. No.	Description	Height	Watt	Mast	Switch	Weight
5750	Single Heavy-duty Fixture	7'	500	3 Stage	Yes	19 lbs.
5710	Double Heavy-duty Fixture	7'	1000	3 Stage	Yes	25 lbs.

- Folding tripod base and removable head assemblies for easy set-up and storage.
- Cord retainer mounted on the base to prevent tip over.
- 16/2 SFTW power supply cord.
- Removable head assembly on all models.
- All steel stand and components.
- Adjustable telescoping mast assemblies.

Cat. No.	Description	Height	Watt	Mast	Switch	Weight
5125i	Shorty	1'	500	N/A	No	5 lbs.

- Fully weatherproof and UL Listed for use in wet locations.
- One rough service quartz halogen bulb included with each fixture.
- Convenient cord wrap.



The TOUGHEST WORK LIGHT on the PLANET!

Bright, durable and virtually indestructible; the 36" tall Wobble Light® is a self righting, highly durable work light that can takes a severe beating from workers, vehicles, debris and drops. Internal ventilation system keeps light cool enough to touch. String them in a series or use individually. No set-up. Just plug it in.

WOBBLELIGHT	Light Output (Lumens)	Product Uses
WL175MH 175W Metal Halide 30-42 ft. range	15000	Residential construction, remodeling, light manufacturing medium rooms, medium outdoor areas.
WL400MH 400W Metal Halide 78-110 ft. range	40000	Commercial construction, heavy industry, large areas, outdoor areas.

360° BRIGHT AS TOUGH AS YOUR WORK WORLD



Bright, durable and virtually indestructible; the 27" tall Wobble Light Jr® is a self righting, highly durable light that can take rough handling at home or on the job. Shock absorber protects bulb from strikes and jarring. Internal ventilation system keeps light cool enough to touch. On board outlet plug for stringing them in a series or for use with power tools. No set-up. Just plug it in.

WOBBLELIGHT JR.	Light Output (Lumens)	Product Use
WL100MH 100W Metal Halide 30 ft. range	9000	At home or on the job.



360° BRIGHT SELF-RIGHTING LIGHT





Tuff-Grip™ Pro

- Tuff-Cuff™ tape retaining feature keeps tape properly positioned in the opening.
- Full-circle handle band helps keep dirt and moisture out, prolonging life.
- Easier to install replacement tapes.
- Superior pull-out and rewind characteristics.
- Exceptionally durable case and handle.
- Clean contemporary styling.
- Large, comfortable ergonomically designed handle, grasp from the top or side. Allows for use with gloves.



Rapid-Pak® Fish Tapes

- Inner rotating reel with winding knob retrieves tape faster than traditional fish tapes for increased labor savings.
- Funneled tape opening reduces kinking and tape breakage.
- Reversible, hinged knob for right- or left-handed rewinds.
- Stationary handle for extra durability.
- Textured case surface provides positive grip.
- Impact-resistant plastic case.



Gold-Fish® Fish Tapes 31-142

- Designed for multiple-bend applications.
- Flexible in all directions.
- Brass plated to resist corrosion.
- Minimum 600 pounds tensile strength.
- 100' long.



Tuff-Grip™ Fish Tapes

- Non-slip handle and fingertip grooves provide secure grip for added handling comfort.
- Oversized handle opening accommodates large, gloved hands.
- Durable handle withstands rugged job site conditions.
- Impact-resistant plastic case.



Zoom™ Fish Tapes

- Translucent, impact-resistant case shows precisely how much tape is left.
- Large Tuff-Grip™ handle provides secure grip, accommodates large gloved hands.
- Zoom™ Tape's tough outer nylon jacket offers abrasion resistance, with enhanced lubricity resin additives.
- Zoom™ Tape's 3/32" round, 19 strand preformed core handles tight bends and tough pulls by providing omni-directional (all directions) flexibility to change planes in conduit runs.
- Over-molded with ultra hard nylon for fast, smooth fishing.
- Total diameter 3/16".
- Not an insulated fish tape.
- 304 Grade Stainless Steel (Cutlery Grade) assures long, rust-free performance.
- Can be used in aqueous pulling lubricants and wet conduit runs without concern about rusting.



Thumb Winder™ Fish Tape #31-010

- Durable, impact-resistant case for the most rugged jobsite conditions.
- Impact-resistant ABS case won't rust or dent.
- Blued steel 50 ft length.
- Blued steel is an exclusive IDEAL innovation. Constructed of highest grade tempered steel and put through our proprietary finishing process, it offers a smooth finish for superior performance and rust resistance.
- Use blued steel for easier feeding into conduit, easier winding in and winding out.



Fiberglass S-Class® Fish Tape Puller #31-170

- Non-slip material securely grips fiberglass fish tape without damaging tape.
- Fits into standard fish tape case opening when not in use.

KWIK SILVER™ STEEL FISH TAPES

438-5

438-10

- Kwik Silver™ plated fish tape wire is corrosion resistant.
- Same strength as conventional steel tape.
- Smooth plating makes it easier to fish with, saving you time on the job.
- High-impact nylon, one-piece handle for maximum durability, long life and easy, comfortable use.
- Large handle grip for greater user control.
- Self-tensioning case for easy tape winding.
- Wide, impact-resistant rewinder case with viewports to ensure tape fit and retaining strap on inside to hold tape secure.

CAT. NO.	UPC NO.	DESCRIPTION
438-5	29045	65' × 1/8" × 0.060" (19.8m × 3.2mm × 1.5mm) Steel Fish Tape in Winder Case
438-5BP	00170	65' × 1/8" × 0.060" (19.8m × 3.2mm × 1.5mm) Steel Fish Tape in Winder Case, 5-pack
438-10	28256	125' × 1/8" × 0.060" (33m × 3.2mm × 1.5mm) Steel Fish Tape in Winder Case
438-10BP	00171	125' × 1/8" × 0.060" (33m × 3.2mm × 1.5mm) Steel Fish Tape in Winder Case, 5-pack
438-20	29046	240' × 1/8" × 0.060" (73m × 3.2mm × 1.5mm) Steel Fish Tape in Winder Case
438-20BP	00172	240' × 1/8" × 0.060" (73m × 3.2mm × 1.5mm) Steel Fish Tape in Winder Case, 5-pack
R438-5	29047	50' × 1/8" × 0.060" (15.2m × 3.2mm × 1.5mm) Steel Fish Tape without Winder Case
R438-10	28257	100' × 1/8" × 0.060" (30.5m × 3.2mm × 1.5mm) Steel Fish Tape without Winder Case
R438-20	29048	200' × 1/8" × 0.060" (61m × 3.2mm × 1.5mm) Steel Fish Tape without Winder Case
R438B	29367	Swivel Ball Head for use on 1/8" steel fish tapes
R438-BM	05853	Ball Tip Male Half
439-1	30859	12" (305mm) Flexible Fish Tape Leader
39790	39790	One-Piece Handle
39791	39791	12" (305mm) diameter Replacement Case

SPECIFICATIONS

Capacity	1/8" (3.2mm) tape width- 400 lbs. (1.7kN) maximum design strength
Weight	438-5 - 2.75 lbs. (1.2kg) 438-10 - 5 lbs. (2.3kg) 438-20 - 7lbs. (3.2kg) R438-5 - 2 lbs. (0.9kg) R438-10 - 3 lbs. (1.4kg) R438-20 - 6 lbs. (2.7kg)

POLY LINE

430

430-500

- Ready-to-use, pre-punched hole in lid with resealable cap.
- Use with power fishing systems directly from the container.
- Resists tangling when dispensing.
- Rot and mildew resistant.
- Handy reusable plastic dispenser pail with handle keeps the line dry.
- Use to pull rope through conduit.

CAT. NO.	UPC NO.	DESCRIPTION
430	21481	Poly Line 6500' (1981m), Green Tracer
430-500	12598	Poly Line 500' (152.4m), Green Tracer
431	21482	Poly Line 5200' (1585m), Yellow Tracer
37959	37959	Poly Line 2200' (670m), Red Tracer
430R	37835	Poly Line Refill 6500' (1981m)

SPECIFICATIONS

Capacity	430 and 430-500 - 210 lbs. (934kN) average breaking strength 431 - 240 lbs. (1kN) average breaking strength 37959 - 500 lbs. (2.2kN) average breaking strength
Weight	430 - 11 lbs. (5kg) 430-500 - 1 lb. (0.5kg) 431 - 12 lbs. (5.4kg) 37959 - 12 lbs. (5.4kg)

SLUG-BUSTER® KNOCKOUT KITS
Slug-Buster® Manual Knockout Kits

7235BB

- Assortment of commonly used Slug-Buster® knockout punches, packaged to meet the contractor's needs.
- High-impact, rugged plastic carrying case.

CAT. NO.	UPC NO.	DESCRIPTION	CAPACITY			
			MILD STEEL GA.	mm	WEIGHT LBS.	kg
7235BB	32013	1/2" - 1-1/4" Conduit Size Manual Slug-Buster® Knockout Punch Kit	10	3.5	2.7	1.2
7237BB	32014	1-1/2" and 2" Conduit Size Manual Slug-Buster® Knockout Punch Kit	10	3.5	5.2	2.4

7235BB/32013 SLUG-BUSTER® KNOCKOUT PUNCH KIT INCLUDES

CAT. NO.	UPC NO.	DESCRIPTION	HOLE SIZE ACTUAL			
			Ø INCH	Ø mm	PG	
721-1/2	31756	1/2" Conduit Size Punch	7/8	.885	22.5	16
14722	14722	1/2" Conduit Size Die	7/8	.885	22.5	16
00042	00042	Draw Stud-3/8" x 1-5/8"				
721-3/4	31757	3/4" Conduit Size Punch	—	1.115	28.3	—
124AV	06972	3/4" Conduit Size Die	—	1.115	28.3	—
721-1	31758	1" Conduit Size Punch	—	1.362	34.6	—
126AV	04011	1" Conduit Size Die	—	1.362	34.6	—
721-1-1/4	31759	1-1/4" Conduit Size Punch	—	1.701	43.2	—
128AV	04013	1-1/4" Conduit Size Die	—	1.701	43.2	—
249AVBB	04040	Draw Stud-3/4" x 2-1/8"				
31880	31880	Plastic Case				

7237BB/32014 SLUG-BUSTER® KNOCKOUT PUNCH KIT INCLUDES

CAT. NO.	UPC NO.	DESCRIPTION	HOLE SIZE ACTUAL			
			Ø INCH	Ø mm	PG	
721-1-1/2	31760	1-1/2" Conduit Size Punch	—	1.951	49.6	—
440AV	04061	1-1/2" Conduit Size Die	—	1.951	49.6	—
721-2	31761	2" Conduit Size Punch	2-3/8	2.416	61.5	—
442AV	04063	2" Conduit Size Die	2-3/8	2.416	61.5	—
304AVBB	04042	Draw Stud-3/4" x 2-15/16"				
32012	32012	Plastic Case				


7237BB

QUICK DRAW® HYDRAULIC PUNCH DRIVER AND KITS

The Quick Draw®, Quick Draw 90° and Quick Draw® Flex feature:

- Compact, lightweight design for portability and fast, easy one-person operation.
- Develops 8 tons of hydraulic force for easy punching, even in 10-gauge stainless steel, depending on individual punch capacities.
- Quick Draw® is perfect for fast, straight-on front panel punching.
- Quick Draw 90°'s right angle driver head rotates over 180 degrees for maximum flexibility in tight working areas.
- Quick Draw® Flex allows unlimited driver orientation to simplify access to work area.
- Can be used with non-round punches within the capacity of the tool (adapter may be required).
- U.S. Patent #6,772,521.

7806SB
Quick Draw® Kit



10383 Flex Drive Only

7906SB
Quick Draw 90° Kit



CAT. NO.	UPC NO.	DESCRIPTION	WEIGHT LBS. kg	
7704SB	10475	Quick Draw® Flex Driver, 2 draw studs, 1 adapter, 1 spacer and case	12.1	5.5
7706SB	10476	Standard – Quick Draw® Flex Driver, 1/2" through 2" Slug-Buster® conduit size punches and dies 2 draw studs, 1 adapter, 1 spacer and case	17.3	7.9
7804SB	34292	Quick Draw® Driver, 2 draw studs, 1 adapter, 1 spacer and case	10	4.5
7806SB	34293	Standard – Quick Draw® Driver, 1/2" through 2" Slug-Buster® conduit size punches and dies, 2 draw studs, 1 adapter, 1 spacer and case	14	6.4
7804E	34291	Metric – Quick Draw® Driver, 2 draw studs, 1 adapter, 1 spacer and case	9.4	4.3
7804ESB	35611	Metric – Quick Draw® Driver, Slug-Buster® Pg punches and dies 15.2 mm through 30.5 mm, 2 draw studs, 1 adapter, 1 spacer and case	10.3	4.7
7804ISO	35614	Metric – Quick Draw® Driver, Slug-Buster® ISO punches and dies 16.2 mm through 40.5 mm, 2 draw studs, 1 adapter, 1 spacer and case	11.4	5.2
7904SB	33794	Quick Draw 90° Driver, 2 draw studs, 1 adapter, 1 spacer and case	10	4.5
7906SB	34300	Quick Draw 90° Driver, 1/2" through 2" Slug-Buster® conduit size punches and dies, draw studs, 1 adapter, 1 spacer and case	14	6.4
7904E	34299	Metric – Quick Draw 90° Driver, 2 draw studs, 1 adapter, 1 spacer and case	11	5.0
7904ESB	35615	Metric – Quick Draw 90° Driver, Slug-Buster® Pg punches and dies 15.2 mm through 30.5 mm, 2 draw studs, 1 adapter, 1 spacer and case	11	5.0
7904ISO	35616	Metric – Quick Draw 90° Driver, Slug-Buster® ISO punches and dies 16.2 mm through 40.5 mm, 2 draw studs, 1 adapter, 1 spacer and case	12.2	5.5
31872	31872	Plastic Case		

STEEL CAPACITIES FOR CONDUIT SIZES

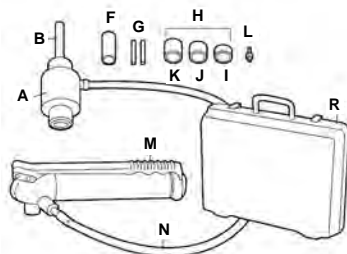
REQUIRED DRAW STUD AND ACCESSORIES	STANDARD PUNCHES AND SLUG-BUSTERS®							SLUG-SPLITTERS®			
	1/2"	3/4"	1-7/32" OILTIGHT	1"	1-1/4"	1-1/2"	2"	1/2"	3/4"	1-7/32" OILTIGHT	1-1/4"
3/8" Draw Stud	////										
Spacer & 7/16" Draw Stud								■			
Spacer & 3/4" Draw Stud		////	////	////	////	////	////		■	■	■
3/4" Draw Stud						////	////				

//// 10-GA. MILD STEEL ■ 10-GA. STAINLESS STEEL

RAM and HAND PUMP HYDRAULIC DRIVER KITS (INCH and METRIC)


- Fast, easy and simple to operate.
- Compact design for field use on construction sites and maintenance jobs.
- Punches 10 times faster than wrench method.
- Will also drive 751 Cable Cutter head.
- Can be used with most standard round Slug-Buster® and Slug-Splitter® punches (not 1/2", 9/16", 5/8").
- Can be used with non-round punches (adapter may be required).
- Powerful 11-ton hydraulic ram.
- 3-foot hose.

Key	Cat./UPC No.	Description
A	746 / 17091	Ram (includes Item B)
B	2113AA / 03294	Draw Stud - 3/4" x 5-3/8"
F	1557AA / 03170	Punch Sleeve
G	1614SS / 30043	Draw Stud 3/8" x 2-13/16"
H	15908	Spacer Group (includes Items I, J and K)
I	1924AA / 03248	Spacer-Short
J	1925AA / 03249	Spacer-Medium
K	1926AA / 06904	Spacer-Long
L	34410	Kwik Stepper® Step Bit 1/2"
M	767 / 13284	Hydraulic Hand Pump
N	06302 / 06302	High Pressure Hose-1/4" x 3'
R	20206	Plastic Case



CAT. NO.	UPC NO.	DESCRIPTION	WEIGHT	
			LBS.	kg
7646	15906	Driver with hand pump, draw studs, spacer and plastic case	20	9.1
7306	15909	Driver, hand pump, standard punches, dies and draw studs for 1/2" through 2" conduit, plastic case	24	11
7306SB	34360	Driver, hand pump, Slug-Buster® punches, dies and draw studs for 1/2" through 2" conduit, adapter, spacers, Kwik Stepper® Step Bit and plastic case	24	10.9
7310	15910	Driver, hand pump, standard punches, dies and draw studs and spacers for 1/2" through 4" conduit, steel case	54	25
7310SB	34361	Driver, hand pump, Slug-Buster® punches, dies and draw studs for 1/2" through 2" and 2-1/2" through 4" standard conduit size punches, dies and draw studs, adapter, spacers, Kwik Stepper® Step Bit and steel case	54	24.5
7646Pg	27433	Metric – Driver, hand pump, standard Pg punches, dies and draw studs and spacers for 15.2 mm through 60.0 mm, plastic case	24	11
7646PgSB	32799	Metric – Driver, Slug-Buster® Pg punches, dies and draw studs for 15.2 mm through 60.0 mm, adapter, spacers, Kwik Stepper® Step Bit and plastic case	24	10.9
7304	02815	Standard punch and die kit (no draw studs) for 2-1/2" through 4" conduit, plastic case	21	9.5
38456	38456	Driver, hand pump, standard punches, dies and draw studs and spacers for 1/2" through 3" and 4" conduit, steel case	48.4	22
38520	38520	Driver, hand pump, Slug-Buster® punches and draw studs for 1/2" through 3" and 4" conduit, adapter, spacers, Kwik Stepper® Step Bit and steel case	48	21.8

STEEL CAPACITIES FOR CONDUIT SIZES

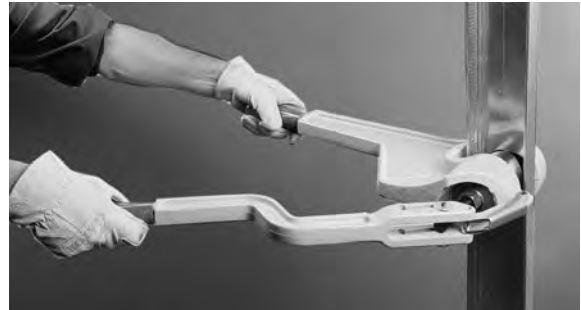
REQUIRED DRAW STUD AND ACCESSORIES	STANDARD & SLUG-BUSTER® PUNCHES						STANDARD				SLUG-SPLITTERS®					
	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
3/4" Stud (03294), 3/8" Stud (30043) & Spacers	////															
3/4" Stud (03294), Long Spacer		////														
3/4" Stud (03294), Short Spacer					////											
3/4" Stud (03294)							////									
3/4" Stud (03294), & Sleeve (03170)								////								
7/16" Stud (29451)											////					
3/4" Stud (29452)													////			

//// 10-GA. MILD STEEL

■■■■■ 10-GA. STAINLESS STEEL

PLUMBER STUD PUNCH

- Punches 2-5/8" (66.7mm) diameter hole in metal studs for professional looking installation of 2" water, vent, waste pipes.
- Two-speed lever action for fast, easy punching of 24- to 20-gauge thick metal studs.
- 2-1/8" (54mm) throat width fits over most studs and channels.
- High strength alloy aluminum c-frame and handle provides lightweight tool for easy handling—10.6 lb. (4.8kg).
- Lever action punch retraction strips punch out of metal stud fast and easy. Patent #6,647,630.



PLUMBER STUD PUNCH											
CAT. NO.	UPC NO.	ACTUAL HOLE SIZE		WEIGHT		LENGTH		HEIGHT		CAPACITY	
		IN.	mm	LBS.	kg	IN.	mm	IN.	mm	GA.	mm
713	06430	2-5/8	66.7	10.6	4.8	23-1/2	596	9-3/4	247	24-20	0.9

CAT. NO.	UPC NO.	DESCRIPTION
08377	08377	Punch for 713
08379	08379	Die for 713

METAL STUD PUNCHES


- Punch up through 20-gauge (0.9mm) steel studs in one stroke.
- Aluminum head provides strength with minimum weight, reducing operator fatigue.
- Contoured handle design gives better operator leverage and makes it possible to punch in tight places.
- Self-stripping design eliminates punch hang-ups.
- Automatically centers holes on standard studs.
- Conversion kit available to upgrade early models from 24-gauge to 20-gauge maximum capacity.

CAT. NO.	UPC NO.	DESCRIPTION	WEIGHT	
			LBS.	kg
709	22280	7/8" (22.2 mm) Diameter Stud Punch	7	3.2
710	21285	1-11/32" (34.1 mm) Diameter Stud Punch	7.5	3.5
30968	30968	Conversion Kit – Upgrades early model 709 or 710 from 24- to 20-gauge maximum capacity		
121AV	04006	Punch for 709 – Accessory		
22286	22286	Die for 709 – Accessory		
24823	24823	Punch for 710 – Accessory		
21297	21297	Die for 710 – Accessory		
06015	06015	Repair Kit		
36617	36617	Link		

SPECIFICATIONS

Capacity **709** - 1-5/8" (41.3mm) and wider studs.
 20-gauge (0.9mm) steel studs.
710 - 2-1/2" (63.4mm) and wider studs.
 20-gauge (0.9mm) steel studs.

BUSHINGS FOR METAL STUD PUNCHES


- Triple-lock design holds bushing securely.
- Locks securely into metal studs from 24-gauge to 12-gauge (0.6mm to 2.5mm).
- Helps protect wire insulation from sharp edges of metal studs.
- Makes pulling smooth and easy by preventing hang-ups of cable on raw metal edges.

CAT. NO.	UPC NO.	DESCRIPTION	WEIGHT	
			LBS.	kg
711C	22288	100 Bushings for hole punched by 709 for 7/8" (22.2mm) diameter hole	.5	.23
711M	22289	1,000 Bushings for hole punched by 709 for 7/8" (22.2mm) diameter hole	3.7	1.7
712A100	05927	100 Bushings for pre-punched hole or 1-11/32" (34.1mm) diameter hole punched by 710	1.4	.64
712A1000	05928	1,000 Bushings for pre-punched hole or 1-11/32" (34.1mm) diameter hole punched by 710	15.5	7.0

MECHANICAL BENDERS FOR IMC and RIGID CONDUIT

- Ratchet action for increased leverage.
- Bypass the ratchet for fast, direct bending on smaller sizes.
- Heavy-duty welded construction for long, reliable service.
- Built-in bending degree indicator and easy-to-use bending charts for accurate, consistent bends.



SPECIFICATIONS

Capacity	1800, 1800G1 – 1/2", 3/4" and 1" IMC and Rigid 1801, 1801G1 – 1-1/4" and 1-1/2" IMC and Rigid
Weight	1800 – 81 lbs. (36.7kg) 1800G1 – 48 lbs. (21.8kg) 1801 – 104 lbs. (47.2kg) 1801G1 – 75 lbs. (34kg)

CENTERLINE BENDING RADII

1800, 1800G1	1/2" Rigid conduit	2-5/8"	(66.7mm)
	3/4" Rigid conduit	4-5/8"	(117.5mm)
	1" Rigid conduit	5-7/8"	(149.2mm)
1801, 1801G1	1-1/4" Rigid conduit	8-1/16"	(204.8mm)
	1-1/2" Rigid conduit	9-11/16"	(246.1mm)

CAT. NO.	UPC NO.	DESCRIPTION
1800	24400	Mechanical Bender for 1/2", 3/4", 1" IMC and rigid conduit.
1800G1	24401	Mechanical Bender without undercarriage, for bench or truck bed mounting. Bends 1/2", 3/4", 1" IMC and rigid conduit.
1801	24753	Mechanical Bender for 1-1/4", 1-1/2" IMC and rigid conduit.
1801G1	24507	Mechanical Bender without undercarriage, for bench or truck bed mounting. Bends 1-1/4", 1-1/2" IMC and rigid conduit.
32416	32416	Undercarriage Unit for 1800 and 1801.

**555® DELUXE ELECTRIC CONDUIT BENDER
 for 1/2" through 2" CONDUIT and PIPE**


- 555 Deluxe Series features unique electrical controls that reduce the inrush current to the relays to minimize contact arcing for longer life. Heavy-duty urethane-filled, puncture-proof pneumatic tires and UL/ULC approved.
- Available in four models for Rigid, EMT or IMC conduit, or bender only without shoes.
- The optional PVC-coated Rigid conduit shoe group can be used on all 555 series benders.

CAT. NO.	UPC NO.	DESCRIPTION
555	39780	Deluxe Electric Bender power unit without bending accessories
555R	23446	Deluxe Electric Bender with Shoe Group for 1/2" through 2" Rigid and 1/2" through 1-1/4" IMC conduit and pipe includes 28007 – 1/2" - 2" Rigid Shoe Group
555E	27989	Deluxe Electric Bender with Shoe Group for 1/2" through 2" EMT conduit includes 23802 – 1/2" - 2" EMT Shoe Group
555I	27990	Deluxe Electric Bender with Shoe Group for 1-1/2" through 2" IMC conduit includes 26330 – 1-1/2" - 2" IMC Shoe Group
555-22	39971	220 VAC 50/60 Cycle Electric Bender power unit without bending accessories
37279	37279	40 MIL PVC Coated Rigid 1/2" - 2" Shoe Group (sold separately) to use with the 555 series benders

SPECIFICATIONS

Capacity	555R: 1/2" - 2" Rigid and 1/2" - 1-1/4" IMC conduit 555E: 1/2" - 2" EMT conduit 555I: 1-1/2" and 2" IMC conduit
Power Source	555 Deluxe Series: 120 VAC; 20 Amp GFCI-protected receptacle
Operating Temperature	-5°F to 120°F (-20° C to 49°C)
Relative Humidity	0-98%
Weight	555: 260 lbs. (118kg) 555R: 393 lbs. (179kg) 555E: 476 lbs. (216kg) 555I: 456 lbs. (207kg)
Height	555 Deluxe Series: 44" (1118mm)
Width	555 Deluxe Series: 29-5/8" (753mm)
Depth	555 Deluxe Series: 28-1/2" (724mm)

SMART QUAD BENDER™

Electric Conduit Bender for 1/2" to 2" EMT, IMC, Rigid and Rigid Aluminum



- Bends a variety of types and sizes of conduit.
- Intelligent pendant controls: Standard (included), digital readout and programmable bend angles for accurate repeat bends. Deluxe (optional), interactive control – calculates complete layout measurements for various types of bends.
- Bends 1/2" to 2" EMT, IMC, Rigid and Rigid aluminum conduit without any shoe changes. No loose parts to get lost.
- Two operating positions; table top and upright.
- Optional shoes available to bend PVC-coated steel conduit.
- Adjustable leveler pads.
- Excellent portability. Convenient lifting eyes.
- Weather-resistant construction.
- Squeeze adjustment to compensate for variations in EMT conduit.

SPECIFICATIONS

Capacity	1/2"- 2" EMT, IMC, Rigid and Rigid Aluminum conduit
Power Source	120 VAC; 20 Amp
Weight	510 lbs. (231.3kg)

CAT. NO.	UPC NO.	DESCRIPTION
855	08550	Smart Bender for 1/2" - 2" EMT, IMC and Rigid conduit (Includes Standard Pendant)
38650	38650	Deluxe Pendant for older bender with serial code ZW
01711	01711	Deluxe Pendant for current bender with serial code ABL
38863	38863	Standard Pendant for older bender with serial code ZW
01648	01648	Standard Pendant for current bender with serial code ABL
38780	38780	Shoe Unit, 1/2" - 1-1/4"
38148	38148	Shoe Unit, 1-1/2" - 2"
01700	01700	PVC Shoe Unit, 1/2" - 2" for bender with serial code ABL only
38962	38962	Vinyl Rain Cover
07086	07086	Optional Kickstand

CAM TRACK®
Conduit Bender for 2-1/2" to 4" EMT, IMC, Rigid


CAT. NO.	UPC NO.	DESCRIPTION
881CT	31287	Cam Track Conduit Bender for One-Shot 90° Bends in 2-1/2", 3", 3-1/2" and 4" EMT, IMC and Rigid conduit, without hydraulic pump
881CT-E980	34208	Cam Track Conduit Bender for One-Shot 90° Bends in 2-1/2", 3", 3-1/2" and 4" EMT, IMC and Rigid conduit, with 980 Electric Hydraulic Pump
881CTD	38466	Cam Track Conduit Bender for One-Shot 90° Bends in 2-1/2", 3" and 4" EMT, IMC and Rigid conduit, without hydraulic pump
881CTD-E980	38467	Cam Track Conduit Bender for One-Shot 90° Bends in 2-1/2", 3" and 4" EMT, IMC and Rigid conduit, with 980 Electric Hydraulic Pump
881	27778	Conduit Bender for One-Shot 90° Bends in 2-1/2" and 3", Two-Shot 90° Bends in 3-1/2" and 4" EMT, IMC and Rigid conduit, without hydraulic pump
881-E980	34205	Hydraulic Conduit Bender for One-Shot 90° Bends in 2-1/2" and 3", Two-Shot 90° Bends in 3-1/2" and 4" EMT, IMC and Rigid conduit, with 980 Electric Hydraulic Pump
881 Basic	35711	Conduit Bender without shoe groups or hydraulic pump
27554	27554	2-1/2" - One-Shot 90° EMT, IMC, Rigid Shoe Group
27555	27555	3" - One-Shot 90° EMT, IMC, Rigid Shoe Group
31281	31281	3-1/2" - One-Shot 90° EMT, IMC, Rigid Shoe Group
27556	27556	3-1/2" - 45° EMT, IMC, Rigid Shoe Group (requires 2 bends to make a 90°)
31274	31274	4" - One-Shot 90° EMT, IMC, Rigid Shoe Group
27557	27557	4" - 45° EMT, IMC, Rigid Shoe Group (requires 2 bends to make 90°)
1813	28901	Bending Table for 881 Bender
881A	27553	Converts 884 or 885 to an 881

- One bender to bend EMT, IMC and Rigid Conduit.
- Fast and easy setup on the jobsite.
- True One-Shot 90° bends with CT models for quick accurate bends.
- Steel reinforced follow bars for long life.
- Bend a 90° elbow in 4" Rigid conduit in 95 seconds.
- Optional 1813 Bending Table and accessories for easier operation.

SPECIFICATIONS

Capacity	2-1/2" - 4" EMT, IMC and Rigid
Power Source	980: 120 VAC Electric Powered Hydraulic Pump 980-22PS: 220 VAC 50/60 Cycle Electric Powered Hydraulic Pump
Weight	881CT-E980: 999 lbs. (454kg) 881-E980: 930 lbs. (422kg) 881: 856 lbs. (388kg) 881 BASIC: 358 lbs. (163kg) 27555: 137 lbs. (62kg) 27556: 130 lbs. (59kg) 27557: 134 lbs. (61kg) 31274: 183 lbs. (83kg)

CAM TRACK® BENDER CENTERLINE BENDING RADII FOR EMT, IMC AND RIGID CONDUIT

SIZE	881 CT, 881 CTD, 881 BASIC			
	881 CENTERLINE RADIUS	881 CT, 881 CTD, 881 BASIC CENTERLINE RADIUS	SHOE GROUP	DEGREE OF BEND
2-1/2"	13-1/2" (342.9mm)	13-1/2" (342.9mm)	27554	90
3"	16" (406.4mm)	16" (406.4mm)	27555	90
3-1/2"	18-5/8" (473.1mm)	18-5/8" (473.1mm)	31281	90
4"	21" (533.4mm)	20-7/8" (530.2mm)	31274	90
3-1/2"		18-5/8" (473.1mm)#	27556	45
4"		21" (533.4mm)#	27557	45
		# 881 Basic Only		

BENDING TABLE (only) for 881 BENDERS


- Converts the 881 Bender into a comfortable, bench-high machine . . . reduces operator fatigue . . . makes loading faster, easier.
- Offset and one-shot bends in all three types of conduit are made quickly and easily with consistent accuracy.
- Pipe vise holds conduit securely for accurate bends. Prevents conduit from twisting or turning during bend.
- Includes 1805 Bending Degree Protractor and metal storage box.

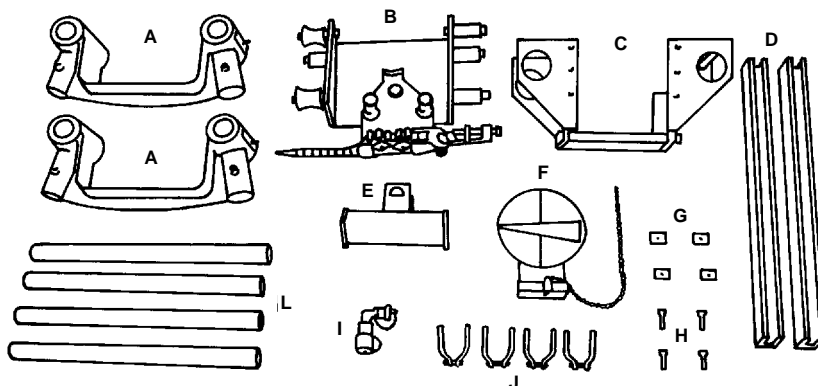
CAT. NO.	UPC NO.	DESCRIPTION
1813	28901	Bending Table for 881 Bender

SPECIFICATIONS

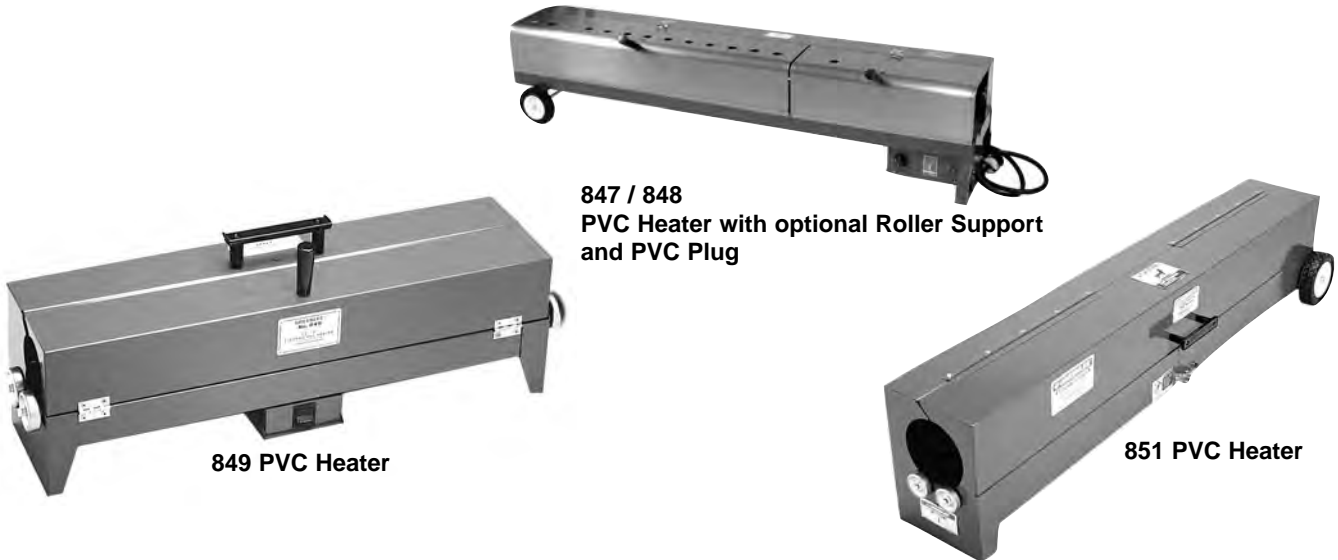
Capacity	881 Benders
Weight	186 lbs. (85kg)

PARTS

KEY	CAT. NO.	UPC NO.	DESCRIPTION	1813/ 28901
A	21541	21541	Leg Support Unit	2
B	28900	28900	Carriage Unit w/vise	1
C	28885	28885	Bender Mounting Unit	1
D	29004	29004	Pump Table Support	2
E	29022	29022	Ram Positioner	1
F	1805	21318	Bending Degree Protractor	1
G	53824	53824	Pump Bracket	4
H	51185	51185	Pump Mounting Screw	4
I	29014	29014	90° Coupling Unit	1
J	53014	53014	Steel Conduit Clamp	4
L	21346	21346	Legs	4
	1531	23274	Steel Storage Box (not shown)	1
	51593	51593	Hex Nut	4
	50975	50975	Cap Screw	4
	51674	51674	Washer	4



PVC BENDING SELECTION GUIDE



849 PVC Heater

**847 / 848
PVC Heater with optional Roller Support
and PVC Plug**

851 PVC Heater

PVC HEATING

CAT. NO.	DESCRIPTION	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"	5"	6"
860	1-1/2 PVC Heating Blanket	✓	✓	✓	✓	✓							
860	3 PVC Heating Blanket						✓	✓	✓				
860	4 PVC Heating Blanket									✓	✓		
849	PVC Heater	✓	✓	✓	✓	✓	✓						
851	PVC Heater	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
847 / 848	PVC Heater	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

PVC HEATING BLANKETS for up to 4", ALL SCHEDULES



860

- Make bends, offsets or saddles in PVC fast and easy.
- Easy to use: wrap blanket around PVC, secure with hook and loop strap. Built-in stiffeners help keep the blanket tight to the PVC surface. Remove blanket and form bend by hand.
- Controlled, even heating for uniform bending.
- Heavy-duty cord and thermostat for long life.
- Temperature over 300°F (149°C).

CAT. NO.	UPC NO.	DESCRIPTION
860-1-1/2	31486	PVC Heating Blanket for up to 1-1/2"
860-3	31487	PVC Heating Blanket for 2"-3"
860-4	31488	PVC Heating Blanket for 3-1/2" and 4"

SPECIFICATIONS

	860-1-1/2	860-3	860-4
Capacity	Up to 1-1/2" PVC All Schedules	2" - 3" PVC All Schedules	3-1/2" - 4" PVC All Schedules
Power Source	120 VAC	120 VAC	120 VAC
Size	13" x 8-1/4" (330.2 x 209.6mm)	30" x 13-1/4" (762.0 x 336.6mm)	38" x 16-1/4" (965.2 x 412.8mm)
Weight	1.7 lbs. (.8kg)	3.3 lbs. (1.5kg)	4.9 lbs. (2.2kg)
Wattage	200	800	1300

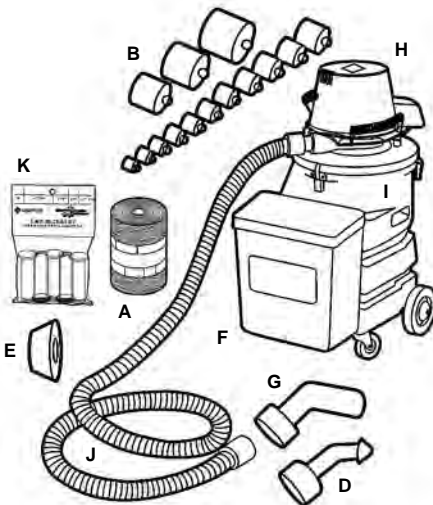
690 VACUUM/BLOWER POWER FISHING SYSTEM


- Rugged, self-contained unit includes everything you need to blow or vacuum fish line, poly line or measuring tape.
- Durable tank and accessory storage box are corrosion, chemical and impact-resistant polyethylene.
- Designed for the jobsite, 10' (3.05m) long hose, large heavy-duty wheels and removable accessory box.
- Large 11-gallon (41.6 l) tank makes the 690 excellent for vacuuming water and debris.

CAT. NO.	UPC NO.	DESCRIPTION
690	31339	Vacuum/Blower Power Fishing System - 120 VAC
18877	18877	Accessory - Vacuum Crevice Tool
18879	18879	Accessory - Vacuum Dust Brush
618	16517	Piston for 5" Conduit - IMC, Rigid
619	16951	Piston for 6" Conduit - EMT
16646	16646	Accessory - Adapter for 5" - 6" conduit

PARTS

KEY	CAT. NO.	UPC NO.	DESCRIPTION	690/ 31339
A	595	32433	Fish Line – 85 lbs. (378N) pulling strength; 2,150' (655m) long	1
B	*		Piston for 1/2" Conduit	1
B	*		Piston for 3/4" Conduit	1
B	*		Piston for 1" Conduit	1
B	*		Piston for 1-1/4" Conduit	1
B	*		Piston for 1-1/2" Conduit	1
B	613	16511	Piston for 2" Conduit	1
B	614	16512	Piston for 2-1/2" Conduit – IMC, Rigid	1
B	621	19107	Piston for 2-1/2" Conduit – EMT	1
B	615	16513	Piston for 3" Conduit – IMC, Rigid	1
B	622	19109	Piston for 3" Conduit – EMT	1
B	616	16514	Piston for 3-1/2" Conduit – IMC, Rigid	1
B	646	24326	Piston for 3-1/2" Conduit – EMT	1
B	617	16515	Piston for 4" Conduit – IMC, Rigid	1
B	623	19110	Piston for 4" Conduit – EMT	1
C	25644	25644	Adapter Cone 1-1/4"-2-1/2" Conduit	1
D	25646	25646	Adapter Cone 1/2"-1" Conduit	1
E	25645	25645	Adapter Cone 3"-4" Conduit	1
F	34027	34027	Storage Box	1
G	23360	23360	Adapter Nozzle for tape and line	1
H	32116	32116	Blower and Vacuum Unit	1
I	34392	34392	Tank with casters	1
J	38624	38624	Flexible Hose 1-1/2" x 10' (38.1mm x 3.05m)	1
	31315	31315	Outer Filter Bag	1
	31314	31314	Inner Filter Bag	1
K	37917-10	37917-10	1/2" Conduit x 150' (46m) Line Pkg.	10
K	37918-5	37918-5	3/4" Conduit x 200' (61m) Line Pkg.	5
K	37920-5	37920-5	3/4" Conduit x 450' (137m) Line Pkg.	5
K	37921-5	37921-5	1" Conduit x 200' (61m) Line Pkg.	5
K	37923-5	37923-5	1" Conduit x 450' (137m) Line Pkg.	5


SPECIFICATIONS

Capacity	1/2" - 4" Conduit (5" and 6" with optional foam pistons)
Power Source	120 VAC
Weight	50 lbs. (22.7kg)
Air Flow	120 cfm
Pressure	Will lift 110" (2794mm) of water

ULTRA CABLE FEEDER™



- Feeds cable at variable speeds to match the speed of cable puller.
- Accommodates cable ranging in size up to 3.5" (88.9mm) in diameter.
- Sets up easily and can be operated by just one person.
- Dual motors drive each wheel for traction on both sides of the cable.
- Comes with pendant and toggle switch. An optional foot switch is available to control feeding.
- Two cable loading methods: top-loading and end-loading.
- Patented.

CAT. NO.	UPC NO.	DESCRIPTION
6810	05564	Ultra Cable Feeder with Hand Switch
445	24821	Foot Switch
05645	05645	Tee (included)
50302	50302	Hitch (included)

SPECIFICATIONS

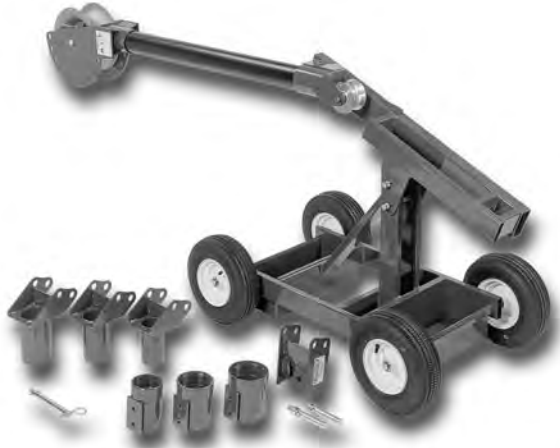
Power Supply	115 VAC, 15 amps, 60 Hz
Speed	4 -36 ft. per min. (1.2-11m per min.)
Maximum Tractive Force	Single Cable: 200 lbs. (.9kN) All Cables: 800 lbs. (3.5kN)
Cable Capacity	Quantity Size 8 x 250 MCM (120mm ²) 6 x 500 MCM (240mm ²) 5 x 750 MCM (300mm ²)
Reel Weight Capacity	25,000 lbs. total (11,300 kg)
Size	41" long x 27.5" wide x 37.5" high (1040mm x 699mm x 953mm)
Weight	285 lbs. (130kg)
Tire Pressure	22 psi (1.5 bar)

CABLE PULLER SELECTION GUIDE

CAT. NO.	DESCRIPTION	PULLING FORCE		WEIGHT		DIMENSIONS			SPEED						ELECTRIC POWER (HP)	REQ. ROPE (in.)	
		CONT (lbs.)	MAX (lbs.)	PULLER (lbs.)	CHAIN (lbs.)	LENGTH (in./mm)	WIDTH (in./mm)	HEIGHT (in./mm)	NO LOAD (fpm)	800LBS. (fpm)	2000LBS. (fpm)	4000LBS. (fpm)	5000LBS. (fpm)	6000LBS. (fpm)			8000LBS. (fpm)
6800	Ultra Tugger™ 8 Power Cable Puller	6500	8000	86		11-1/2 (292.1)	26 (660.4)	8-1/2 (215.9)	9 fpm		8 fpm	7.5 fpm		7 fpm	6 fpm	1-1/2	7/8 double braid
6501	Ultra Tugger™ 5 Power Cable Puller	4000	5000	84		11-1/2 (29cm)	26 (66cm)	6-3/4 (17cm)	14.5 fpm			11.0 fpm	9.5 fpm			1-1/2	3/4 double braid
6001	Super Tugger® Power Cable Puller	4500	6500	108	8	20-3/4 (527)	22-1/2 (571.5)	12 (304.8)	16.5 fpm		11 fpm	7.5 fpm	6 fpm			1-1/2	3/4 double braid
640	Tugger® Power Cable Puller	2500	4000	68	8	21 (533.4)	21 (533.4)	12 (304.8)	35 fpm	up to 35 fpm	16 fpm	6 fpm				1	9/16 double braid
2001	Easy Tugger™ Power Cable Puller	1400	2000	52	6	15 (381)	19 (482.6)	9-1/2 (241.3)	22 fpm		11fpm					1/2	5/8 multiplex
805	Fiber Optic Cable Puller	600	800	33	3	8 (203.2)	18 (457.2)	11-1/4 (285.8)	up to 75 fpm	up to 35 fpm						1/2	3/8 multiplex
766	Manual Wire Puller		1500	35		52 (1320.8)	18 (457.2)	10 (254)									†

† – 766 comes with 200 ft. of aircraft-type steel swaged cable.

11147 ULTRA TUGGER® 640/6001 ADAPTER PACKAGE



- Adapt Greenlee 640 Tugger and 6001 Super Tugger to Ultra Tugger Wheeled Carriage and Boom for faster and easier cable puller setups.
- Wheeled carriage and boom provides fast setup with no anchors to set or chains to mount.
- Boom uses 3" rigid steel conduit for easy length adjustment to pull 10 feet (3m) of cable out of the box fast and easy.
- Optional Elbow Unit and Boom available to reach into manholes or pull up to 20 feet (6m) of cable out of the box.
- Patent pending.

SPECIFICATIONS

Weight	198 lbs. (90kg)
Length	91-1/2" (232cm)
Width	27" (69cm)
Height	38-1/2" (98cm)
Use With Greenlee	640 and 6001 Cable Pullers
Load Rating	6500 lbs. (28.9kN)

CAT. NO.	UPC NO.	DESCRIPTION
11147	11147	Ultra Tugger 640/6001 Adapter Package Includes wheeled carriage, 4 ft. (1.2 m) boom, boom adapter, nose unit, 2-1/2", 3" and 4" slip-in couplings and 2", 3" and 4" screw-on couplings
00863	00863	Elbow Unit
00835	00835	3 ft. (.9m) Boom
00815	00815	Slip-in Coupling, 3-1/2"
00827	00827	Slip-in Coupling, 5"
00781	00781	Screw-on Coupling, 2-1/2"
00783	00783	Screw-on Coupling, 3-1/2"
3048	23362	Storage Box

HOOK SHEAVES for any GREENLEE CABLE PULLER



- For use with any Greenlee cable puller.
- Strong, welded steel frames.
- Forged steel closure type hooks with 1" (25.4 mm) opening.
- All three sheaves are aluminum alloy with self-lubricating bearings.

SHEAVE	8012		8018		8024	
DIAMETER	12" (304.8mm)		18" (457.2mm)		24" (609.6mm)	
DESCRIPTION	CAT. NO.	UPC NO.	CAT. NO.	UPC NO.	CAT. NO.	UPC NO.
Roll Pin	50700	50700	50700	50700	50700	50700
Sheave Pin	00838	00838	00846	00846	00850	00850
Sheave Pin Clip	50302	50302	50302	50302	50302	50302
Sheave Unit	00843	00843	00844	00844	00845	00845
Yoke Frame	00854	00854	00855	00855	00856	00856

SPECIFICATIONS

CAT. NO.	UPC NO.	OUTSIDE DIAMETER	INSIDE RADIUS	WIDTH	WEIGHT	MAXIMUM RATED CAPACITY
8012	00872	12" (304.8mm)	3-7/8" (98.4mm)	5" (127mm)	28 lbs. (12.7kg)	8,000 lbs. (35.8kN)
8018	00873	18" (457.2mm)	7" (177.8mm)	6" (152.4mm)	44 lbs. (19.9kg)	8,000 lbs. (35.8kN)
8024	00874	24" (609.6mm)	9-7/8" (250.8mm)	6-1/2" (165.1mm)	67 lbs. (30.3kg)	8,000 lbs. (35.8kN)

CONDUIT MEASURING TAPE and DISPENSER


- Fish and measure conduit runs in one operation.
- Permanently printed measurements every foot from zero to 3000' (914m).
- Made of strong, waterproof polyester.
- Pay-out dispenser has anti-skid pads, handle and built-in cutter.

SPECIFICATIONS	
Size	3000' (914m)
Capacity	130 lbs. (578kN) average breaking strength
Weight	435: 18.4 lbs. (8.3kg), 434: 3.5 lbs. (1.6kg)

CAT. NO.	UPC NO.	DESCRIPTION
434	21875	Pay-Out Dispenser for 435 Conduit Measuring Tape
435	21562	Conduit Measuring Tape 3/16" x 3000' (4.8mm x 914m)

WIRE CART


- Large capacity, excellent for storing, transporting or feeding wire.
- Save space, use and store vertically or horizontally.
- 5 strong reel axles with spring clip retainers plus 2 positions for axle storage allows you to configure for large reels with no loose parts.
- Strong, yet lightweight, tubular steel welded construction with rugged 8" (203mm) wheels.
- Built-in wire guide for horizontal dispensing.
- Will pass through a 28" (711mm) opening.

SPECIFICATIONS	
Size	54-1/2" (1384mm) long x 27" (685mm) wide x 26-1/2" (673mm) high when horizontal
Capacity	Six 2,500' (762m) spools up to 16" (406mm) in diameter Fifteen 500' (152.4m) spools up to 8" (203mm) in diameter Max. Spool Weight: 550 lbs.
Weight	62 lbs. (28.1kg)

CAT. NO.	UPC NO.	DESCRIPTION
911	31518	Wire Cart
31523	31523	Reel Shaft for 911 Wire Cart
50303	50303	Hitch Clip (10)

WIRE DISPENSER


- All welded steel construction.
- Base has 2 fixed and 2 swivel locking heavy-duty casters.
- The spool rack consists of 10 spindles and an adjustable guide loop, and can be turned 360° independent of the base.
- Spindles are angled to contain reels and act as a brake while paying out wire.
- Fits through a 36" (915mm) opening.

SPECIFICATIONS	
Size	36-1/4" (921mm) long x 31-1/2" (800mm) wide x 59" (1499mm) high.
Capacity	Ten 2500' (762m) spools up to 18" (457mm) in diameter.
Weight	213 lbs. (96.6kg)

CAT. NO.	UPC NO.	DESCRIPTION
910	21982	Wire Dispenser
51488	51488	Caster (Rigid)
53259	53259	Caster (Swivel)

SCREW-TYPE REEL STANDS



- Wide, welded steel base for added stability.
- Roller bearings fit in the spindle groove to keep the spindle in place and turning freely.
- Two stands and a spindle are required for a complete setup.

CAT. NO.	UPC NO.	DESCRIPTION
683	15372	Reel Stand 22" - 54" (558.8 - 1372mm)
687	17076	Reel Stand 13" - 28" (330.2 - 711.2mm)
684	15375	Spindle for 683 Reel Stand
647	15321	Spindle for 687 Reel Stand
25591	25591	Stop Pin (683 - 2; 687 - 1)
38619	38619	Jackscrew Replacement Unit for 683 or 687



SPECIFICATIONS

Size	683 - 24" × 23" (610 × 584mm) base; 54" (1372mm) maximum height 687 - 14-1/2" × 20" (368 × 508mm) base; 28" (711mm) maximum height
Capacity	683 - 2,500 lbs. (1134kg) each, 46" - 96" (1168 × 2438mm) reel diameter 687 - 2,500 lbs. (1134kg) each, 28" - 56" (711 × 1422mm) reel diameter
Weight	683 - 49 lbs. (22.2kg), 687 - 25 lbs. (11.3kg)

RATCHET-TYPE REEL STAND



- Ratchet mechanism to easily raise or lower the height.
- Roller bearings fit in the spindle groove to keep the spindle in place and turning freely.
- Two stands and a spindle are required for a complete setup.

CAT. NO.	UPC NO.	DESCRIPTION
657	21980	Spindle for 656 Reel Stand
656	21979	Ratchet Reel Stand 28" - 46-5/8" (711mm - 1184mm)
38697	38697	Jackscrew Replacement Unit
30291	30291	Handle with grip

SPECIFICATIONS

Size	24-1/2" × 23" (622 × 584mm) base; 46-5/8" (711mm - 1184mm) maximum height
Capacity	3,750 lbs. (1701kg) 58" - 90" (1473mm - 2286mm) reel diameter
Weight	94 lbs. (42.6kg)

HIGH PERFORMANCE RATCHET CABLE CUTTERS



- Two-speed mechanism saves cutting time by closing the blades rapidly and shifting to normal speed to perform the cut.
- No more pushing on stubborn release buttons – the blades open automatically when the cut is complete.
- Completely new ratchet mechanism improves durability.
- Narrow profile permits use in deep boxes, against walls or on floors.
- Durable, lightweight fiberglass handles.
- U.S. Patent #6,766,581

CAT. NO.	UPC NO.	DESCRIPTION
773	01876	High Performance Ratchet Cable Cutter 15-1/2"
774	01878	High Performance Ratchet Cable Cutter 19-1/8"

718 CABLE CUTTER



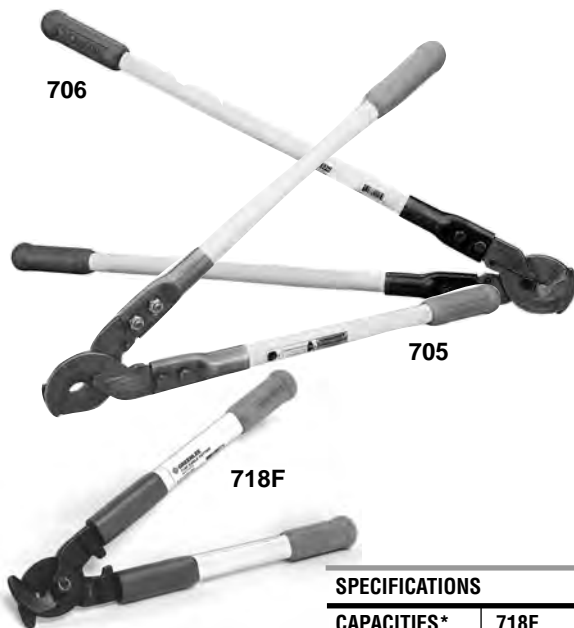
- Economical, lightweight, fits easily into tool boxes.
- Heat-treated, precision ground, shear action blades.
- Steel handles with rubber grips for leverage.

SPECIFICATIONS

Capacity	Copper	Aluminum
Maximum Capacity*	350 kcmil (MCM) (150mm ²)	
Frequent Use Capacity*	4/0 (95mm ²)	350 kcmil (MCM) (150mm ²)
Length	18" (457mm)	
Weight	2.78 lbs. (1.3kg)	

CAT. NO.	UPC NO.	DESCRIPTION
718	30208	Cable Cutter

HEAVY-DUTY CABLE CUTTERS



718F, 704, 705 and 706

- Strong, lightweight fiberglass handles.
- Adjustable pivot bolt provides for blade adjustment.

704, 705 and 706

- Replaceable, forged, heat-treated, and precision ground blades.
- Made in USA.

CAT. NO.	UPC NO.	DESCRIPTION
718F	10507	Heavy-Duty Cable Cutter , 17-1/2"
704	24564	Heavy-Duty Cable Cutter, 21"
705	05923	Heavy-Duty Cable Cutter, 25-1/2"
706	22291	Heavy-Duty Cable Cutter , 31-1/2"
24565	24565	704 Cutter Unit (Includes 2 Blades)
24567	24567	704 Handle Unit (Includes Handle, Sleeve, Grip)
06555	06555	705 Cutter Unit (Includes 2 Blades)
05930	05930	705 Handle Unit (Includes Handle, Sleeve, Grip)
22292	22292	706 Cutter Unit (Includes 2 Blades)
22296	22296	706 Handle Unit (Includes Handle, Sleeve, Grip)

SPECIFICATIONS

CAPACITIES*	718F	704	705	706
Copper				
Maximum Use	350 kcmil (MCM) (150mm ²)	350 kcmil (MCM) (150mm ²)	500 kcmil (MCM) (240mm ²)	750 kcmil (MCM) (400mm ²)
Frequent Use	4/0 AWG (95)	250 kcmil (MCM) (120mm ²)	350 kcmil (MCM) (150mm ²)	500 kcmil (MCM) (240mm ²)
Aluminum				
Maximum Use		500 kcmil (MCM) (240mm ²)	1000 kcmil (MCM) (500mm ²)	1000 kcmil (MCM) (500mm ²)
Frequent Use	350 kcmil (MCM) (150mm ²)	350 kcmil (MCM) (150mm ²)	750 kcmil (MCM) (400mm ²)	750 kcmil (MCM) (400mm ²)
Communications Cable				
Maximum Use	1" (25mm) dia.	1-1/4" (32mm) dia.	1-3/4" (44mm) dia.	1-1/2" (38mm) dia.
Length	17-1/2" (444mm)	21" (533mm)	25-1/2" (648mm)	31-1/2" (800mm)
Weight	2.8 lbs. (1.3kg)	3.01 lbs. (1.37kg)	5.5 lbs. (2.5kg)	6.2 lbs. (2.8kg)

*Tool Boxes • Work Benches • Transfer Tanks • Ladder Racks
Hand/Mechanical Jacks • Trench Braces
Cylinders • Hand Pumps • Spreaders
Drywall Carts • High Pressure Hoses
Platform/Pallet Trucks • Hoists • Contractor Lifts/Rollers
Beam Clamps • Trolleys • Winches • Cranes
Lever Dollies • Web Slings • Wire Rope/Cutters
Load Binders • Chains • Shackles • Hooks • Swivels
Rigging/Chain Accessories • Snatch/Wood Blocks*

Material Handling

6

*Pulleys • Snaps • Clamps
Barrier Grabs • Pipe Handling
Manila/Nylon/Polypropylene Rope
Air/Water/Suction/Discharge Hose
Fire Hose Fittings • Hydrant Adapters
Filters • Regulators • Lubricators
Blo-Guns • Inflator Gages
Couplers • Shank • Valves • Strainers • Skimmers • Nipples
Dust Caps • Plugs • Air Fittings
Utility/Discharge/Transfer Pumps • Power Cord/Hose Reels
Banding • Clamps • Strapping
Sprayers • Gas Cans • Storage Cabinets
Spill Containment • Asphalt Tools
Galvanized Tubs/Pails/Funnels
Grease Guns • Wheel Casters • Trailer Hitches
Hand Trucks • Dollies • Drum Cradles
Tilt Trucks • Mopping Equipment • Towels • Coolers*



KNAACK® STORAGEMASTER® CHESTS offer the ultimate in jobsite security. They lead the way with the innovative **WATCHMAN® IV Lock System**. This system will not only save time and money with a one-time, one-lock installation, but adds the strength of a heavy-duty deadbolt latching mechanism. All models provide maximum protection and the convenience and ease-of-use you require. Model 69 can be used as a convenient work table. Accessories are available.

STORAGEMASTER® Chests Standard Features:

- **Recessed Handles** - Ergonomic design allows for positive gripping even with a gloved hand. Eliminates damage to handles from transportation.
- **Heavy Gauge Steel** - 16-gauge steel body with fully arc-welded seams provides extra strength and weather protection. 7-gauge cover tang provides maximum protection. The baked-on enamel finish in our universally recognized, trademarked **TAN COLOR** is your assurance for **KNAACK®** Equipment quality.
- **33% Wider Panels** - More durability. Resists distortion from pry bars.
- **Protected Gas Springs** - Dual gas springs allow user one-handed easy opening. Metal guards protect gas springs from damage during shifting loads.
- **12% Larger Shelves** - Larger shelves make it more convenient to store large power tools. Pre-punched holes make it easy to add accessory doors, which will protect valuable tools while the chest is open.
- **12-Gauge Caster Ready Skids** - Greater mobility. Easy to maneuver with forklift operation.



Model 89

Dimensions Model	Depth	Width	Wt.	Cu. Ft.	Closed Height	Open Height	Accessory
69	30"	60"	282 lbs.	35.3	37"	66"	NA
79	30"	48"	287 lbs.	38.2	49"	78"	Shelf Door 479
89	30"	60"	337 lbs.	47.8	49"	78"	Shelf Door 489
90	30"	72"	380 lbs.	57.5	49"	78"	Shelf Door 491

KNAACK® JOBMASTER® CHESTS offer the ultimate in jobsite security with the innovative **WATCHMAN® IV Lock System**. This system will not only save time and money with a one-time, one-lock installation, but adds the strength of a heavy-duty deadbolt latching mechanism.

JOBMASTER® Chests Standard Features:

- **Recessed Handles** - Ergonomic design allows for positive gripping even with a gloved hand. Eliminates damage to handles from transportation.
- **Heavy Gauge Steel** - 16-gauge steel body with fully arc-welded seams provides extra strength and weather protection. The baked-on enamel finish in our universally recognized, trademarked **TAN COLOR** is your assurance for **KNAACK®** Equipment quality.
- **Reinforced Deeper Cover** - Overlapping cover design provides weather protection and resistance to forced entry. Extra wide reinforcing channel provides added strength. Deeper cover allows more closing room. 7-gauge cover tang provides maximum protection.
- **12-Gauge Caster Ready Skids** - Greater mobility. Easier to maneuver with forklift operation.
- **Accessory Tool Trays** - Suspend across the top opening of the chest. Small tools will not get lost.



Model 60

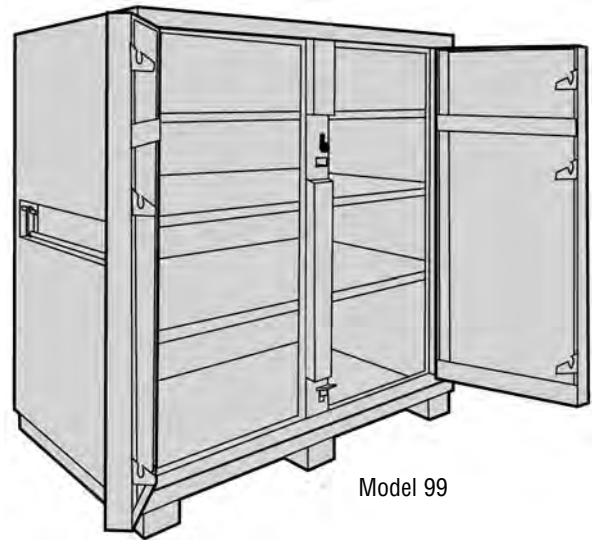
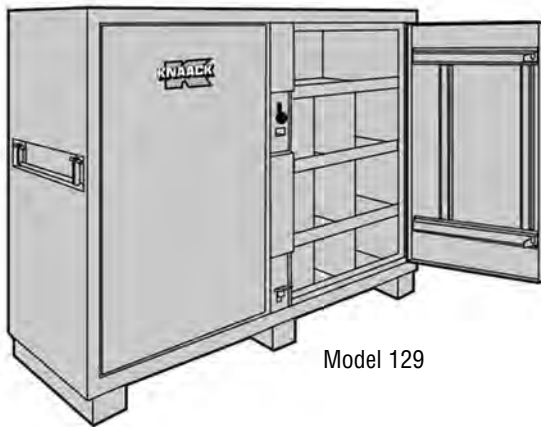
Dimensions Model	Width	Depth	Wt.	Cu. Ft.	Closed Height	Open Height	Accessory Tool Tray
32	32"	19"	84 lbs.	5	18-3/8"	34-3/8"	Model 41
36	36"	19"	97 lbs.	7	21-3/8"	37-3/8"	Model 41
42	42"	19"	114 lbs.	9	23-3/8"	39-3/8"	Model 41
60	60"	24"	190 lbs.	20.25	28-1/4"	49-1/4"	Model 21
4824	48"	24"	158 lbs.	16	28-1/4"	49-1/4"	Model 21
4830	48"	30"	194 lbs.	25.25	34-1/4"	61-1/4"	Model 31
2472	72"	24"	216 lbs.	24.5	28-1/4"	49-1/4"	Model 21

KNAACK® JOBMASTER® FULL WIDTH SHELF CABINETS

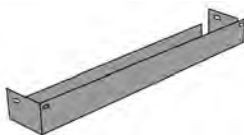
JOBMASTER® Cabinets Standard Features:

- **WATCHMAN® IV Lock System**
- Full length shelves allow you to organize longer items.
- Top shelf is 14" from top of cabinet. Second shelf measures 10" from bottom of top shelf.
- Bottom shelf is adjustable for easy storage of bulky items. (Not on Model 129)
- Ability to add accessory pegboard and door shelves. (Not on Model 129)
- **Model 109** and **Model 129** doors on front side only, **Model 99** double doors on front and back.

Model	Width	Depth	Height	Weight	Cu. Ft.
109	60"	24"	60"	394	47.5
129	72"	24"	51"	452	48.0
99	60"	30"	60"	519	59.4

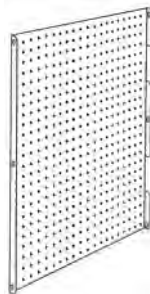


JOBMASTER® Cabinet Accessories

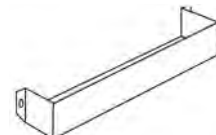


Model 493
Accessory shelf for the LEFT inside door.
Measures:
3" W x 23" L x 2-1/2" D
Ship Wt. 3 lbs.

Model 494
Accessory shelf for the RIGHT inside door.
Measures:
3" W x 23" L x 2-1/2" D
Ship Wt. 3 lbs.



Model 492-3
The Accessory Pegboard Panel is made of white powder coated steel and will mount inside either door. 10 curved hooks and 8 straight hooks are included.
Measures:
22-3/4" W and 24-1/2" T.
Ship Wt. 15 lbs.



Model 495-3
Accessory Pegboard Panel Shelf mounts to the Model 492-3 Pegboard and is made of white powder coated steel.
Measures:
4" W x 19" L x 2-1/2" D
Ship Wt. 3 lbs.

Accessory Caster Sets

Model	Size	Description	Load Rating	Ship Wt.	Fits
404	4"	Without Brakes	1,060 lbs.	11 lbs.	All JOBMASTER® & Classic Chests
405	4"	With Brakes	1,060 lbs.	12 lbs.	All JOBMASTER® & Classic Chests
505	5"	Without Brakes	1,240 lbs.	14 lbs.	All JOBMASTER® & STORAGEMASTER® & Classic Chests
516	6"	With Brakes Non-Marking Polyurethane Wheels	2,240 lbs.	18 lbs.	All JOBMASTER® & Classic Chests
606	6"	Without Brakes	1,360 lbs.	15 lbs.	All Models
607	6"	With Brakes	1,360 lbs.	16 lbs.	All Models
600	6"	Heavy-Duty W/brakes	3,280 lbs.	25 lbs.	All Models

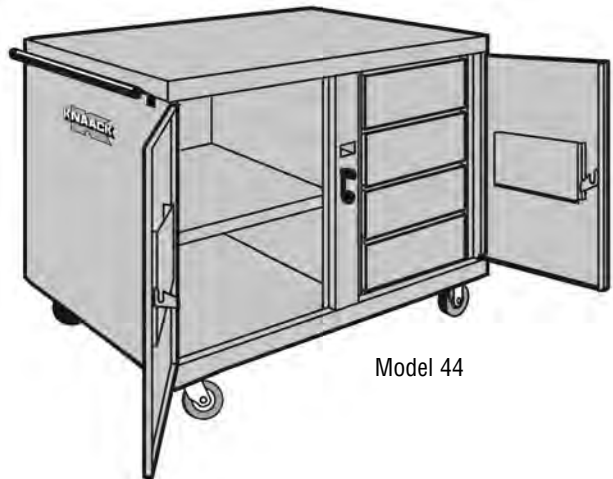


KNAACK® JOBMASTER® Rolling Work Benches are designed for those individuals who need a strong and durable bench with basic storage needs. There are two models offered (model 40 and model 44) each having a load capacity of 800 lbs. Some of the features include:

- **WATCHMAN® IV** Single Lock System, a **KNAACK®** exclusive, saves you time and money with a one time install.
- Recessed padlock housing helps prevent theft from bolt cutters, pry bars and hack saws.
- Heavy-duty drawers are rated for 50 lbs. and operate on ball bearing slides.
- Two 4" swivel casters and two 4" rigid casters are included with each bench.
- Heavy gauge construction and baked on enamel finish featuring our universally recognized **TAN COLOR** is your assurance of **KNAACK®** Equipment quality.

- Model 40** includes two drawers and a full width shelf.
- Shelf is welded in place for maximum strength.
 - Shelf clearance is 14" from bottom of cabinet to bottom edge of shelf and 8" from top of shelf to bottom of drawer.
 - 16-gauge steel drawers mounted on ball bearing glides.
 - Padlock not included.

- Model 44** includes four drawers and a half width shelf.
- Shelf is welded in place for maximum strength.
 - Shelf clearance is 14" from bottom of cabinet to bottom edge of shelf and 16" from top of shelf to top of cabinet.
 - 16-gauge steel drawers mounted on ball bearing glides.
 - Padlock not included.



Model 44

Work Bench Dimensions

Model	Width	Depth	Height	Weight	Load Capacity
40	40-3/4"	25"	37-1/2"	210 lbs.	800 lbs.
44	40-3/4"	25"	37-1/2"	240 lbs.	800 lbs.

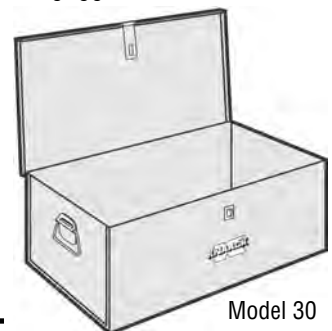
KNAACK® Hand Held Tool Boxes

Model 28

- 16-gauge steel.
- Heavy-duty handles on each end.
- Optional model 51 accessory tray available.
- Hemmed edges for safe handling.
- Full arc welding for extreme strength.
- Stop hinge gives lid extra support.

Model 30

- Designed to hold welders gloves, goggles, tools and rods.
- 16-gauge steel.
- Baked on enamel finish.
- Spot welded construction.



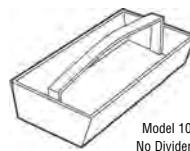
Model 30

Hand Held Tool Box Dimensions

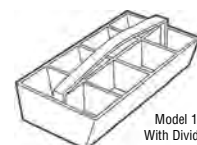
Model	Width	Depth	Height	Weight	Cu. Ft.	Accessory
28	28"	12"	12"	32	2.3	Tool Tray Model 51
30	30"	16"	12"	38	3.3	

Accessory Tote Trays and Tool Tray

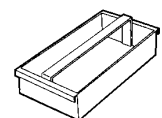
Model	Width	Depth	Height	Weight	Features
10	18"	8"	3-3/4"	8 lbs.	
11	18"	8"	3-3/4"	11 lbs.	with dividers
21	21-5/8"	8"	4"	9 lbs.	
31	27-5/8"	8"	4"	11 lbs.	
41	16-5/8"	8"	4"	7 lbs.	
51	27-5/8"	11"	3"	11 lbs.	



Model 10
No Dividers



Model 11
With Dividers

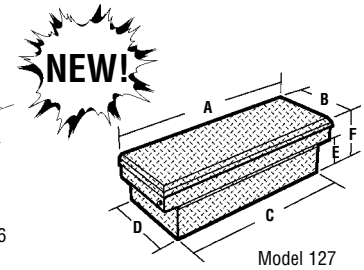
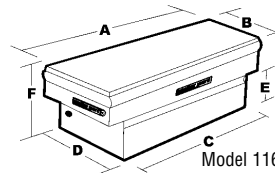


Model 21
No Dividers

ALUMINUM & STEEL SADDLE BOX

ALL NEW Steel and Aluminum features include:

- **EXTREME PROTECTION™ LOCK.**
- 90° cover opening.
- Level storage.
- 12V access.
- New cover and body channel.
- Automotive style latch.
- Plus crimp-free, drill-free install mounting brackets, full weather seal, reduced clearance cover, latch linkage protection, increased warranty.



STEEL SADDLE BOX Dimensions

Model*	Application	A	B	C	D	E	F	Cu.Ft.	Wgt.
116-X-01	Full size-Extra wide	71-1/2"	27-1/2"	60"	27-1/4"	11-1/4"	18-1/2"	15.3	157 lbs.
128-X-01	Full size-Extra deep	71-1/2"	20-1/4"	60"	19-3/4"	17-1/4"	24"	15.1	148 lbs.
126-X-01	Full size-Standard	71-1/2"	20-1/4"	60"	19-3/4"	11-1/4"	18-1/2"	11.3	130 lbs.
136-X-01	Compact-Deep	62"	20-1/4"	39-3/4"	19-3/4"	11-1/4"	18-1/2"	8.9	115 lbs.
156-X-01	Compact-Standard	62"	20-1/4"	50-1/4"	19-3/4"	6-1/4"	13-1/4"	6.5	100 lbs.

ALUMINUM SADDLE BOX Dimensions

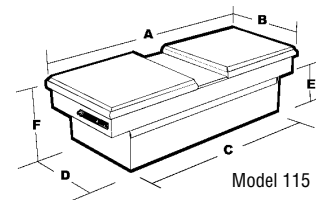
Model*	Application	A	B	C	D	E	F	Cu.Ft.	Wgt.
117-X-01	Full size-Extra wide	71-1/2"	27-1/2"	60"	27-1/4"	11-1/4"	18-1/2"	15.3	101 lbs.
123-X-01	Full size-Extra deep	71-1/2"	20-1/4"	60"	19-3/4"	17-1/4"	24"	15.1	94 lbs.
127-X-01	Full size-Standard	71-1/2"	20-1/4"	60"	19-3/4"	11-1/4"	18-1/2"	11.3	84 lbs.

*Most models available in Clear Coat, White or Black Powder Coating. To specify coating, replace the "X" in the steel model numbers with a "3" for white, a "5" for black; or on aluminum models, a "0" (zero) for clear coat or a "5" for black.

STEEL CROSS BOX

Steel Cross Box features include:

- Engineered strength with a unique blend of steel - 17-gauge in ends, sides and cover with 16-gauge steel in the bottom.
- Easy access from either side of the truck.
- Features twin, gull-wing type covers.
- **ONE-TOUCH** Latch System "pops" open the covers.
- The automotive-style, trademarked **RED PUSHBUTTON** is your assurance of **WEATHER GUARD®** Equipment quality.
- D-shaped weather stripping seals out dust and weather.
- Each cover operates independently.
- Powder coated steel divider tray provides storage for small parts and tools.
- Tray lock prevents unwanted sliding of the tray when driving.
- Stainless steel hinges provide trouble-free use.
- Finished with **BRITE WHITE or BLACK ARMOR-TUF™** Powder coating.
- Cross boxes can be used separately or in combination with Lo-Side Boxes and Super-Lo Boxes.



STEEL CROSS BOX Dimensions

Model*	Application	A	B	C	D	E	F	Cu.Ft.	Wgt.
115-3-01	Full size-Extra wide	71-1/2"	27-3/4"	60"	27-1/4"	11-1/4"	18-1/2"	15.3	150 lbs.
125-X-01	Full size-Standard	71-1/2"	20-1/4"	60"	19-3/4"	11-1/4"	18-1/2"	11.3	122 lbs.

*To specify coating, replace the "X" in the steel model numbers with a "3" for white, a "5" for black.

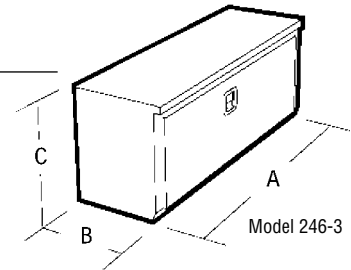
STEEL & ALUMINUM HI-SIDE BOXES

Steel and Aluminum features include:

- High profile mount on side rails of pickup truck.
- Steel Hi-Side box features a blend of steel and aluminum; 14-gauge steel end panels and door posts, 17-gauge steel tops, backs and bottoms and .100 thick aluminum doors and reinforcing channels.
- Adjustable aircraft-type cable with swaged fittings.
- Three-position, swing down powder-coated aluminum door.
- Brushed stainless steel paddle handle has a rotary style latch.
- Rain gutter design is fully weather stripped and provides a positive seal against the weather.
- Mounting legs are made of 1/4" bar stock and provide sturdy mounting.



Model 264-3



Model 246-3

STEEL Box Dimensions

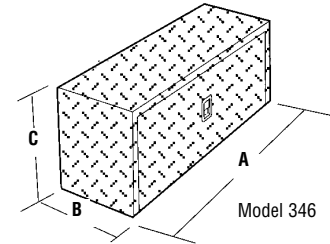
Model	A	B	C	Door Opening	Cu.Ft.	Weight
246-3	45-5/8"	12-3/8"	16"	11.5" H x 42" W	5.16	72 lbs.
264-3	64-1/8"	12-3/8"	16"	11.5" H x 26.25" W	7.26	96 lbs.
272-3	72-1/8"	12-3/8"	16"	11.5" H x 32.75" W	8.16	107 lbs.
290-X	90-1/8"	12-3/8"	16"	11.5" H x 42" W	10.21	126 lbs.
296-3	96-1/8"	12-3/8"	16"	11.5" H x 42" W	10.89	133 lbs.

*Models available in White Coat or Black Powder Coating. To specify coating, replace the "X" in the model numbers with a "5" for black; or "3" for white coat.

ALUMINUM Box Dimensions

Model	A	B	C	Door Opening	Cu.Ft.	Weight
346-X	45-5/8"	13"	16"	11.5" H x 40.75" W	5.3	45 lbs.
364-X	64-1/8"	13"	16"	11.5" H x 25.5" W	7.6	58 lbs.
372-X	72-1/8"	13"	16"	11.5" H x 32" W	8.7	64 lbs.
390-X	90-1/8"	13"	16"	11.5" H x 40.75" W	10.8	72 lbs.
396-X	96-1/8"	13"	16"	11.5" H x 40.75" W	11.5	80 lbs.

*Models available in Clear Coat or Black Powder Coating. To specify coating, replace the "X" in the model numbers with a "5" for black; or "0" (zero) for clear coat.

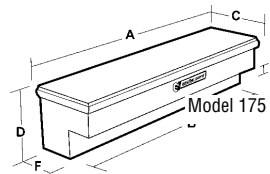


Model 346

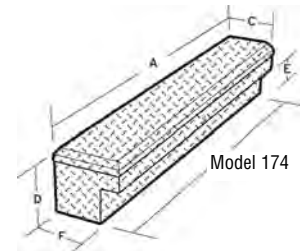
STEEL & ALUMINUM LO-SIDE BOXES

ALL NEW Steel and Aluminum features include:

- EXTREME PROTECTION™ LOCK.
- 90° cover opening.
- 12V access.
- New cover and body channel.
- Automotive style latch.
- Plus crimp-free, drill-free install mounting brackets, full weather seal, reduced clearance cover, latch linkage protection, increased warranty.



Model 175



Model 174

STEEL Dimensions (Available in white only)

Model	Application	A	B	C	D	E	F	Cu.Ft.	Wgt.
165-3-01	Long	87-3/4"	87-1/4"	13-1/2"	13"	6"	7-3/4"	6.2	108 lbs.
175-3-01	Standard	60-1/4"	59-1/2"	13-1/2"	13"	6"	7-3/4"	4.5	81 lbs.
185-3-01	Short	46-3/4"	46-1/4"	13-1/2"	13"	6"	7-3/4"	3.2	63 lbs.

ALUMINUM Dimensions

Model*	Application	A	B	C	D	E	F	Cu.Ft.	Wgt.
164-X-01	Long	87-3/4"	86-1/4"	16-1/2"	13-1/4"	6-1/4"	10-3/4"	6.4	74 lbs.
174-X-01	Standard	56-1/4"	55-1/4"	16-1/4"	13-1/4"	6-1/4"	10-3/4"	4.1	53 lbs.
184-X-01	Short	47-1/4"	46-1/4"	16-1/4"	13-1/4"	6-1/4"	10-3/4"	3.4	46 lbs.

*Models available in Clear Coat, or Black Powder Coating. To specify coating, replace the "X" in the models, a "0" (zero) for clear coat or a "5" for black.

STEEL UNDERBED BOX

ALL NEW Steel features include:

- Stainless steel D-handle.
- Versatile 180° drop down door.
- Aluminum door and hinge.
- Three-point latching.
- Picture frame body design.
- Removable chain stays.

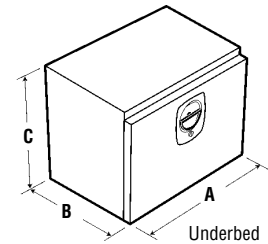
Model 536-5-01

Model 536-3-01



STEEL Dimensions

Model*	Application	A	B	C	Door Opening	Cu.Ft.	Weight
525-X-01	Mini	24-1/8"	12-3/8"	14"	9.5" x 22"	2.3	37 lbs.
524-X-01	Standard	24-1/8"	18-1/4"	18"	13.5" x 20"	4.5	66 lbs.
530-X-01	Standard	30-1/8"	18-1/4"	18"	13.5" x 26"	5.6	77 lbs.
536-X-01	Standard	36-5/8"	18-1/4"	18"	13.5" x 32.5"	6.7	89 lbs.
548-X-01	Standard	48-1/8"	18-1/4"	18"	13.5" x 44"	9.0	112 lbs.
560-X-01	Standard	60-1/8"	18-1/4"	18"	13.5" x 56"	11.25	142 lbs.



*Models available in White or Black Powder Coating. To specify coating, replace the "X" in the steel model numbers with a "3" for white and "5" for black.

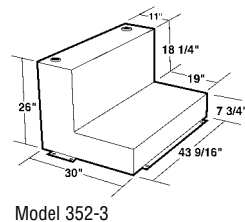
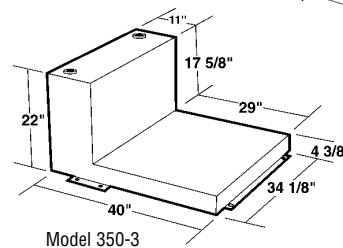
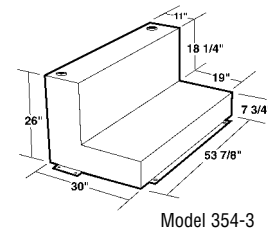
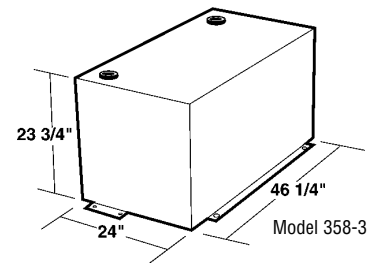
TRANSFER TANKS

Features include:

- Heavy 14-gauge steel construction.
- Includes one vented cap.
- Exterior protected with Bright White Powder Coating.
- Mounting hardware.

WARNING: Designed to transport only diesel fuel and NOT designed to transport flammables, such as gasoline.

Transfer Tanks must not be connected to a vehicle's fuel system as an auxiliary fuel tank. Transfer Tanks may not meet certain governmental or state regulations and are not intended for use in fueling aircraft. Transfer Tanks must be grounded to prevent static charge buildup.



Transfer Tanks fit with most bed liners and WEATHER GUARD® Cross and Saddle Boxes.

STEEL Tank Dimensions

Model	Application	Gallon Capacity	Weight
350-3	Mini Pickups	47	134
352-3	Full/Short Bed	70	165
354-3	Full/Standard	88	186

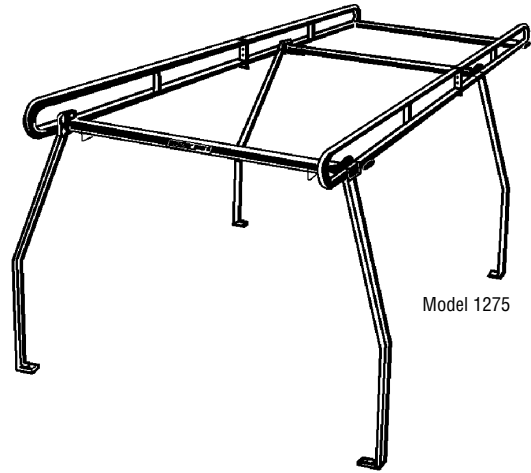
The above may be used in combination with most WEATHER GUARD® Cross & Saddle Boxes. Not applicable for some vehicles/combinations.

358-3	Full Size Pickups	100	160
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STEEL LADDER RACKS

EXCLUSIVE FEATURES AND BENEFITS:

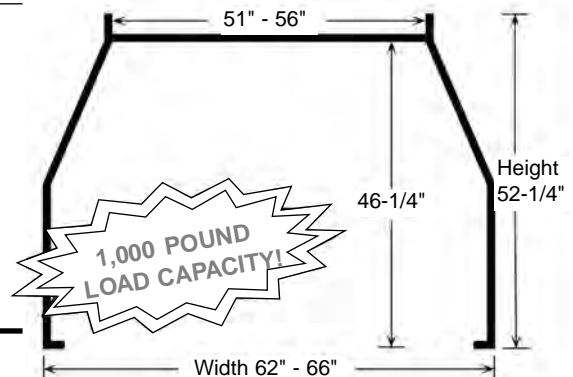
- Model 1245 fits full size short bed pickups and short bed Toyota Tundra.
- Model 1275 fits full size long bed pickups.
- Load capacity rating is 1000 lbs.
- Load carrying capacity is increased to 1500 lbs. when utilizing the Accessory screen.
- Sleekly designed and repackaged to offer more versatility.
- Includes 4 legs, 3 cross members and 2 side rails.
- Available in BLACK ARMOR-TUF Powder Coating.
- Made of formed 1" x 2", 14-gauge wall tubing.
- Cross members are made of 1-1/2" x 1-1/2", 14 gauge wall tubing.
- Full-welded bracket that clamps around the side rail is made of formed 7- and 12-gauge steel.
- Use the Accessory Cross Member when hauling shorter and more flexible materials or shorter ladders.



Model 1275

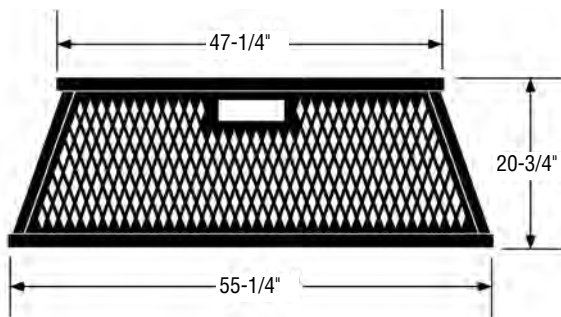
Full Size Rack and Accessories

Model	Application	Load Cap.	Weight
1245	Full size pickups short bed	1,000 #	159 lbs.
1275	Full size pickups long bed	1,000 #	171 lbs.
1259	Accessory Cab Screen		35 lbs.
	Not available for Dodge Dakota.		
1060-5	Accessory Cross Member		10 lbs.
1246	Airfoil for Ford Super Cab Super-Duty Vehicles		5 lbs. Required
1247	Airfoil for GM, Dodge and Ford F-150 Extended Cab		7 lbs. Required

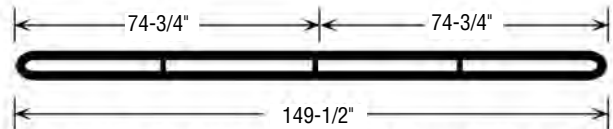


Leg and Cross member dimensions.
(Same for both 1245 and 1275)

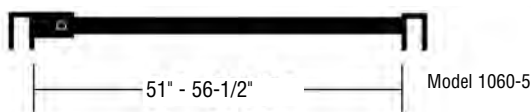
ACCESSORIES



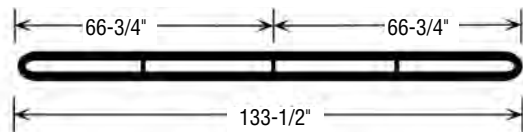
Accessory Cab Screen



Side Rail dimension for Model 1275



Accessory Cross Member



Side Rail dimension for Model 1245

STEEL ALL-PURPOSE RACKS

POWDER COATED HEAVY-DUTY STEEL RACK FOR FULL SIZE VANS

This all-purpose rack features 14-gauge steel wall tubing cross members. Mounting base is extra wide 12-gauge steel.

Model 205-3 (White)2 Cross member rackShip Wt. 42 lbs.

Model 205-5 (Black)2 Cross member rackShip Wt. 42 lbs.
For all full size vans.

Model 215-3 (White)3 Cross member rackShip Wt. 63 lbs.

Model 215-5 (Black)3 Cross member rackShip Wt. 63 lbs.
Ford- For all '91 model year and older.
Chevrolet/GMC G Classic- For all '95 model year and older.
Dodge- For all model years.

Model 216-3 (White)3 Cross member rackShip Wt. 63 lbs.

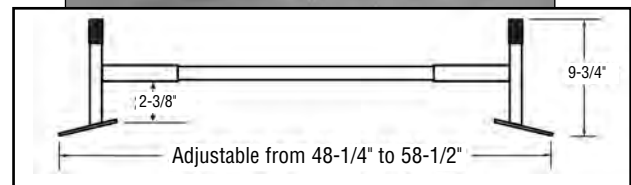
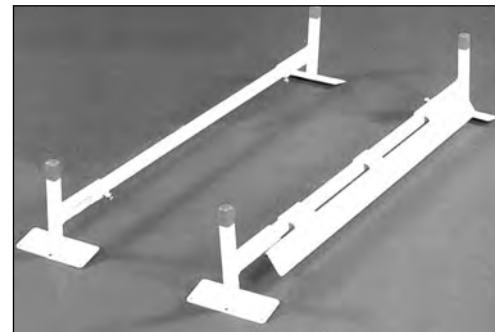
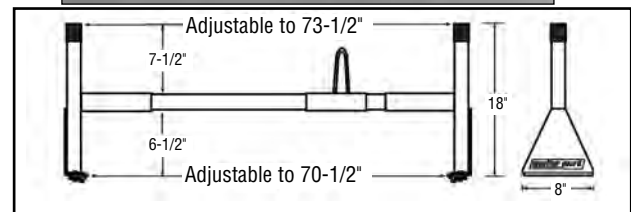
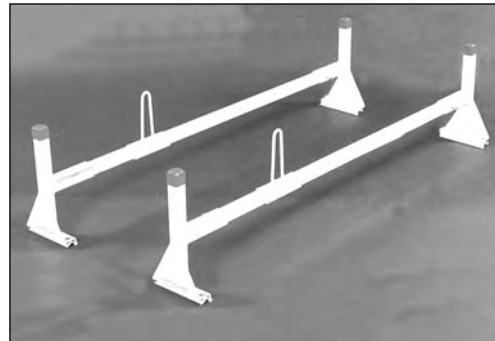
Model 216-5 (Black)3 Cross member rackShip Wt. 63 lbs.
Ford- For all '92 model year and newer.
Chevy Express/GMC Savana- For all '95 model year and newer

Model 2055-3 (White) ..Accessory Cross Member ..Ship Wt. 26 lbs.

Model 2055-5 (Black) ..Accessory Cross Member ..Ship Wt. 26 lbs.
Ford- For all '91 model year and older.
Chevrolet/GMC G Classic- For all '95 model year and older.
Dodge- For all model years.

Model 2056-3 (White) ..Accessory Cross Member ..Ship Wt. 23 lbs.

Model 2056-5 (Black) ..Accessory Cross Member ..Ship Wt. 23 lbs.
Ford- For all '92 model year and newer.
Chevy Express/GMC Savana- For all '95 model year and newer.



POWDER COATED STEEL RACK FOR ASTRO/SAFARI MINI VANS

This all-purpose rack features 14-gauge steel wall tubing cross members and a specially designed mounting base for secure through the roof mounting.

Model 220-32 Cross member rackShip Wt. 24 lbs.
For Astro and Safari mini vans.

Model 221-3Accessory Cross Member ..Ship Wt. 11 lbs.
For Astro and Safari mini vans.

POWDER COATED LITE DUTY STEEL RACK FOR FULL SIZE VANS

This all-purpose rack features 12-gauge formed steel cross members. Mounting base is extra wide 7-gauge steel.

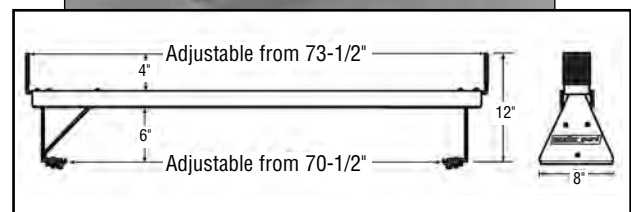
Model 207-32 Cross member rackShip Wt. 52 lbs.
For all full size vans.

Model 217-33 Cross member rackShip Wt. 73 lbs.
Ford- For all '91 model year and older.
Chevrolet/GMC G Classic- For all '96 model year and older
Dodge- For all model years.

Model 2076-33 Cross member rackShip Wt. 72 lbs.
Ford- For all '92 model year and newer.
Chevy Express/GMC Savana- For all '96 model year and newer.

Model 2077-3Accessory Cross Member....Ship Wt. 27 lbs.
Ford- For all '91 model year and older.
Chevrolet/GMC G Classic- For all '96 model year and older.
Dodge- For all model years.

Model 2078-3Accessory Cross Member....Ship Wt. 26 lbs.
Ford- For all '92 model year and newer.
Chevy Express/GMC Savana- For all '96 model year and newer.





1018



K24



K32X



5220

Cantilever Tool Boxes

18 INCH
1018

22 INCH
1022

You'll like the way each opens to see all your tools at a glance.

- Movable/removable partitions and divider sets permit you to create six compartments in each of two trays.
- Quality plated locking hardware and steel core, vinyl cushioned handles make these boxes a pleasure to own and use.
- Model 1022 has divider for storing socket sets.
- Brown wrinkle powder finish.

No.	Brn. UPC No.	Trays	Dimensions (Inches)			Net Wt. Lbs.	Ship Wt. Lbs.
			Width	Depth	Height		
1018	00026	4	18-1/8	10	12-5/8	18.25	19.5
1022	00027	4	22-1/8	10	12-5/8	21	22.5

Professional Tool Boxes

20 INCH
K20

24 INCH
K24

32 INCH
K32X

- Include lift-out tray, vinyl coated, steel top handle.
- K20 and K24 trays have socket set divider.
- Model K32X also has plated side carry handles.
- Brown wrinkle powder finish.

No.	Brn. UPC No.	Dimensions (Inches)			Net Wt. Lbs.	Ship Wt. Lbs.	
		Width	Depth	Height			
K20	00031		20-1/8	8-5/8	9-3/4	13	14
		Tray	19-1/2	7-3/4	3-3/8		
K24	00032		24-1/8	8-5/8	9-3/4	14.5	16
		Tray	23-1/2	7-3/4	3-3/8		
K32X	00033		32-1/8	8-5/8	9-3/4	18	20
		Tray	31-3/8	4-3/4	1-5/8		

Has two compartments

Tool Toters

20 INCH
5220

- Great for storing the tools you need for the car, boat, pickup or your household.
- Brown wrinkle powder finish with lift-out tray.

No.	Brn. UPC No.	Dimensions (Inches)			Net Wt. Lbs.	Ship Wt. Lbs.	
		Width	Depth	Height			
5220	05220		20	7-1/8	7-1/4	9	10
		Tray	19-7/8	6-3/8	4		

RATCHET JACKS

- 8 Models.
- Double-lever sockets for jacking in close quarters.
- Multiple-tooth pawls for strength and safety.
- Drop-forged, alloy steel, heat-treated components.
- Adjustable spring links.
- Plated springs to resist corrosion.
- Precision machining throughout.
- Large base insures a firm foundation.
- Supports full rated capacity on the toe or the cap.
- Steel lever bars sold separately.



Model 85A is used to lift a CNC machine for installation. Five ton lifting capacity, low toe height and light weight make the models 84A, 85A and 86A universal tools. Ten-ton models 1017 and A1022 are used extensively by structural movers, riggers and maintenance crews.



• 5 Ton Ratchet Jacks

These units are all mechanically identical and vary only in stroke and height.

• 10 Ton Ratchet Jacks

The 1017 and 22B incorporate a ductile iron housing for maximum durability. The A1022, which is identical to the 22B except for an aluminum housing, is the ideal choice when portability is important. These jacks are often selected for lifts of 10 tons or less because of their low handle effort.



• A1538 Utility Pole Jack

Lightweight aluminum alloy housing is used for pole lining maintenance by telephone, light and power, and railroad companies. Jack pivots, I-Beam base assures firm foundation. Alloy steel chain, I-Beam base, and steel lever bar are all ordered separately.

I-Beam Base Order#: 10800

Alloy Chain Order#: 10760

Ratchet Jacks

Model No.	Supporting Cap. (tons)	Lifting Cap. (tons)	Stroke (in.)	Handle Effort per Ton (lbs.)	Cap Min. Height (in.)	Toe Min. Height (in.)	Base Size (in.)	Wt. (lbs.)	Steel Lever Bars					
									Order Number	Lgth. (in.)	Dia. (in.)	Wt. (lbs.)		
84A	5	5	7	32	14	1-3/4	5 x 7-3/8	28	10640	36	1	8		
85A			10		17			30						
86A			13		20			35						
1017	10	10	9-1/2	30	17-1/4	2	6 x 8-3/4	40	10665	60	1-1/4	17		
A1022			12		21-5/8			2-1/4					6-1/2 x 10-1/4	42
22B			12		21-5/8			2-1/4					6-1/2 x 10-1/4	70
A1538	15	8	22	32	-	-	8 x 8-1/4	62	10675	72	1-1/4	20		
24A	20	15	13	32	23-1/4	2-1/4	8 x 10-1/4	93						
2029			18		28-1/4		8 x 11	104						

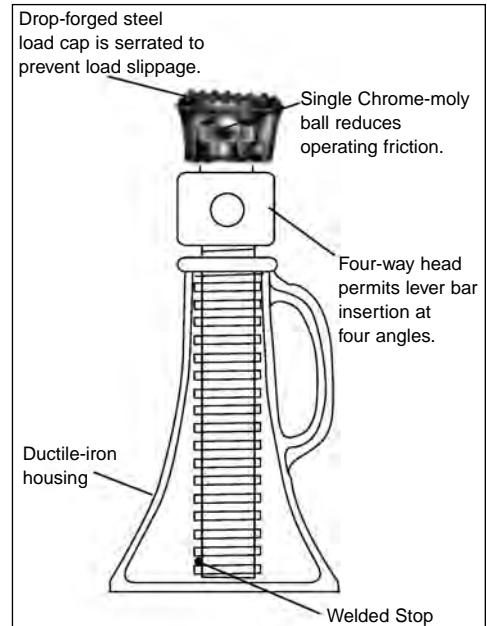
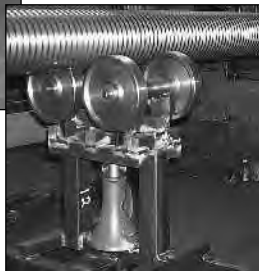
Pivot Bases are included on model A1538.

Optional for the A1538 are I-Beam Base (#10800) and Chain (#10760).

SCREW JACKS

- 9 Models.
- Ductile iron bodies for strength.
- Positive stop for safety.
- Supports loads indefinitely, and won't creep down.
- Serrated load cap.
- Steel lever bars sold separately.

Simplex screw jacks are used to adjust the height of this roller fixture. "We use this fixture during the assembly of long pieces of screw stock." "Simplex screw jacks make fixturing easy and precise."

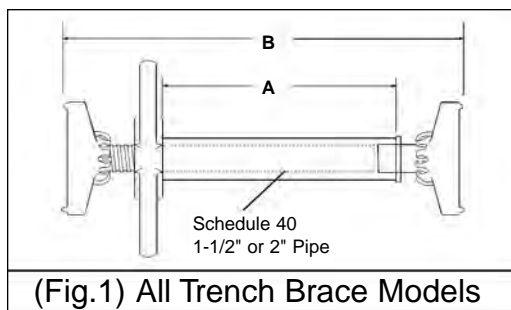


Screw Jacks

Model No.	Order Number	Sustaining Capacity (tons)	Closed Height (in.)	Stroke (in.)	Handle Effort Per Ton (lbs.)	Base Dia. (in.)	Wt. (lbs.)	Steel Lever Bars			
								Order Number	Lgth. (in.)	Dia. (in.)	Wt. (lbs.)
1-1/2 x 6	03060	12	9-3/4	3-3/4	16	4-3/4	10	10621	24	3/4	4
1-1/2 x 8	03090		11-5/8	5-3/4		5-1/2	12				
1-1/2 x 12	03120		15-5/8	9-3/4		6-1/4	16				
2 x 8	03165	20	11-3/4	5	15	6	17	10635	36	13/16	6
2 x 10	03195		13-3/4	7		6-1/2	20				
2 x 12	03210		15-3/4	9		6-3/4	24				
2-1/2 x 8	03240	24	13	4-1/4	15	6-1/2	28	10655	42	1-1/8	12
2-1/2 x 12	03255		17	8-1/4		7-1/4	37				
2-1/2 x 18	03300		23	14-1/4		8-1/2	52				

TRENCH BRACES

Simplex Trench Braces provide efficient, economical protection against cave-ins and costly redigging in construction and utility maintenance. Braces extend by turning the lever nut handle. The ball socket joints tilt for **added safety on angular mounting**. Holes on each end facilitate mounting to wood members.



Specifying Simplex Trench Braces

Simplex trench braces are designed for use with standard schedule 40 pipe. Screw end models SE-12, SE-16 and butt end model BE-25 use **1-1/2" diameter pipe**. Model SE-18 and butt end BE-35 use **2" diameter pipe**. Pipe should be cut to length based on the chart below and drawing in Fig. 1.

Model Number	Adjust Range (in.)	Pipe Size (in.)	Butt End	"A" Min. Pipe Lgth. (in.)	"B" Min. Closed Ht. (in.)
SE-12	7	1-1/2	BE-25	12	18
SE-16	10		BE-35	16	22
SE-18			2		18	25-1/2

Dimensions assume the use of both screw and butt ends together as an assembly.

Quick Reference Timber/Trench Brace Equivalency Tables*

The following charts are based on OSHA Timber/Trench Brace Charts* which do not consider transverse loading conditions.

Soil Type A $P_a = 25 \times h + 72$ psf (2ft. Surcharge)

Trench Depth (ft.)	Horizontal Spacing (ft.)	Cross Brace			Vertical Spacing (ft.)	Wales		Uprights (in.)			
		Width of Trench (ft.)				Size (in.)	Vertical Spacing (ft.)	Max. Allowable Horizontal Spacing (ft.)			
		up to 4	up to 6	up to 8				4'	5'	6'	8'
5 to 10	up to 6	SE12	SE12	SE18	4	Not Req.			2" x 6"		
		SE16	SE16								
	up to 8	SE12	SE12	SE18		8 x 8	4		2" x 6"		2" x 6"
		SE16	SE16								
10 to 15	up to 10	SE18	SE18	SE18	8 x 8	4		2" x 6"		2" x 6"	
	up to 12	SE18	SE18								
10 to 15	up to 6	SE12	SE12	SE18	8 x 8	4	Not Req.		3" x 8"		
	up to 8	SE16	SE16								
	up to 8	SE18	SE18					2" x 6"			

Soil Type B $P_a = 45 \times h + 72$ psf (2ft. Surcharge)

Trench Depth (ft.)	Horizontal Spacing (ft.)	Cross Brace		Vertical Spacing (ft.)	Wales		Uprights (in.)	
		Width of Trench (ft.)			Size (in.)	Vertical Spacing (ft.)	Max. Allowable Horizontal Spacing (ft.)	
		up to 4	up to 6				3'	
5 to 10	up to 6	SE18	SE18	5	6 x 8	5	2" x 6"	

* Refer to OSHA Standard, 29CFR 1926, subpart P-Excavations (table C-1.1 and C-1.2).

SPRING RETURN CYLINDERS

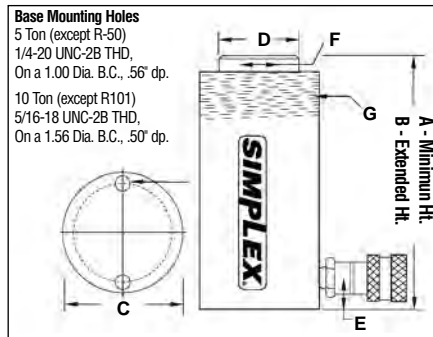
- High flow quality couplers.
- Collar threads designed for full load.
- Base and piston mountings for easy fixturing.
- Removable load caps for flexibility and safety.
- Stop ring for piston blow-out protection.
- Plated piston to resist scoring and corrosion.
- Large bearings resist side load.
- Rod wiper protects inner cylinder from dirt.
- Removable carrying handles included on models R556 through R10010.



SPRING RETURN - 5-10 TON

Simplex Cylinders Improve Manufacturing Efficiencies.

- 14 Models.



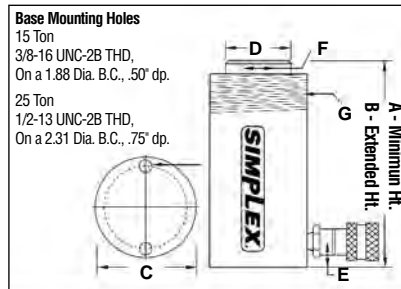
Simplex spring return cylinders, used in this fabricating fixture, provide fast and accurate forming of precision metal products.



SPRING RETURN - 15-25 TON

Simplex Cylinders Are Perfect For Heavy Maintenance.

- 13 Models.



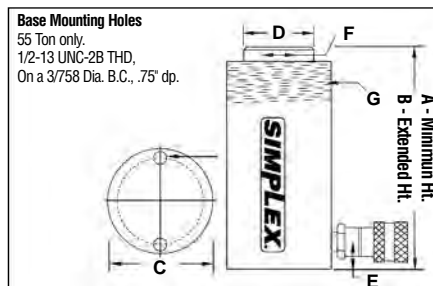
Large steel coils that were damaged in handling are reshaped using a Simplex R256 cylinder and 70 Series pump.



SPRING RETURN - 30-100 TON

Simplex Cylinders Help Stand Up To Tough Construction Jobs.

- 9 Models.



Contractors called on the brute force of Simplex R5513 cylinders to lift and position highway ramps in San Diego. The Simplex 50 Series power units provided the power and control in this rough outdoor application.



CYLINDERS

Spring Return Cylinders 5 and 10 Ton Capacities

Model No.	Cap. (tons)	Stroke (in.)	A Min. Ht. (in.)	B Ext. Ht. (in.)	Ram Bore Dia. (in.)	Effect Area (sq. in.)	Pres. @ Cap. (psi)	Oil Cap. Req'd (cu. in.)	C Body O.D. (in.)	D Piston O.D. (in.)	E Base To Port C/L (in.)	F		G		Wgt. (lbs.)	Sugstd. Hand Pump
												Piston I.D. Thrds. (in.)	Piston Thrd. Depth (in.)	Collar Thrds. (in.)	Collar Thrd. Lgth. (in.)		
R50	5	5/8	1-5/8	2-1/4	1-1/8	.99	10,000	.6	1.6 x 2.3	1	3/4	None	None	None	None	2.5	P41
R51		1	4-11/32	5-11/32				1.0				2.5					
R53		3	6-1/2	9-1/2				3.0				3.3					
R55		5	8-1/2	13-1/2				5.0				4.0					
R57		7	10-5/8	17-5/8				7.0				5.0					
R59		9-1/8	12-3/4	21-7/8				9.1				5.5					
R101	10	1	3-17/32	4-17/32	1-11/16	2.24	8,945	2.2	2-1/4	1-1/2	3/4	None	None	1-1/8	2-1/4 x 14	3.5	P42
R102		2-1/8	4-25/32	6-29/32				5.22				5.2					
R104		4-1/8	6-3/4	10-7/8				9.2				6.3					
R106		6-1/8	9-3/4	15-7/8				13.7				8.8					
R108		8	11-3/4	19-3/4				18.0				10.5					
R1010		10-1/8	13-3/4	23-7/8				22.7				12.0					
R1012		12	15-3/4	27-3/4				27.0				13.5					
R1014		14	17-3/4	31-3/4				31.5				15.3					

Spring Return Cylinders 15 and 25 Ton Capacities

Model No.	Cap. (tons)	Stroke (in.)	A Min. Ht. (in.)	B Ext. Ht. (in.)	Ram Bore Dia. (in.)	Effect Area (sq. in.)	Pres. @ Cap. (psi)	Oil Cap. Req'd (cu. in.)	C Body O.D. (in.)	D Piston O.D. (in.)	E Base To Port C/L (in.)	F		G		Wgt. (lbs.)	Sugstd. Hand Pump
												Piston I.D. Thrds. (in.)	Piston Thrd. Depth (in.)	Collar Thrds. (in.)	Collar Thrd. Lgth. (in.)		
R152	15	2	5-7/8	7-7/8	2	3.14	9,554	6.3	2-3/4	1-5/8	3/4	1 x 8	1	2-3/4 x 16	1-3/16	8.3	P42
R154		4	7-7/8	11-7/8				12.6								10.8	
R156		6	10-11/16	16-11/16				19.0								14.5	
R1510		10	14-11/16	24-11/16				31.4								19.5	
R1514		14	18-11/16	32-11/16				44.0								24.5	
R251	25	1	5-1/2	6-1/2	2-9/16	5.15	9,700	5.2	3-3/8	2-1/4	1	1-1/2 x 16	1-1/8	3-5/16 x 12	1-15/16	12.0	P42
R252		2	6-1/2	8-1/2				10.3								15.0	
R254		4	8-1/2	12-1/2				20.6								18.0	
R256		6-1/4	10-3/4	17				32.2								23.0	
R258		8-1/4	12-3/4	21				42.5								27.0	
R2510		10-1/4	14-3/4	25				52.8								31.0	
R2512		12-1/4	16-3/4	29				63.1								35.0	
R2514		14-1/4	18-3/4	33				73.4								39.0	

Spring Return Cylinders 30 Through 100 Ton Capacities

Model No.	Cap. (tons)	Stroke (in.)	A Min. Ht. (in.)	B Ext. Ht. (in.)	Ram Bore Dia. (in.)	Effect Area (sq. in.)	Pres. @ Cap. (psi)	Oil Cap. Req'd (cu. in.)	C Body O.D. (in.)	D Piston O.D. (in.)	E Base To Port C/L (in.)	F		G		Wgt. (lbs.)	Sugstd. Hand Pump
												Piston I.D. Thrds. (in.)	Piston Thrd. Depth (in.)	Collar Thrds. (in.)	Collar Thrd. Lgth. (in.)		
R308	30	8-1/4	15-1/4	23-1/2	2-7/8	6.49	9,245	53.6	4	2-1/4	2-1/4	1-1/2 x 16	1-3/16	3-5/16 x 16	1-5/16	40.0	P82
R552	55	2	6-15/16	8-15/16	3-3/4	11.05	9,955	22.1	5	3-1/8	1-3/8	NA	NA	5 x 12	1-15/16	32.0	P72
R554		4	8-15/16	12-15/16				54.0								42.0	
R556		6-1/4	11-1/8	17-3/8				69.0								50.0	
R5513		13-1/4	18-1/8	31-3/8				146.3								78.0	
R756	75	6-1/8	11-1/4	17-3/8	4-1/2	15.90	9,430	97.4	5-3/4	3-3/4	1-3/16	NA	NA	5-3/4 x 12	1-3/4	63.0	*
R7513		13-1/8	19-3/8	32-1/2				208.0								130.0	
R1006	100	6-5/8	13-1/4	20-11/16	5-1/8	20.63	9,695	137.0	6-1/4	4-1/8	1-3/16	NA	NA	6-1/4 x 12	2-1/4	90.0	*
R10010		10-1/4	16-7/8	27-15/16				212.0								110.0	

*Power pumps are suggested for these units.



Hardware & Supply Co., Inc.
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LOW PROFILE 10 – 100 TONS

“These Low Profile Cylinders Gave Us The Power We Wanted In The Compact Sizes We Needed.”

- 5 Models.
- Plated pistons to resist scoring and corrosion.
- High flow couplers.
- Stop rings for piston blow-out protection.
- Rod wiper protects inner cylinder from dirt.
- Exceeds ANSI/ASME B30.1 safety standards.



Simplex RLS Series provides the ideal fit and force required for most bridge lifting and pier cap maintenance jobs. Compact, light weight and tough as nails, Simplex cylinders are at home on any construction site.

5 – 150 TON FLAT JACK

Simplex Flat Jacks, Designed To Fit In Tight Spots.

- 8 Models.
- Stop rings for piston blow-out protection.
- Bronze plated domed piston resists side load.
- Plated pistons to resist scoring and corrosion.
- High flow couplers.
- Mounting holes in 5, 10 and 20 ton models.
- Rod wiper protects inner cylinder from dirt.
- Exceeds ANSI/ASME B30.1 safety standards.



Simplex RFS Series are designed specifically for near impossible lifting, clamping or positioning jobs where space is at a premium. Ideal for break loose or start up spreading jobs. These mini-monsters pack up to 150 tons of force into a convenient, portable package.

SINGLE-ACTING CENTER HOLE

Simplex Hard-Kor™ Cylinders Make Light Work Of Structural Reconstruction.

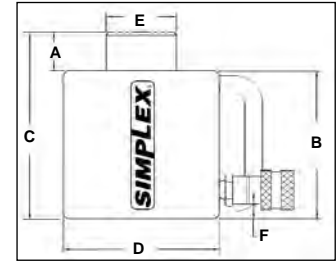
- 12 standard Models.
- HARD-KOR™ DESIGN!
- No potential leak points at base.
- Extra protection against base blow-out.
- Low profiles for more versatility.
- Double wipers protect against contamination.
- Faster retraction increases productivity.
- Large center holes for greater flexibility.
- Lower operating pressures.
- Doubles as lifting cylinder.
- High flow coupling with tough rubber dust cap.
- Rhino-Rod™ pistons resist scoring and corrosion.
- Precision construction that prevents seal extrusion.



Damage from earthquakes and age, caused the roof of the Mission San Juan Capistrano to be in need of repair. 24 Simplex RC121 cylinders were used to transfer the load, so repairs could be made.

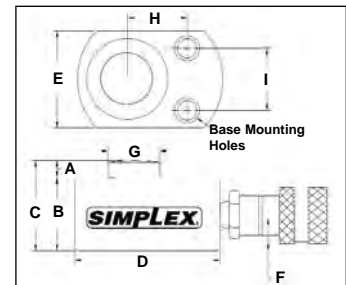
Spring Return Low Profile Cylinders 10 Through 100 Ton Capacities

Model No.	Cap. (tons)	A Stroke (in.)	B Min. Ht. (in.)	C Ext. Ht. (in.)	Ram Bore Dia. (in.)	Effect Area (sq. in.)	Pres. @ Cap. (psi)	Oil Cap. Req'd (cu. in.)	D Body O.D. (in.)	E Piston O.D. (in.)	F Base To Port C/L (in.)	Wgt. (lbs.)	Sugstd. Hand Pump
RLS101	10	1-1/2	3-15/32	4-31/32	1-11/16	2.23	8,940	3.4	2-3/4	1-1/2	11/16	5.8	P42/ P72
RLS201	20	1-3/4	3-7/8	5-5/8	2-3/8	4.43	9,030	7.8	3-5/8	2		10.5	
RLS302	30	2-7/16	4-5/8	7-1/16	2-7/8	6.49	9,250	15.8	4	2-1/4	3/4	13.8	P140
RLS502	50	2-3/8	4-13/16	7-3/16	3-1/2	9.62	10,400	22.8	5	2-1/4	15/16	22.8	
RLS1002	100	2-1/4	5-9/16	7-13/16	5	19.63	10,200	44.2	6-1/2	3-5/8	1-1/4	44.5	



Mounting Hole Dimensions

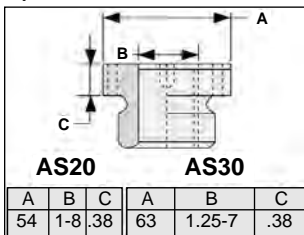
Capacity	H (in.)	I (in.)	Base Mounting Hole Dimensions (in.)
5 Ton	1	1-1/8	7/32 through x 23/64 C'Bore (1/4 Deep)
10 Ton	1-11/32	1-13/32	9/32 through x 27/64 C'Bore (5/16 Deep)
20 Ton	1-9/16	1-15/16	25/64 through x 19/22 C'Bore (25/64 Deep)



Spring Return Flat Jacks 5 Through 150 Ton Capacities

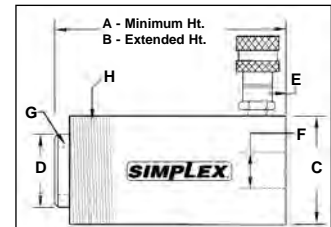
Model No.	Cap. (tons)	A Stroke (in.)	B Min. Ht. (in.)	C Ext. Ht. (in.)	Ram Bore Dia. (in.)	Effect Area (sq. in.)	Pres. @ Cap. (psi)	Oil Cap. Req'd (cu. in.)	D Body Length (in.)	E Body Width (in.)	F Base To Port C/L (in.)	G Piston O.D. Spring Ret. (in.)	Wgt. (lbs.)	Sugstd. Hand Pump
R50	5	5/8	1-5/8	2-1/4	1-1/8	.99	10,000	.6	2-9/16	1-5/8	3/4	1	2.5	P41/ P71
RFS10	10	7/16	1-11/16	2-1/8	1-11/16	2.24	8,940	1.0	3-1/4	2-3/16		3/4	3.3	
RFS20	20		2-1/32	2-15/32	2-3/8	4.43	9,030	1.9	4	3		1-1/8	6.0	
RFS30	30	1/2	2-5/16	2-13/16	2-7/8	6.49	9,250	3.2	4-1/2	3-3/4	15/16	1-3/8	8.5	P42/ P72
RFS50	50	5/8	2-5/8	3-1/4	3-1/2	9.62	10,400	6.0	5-1/2	4-1/2		1-3/4	14.3	
RFS75	75		3-1/8	3-3/4	4-1/2	15.90	9,440	10.0	6-1/2	5-1/2		2-1/8	24.5	
RFS100	100	9/16	3-3/8	4	5	19.63	10,200	12.3	7	6	2-1/2	31.0	50.5	
RFS150	150		3-15/16	4-1/2	6-1/4	30.66	9,785	17.2	8-1/2	7-1/2	3			

Optional Threaded Saddles



Base Mounting Holes

Capacity	Thread		Bolt Circle Dia. (in.)
	Size (in.)	Dpth. (in.)	
12 Ton	5/16-18	5/16	2
20 Ton	3/8-16	7/16	3-1/4
30 Ton	3/8-16	3/8	3-5/8
60 Ton	1/2-13	7/16	5-1/8
100 Ton	5/8-11	3/4	7



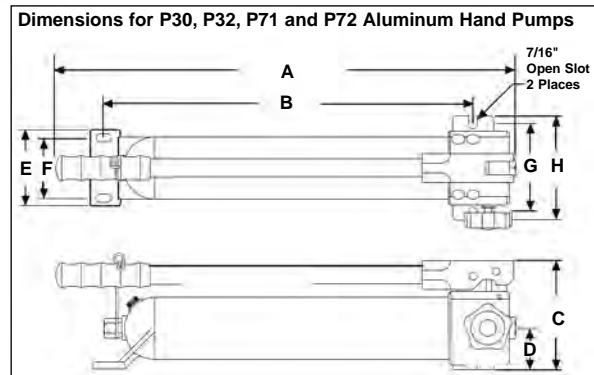
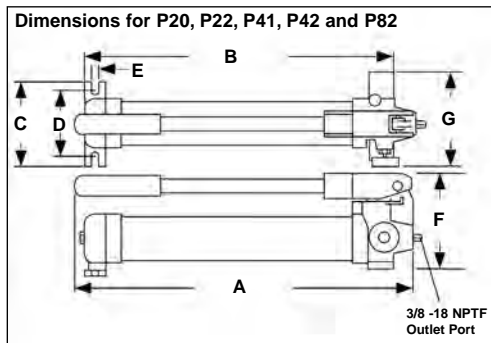
Single-Acting Center Hole Cylinders 12 Through 100 Ton Capacities

Model No.	Cap. (tons)	Stroke (in.)	A Min. Ht. (in.)	B Ext. Ht. (in.)	Effect Area (sq. in.)	Pres. @ Cap. (psi)	Oil Cap. Req'd (cu. in.)	C Body O.D. (in.)	D Piston O.D. (in.)	E Base To Port C/L (in.)	F Ctr. Hole Dia. (in.)	G Piston Thrds. (in.)		H Collar Thrds. (in.)		Wgt. (lbs.)	
RC120	12	5/16	2-3/16	2-1/2	2.36	10,185	.90	2-3/4	1-3/8	7/16	49/64	3/4 - 16	5/8	2-3/4 - 16	1-13/16	3.5	
RCQ120												3/4 - 10					
RC121		1-5/8	4-3/4	6-3/8								8.3	3/4 - 16				5/8
RC1211												3	7-1/4				10-1/4	-----	-----	10
RC202	20	2	6-3/16	8-3/16	5.30	7,545	11.0	4	2-1/8	51/64	1-1/16	1-9/16 - 16	3/4	3-7/8 - 12	1-1/2	17	
RC206		6	11-3/16	17-3/16								32.0					31
RC302	30	2-1/2	7	9-1/2	8.64	6,950	22.0	5	2-1/2	13/16	1-5/16	1-13/16 - 16	7/8	4-1/2 - 12	1-3/4	26	
RC306		6-1/8	12-1/4	18-3/8								64.0					52
RC603	60	3	8-21/32	11-21/32	14.58	8,230	44.0	6-3/4	4	2-1/8	2-3/4 - 16	3/4	6-1/4 - 12	2	68		
RC606		6	12-21/32	18-21/32												88.0	80
RC1003	100	3	9	12	20.60	9,700	62.0	8-1/4	5	1	3-1/8	4 - 16	1	-----	-----	99	

LIGHTWEIGHT HAND PUMPS/ SILVER LITE ALUMINUM HAND PUMPS

Simplex Hand Pumps are Lightweight and Easy to Use.

- 5 Models each for maximum versatility.
- Silver Lite Aluminum models in 30 and 70 cu. in. reservoir capacity.
- Lightweight for maximum portability.
- Weighing just 9 lbs. with a full 70 cu. in. of usable oil gives the P71 and P72 the highest available capacity at the least amount of weight.
- Complies with ANSI/ASME B30.1 safety standards.
- All metal construction for durability.
- Silver Lite Aluminum construction resists corrosion.
- Low handle effort for easy operation.
- Carrying handles for easy pick-up.
- External adjustable relief valve.
- Single- or two-speed models.
- 3/8" NPTF outlet ports.



Lightweight Hand Pumps For Single-Acting Cylinders

Model No.	Speed	Pressure Rating (psi)	Oil Volume Per Stroke (cu.in.)	Usable Oil Capacity (cu. in.)	A (in.)	B (in.)	C (in.)	D (in.)	E Slot Size (in.)	F (in.)	G (in.)	H (in.)	Wgt. (lbs.)
P20	2	1 Stage 200	.82	20	13	11.50	2.625	1-1/2	19/32	5.75	4.75	-	10
		2 Stage 2850	.16										
P22	2	1 Stage 200	.23	45	13.50	11.50	2.625	1-1/2	19/32	5.75	5.75	-	18
		2 Stage 10,000	.06										
P41	1	10,000	.16	45	23	21.75	5	-	-	5.75	5.75	-	18
P42	2	1 Stage 200	.82	45	23	21.75	5	-	-	5.75	5.75	-	18
		2 Stage 10,000	.16										
P82	2	1 Stage 200	.82	145	23	17.50	5.50	5	1/2	6.625	5.75	-	24
		2 Stage 10,000	.16										

Silver Lite Aluminum Hand Pumps for Single-Acting Cylinders

P30	2	1 Stage 200	.91	30	16.46	11.81	5.55	2	4.41	3.19	4.56	5.50	8
		2 Stage 3000	.19										
P32	2	1 Stage 200	.82	70	24.09	19.44	5.55	2	4.41	3.19	4.56	5.50	9
		2 Stage 10,000	.16										
P71/P71V*	1	10,000	.19	70	24.09	19.44	5.55	2	4.41	3.19	4.56	5.50	9
P72	2	1 Stage 200	.91										
		2 Stage 10,000	.19										

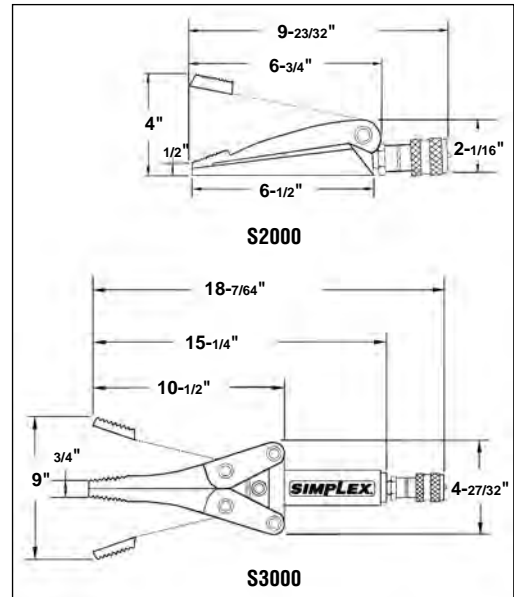
*P71V is equipped with Viton seals.

SPREADERS 1 - 10 TONS

GAT'R JAW™ SPREADERS



- 2 Models.
- High flow quality couplers.
- Spring return for easy operation.
- Narrow closed ends.
- All metal construction.



Hydraulic Spreaders 1 and 1-1/2 Ton Capacities

Model No.	Cap. (tons)	Pressure @ Capacity (psi)	Oil Capacity Required (cu.in.)	Width (in.)	Wgt. (lbs.)	Suggested Hand Pump
S2000	1	10,000	.8	1.97	7	P42
S3000	1.5		5.5	2	16	

HAND JACKS

Simplex Hydraulic Jacks Prove To Be A Universal Tool.



- 11 Models.
- Drop forged base and rugged welded construction.
- Operates in horizontal position with handle down.
- All models include over travel protection.
- Grooved saddles help prevent load slippage.
- 2- through 22-ton models include screw extensions.
- Piston rods are chrome plated to resist corrosion.
- Super low profile versions available in 12- and 22-ton capacities.
- Service kits are available for all models.

Model No.	Cap. (tons)	Min. Ht. (in.)	Stroke (in.)	Ext. Screw Ht. (in.)	Max. Ht. (in.)	Base Area (in.)	Piston Dia. (in.)	Max. Handle Effort (lbs.)	Wgt. (lbs.)
HJ2	2	7-1/8	4-1/2	2	13-5/8	4-3/8 x 2-5/8	3/4	64	5.3
HJ3	3	7-1/2	4-1/2	2-3/8	14-3/8	4-1/2 x 2-7/8	7/8	64	7.3
HJ5	5	7-7/8	4-3/4	2-3/4	15-3/8	5-1/4 x 4	1-1/4	48	8.2
HJ8	8	7-7/8	4-3/4	2-3/4	15-3/8	4 x 3-1/2	1-3/8	69	12.8
HJ12	12	9-1/2	5-7/8	3-1/8	18-1/2	6-1/2 x 4-3/16	1-5/8	73	19.7
HJ12/LP	12	6-3/4	3-3/4	3	13-1/2	6-1/2 x 4-3/16	1-5/8	73	15.0
HJ22	22	10-5/8	6-3/8	-	17	7-1/4 x 5-5/8	2-1/8	73	29.8
HJ22/LP	22	7-1/8	3-3/8	1-5/8	12-1/8	7-1/4 x 5-5/8	2-1/8	73	24.3
HJ35	35	11	6-3/8	-	17-3/8	7-5/8 x 5-5/8	2-1/2	69	45.2
HJ55	55	12	6-3/4	-	18-3/4	9-3/8 x 7-3/8	3-1/4	73	97.0
HJ100	100	12	6-23/32	-	17-23/32	12-33/64 x 10-7/16	4-29/32	93	194.0




Note: Handles are included with all models.



"We needed a jack of all trades." Applications ranged from spreading, leveling, lifting and holding for the maintenance crew at a large steel fabrication plant. "The Simplex Jacks are the best utility tool for the wide-variety of jobs that come up day after day."

HIGH PRESSURE HOSES



All Simplex hoses have 3/8" male NPTF threads. Special lengths are available upon request.

Model No.	Length (ft.)	Hose End	Hose End	I.D. (in.)
H3	3		3/8" NPTF Male	1/4
H6	6			
H10	10			
H20	20			
H36	36			
H50	50		C213 Coupler*	
HC3	3			
HC6	6			
HC10	10			
HC20	20			
HC36	36		C213 Coupler*	
HC50	50			

• **H & HC Series** industrial grade 1/4" I.D. hose is rated at **10,000 psi operating pressure and 20,000 psi minimum burst pressure**. This hose is the recommended choice for hand pump and cylinder sets, as well as a wide range of other intermittent applications.



• **High Flow HD & HDC Series** 3/8" I.D. hose is recommended to achieve higher retraction speeds and minimal flow restrictions. These heavy-duty hoses are rated at **10,000 psi with a minimum burst pressure of 30,000 psi**.

Model No.	Length (ft.)	Hose End	Hose End	I.D. (in.)
HD3	3		3/8" NPTF Male	3/8
HD6	6			
HD10	10			
HD20	20			
HD50	50			
HDC3	3		C213 Coupler*	
HDC6	6			
HDC10	10			
HDC20	20			
HDC50	50			

Note: Recommended for use with Suc-O-Matic Pumps.


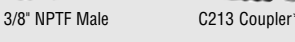

HIGH PERFORMANCE HOSES



4:1 Safety Hoses




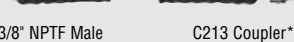
• **Heavy Duty HE & HEC Series Hoses** are for demanding and continuous duty applications that require 10,000 psi working and 40,000 psi burst, (4:1 safety factor) but where rubber coated, steel wire braid design is preferred. These hoses are well suited in operating temperatures up to 150° F.

• **Thermo-Plastic HP & HPC Series Hoses** are recommended for demanding applications. Along with their distinctive green color, the HP & HPC series hoses boast a 10,000 psi working, 40,000 psi minimum burst, (4:1 safety factor) and a tough polyurethane outer cover that resists abrasion and wear. Well suited for continuous duty, the reinforced polyester and carbon steel wire design contributes to low volume expansion, minimized fatigue and enhanced system efficiencies.

Model No.	Length (ft.)	Hose End	Hose End	I.D. (in.)
HP3	3		3/8" NPTF Male	1/4
HP6	6			
HP10	10			
HP20	20			
HP36	36			
HP50	50		C213 Coupler*	
HPC3	3			
HPC6	6			
HPC10	10			
HPC20	20			
HPC36	36		C213 Coupler*	
HPC50	50			

Model No.	Length (ft.)	Hose End	Hose End	I.D. (in.)
HE6	6		3/8" NPTF Male	1/4
HE10	10			
HE20	20			
HEC6	6		C213 Coupler*	
HEC10	10			
HEC20	20			

• **Non-Conductive Thermo Plastic HR & HRC Series Hoses** are for those special applications where non-conductivity is a must. The HR & HRC series hose operates at 10,000 psi working and 40,000 psi burst, (4:1 safety factor). Lightweight and durable, the multi-layered design complies with M.H.I. I.J.100 hose specifications. Orange in color, the HR and HRC are easily identified from standard conductive hoses.

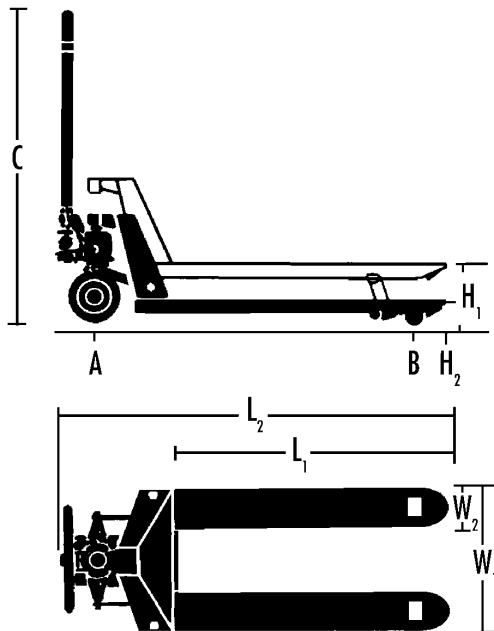
Model No.	Length (ft.)	Hose End	Hose End	I.D. (in.)
HR3	3		3/8" NPTF Male	1/4
HR6	6			
HR10	10			
HR20	20			
HRC3	3			
HRC6	6		C213 Coupler*	
HRC10	10			
HRC20	20			

*All hoses on this page equipped with C213 Coupler also includes a CR215 Dust Cap.

W SERIES PALLET TRUCKS



140075



- 6000 pound capacity.
- 200° turning radius allows room to maneuver in tight quarters.
- Articulating 7" poly-over-aluminum steer wheels ensure continual contact with uneven floors.
- One-piece cast pump features high quality seals, hardened and chrome plated ram and piston, top-of-stroke and overload safety bypass valves.
- Pump also features smooth, special lowering valve for controlled descent.
- Single point valve replacement for quick and easy rebuild.
- Rounded fork tips with nylon guide rollers for trouble-free pallet entry and exit.
- Solid steel push rods never need adjustment.
- Wheel bearings are double sealed and lifetime lubricated.



DIMENSIONS (IN)

STOCK NUMBER	MODEL	W1	W2	L1	L2	H1	H2	A	B	C	SHIP WEIGHT (LBS.)	CARTON PACK
140070	PT-2036W	20-1/2	6-1/4	36	52-1/2	7-3/4	2-7/8	7 x 2	2-7/8 x 3-11/16	47	170	1
140071	PT-2042W	20-1/2	6-1/4	42	58-1/2	7-3/4	2-7/8	7 x 2	2-7/8 x 3-11/16	47	179	1
140072	PT-2048W	20-1/2	6-1/4	48	64-1/2	7-3/4	2-7/8	7 x 2	2-7/8 x 3-11/16	47	187	1
140073	PT-2736W	27	6-1/4	36	52-1/2	7-3/4	2-7/8	7 x 2	2-7/8 x 3-11/16	47	183	1
140074	PT-2742W	27	6-1/4	42	58-1/2	7-3/4	2-7/8	7 x 2	2-7/8 x 3-11/16	47	192	1
140075	PT-2748W	27	6-1/4	48	64-1/2	7-3/4	2-7/8	7 x 2	2-7/8 x 3-11/16	47	200	1

SMH SERIES HAND CHAIN HOISTS



101704

- Full range capacity 1/2 to 10 tons.
- 28 models stocked, one for every application.
- Standard features found only in higher priced models.
- Economical hand chain hoist designed for years of trouble-free service.
- 10', 15', 20' and 30' lifts standard, custom length lifts available.
- All steel construction with a durable powder coat finish.
- Lightweight, compact design for low headroom applications.
- Needle bearing supported load sheave for smooth operation.
- Completely enclosed Weston type automatic brake system for precise load spotting.
- Triple-spur gears provide high efficiency ratio with minimum effort.
- Induction hardened grade 80 load chain.
- Drop-forged hooks with heavy-duty safety latches swivel 360° for easy rigging.
- Smooth rolled edge on hand chain cover prevents side pull jamming.
- Standard hand chain drop equals lift length.
- Proof tested with test certificate.
- Complies with OSHA, ANSI/ASME B30.16 and HST-2 standards.

CAUTION

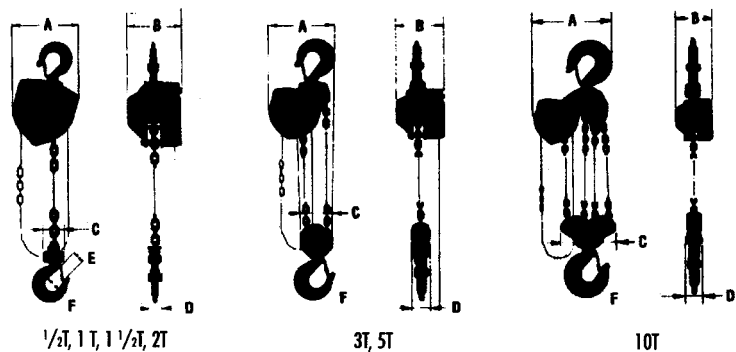
Be sure that the supporting structures and load-attaching devices used in conjunction with this hoist provide an adequate safety factor to handle the rated load plus the weight of the equipment. In doubt, consult a qualified structural engineer. This equipment is not to be used for lifting, supporting or transporting people, or lifting or supporting loads over people.

IMPORTANT

Before installation, read owner's manual for additional warnings and precautions. Not for use in an explosive environment.

OPTIONAL ACCESSORIES

- Trolleys
- Beam Clamps
- Slings



DIMENSIONS (IN)

MODEL	A	B	C	D	E	F
1/2-ton	5-1/2	4-1/2	2	1-1/4	7/8	1-3/8
1-ton	6-5/8	5-1/5	2-1/8	1-1/4	1-1/8	1-9/16
1-1/2-ton	7-3/4	5-3/4	2-1/2	1-7/18	1-1/4	1-3/4
2-ton	8-7/8	5-3/4	2-3/5	1-3/5	1-3/8	2
3-ton	8-1/2	6	3-5/8	2-3/4	1-3/4	2-1/4
5-ton	9-1/2	7	4-1/2	3	2	2-5/8
10-ton	17-1/2	7	12-1/4	4	3	3-1/2



SMH SERIES HAND CHAIN HOISTS



STOCK NUMBER	MODEL	CAPACITY (LBS.)	STANDARD LIFT (FT.)	HEADROOM (IN.)	NUMBER OF FALLS	LOAD CHAIN (DIA./MM)	REQ. HAND CHAIN (FT.) TO LIFT LOAD 1'	POUNDS PULL TO LIFT CAPACITY	SHIP WEIGHT EACH (LBS.)	CARTON PACK
1/2-TON HAND CHAIN HOISTS										
101700	SMH-1/2T-10	1100	10	13	1	5	32	49	20	1
101701	SMH-1/2T-15	1100	15	13	1	5	32	49	25	1
101702	SMH-1/2T-20	1100	20	13	1	5	32	49	29	1
101703	SMH-1/2T-30	1100	30	13	1	5	32	49	40	1
1-TON HAND CHAIN HOISTS										
101704	SMH-1T-10	2200	10	15	1	6.3	37	80	27	1
101705	SMH-1T-15	2200	15	15	1	6.3	37	80	33	1
101706	SMH-1T-20	2200	20	15	1	6.3	37	80	38	1
101707	SMH-1T-30	2200	30	15	1	6.3	37	80	51	1
1-1/2-TON HAND CHAIN HOISTS										
101708	SMH-1-1/2T-10	3520	10	17-1/2	1	7	58	82	41	1
101709	SMH-1-1/2T-15	3520	15	17-1/2	1	7	58	82	49	1
101710	SMH-1-1/2T-20	3520	20	17-1/2	1	7	58	82	56	1
101711	SMH-1-1/2T-30	3520	30	17-1/2	1	7	58	82	69	1
2-TON HAND CHAIN HOISTS										
101712	SMH-2T-10	4400	10	18-1/2	1	8	70	91	46	1
101713	SMH-2T-15	4400	15	18-1/2	1	8	70	91	53	1
101714	SMH-2T-20	4400	20	18-1/2	1	8	70	91	60	1
101715	SMH-2T-30	4400	30	18-1/2	1	8	70	91	75	1
3-TON HAND CHAIN HOISTS										
101716	SMH-3T-10	6820	10	23-1/2	2	7	116	86	60	1
101717	SMH-3T-15	6820	15	23-1/2	2	7	116	86	71	1
101718	SMH-3T-20	6820	20	23-1/2	2	7	116	86	80	1
101719	SMH-3T-30	6820	30	23-1/2	2	7	116	86	102	1
5-TON HAND CHAIN HOISTS										
101720	SMH-5T-10	11,000	10	28	2	9	172	97	91	1
101721	SMH-5T-15	11,000	15	28	2	9	172	97	106	1
101722	SMH-5T-20	11,000	20	28	2	9	172	97	122	1
101723	SMH-5T-30	11,000	30	28	2	9	172	97	153	1
10-TON HAND CHAIN HOISTS										
101724	SMH-10T-10	22,000	10	35	4	9	344	104	177	1
101725	SMH-10T-15	22,000	15	35	4	9	344	104	205	1
101726	SMH-10T-20	22,000	20	35	4	9	344	104	232	1
101727	SMH-10T-30	22,000	30	35	4	9	344	104	287	1

MINI-MITE SERIES LEVER HOISTS



187515

- Compact size fits easily in a truck or toolbox.
- A size for every need.
- Dependable, lightweight and portable heavy-duty lever hoist for industrial applications.
- 1/4-ton to 6-ton capacities.
- 5', 10', 15' and 20' lifts standard, custom length lifts available.
- All steel construction with a powder coat finish.
- Easy-to-use with single hand operation and control.
- Simple design makes routine inspection and maintenance easy.
- Freewheeling feature without load for quick load attachment.
- Premium 100 grade low wear chain resists abrasion.
- Completely enclosed Weston type automatic brake system for precise load positioning.
- Wide throat safety hooks feature heavy-duty latches for easy rigging.
- Proof tested with test certificate.
- Complies with OSHA, ANSI/ASME B30.21 and HST-3 standards.

CAUTION

Be sure that the supporting structures and load-attaching devices used in conjunction with this hoist provide an adequate safety factor to handle the rated load plus the weight of the equipment. If in doubt, consult a qualified structural engineer. This equipment is not to be used for lifting, supporting or transporting people, or lifting or supporting loads over people.

IMPORTANT

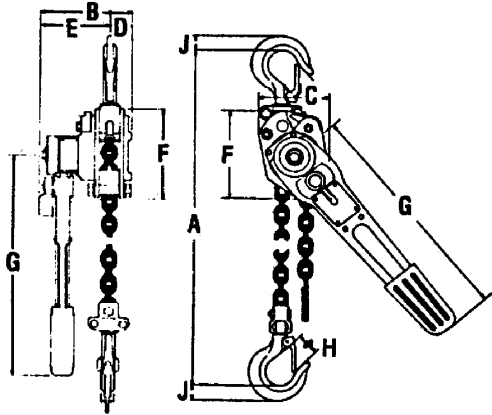
Before installation, read owner's manual for additional warnings and precautions. Not for use in an explosive environment.

OPTIONAL ACCESSORIES

- Trolleys
- Beam Clamps
- Slings



MINI-MITE SERIES LEVER HOISTS

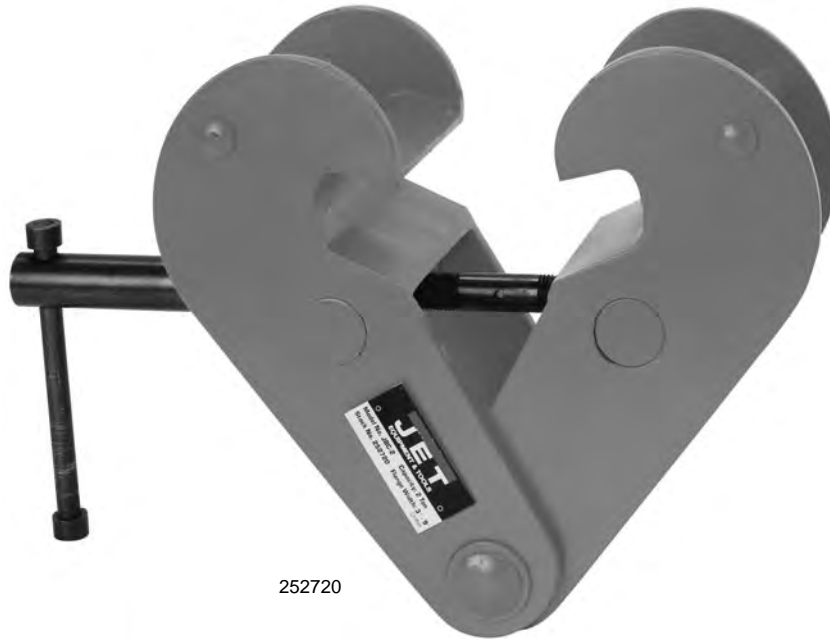


DIMENSIONS (IN.)

MODEL	A	B	C	D	E	F	G	H	I	J
MM-25,26	9-1/4	3-9/16	-	5/64	2-3/4	-	6-3/32	15/16	15/32	-
MM-50,51,52,53	10-1/4	4-5/16	3-3/8	1-3/64	3-1/4	4-7/16	11-3/16	13/16	5/8	11/16
MM-75,751,52	9-3/4	5-7/8	4-7/8	2-3/8	3-1/2	4-7/8	10-5/64	1	7/8	7/8
MM-150,151,152,155	13	6-3/4	5-5/8	2-5/8	3-5/8	5-7/8	17-5/16	1-1/4	1-1/8	1-1/8
MM-300,310,320,355	16-3/4	8-1/8	7-1/4	3-1/2	4-1/2	7-1/4	17-5/16	1-5/8	1-5/16	1-5/8
MM-600,620	24-1/2	8-1/8	9-5/8	3-1/2	4-1/2	7-1/4	17-5/16	2	1-9/16	2

STOCK NUMBER	MODEL	LOAD CHAIN (DIA./MM)	NO. OF FALLS	RATED CAP'Y (TON)	LIFT PER FULL TURN OF LEVER (IN.)	MIN DIST BETWEEN HOOKS (IN.)	STANDARD LIFT (FT.)	LBS. PULL TO LIFT CAP'Y	LEVER LENGTH (IN.)	SHIP WEIGHT (LBS.)
187625	MM-25	4.3	1	1/4	2	9-1/4	3'3"	61	6-3/32	4-1/2
187626	MM-26	4.3	1	1/4	2	9-1/4	10	61	6-3/32	9
187650	MM-50	5	1	1/2	1-3/64	10-1/4	5	75	11-3/16	8
187651	MM-51	5	1	1/2	1-3/64	10-1/4	10	75	11-3/16	12
187652	MM-52	5	1	1/2	1-3/64	10-1/4	15	75	11-3/16	14
187653	MM-53	5	1	1/2	1-3/64	10-1/4	20	75	11-3/16	17
187575	MM-75	6.3	1	3/4	1-3/16	9-3/4	5	48-1/2	10-5/64	13-1/2
187510	MM-751	6.3	1	3/4	1-3/16	9-3/4	10	48-1/2	10-5/64	17
187520	MM-752	6.3	1	3/4	1-3/16	9-3/4	20	48-1/2	10-5/64	23
187519	MM-755	6.3	1	3/4	1-3/16	9-3/4	15	48-1/2	10-5/64	25
187515	MM-150	7.1	1	1-1/2	1	13	5	51	17-5/16	23-1/2
187511	MM-151	7.1	1	1-1/2	1	13	10	51	17-5/16	28
187525	MM-155	7.1	1	1-1/2	1	13	15	51	17-5/16	33-1/2
187521	MM-152	7.1	1	1-1/2	1	16-3/4	20	51	17-5/16	35-1/2
187530	MM-300	9.5	1	3	1/2	16-3/4	5	75	17-5/16	46
187531	MM-310	9.5	1	3	1/2	16-3/4	10	75	17-5/16	53
187535	MM-355	9.5	1	3	1/2	16-3/4	15	75	17-5/16	56
187532	MM-320	9.5	1	3	1/2	16-3/4	20	75	17-5/16	67-1/2
187560	MM-600	9.5	2	6	3/8	24-1/2	5	79	17-5/16	82
187562	MM-620	9.5	2	6	3/8	24-1/2	20	79	17-5/16	121

JBC SERIES INDUSTRIAL DUTY BEAM CLAMPS



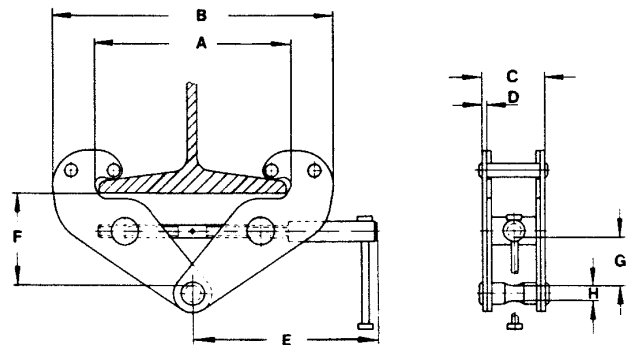
252720



- For construction, commercial and industrial, vertical or horizontal rigging operations.
- 1-ton to 5-ton capacities.
- Mount hoists or lift beams with portable lightweight clamp.
- Adjusts with ease to fit a broad range of wide-flange H or standard I-beams.
- Clamp jaw designed to distribute the load away from beam flange edge.
- Low headroom with built-in suspension rod.
- Proof tested with test certificate.
- Compliance: ANSI/ASME B30.17 and B30.20 standards.

CAUTION

Read owners manual for additional warnings and precautions before use. Failure to read, understand and follow all instructions can result in serious injury. Do not exceed rated capacity. Use clamp only if authorized and properly trained. Do not move unbalanced load. Not for use in explosive environment.

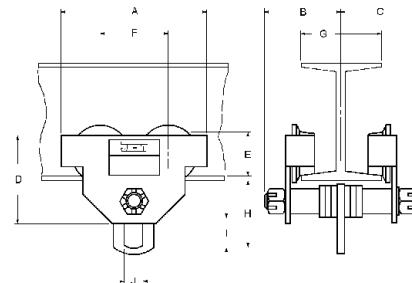


STOCK NO.	MODEL	RATED CAP'Y (LBS.)	BEAM FLANGE WIDTH (IN.)	DIM. (IN.) MAX. A.	MIN. B	MAX. B	C	D	E	MAX. F	MIN. F	MIN. G	H	SHIP WT. EACH (LBS.)	CARTON PACK
252710	JBC-1	2,000	2-31/32 - 8-21/32	9-21/32	7-3/32	14-11/64	2-3/4	13/64	9-9/32	5-5/16	3-35/64	1-3/16	13/16	12	1
252720	JBC-2	4,000	2-31/32 - 8-21/32	9-21/32	7-3/32	14-11/64	2-29/32	1/4	9-9/32	5-5/16	3-35/64	1-3/16	13/16	14	1
252730	JBC-3	6,000	3-15/16 - 9-27/32	11-5/8	9-27/32	17-17/32	4-21/32	5/16	10-1/4	6-11/16	4-11/32	2-11/64	1	27	1
252750	JBC-5	10,000	4-15/16 - 10-5/8	11-7/32	10-7/16	19-3/32	5-1/2	25/64	10-1/4	6-15/16	4-15/16	2-3/64	1-7/64	34	1

PT SERIES INDUSTRIAL DUTY BEAM TROLLEYS



- Designed for low maintenance and trouble-free operation through a wide range of beams.
- 1/2-ton to 10-ton capacities.
- For use with wide-flange H-beams, standard I-beams, or curved track.
- Multiple spacer washers make beam flange width adjustment quick and easy.
- Rugged steel side plates feature built-in bumper guards.
- Hardened wheels with lubricated for life, double sealed ball bearings.
- Proof tested with test certificate.
- Compliance: OSHA, ANSI/ASME B30.11 and B30.17 standards.



DIMENSIONS (IN.)

MODEL	A	B	C	D	E	F	G	H	I	J
1/2 PT	8-3/8	6-3/16	6-3/16	5-1/8	2-5/16	4	2-1/2 – 8	4	1-9/16	15/16
1 PT	9-15/16	6-1/2	6-1/2	6-1/8	2-15/16	4-5/8	3 – 8	4-1/2	1-15/16	1-3/16
1-1/2 PT	10-7/8	6-5/8	6-5/8	6-3/8	3-3/8	4-7/8	3-1/4 – 8	5-1/8	2-1/2	1-5/16
2 PT	11-7/8	6-7/8	6-7/8	6-11/16	3-9/16	5-3/8	3-1/4 – 8	5-1/4	2-9/16	1-7/16
3 PT	13-5/8	7-5/16	7-5/16	8-9/16	4-5/16	6-3/16	4 – 8	6-5/8	3	1-3/4
5 PT	15-1/16	7-7/8	7-7/8	10-1/16	4-13/16	6-3/4	4-5/8 – 8	7-7/8	3-13/16	2-3/8
10 PT	17-15/16	8-1/2	8-1/2	11-5/8	5-15/16	7-7/8	4-3/4 – 8	10-1/8	5	3-1/4

STOCK NUMBER	MODEL	CAP'Y (TON)	BEAM FLANGE WIDTH (IN.)	BEAM HEIGHT (FT.)	MIN. RADIUS CURVE (IN.)	SHIP WEIGHT (LBS.)	CARTON PACK
252005	1/2 PT	1/2	2-1/2 – 8	4 – 19	39	20	1
252010	1 PT	1	3 – 8	4 – 19	39	34	1
252015	1-1/2 PT	1-1/2	3-1/4 – 8	4 – 19	43	43	1
252020	2 PT	2	3-1/4 – 8	4 – 19	43	52	1
252030	3 PT	3	4 – 8	5 – 19	51	88	1
252050	5 PT	5	4-5/8 – 8	5 – 19	55	129	1
252060	10 PT	10	4-3/4 – 8	5 – 19	67	213	1

Cable Hoists

Designed for Reliability, Durability and Versatility

- **Capacities** — Rated loads of 1000, 1500 and 2000 lbs.- single line; 2000, 3000 and 4000 lbs.- double line.
- **Handle Designed for Overload Protection** — Handle bends to warn of hazardous condition and prevents dangerous overload.
- **Hooks with Latches** — 360° swiveling hooks equipped with latches for positive load engagement.
- **Positive Load Holding in All Environments** — Double, interlocking pawl mechanism assures one pawl is engaged at all times.
- **Meets or Exceeds** — Minimum 4:1 design factor and all requirements of ASME/ANSI Standard B-30.21. All units tested at 125% of rated load.
- **Lightweight and Rugged** — Special cast aluminum and zinc alloy housings.
- **Heavy-Duty Cable** — Utilizes preformed and galvanized, extraflexible aircraft cable. Stainless steel cable available—suitable for marine environments.
- **Corrosion Resistant** — All stainless steel springs and shafts.
- **Reduced Wear** — All rotating shafts are mounted on bronze bushings.
- **Self-Storing Cable Drum** — Provides compact operation.
- **Easy Load Positioning** — Utilizes a double pawl system with multiple pawl stops for precise load adjustment.
- **Fast Cable Take-Up** — Winding wheel provided for quick take-up or positioning of cable.
- **Open Construction** — Allows for easy cleaning and inspection.
- **Versatile** — 430CDPB equipped with oversized slip hooks—ideal for opening and closing boxcar doors.



SPECIFICATIONS

Single and Double Line Cable Hoist • 1000 - 4000 Lbs.

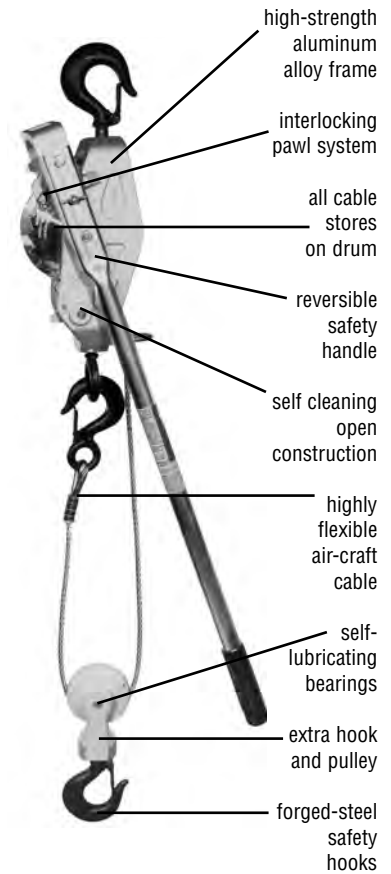
Model Number	SINGLE LINE			DOUBLE LINE			Cable Diameter (in.)	Ship Weight (Lbs.)
	Capacity (Lbs.)	Lift (Ft.)	Hook to Hook (Min.) (in.)	Capacity (Lbs.)	Lift (Ft.)	Hook to Hook (Min.) (in.)		
105SB	1000	40	20	—	—	—	3/16	12-1/2
115SB	1000	23	20	—	—	—	3/16	11
115DB	1000	23	20	2000	11-1/2	27	3/16	14
505NB	1500	17	20	—	—	—	1/4	11-1/2
202WNB	1500	17	20	3000	9	27	1/4	14
434WNB	1500	22	20	3000	11	27	1/4	15-1/4
430CDPB	1500	22	20	3000	11-1/4	27	1/4	17
404WNB	2000	17	20	4000	8-1/2	27	9/32	16-1/2
404WNB/MC	2000	17	20	4000	8-1/2	27	9/32	16-1/2

Three Frame Sizes



Made in U.S.A.

- 1/2 to 3-ton capacities.
- Cable lengths to 38 feet.
- Lightweight from 7 lbs.
- Available with these options:
 - Marine grade.
 - Cable return crank.
 - Rapid lowering.
 - Choice of safety hooks.



Lift, Lower, Pull, Bend, Stretch, Tighten at any Angle, in any Position.

(when used in accordance with accepted rigging practices)

Lightweight, portable **LUG-ALLs** are easy to carry...easy to rig. Safe and sturdy, these dependable cable ratchet-lever winch hoists have unlimited applications in industry and construction. Safety features include a unique reversible handle that bends when the hoist is overloaded, and an interlocking pawl system that provides positive load control.

Lug-All Car Door Pullers

LUG-ALL Car Door Pullers are compact and portable – but rugged enough to open box car doors without banging or prying. With a **LUG-ALL**, even dislodging stuck doors becomes a one-man job.



ALL LUG-ALLS ARE GUARANTEED FOR ONE YEAR AGAINST DEFECTIVE PARTS AND/OR WORKMANSHIP

CABLE MODEL SPECIFICATIONS

CAPACITY	LUG-ALL Model No.'s		Double Line				Single Line				Cable Diam.	NET Weight (lbs.)	
	Standard Lowering Model	Rapid Lowering Model	Capacity in Lbs.	Handle pull for full load (lbs.)	Lifting Distance	Min. Distance Between Hooks	Capacity in Lbs.	Handle pull for full load (lbs.)	Lifting Distance	Min. Distance Between Hooks			
SMALL FRAME	½ TON	1000-15SH	115-RSH	-----	-----	-----	-----	1000	77	15'	16"	3/16"	7
	¾ TON	1500-25SH	125-RSH	1500	67	12½'	21"	750	65	25'	16"	5/32"	8½
	1 ½ TON	2250-15SH	215-RSH	2250	86	7½'	21"	1125	83	15'	16"	3/16"	8¾
	1 ½ TON	2250-20SH	-----	2250	86	10'	21"	1125	83	20'	16"	3/16"	9¼
MEDIUM FRAME	1 ½ TON	3000-10SH	310-RSH	3000	100	5'	21"	1500	97	10'	16"	7/32"	9
	1 ½ TON	2250-38SH	238-RSH	2250	100	19'	23½"	1125	83	38'	18"	3/16"	13¾
MEDIUM LARGE FRAME	1 ½ TON	3000-30SH	330-RSH	3000	100	15'	23½"	1500	97	30'	18"	7/32"	13¾
	2 TON	4000-20SH	420-RSH	4000	115	10'	26½"	2000	110	20'	18½"	¼"	15½
LARGE FRAME	3 TON	6000-15SH	-----	6000	105	7½'	34"	3000	105	15'	26½"	5/16"	34



RATCHET LEVER HOISTS

- **CAPACITIES & LIFT** - Rated loads from 3/4 to 6 tons, with 5-foot standard lift. Other lifts available.
- **RUGGED** - Unit and handle made from high strength ductile aluminum alloy for corrosion resistance and portability.
- **FREE CHAINING MECHANISM** - Allows quick and easy one-handed take-up and positioning of slack chain. Will not accidentally free chain when under load.
- **TOP SLING MODELS** - Allow secure fastening around posts, beams, and other anchor points for easy rigging. MAR and RAR models have 30" sling with grab hook. RADO model has a 15" sling with a standard hook.
- **HANDLE STOPS** - Keep handle from spinning in case operator's hand accidentally slips off the handle. Length 20-1/2".
- **OPTIONS** - Bullard hooks, bronze hooks, zinc-plated hooks and zinc plated chain.
- **LIFETIME WARRANTY.**

RA Model Ratchet Lever Hoist

COFFING RA Model - Aluminum ratchet lever hoists utilize a ratchet and pawl design. The RA is ideal for transmission and distribution utility applications where a disc brake mechanism is not desirable.

- **RATCHET AND PAWL DESIGN** - Provides easy operation and freedom from maintenance. One pawl is always engaged with the ratchet during lifting and lowering operations, so handle will not ratchet when lowering a load if handle is unintentionally released.
- **OPEN BODY CONSTRUCTION** - Permits easy inspection of suspension hook assembly.
- **MULTIPLE RIGGING OPTIONS** - Hoist can lift, pull or bind. Can be operated from either side and will work in any position with equal efficiency.



MA and MAL Ratchet Lever Hoists

COFFING MA and MAL Models - Survive the toughest environments to provide safe, secure load control. Five seals (exclusive to the MA and MAL) increase the life of the hoist by protecting the gears and the brake mechanism from contamination by oil, grease, dirt, water and other environmental hazards. The MA and MAL are ideal for construction, industrial and maintenance applications which require a brake for precise positioning or to disengage the tension on the load.

- **FIVE SEALS** - Keep the brake mechanism clean and dry, so braking performance remains consistent even under severe exposure conditions.
- **PRECISE LOAD POSITIONING** - Screw and disc brake lowering allows "micro-inching" for load spotting within fractions of an inch.



SPECIFICATIONS

MA / MAL Ratchet Lever Hoists

Capacity Lbs. Tons	Model Number *	Strands of Load Chain	Minimum Distance Between Hooks (In.)	Minimum Lifting Increment (In.) †	Average Handle Effort (Lbs.)	Net Weight (Lbs.) ††
1500 3/4	MA(L)-15	1	12-7/8	.188	61	14-1/4
2000 1	MA(L)-20	1	12-7/8	.188	81	14-1/4
3000 1-1/2	MA(L)-15-2	2	17	.094	61	20-1/4
3000 1-1/2	MA(L)-30	1	15	.088	82	23
4000 2	MA(L)-40	1	15	.088	109	23
6000 3	MA(L)-30-2	2	18-3/4	.044	87	36
9000 4-1/2	MA(L)-30-3	3	23-1/8	.029	90	53
12000 6	MA(L)-30-4	4	22	.022	93	63

* Designate MAL model number for load limiter option. Designate MAR for 30" top sling with grab hook. Longer slings available.

† Minimum increment in lowering position is infinitesimal.

†† Add approximately 2 lbs. for MAL version.

SPECIFICATIONS

RA Ratchet Lever Hoist

Capacity Lbs. Tons	Model Number *	Strands of Load Chain	Minimum Distance Between Hooks (In.)	Minimum Lifting Increment (In.) †	Average Handle Effort (Lbs.)	Net Weight (Lbs.) ††
1500 3/4	RA-15	1	12-7/16	.451	59	12-1/4
2000 1	RA-20	1	12-7/16	.451	79	12-1/4
3000 1-1/2	RA-15-2	2	17-1/4	.226	60	18
3000 1-1/2	RA-30	1	13-3/4	.256	82	23
4000 2	RA-40	1	13-3/4	.256	109	23
6000 3	RA-30-2	2	17-1/4	.128	93	35
9000 4-1/2	RA-30-3	3	22	.085	96	53
12000 6	RA-30-4	4	22	.064	97	63

* Designate RAR model for 30" top sling with grab hook, or RADO model for 15" top sling with standard hook. Longer sling lengths available.

† Minimum increment in lifting or lowering position.

LHH Hand Chain Hoist

COFFING LHH Models - Stamped steel hand chain hoists are an excellent low cost option in the Coffing line. The compact, lightweight design is ideal for construction and contractor applications where portability and easy rigging are critical.

- **CAPACITIES AND LIFT** - Rated loads from 1/2 to 20 tons in stock with standard lifts of 10, 15 and 20 feet. Standard hand chain drop is 2 feet less than lift. Other lifts and hand chain drops, and 25 - 50 ton models available.
- **COMPACT AND LIGHTWEIGHT** - Designed for portability and easy installation. Compact gear housing provides low headroom.
- **EASY TO OPERATE** - Lubricated bearings and bushings, bearing mounted pinions, and heat-treated spur gearing ensure smooth and efficient operation with minimal effort.
- **SAFETY AND LOAD CONTROL** - Mechanical load brake engages instantly for precise load holding and positioning. 360° swivel hooks with safety latches for positive load engagement.
- **DURABLE** - Through hardened load chain provides added strength and wear resistance for greater chain life. Stamped steel housing withstands rugged conditions.
- **EASY TO MAINTAIN** - Designed for easy inspection and maintenance. Hoist can be dismantled easily with simple hand tools.
- **LIFETIME WARRANTY.**

SPECIFICATIONS

Capacity		Model Number	Lifts (Ft.) **	Strands of Load Chain	Minimum Headroom (In.)	Average Overhaul for 1 Ft. Lift (Ft.)	LHH Hand Chain Hoists	
Lbs.	Tons						Net Pull to Lift Rated Load (Lbs.)	Weight for 10 Ft. Lift (Lbs.)
1000	1/2	LHH-1/2	10/15/20	1	10-1/4	32	55	19
2000	1	LHH-1	10/15/20	1	11-13/16	56	53	25
3000	1-1/2	LHH-1-1/2	10/15/20	1	13-9/16	75	65	36
4000	2	LHH-2	10/15/20	1	15	75	74	45
6000	3	LHH-3	10/15/20	1	17-1/8	95	84	66
10000	5	LHH-5	10/15/20	3	22-5/8	203	79	75
16000	8	LHH-8	10/20	3	32-1/2	312.5	77	158
20000	10	LHH-10	10/20	3	32-1/2	312.5	95	158
24000	12	LHH-12	10/20	5	50-5/8	526	84	328
30000	15	LHH-15	10/20	5	50-5/8	526	103	328
40000	20	LHH-20	10	6	52-3/8	312.5 x 2 †	99 x 2 †	535
50000	25*	LHH-25	10	8	52-7/8	416.7 x 2 †	97 x 2 †	680
60000	30*	LHH-30	10	10	65	526.3 x 2 †	104 x 2 †	945
80000	40*	LHH-40	10	14	73-5/16	714.3 x 2 †	101 x 2 †	1400
100000	50*	LHH-50	10	20	77-5/8	1000 x 2 †	104 x 2 †	1840

* 25,30, 40 and 50 ton models available by special order.

** Standard lifts show. Other lifts available.

† LHH-20 through LHH-50 models have two hand chains.



LMR Aluminum Construction Low Handle Effort

- **RUGGED and LIGHTWEIGHT** - Rated loads of 3/4, 1, 1-1/2 and 3 tons, with 5-, 10-, 15- and 20-foot lifts. Unit and handle made from high strength ductile aluminum alloy. Compact design increases portability and rigging efficiency.
- **EASY and RELIABLE OPERATION** - Double reduction gearing and short handle provide lowest handle effort in the Little Mule line. Provides versatile rigging options when used in confined spaces. State-of-the-art free wheeling mechanism allows quick and easy one-handed take-up and positioning of slack chain. Meets or exceeds minimum 4:1 design factor and all requirements of ASME/ANSI Standard B-30.21. All units tested at 125% of rated load.
- **SPECIAL MODEL FEATURES** - Enclosed self-adjusting screw-and-disc type load brake stays clean and dry — eliminating drift and backlash for positive load control. 25° minimum lever stroke allows “micro-inking” load positioning. Hardened steel load chain provides high strength and resists wear. Alloy steel spur gearing is heat-treated for long life and is lifetime lubricated.

SPECIFICATIONS

Model Number	Capacity		Lift (Ft.)*	Strands of Load Chain	Minimum Distance Between Hooks (In.)	Handle Length (In.)	Average Handle Effort (Lbs.)	Net Weight (Lbs.)
	Lbs.	Tons						
LMR-1500	1500	3/4	5	1	12	12	37	15
LMR-1510	1500	3/4	10	1	12	12	37	17
LMR-1515	1500	3/4	15	1	12	12	37	19
LMR-1520	1500	3/4	20	1	12	12	37	21
LMR-2000	2000	1	5	1	13	12	49	15
LMR-2010	2000	1	10	1	13	12	49	17
LMR-2015	2000	1	15	1	13	12	49	19
LMR-2020	2000	1	20	1	13	12	49	21
LMR-3000	3000	1-1/2	5	1	14-1/2	12	41	25
LMR-3010	3000	1-1/2	10	1	14-1/2	12	41	29
LMR-3015	3000	1-1/2	15	1	14-1/2	12	41	33
LMR-3020	3000	1-1/2	20	1	14-1/2	12	41	37
LMR-6000	6000	3	5	2	17-1/2	16	61	41
LMR-6010	6000	3	10	2	17-1/2	16	61	48
LMR-6015	6000	3	15	2	17-1/2	16	61	55
LMR-6020	6000	3	20	2	17-1/2	16	61	62

CA and CB Hand Chain Hoists

COFFING CA and CB Models - Hand chain hoists set the standard for performance and durability. The CB has exclusive right angle Superoid® gearing which provides smooth chain travel and requires little maintenance. The CB is ideal for industrial lifting applications.

- **CAPACITIES and LIFT** - Rated loads from 1/2- to 12-tons. Standard 8-foot lift and 6-foot hand chain drop. Other lifts and hand chain drops available.
- **GOVERNMENT APPROVED** - All CB models except CA-1/2 meet MIL-H-904 Class 2 requirements, Type C, Style 1 or 2.
- **DURABLE** - Impact-resistant, permanent mold aluminum alloy housing provides extra strength and long service life.
- **EASY INSPECTION AND MAINTENANCE** - Easily dismantled with simple hand tools for routine inspection and maintenance.
- **OPTIONAL CAPACITY LIMITER** - Provided when specified at time of order at no extra charge.
- **LOAD CONTROL** - Fully enclosed, self-adjusting, friction-type screw and disc load brake ensures positive load control.
- **TWIN HOOK (TH Models)** - Available for 1/2- to 3-ton models. Useful for lifting long, bulky loads. Standard 3-foot space between hooks - other spacing available.
- **EXTENDED HAND WHEEL (EHW Models)** - Available for 1-1/2- to 3-ton models. Useful for dipping applications or other situations where hoist must be operated from a distance. Standard 3-foot extension - other lengths available.
- **OPTIONS** - Bullard hooks, plated hooks, plated chain, stainless steel chain, spark-resistant features, and top clevis connection available. Chain containers available.
- **LIFETIME WARRANTY.**



SPECIFICATIONS CA and CB Hand Chain Hoists

Capacity Lbs. Tons	Model	Capacity Limiter Model	Strands of Load Chain	Minimum Headroom (In.)	Hand Chain Overhaul for 1 Ft. Lift (Ft.)	Average Pull to Lift Rated Load (Lbs.)	Net Weight (Lbs.)
1000 1/2	CA-1/2*	CA-1/2-CL*	1	13-1/4	18	58	22
2000 1	CB-1	CB-1-CL	1	13-3/8	38	58	38
3000 1-1/2	CB-1-1/2	CB-1-1/2-CL	1	18-1/2	58	62	58
4000 2	CB-2	CB-2-CL	1	18-1/2	58	83	58
6000 3	CB-3	CB-3-CL	1	21-1/2	85	91	78
8000 4	CB-4	CB-4-CL	2	25-1/4	116	85	98
10000 5	CB-5	CB-5-CL	3	26-3/4	174	72	127
12000 6	CB-6	CB-6-CL	3	26-3/4	174	87	127
16000 8	CB-8	CB-8-CL	4	28-1/2	232	90	160
20000 10	CB-10	CB-10-CL	4	31	340	83	212
24000 12	CB-12	CB-12-CL	4	31	340	100	212

* Spur gear model.

SPECIFICATIONS CTH Trolley Mounted Hoists

Capacity Lbs. Tons	Model Number	Minimum Headroom (In.)	Hand Chain Overhaul for 1 Ft. Lift (Ft.)	Average Pull to Lift Rated Load (Lbs.)	Std. Beam Height (In.)	Minimum Radius Curve (In.)	Net Plain (P) (Lbs.)	Weight Geared (G) (Lbs.)
1000 1/2	CTH-1/2-P(G)*	14	18	58	6-18	48	64	71
2000 1	CTH-1-P(G)	14-3/8	38	58	6-18	48	80	87
3000 1-1/2	CTH-1-1/2-P(G)	18-3/4	58	62	6-18	48	100	107
4000 2	CTH-2-P(G)	18-3/4	58	83	6-18	48	100	107
6000 3	CTH-3-P(G)	20	85	91	6-18	48	135	142
8000 4	CTH-4-P(G)	27-1/16	116	85	8-18	**	221	228
10000 5	CTH-5-P(G)	27-3/4	174	72	8-18	**	280	287
12000 6	CTH-6-P(G)	27-3/4	174	87	8-18	**	280	287

Note: When ordering, specify "P" for plain trolley or "G" for geared trolley.

* Spur gear model.

** For Straight track only. Articulated model for 48 inch minimum radius curve track available.

CTH - Trolley Mounted Suspension

COFFING CTH Models - Featuring a CA or CB hoist integrally mounted to a CT trolley. The CTH is ideal for industrial lifting applications which require a trolley mounted hoist for horizontal movement of the load.

- **CAPACITIES and LIFT** - Rated loads from 1/2- to 6-tons in plain or geared trolley models. Standard 8-foot lift and 6-foot hand chain drop, with other lifts and hand chain drops available.
- **REDUCED HEADROOM** - Lug-mounted trolley hoist design.
- **HOIST FEATURES** - Please refer to CA and CB information above.
- **OPTIONS** - Capacity limiter available - provided when specified at time of order at no extra charge. Special trolley wheels, spark resistant features, and track clamps available.

EC Hook & Lug Suspension Models

COFFING EC Models - High performance hoists engineered for heavy-duty industrial service. Designed for safety, the EC incorporates mechanical load brake, motor brake and overload clutch as standard.

- **CAPACITIES & LIFTS** - Rated loads from 1/4 to 5 tons, with 10-, 15- and 20-foot standard lifts. Other lifts available. Standard push button drop is 4 feet less than lift.

SPECIFICATIONS

EC Hook & Lug Suspension Models

Capacity (Lb.) (Ton)	Model Number	Frame* Size	No. of Chains	Motor HP	Lift Speed (FPM)		Headroom (In.)	Housing Dimensions (In.)			Net Wt.** (Lb.)	
					Single	Two		H	W	L		
500	1/4	EC-0516	S	1	1/4	16	5.3	16-7/8	8	11-5/8	23-3/8	100
500	1/4	EC-0532	S	1	1/2	32	10.7	16-7/8	8	11-5/8	23-3/8	108
500	1/4	EC-0564	S	1	1	64	21.3	16-7/8	8	11-5/8	23-3/8	116
1000	1/2	EC-1009	S	1	1/4	9	3	16-7/8	8	11-5/8	23-3/8	104
1000	1/2	EC-1016	S	1	1/2	16	5.3	16-7/8	8	11-5/8	23-3/8	106
1000	1/2	EC-1032	S	1	1	32	10.7	16-7/8	8	11-5/8	23-3/8	118
2000	1	EC-2004	S	2	1/4	4	1.3	18-1/4	8	11-5/8	23-3/8	116
2000	1	EC-2008	S	2	1/2	8	2.7	18-1/4	8	11-5/8	23-3/8	116
2000	1	EC-2012	S	1	3/4	12	4	16-7/8	8	11-5/8	23-3/8	114
2000	1	EC-2016	S	1	1	16	5.3	16-7/8	8	11-5/8	23-3/8	118
2000	1	EC-2032	L	1	2	32	10.7	23	10-7/8	14-13/16	31-3/16	295
4000	2	EC-4006	S	2	3/4	6	2	18-15/16	8	11-5/8	23-3/8	127
4000	2	EC-4008	S	2	1	8	2.7	18-15/16	8	11-5/8	23-3/8	133
4000	2	EC-4016	L	1	2	16	5.3	23	10-7/8	14-13/16	31-3/16	295
4000	2	EC-4024	L	1	3	24	8	23	10-7/8	14-13/16	31-3/16	302
6000	3	EC-6005	S	3	1	5	1.7	23-1/4	8	12	26-3/8	200
6000	3	EC-6010	L	2	2	10	3.3	27-3/8	10-7/8	14-13/16	31-3/16	340
6000	3	EC-6016	L	2	3	16	5.3	27-3/8	10-7/8	14-13/16	31-3/16	347
8000	4	EC-8008	L	2	2	8	2.7	27-3/8	10-7/8	14-13/16	31-3/16	345
8000	4	EC-8012	L	2	3	12	4	27-3/8	10-7/8	14-13/16	31-3/16	352
10000	5	EC-10005	L	3	2	5	1.7	27-7/8	10-7/8	14-13/16	31-3/16	393
10000	5	EC-10008	L	3	3	8	2.7	27-7/8	10-7/8	14-13/16	31-3/16	393

* S= Small frame hoist, parallel mounted, single or three phase. L= Large frame hoist, cross mounted, three phase only.
** For 10 ft. lift, top hook suspension and lug suspension units.

EC Trolley Suspensions

COFFING ECT and ECMT Models - Plain and motorized trolley suspensions with all the features of basic EC models for added flexibility in a variety of applications.

- **PLAIN TROLLEY** - For manual positioning of hoist and load.
- **MOTORIZED TROLLEY** - For faster positioning of hoist and load over longer distances. 35 or 75 FPM speeds standard with

SPECIFICATIONS

EC Plain, Geared & Motorized Suspensions

Capacity (Lb.) (Ton)	Model Number	Frame* Size	Trolley† Mount	ECT Hdrm (In.)	ECMT Hdrm (In.)	Flange Width (In.)	Beam Ht. (In.)	Min. Rad. Curve (In.)	Net Wt.** (Lb.)	ECMT Net Wt. (Lb.)	
											500	1/4	EC(+)-0516	S	P	17-1/4	17-1/4	3.332 - 6	6 - 18	48	145	180
500	1/4	EC(+)-0532	S	P	17-1/4	17-1/4	3.332 - 6	6 - 18	48	153	188
500	1/4	EC(+)-0564	S	P	17-1/4	17-1/4	3.332 - 6	6 - 18	48	161	196
1000	1/2	EC(+)-1009	S	P	17-1/4	17-1/4	3.332 - 6	6 - 18	48	151	186
1000	1/2	EC(+)-1016	S	P	17-1/4	17-1/4	3.332 - 6	6 - 18	48	151	186
1000	1/2	EC(+)-1032	S	P	17-1/4	17-1/4	3.332 - 6	6 - 18	48	163	198
2000	1	EC(+)-2004	S	P	18-5/8	18-5/8	3.332 - 6	6 - 18	48	161	196
2000	1	EC(+)-2008	S	P	18-5/8	18-5/8	3.332 - 6	6 - 18	48	161	196
2000	1	EC(+)-2012	S	P	17-1/4	17-1/4	3.332 - 6	6 - 18	48	158	194
2000	1	EC(+)-2016	S	P	17-1/4	17-1/4	3.332 - 6	6 - 18	48	163	198
2000	1	EC(+)-2032	L	C	21-9/16	22-1/4	3.332 - 6	6 - 18	48	347	375
4000	2	EC(+)-4006	S	P	19-5/16	19-5/16	3.332 - 6	6 - 18	48	172	207
4000	2	EC(+)-4008	S	P	19-5/16	19-5/16	3.332 - 6	6 - 18	48	178	213
4000	2	EC(+)-4016	L	C	21-9/16	22-1/4	3.332 - 6	6 - 18	48	347	375
4000	2	EC(+)-4024	L	C	21-9/16	22-1/4	3.332 - 6	6 - 18	48	354	362
6000	3	EC(+)-6005	S	P	23-1/4	24	3.332 - 6	6 - 18	48	260	320
6000	3	EC(+)-6010	L	C	26	26-5/8	3.332 - 6	6 - 18	48	396	424
6000	3	EC(+)-6016	L	C	26	26-5/8	3.332 - 6	6 - 18	48	403	431
8000	4	EC(+)-8008	L	C	25-15/16	26-3/4	4 - 6	8 - 18	***	520	560
8000	4	EC(+)-8012	L	C	25-15/16	26-3/4	4 - 6	8 - 18	***	527	567
10000	5	EC(+)-10005	L	C	29-3/4	30-5/8	4 - 6	8 - 18	***	561	599
10000	5	EC(+)-10008	L	C	29-3/4	30-5/8	4 - 6	8 - 18	***	568	606

† Specify ECT for plain trolley and ECMT for motorized trolley models.

* S= Small frame hoist, single or three phase. L= Large frame hoist, three phase only.

† P= Parallel mount, standard on small frame hoists. C= Cross mount, standard on large frame hoists.

** Weight for 10 ft. lift ECT units.

*** 4 and 5 ton straight track only. Articulated model 48" min. radius curved track available.

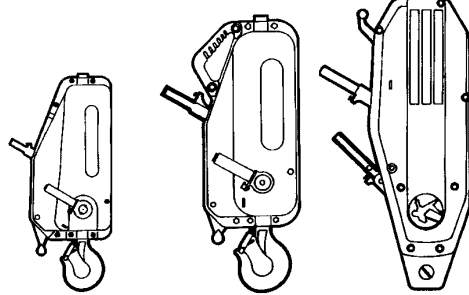


- **VOLTAGE & MOTOR OPTIONS** - 115/230, 208 - single phase; 230/460, 208, 220/380, 575 - three phase. 60 hertz standard, 50 hertz available. Two-speed motors available (3 to 1 speed ratio).
 - **SUSPENSION OPTIONS** - Rigid or swivel top hook, lug, plain, geared and motorized trolley available.
 - **SMALL FRAME DESIGN** - Features housings of cast aluminum alloy construction for minimum weight. Engineered and designed for use with motors up to 1 HP.
 - **LARGE FRAME DESIGN** - Features load bearing housings of ductile iron construction for maximum strength. Non-load bearing housings of cast aluminum alloy for minimum weight. Engineered and designed for use with higher torque 2 and 3 HP three phase motors.
 - **DURABLE CONSTRUCTION** - Built in compliance with ASME/ANSI B30.16 and CSA standards.
- optional speeds of 18, 24, 50, 100 and 150 FPM.
- **VOLTAGES** - 115/230, 208 - single phase; 230/460, 208, 220/380, 575 - three phase. 60 hertz standard, 50 hertz available.
 - **TWO-SPEED MOTORIZED TROLLEY MODELS** - Optional with 3 to 1 speed ratio, three-phase, single voltage only.
 - **WRAP-AROUND SIDE PLATES** - Act as safety lugs and as bumpers to protect wheels. Available to fit American Standard I-Beams, wide flange, and patented track beams. Specify track type and beam size.
 - **PRECISION TROLLEY WHEELS** - Machined, cast iron wheels with sealed, lifetime lubricated ball bearings for extended trolley life. Motorized trolley wheels heat treated for added durability. Bronze and stainless steel wheels optional.
 - **TWO TROLLEY DESIGNS** - 4-wheel design on 1/4 - 3 ton negotiates 48" minimum radius curve, including patented track applications. 8-wheel design on 4 and 5 ton reduces beam flange stress.

The TU and T-500 ranges of versatile **GRIPHOIST-TIRFOR** lifting and pulling machines are safe, reliable and efficient. Suitable for many applications, **GRIPHOIST-TIRFOR** machines are lever operated hoists using a separate wire rope. One-man operated, using a telescopic operating handle, they can work in any position and over any height of lift. They can replace conventional winches and other hoists for many applications.

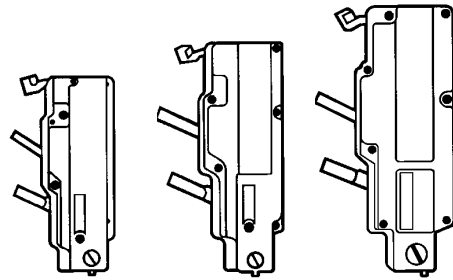
TU Range

materials handling and manriding

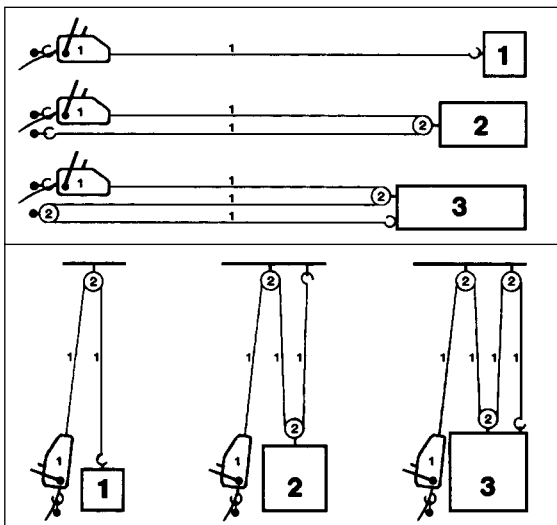


light-duty range

only for materials handling

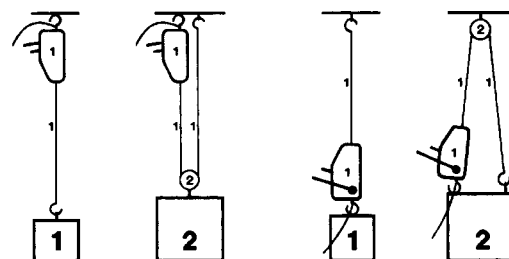


Item #	TU-17	TU-28	TU-32	T-508	T-516	T-532
Approx. speed	7-9 ft./min.	7-8 ft./min.	5 ft./min.	7-9 ft./min.	6 ft./min.	6 ft./min.
Nominal Capacity for Material Handling	2000 lbs.	4000 lbs.	8000 lbs.	2000 lbs.	4000 lbs.	8000 lbs.
Capacity for Manriding	1500 lbs./600kg	3000 lbs./1200kg	6000 lbs./2400kg			
Machine Weight	18.5 lbs.	41 lbs.	59.5 lbs.	14.25 lbs.	30 lbs.	51 lbs.
Wire Rope Weight	8 lbs.	28.9 lbs.	8 lbs.	8 lbs.	28.9 lbs.	8 lbs.
Wire Rope Length	30 ft.	60 ft.	30 ft.	30 ft.	60 ft.	30 ft.
Machine Dimensions Inches	20-3/4 x 9-3/4 x 4-1/2	26 x 13 x 5-3/4	27 x 13 x 6-1/8	16-1/2 x 9-7/8 x 3-7/8	20-7/8 x 12-7/16 x 5	24-7/16 x 14 x 5-1/8
Handle Extended Length	28 inches	45 inches	45 inches	27 inches	45 inches	45 inches
Handle Closed Length	18 inches	26 inches	26 inches	16 inches	26 inches	26 inches
Wire Rope Diameter	5/16 inches	7/16 inches	5/8 inches	5/16 inches	7/16 inches	5/8 inches
Wire Rope Break Strain	10000 lbs.	20000 lbs.	40000 lbs.	10000 lbs.	20000 lbs.	40000 lbs.



Increase the capacity of the GRIPHOIST-TIRFOR

The lifting and pulling power of GRIPHOIST-TIRFOR winches can be greatly increased by the use of multiple sheave blocks. These can increase the nominal capacity of the GRIPHOIST-TIRFOR machine by 2, 3 or 4 times or more. For most applications, an allowance must be made for friction in the sheaves. Ensure that the capacity of the blocks, fittings and anchor points are suitable for the load. When using the GRIPHOIST-TIRFOR for pulling purposes it should be remembered that the necessary pulling effort is not equal to the weight of the load to be moved. It should be calculated.



Spur Gear Hand Winches

- **Machine Cut Spur Gears** for accurate and long lasting service.
- **Automatic Brake Models** provide positive load control for lifting and lowering operations. Just add PB to the model number.
- **Corrosion Resistant** durable paint finish combined with zinc and iridescent dichromate plated finish protects against corrosion in harsh environments.
- **Bronze and Radial Ball Bearings** provide smooth and efficient operation.
- **Large Diameter Drums** minimize wear to extend wire rope life.
- **Steel Gear Covers** protect gears and help prevent injuries.
- **Stainless Steel Models Available** for harsh environments, models up to 2000 lb. capacity. Stainless steel models are electro-polished for added corrosion resistance.
- **Quick Disconnect Anchor** for quickly attaching or removing wire rope equipped with a swaged ball fitting, models up to 2,000 lb. capacity.
- **Spring Loaded Ratchets** for positive engagement with gear.
- **Handles Adjust** in length to change force required to move load, models up to 10,000 lb. capacity.
- **Two-year Limited Warranty.**

Spur Gear Hand Winches up to 2000 lb. capacity – Configurations and Performance Characteristics

model number	description	load rating (lb.)			wire rope dia. (in.)	drum capacity (ft) ¹			single gear ratio	double gear ratio	force ² to lift 1000 lb.	approx. ship wt. (lb)
		1st layer	mid drum	full drum		1st layer	mid drum	full drum				
M401	500 lb. – marine duty (for pulling only)	500	400	300	1/8 3/16	7 4	60 27	130 60	—	—	—	8
M4022	1000 lb. – marine duty (for pulling only)	1000	700	500	1/8 3/16	4 3	52 26	130 57	2.85:1	—	40 lb.	12
M4032	1000 lb. – marine duty (for pulling only)	1000	700	500	1/8 3/16	11 7	110 51	250 110	2.85:1	—	40 lb.	14
M4312	2000 lb. – marine duty (for pulling only)	2000	1600	1200	3/16 1/4 5/16	8 5 4	48 27 17	110 59 39	3.83:1	14.7:1	20 lb. (double gear)	23
M4412	2000 lb. – marine duty (for pulling only)	2000	1600	1200	3/16 1/4 5/16	18 14 11	97 52 35	210 120 77	3.83:1	14.7:1	20 lb. (double gear)	25

Model M4042PBSS



Model M4312

¹ Actual drum capacities may be 25-30% less, due to nonuniform winding. Wire rope tension will also affect drum capacity.
² Approximate handle force required to lift 1000 lb. with an empty drum, and maximum handle length.
 Above model available with brake (for lifting). Just add **PB** to the model number.
 Stainless steel models available (for lifting): Model 4042PBSS 1000 lb. and Model 4312PBSS 2000 lb.
 Please contact Wharton Hardware and Supply for firm fixed price and delivery.

Spur Gear Hand Winches up to 10,000 lb. capacity– Configurations and Performance Characteristics

model number	description	load rating (lb.)			wire rope dia. (in.)	drum capacity (ft) ¹			single gear ratio	double gear ratio	force ² to lift 1000 lb.	approx. ship wt. (lb)
		1st layer	mid drum	full drum		1st layer	mid drum	full drum				
M452	4000 lb. – marine duty (for pulling only)	4000	3300	2500	1/4 5/16 3/8	23 18 14	130 89 64	300 200 140	4.42:1	19.54:1	10 lb. (double gear)	83
M492	10,000 lb – marine duty (for pulling only)	10,000	7400	5400	5/16 3/8 1/2	27 21 15	240 170 100	540 390 230	5.00:1	25.00:1	8 lb. (double gear)	166
M492-12	10,000 lb – marine duty (for pulling only) 12 inch drum width	10,000	7400	5400	5/16 3/8 1/2	46 37 27	380 270 160	850 610 360	5.00:1	25.00:1	8 lb. (double gear)	175
MB451	disc brake only for M452 (for lifting)											13
MB491	disc brake only for M492 and M492-12 (for lifting)											15
HW452	hand wheel only for M452 (for pulling only)											19
HW492	hand wheel only for M492 and M492-12 (for pulling only)											20

¹ Actual drum capacities may be 25-30% less, due to nonuniform winding. Wire rope tension will also affect drum capacity.
² Approximate handle force required to lift 1000 lb. with an empty drum, and maximum handle length.
 Above models available with brake. Add **B** to the number to indicate model with brake (for lifting).
 Model M452 available with 4 inch drum width (M452B-A).
 Please contact Wharton Hardware and Supply for firm fixed price and delivery.



Model M452B

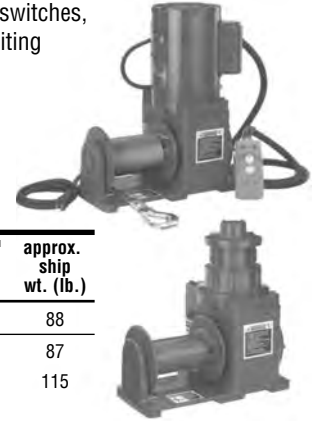


Model M492

Series 477 Helical/Worm Gear Power Winches – Up to 2000 lb. capacity

- **Machine Cut Worm Gears** for accurate and long lasting service.
- **Enclosed Oil Bath** provides continuous lubrication of gears to minimize wear. Oil seals keep oil in and dirt out.
- **Internal Mechanical Brake** provides positive load control.
- **Cast Aluminum** construction for lightweight strength, with durable paint finish to resist corrosion.
- **Ball Bearings** ensure smooth and efficient operation.
- **Series 4777** is designed with a 4-inch wide drum for tight fleet angle installations.
- **Accessory Options** include limit switches, cable pressure plates, torque limiting controls, and manual overrides.
- **Wire Rope** sold separately.
- **Two-year Limited Warranty.**

Model 4771 shown with wire rope



Model 4771PN

Series 477 – Configurations and Performance Characteristics

model number	motor description	motor hp	amps full load	load rating (lb.)			wire rope dia.(in.)	line speed (fpm)			drum capacity (ft.) ¹			approx. ship wt. (lb.)
				1st layer	mid drum	full drum		1st layer	mid drum	1st layer	mid drum	full drum		
4771 ²	115/1/60 VAC - 6 ft. pendant	1.2	16	2000	1500	1200	5/16	13	22	13	40	90	88	
4771AC-1PH	115/1/60 VAC - less controls	1.2	16	2000	1500	1200	5/16	13	22	13	40	90	87	
4771AC-1PH2	115/230/1/60 VAC - less controls	1.5	16/8	2000	1500	1200	5/16	13	22	13	40	90	115	
4771AC-3PH ⁴	230/460/3/60 VAC - less controls	1.5	5/2.5	2000	1500	1200	5/16	13	22	13	40	90	111	
4771DC ⁵	12 VDC - with 10 ft. pendant	1.0	100	2000	1500	1200	5/16	13	22	13	40	90	105	
4771PN ^{5,6}	pneumatic - less controls	1.2		2000	1500	1200	5/16	13	22	13	40	90	70	
4771HY ^{5,6}	hydraulic - less controls	2.3		2000	1500	1200	5/16	13	22	13	40	90	72	
4777 ²	115/1/60 VAC - 6 ft. pendant	1.2	16	2000	1500	1200	5/16	13	22	7	27	60	93	
4777DC ⁵	12 VDC - with 10 ft. pendant	1.0	100	2000	1500	1200	5/16	13	22	7	27	60	105	

1 Actual drum capacities may be 25-30% less, due to nonuniform winding. Wire rope tension will also affect drum capacity.
 2 Motor includes an 8 ft. power cord with grounded plug, and a push button pendant control on 6 ft. cord.
 4 For Model 4771AC-3PH, please specify voltage when ordering.
 5 For pneumatic, hydraulic and DC models, line speed is based on rated load, actual line speed varies with load weight and power supply.
 6 For Model 4771PN, ratings are for 80 cfm at 100 psi. For Model 4771HY, ratings are for 4 gpm at 1000 psi.
 Please contact Wharton Hardware for firm fixed price and delivery.

Series 4WS Worm/Spur Gear Power Winches

- **Modular Design** allows us to make-to-order each winch to meet your exact needs.
- **Standard Features** include TEFC brake motors, enclosed machine cut gearing and flange style ball bearings.
- **Custom Modifications** available include grooved drums, special drum lengths and diameters, limit switches, roller pressure bars and special finishes. Pneumatic, hydraulic and alternate motor voltages are also available.
- **Two-year warranty.**

Series 4WS Electric – Configurations and Performance Characteristics

When ordering, please indicate Model Number and Extensions.
 Examples: 4WS1M6-1100-20-A (without clutch); 4WS1M6-1100-20-A-C (with clutch)

model number	model load rating	number line speed	extensions motor codes	clutch option	motor hp	load rating (lb.)			wire rope dia.(in.)	line speed (fpm)			drum capacity (ft.) ¹			approx. ² ship wt.(lb.)
						1st layer	mid drum	full drum		1st layer	mid drum	1st layer	mid drum	full drum		
4WS1M6	800	40	A, B, D, E, F	C	1	800	550	420	3/16	43	82	21	110	260	175	
4WS1M6	1100	40	D, E, F	C	1.5	1100	800	600	1/4	44	81	16	62	140	170	
4WS1M6	1500	40	B, D, E, F	C	2	1500	1100	800	1/4	44	81	16	62	140	180	
clutch option for 4WS1M6 (for horizontal pulling only)													add:	5		
4WS3M10	2000	20	D, E, F	C	1.5	2200	1400	1000	5/16	18	39	34	220	500	305	
4WS3M10	2500	20	B, D, E, F	C	2	2500	1600	1200	3/8	22	46	27	160	360	320	
4WS3M10	3000	20	B, D, E, F	C	2	3000	2000	1500	3/8	19	39	27	160	360	320	
4WS3M10	3500	20	D, E, F	C	3	3700	2500	1800	7/16	23	46	23	120	270	330	
clutch option for 4WS3M10 (for horizontal pulling only)													add:	8		
4WS6M12	3000	20	B, D, E, F	C	2	3100	2000	1500	3/8	20	42	40	300	660	530	
4WS6M12	4000	20	D, E, F	C	3	4000	2500	1900	7/16	24	50	34	220	500	540	
4WS6M12	6000	20	D, E, F	C	5	6400	4200	3100	9/16	24	50	26	140	310	585	
clutch option for 4WS6M12 (for horizontal pulling only)													add:	12		

1 Actual drum capacities may be 25-30% less, due to nonuniform winding. Wire rope tension will also affect drum capacity.
 2 Weight may vary with motor.
 Please contact Wharton Hardware for firm fixed price and delivery.



Wire rope assemblies and controls sold separately

Series 5122 Portable Davit Cranes

Crane Model

- **Adjustable Boom** with 2 different positions for operation.
- **Crane Rotates 360°** in a sleeve bearing in the base.
- **Crane** folds down for storage or transport.

Winch Models

- **Hand Winch Operation** with spur gear hand winch equipped with automatic disc brake for load control.
- **Quick Disconnect Anchor** for quickly attaching or removing wire rope equipped with a swaged ball fitting.

Optional Finishes

- **Galvanized Finish** provides extra protection against corrosion.
- **Stainless Steel Models** are constructed from all stainless steel with an electro-polished finish for superior corrosion resistance.

1 Base Model 5122

base model	description	approx. ship wt.
5122 ¹	up to 500 lb. - portable davit	54 lb.

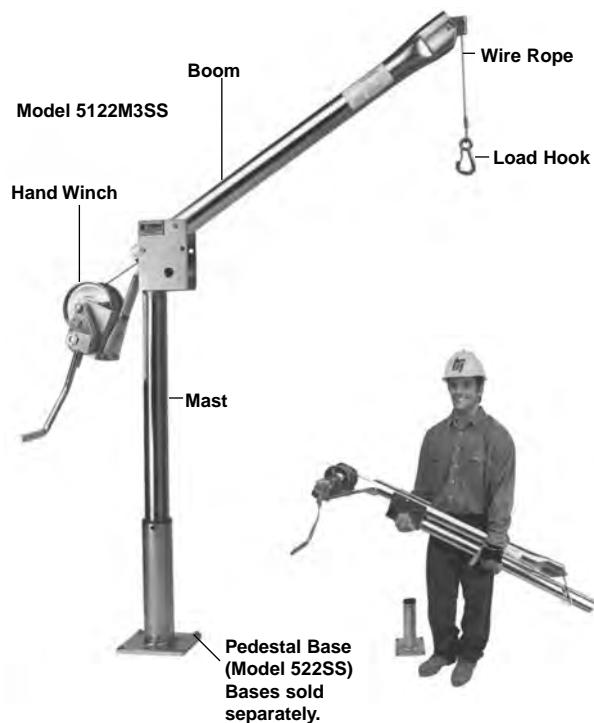
¹ Base Model includes corrosion resistant electrostatic powder coated finish. Other finishes available.

2 Winch Options

winch	description	approx. ship wt.
M1	M4022PB-K – zinc plated spur gear hand winch	17 lb.
M3	M4042PBSS-K – stainless steel spur gear hand winch	24 lb.

3 Optional Finish (crane only)

finish	description
GAL	galvanized finish – crane only
SS	stainless steel construction – crane only



Independent Bases

base	description	approx. ship wt.
522	pedestal/socket base – powder coat finish (upright or flush mount)	18 lb.
522GAL	pedestal/socket base – galvanized finish (upright or flush mount)	18 lb.
522SS	pedestal/socket base – stainless steel (upright or flush mount)	18 lb.
522W	wall mount base – powder coat finish	21 lb.
522WGAL	wall mount base – galvanized finish	21 lb.
522SSW	wall mount base – stainless steel	21 lb.
514	wheel base – enamel finish	80 lb.

Series 5122 Performance Characteristics

wire rope dia. (in.)	wire rope length (ft.)	5122 Series with M1 winch		5122 Series with M3 winch		lift below floor level (min – max) ¹
		load rating position A	load rating position B	load rating position A	load rating position B	
3/16 in	20	500 lb.	500 lb.	500 lb.	500 lb.	9 - 10 ft.
3/16 in	28	500 lb.	500 lb.	500 lb.	500 lb.	17 - 18 ft.
3/16 in	36	500 lb.	500 lb.	500 lb.	500 lb.	25 - 26 ft.
3/16 in	45	500 lb.	500 lb.	500 lb.	500 lb.	34 - 35 ft.
3/16 in	60	-	-	500 lb.	500 lb.	49 - 50 ft.
3/16 in	75	-	-	500 lb.	500 lb.	64 - 65 ft.

¹ Lift below floor level varies depending on boom position and base configuration. For longer lifts, please contact factory.



SERIES 2100

CONTRACTOR LIFTS

- 12', 18' and 24' heights (4.0m, 5.6m and 7.3m).
- 650 lb. capacity (300kg).
- Rolls through standard doorways and tail gates.
- Loading Bar – great for overhead cranes.
- Reversible forks.
- Plunger pins for quick readjustment and compact storage.
- No tools needed – no loose parts.
- Variety of attachments.
- Large 7/32" (5.5mm) load cable.
- Lockable, 5" polyurethane casters.
- Load cable feeds inside mast (no more exposed cable just inches away from operator's face).

This compact lift offers stronger mast design and a superior cabling system. The shorter mast sections allow the 2100 to travel through doorways without tipping and to fit nicely into vehicles with small storage space.



Sumner-built Winch
– Highly reliable, single-speed winch uses idler roller to feed four rollers to feed cable evenly on the drum to avoid cable flats.



10" Rough Terrain Wheels – Makes loading a truck or van hassle free (optional on Series 2000 Lifts).



Fast Action Stabilizer Legs – Mounted on base top, stabilizer legs fold down with ease and lock in place. The 2118 and 2124 models come with stabilizer legs (optional on models 2010, 2015, and 2112).



Lockable 5" Casters – Hard tread urethane wheels with Delrin[®] bearings.

Great all around contractor lift.

Ideal for compact storage – No tools or loose hardware to worry about. Leg lock mechanism releases with the push of a button and locks in the stored position. Leg rollers allow lift to be wheeled around. Forks remove by pulling plunger pins.



Reversible Forks – By pulling plunger pins, forks can be repositioned for added height or just to get flush with the ceiling.

Roller Wheels
– Helps to roll into trucks or vans.

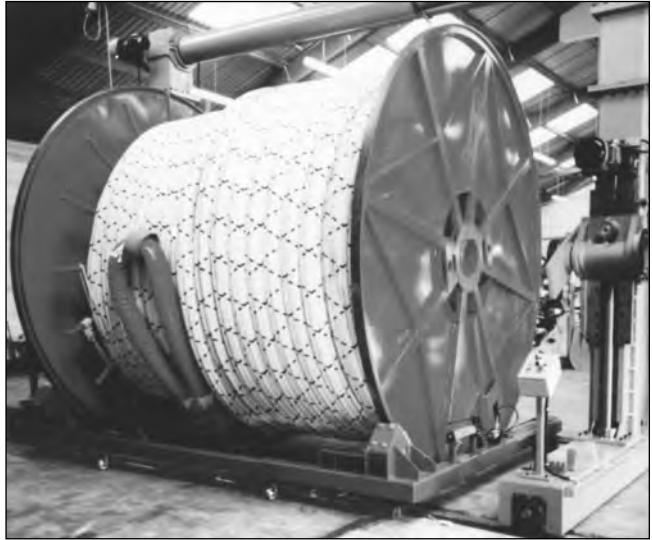


Series 2100 Contractor Lift Specifications

Dimensions	2112		2118		2124	
Height - stowed	84.0"	2.13m	84.0"	2.13m	84.0"	2.13m
Length - stowed	34.0"	0.86m	34.0"	0.86m	34.0"	0.86m
Height - operating	84.0"	2.13m	84.0"	2.13m	84.0"	2.13m
Length - operating	62.0"	1.57m	73.0"	1.84m	73.0"	1.84m
Base width	31.25"	0.80m	31.25"	0.80m	31.25"	0.80m
Width with stabilizer legs	74.0"	1.88m	74.0"	1.88m	74.0"	1.88m
Ground clearance	2.5"	6.4cm	2.5"	6.4cm	2.5"	6.4cm
Load height (min.)	6.0"	15.2cm	6.0"	15.2cm	6.0"	15.2cm
Max. height (forks down)	11'1"	3.4m	16'5"	5.0m	22'1"	6.7m
Max. height (forks reversed)	13'1"	4.0m	18'6"	5.6m	23'1"	7.3m

Part No.	Description	Max. Height		Lifting Capacity		Lift Weight		Ship. Wgt.	
		Feet	Meter	Lb.	Kg	Lb.	Kg	Lb.	Kg
783650	2112 Contractor Lift	13'1"	4.0	650	300.0	252	114.5	287	130.5
783651	2118 Contractor Lift	18'6"	5.6	650	300.0	321	145.9	356	161.8
783652	2124 Contractor Lift	23'11"	7.3	650	300.0	366	166.0	399	181.4

Kits and Sets - Light Duty

Kits and Sets - FT Deluxe

FT Light Duty Kits

Hilman Deluxe Kits are ideal for all kinds of heavy equipment moving, machinery installation and maintenance. Kits include everything needed to make those heavy moves: (4) professional quality swivel padded Rollers, (2) full-length steering handles in a sturdy, (1) heavy gauge steel storage case.

Easy and safe to use! Just lift the load, set the Rollers, and move. The recirculating chains on the Hilman Rollers provide controllable heavy moving directly on ordinary concrete floors. These Kits, which feature swivel padded tops, allow equipment positioning in the tightest quarters.

Model No.	Metric Ton Capacity	Contents	Weight
KRS-3-4S	3 Tons	4 - .75-Ton capacity with SP style top 2 - Steering handles 1 - Steel storage case	56 lbs. (25kg)
KRS-8-4S	8 Tons	4 - 2-Ton capacity with SP style top 2 - Steering handles 1 - Steel storage case	86 lbs. (39kg)


FT Light Duty Sets

Hilman Deluxe Sets are ideal for all kinds of heavy equipment moving, machinery installation and maintenance. Sets include everything needed to make those heavy moves.

Easy and safe to use! Just lift the load, set the Rollers, and move. The recirculating chains on the Hilman Rollers provide controllable heavy moving directly on ordinary concrete floors. These Sets, which feature swivel padded tops, allow equipment positioning in the tightest quarters.

Model No.	Metric Ton Capacity	Contents	Weight
RS-3-4S	3 Tons	4 - .75-Ton capacity with SP style top 2 - Steering handles	43 lbs. (19kg)
RS-8-4S	8 Tons	4 - 2-Ton capacity with SP style top 2 - Steering handles	73 lbs. (33kg)



FT Deluxe Kits

Hilman Deluxe Kits are ideal for all kinds of heavy equipment moving, machinery installation and maintenance. Kits include everything needed to make those heavy moves: (4) professional quality swivel-locking Rollers, (2) full-length steering handles and (1) heavy gauge steel storage case.

Easy and safe to use! Just lift the load, set the Rollers, and move. The recirculating chains on the Hilman Rollers provide controllable heavy moving directly on ordinary concrete floors. Fully directional swivel tops allow equipment positioning in the tightest quarters. Kits are available with your choice of swivel-locking padded Rollers or Rollers with swivel-locking diamond steel grid tops and loose Preload Pads.



Model No.	Metric Ton Capacity	Contents	Weight
KRS-15- SLP	15 Tons	4 - 3.75 Ton capacity SLP rollers 2 - Steering handles 1 - Steel storage case	196 lbs. (89kgs.)
KRS-15- SLD	15 Tons	4 - 3.75 Ton capacity SLD rollers 4 - Preload Pads 2 - Steering handles 1 - Steel storage case	196 lbs. (89kgs.)
KRS-30-SLP	30 Tons	4 - 7.5 Ton capacity SLP rollers 2 - Steering handles 1 - Steel storage case	208 lbs. (94kgs.)
KRS-30-SLD	30 Tons	4 - 7.5 Ton capacity SLD rollers 4 - Preload Pads 2 - Steering handles 1 - Steel storage case	208 lbs. (94kgs.)
KRS-40-SLP	40 Tons	4 - 10 Ton capacity SLP rollers 2 - Steering handles 1 - Steel storage case	212 lbs. (96kgs.)
KRS-40-SLD	40 Tons	4 - 10 Ton capacity SLD rollers 4 - Preload Pads 2 - Steering handles 1 - Steel storage case	212 lbs. (96kgs.)
KRS-60-SLP	60 Tons	4 - 15 Ton capacity SLP rollers 2 - Steering handles 1 - Steel storage case	248 lbs. (112kgs.)
KRS-60-SLD	60 Tons	4 - 15 Ton capacity SLD rollers 4 - Preload Pads 2 - Steering handles 1 - Steel storage case	252 lbs. (114kgs.)

FT Deluxe Sets

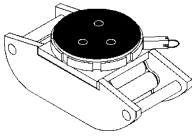
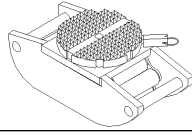
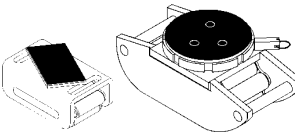
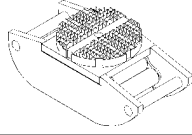
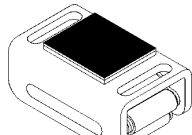
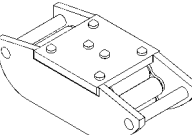
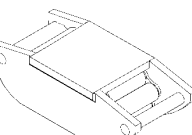
Hilman Deluxe Sets are ideal for all kinds of heavy equipment moving, machinery installation and maintenance. Sets include everything needed to make those heavy moves.

Easy and safe to use! Just lift the load, set the Rollers, and move. The recirculating chains on the Hilman Rollers provide controllable heavy moving directly on ordinary concrete floors. Fully directional swivel tops allow equipment positioning in the tightest quarters. Sets are available with your choice of swivel-locking padded Rollers or Rollers with swivel-locking diamond steel grid tops and loose Preload Pads.



Model No.	Metric Ton Capacity	Contents	Weight
RS-15- SLP	15 Tons	4 -3.75 Ton capacity SLP rollers 2 - Steering handles	158 lbs. (72kgs.)
RS-15- SLD	15 Tons	4 -3.75 Ton capacity SLD rollers 4 - Preload Pads 2 - Steering handles	158 lbs. (72kgs.)
RS-30-SLP	30 Tons	4 - 7.5 Ton capacity SLP rollers 2 - Steering handles	170 lbs. (77kgs.)
RS-30-SLD	30 Tons	4 - 7.5 Ton capacity SLD rollers 4 - Preload Pads 2 - Steering handles	170 lbs. (77kgs.)
RS-40-SLP	40 Tons	4 - 10 Ton capacity SLP rollers 2 - Steering handles	174 lbs. (79kgs.)
RS-40-SLD	40 Tons	4 - 10 Ton capacity SLD rollers 4 - Preload Pads 2 - Steering handles	174 lbs. (79kgs.)
RS-60-SLP	60 Tons	4 - 15 Ton capacity SLP rollers 2 - Steering handles	210 lbs. (95kgs.)
RS-60-SLD	60 Tons	4 - 15 Ton capacity SLD rollers 4 - Preload Pads 2 - Steering handles	214 lbs. (97kgs.)
RS-120-SLP	120 Tons	4 - 30 Ton capacity SLP rollers 2 - Steering handles	542 lbs. (246kgs.)
RS-120-SLD	120 Tons	4 - 30 Ton capacity SLD rollers 4 - Preload Pads 2 - Steering handles	538 lbs. (244kgs.)
RS-200-SLP	200 Tons	4 - 50 Ton capacity SLP rollers 2 - Steering handles	834 lbs. (378kgs.)
RS-200-SLD	200 Tons	4 - 50 Ton capacity SLD rollers 4 - Preload Pads 2 - Steering handles	846 lbs. (384kgs.)

Individual Roller Specifications: .75- to 50-Ton Capacity

Roller Top Style	Capacity Tons	Model Number	Height		Width		Length		Weight		Contact Rolls	
			In.	mm	In.	mm	In.	mm	Lbs.	Kgs		
Swivel Locking Padded 	3.75	3.75-SLP	5	127	5-3/4	146	10-1/2	267	34	15	5	
	7.5	7.5-SLP	5-1/4	133	5-3/4	146	10-1/2	267	37	17	5	
	10	10-SLP	5-1/4	133	5-3/4	146	10-1/2	267	38	17	5	
	15	15-SLP	5-1/8	130	5-3/4	146	12-3/4	324	47	21	5	
	30	30-SLP	8	203	8	203	15	381	123	56	5	
	50	50-SLP	8-15/16	227	8	203	21	533	196	89	7	
Swivel Locking Diamond 	3.75	3.75-SLD	4-3/4	121	5-3/4	146	10-1/2	267	33	15	5	
	7.5	7.5-SLD	5	127	5-3/4	146	10-1/2	267	36	16	5	
	10	10-SLD	5	127	5-3/4	146	10-1/2	267	37	17	5	
	15	15-SLD	4-7/8	124	5-3/4	146	12-3/4	324	47	21	5	
	30	30-SLD	7-1/8	181	8	203	15	381	120	54	5	
	50	50-SLD	8-1/16	205	8	203	21	533	197	89	7	
Swivel Padded 	.75	.75-SP	3-5/16	84	3-5/8	92	6-1/2	165	9	4	5	
	2	2-SP	3-15/16	100	4-1/8	105	6-1/2	165	15	7	4	
	3.75	3.75-SP	5	127	5-3/4	146	10-1/2	267	33	15	5	
	7.5	7.5-SP	5-1/4	133	5-3/4	146	10-1/2	267	37	17	5	
	10	10-SP	5-1/4	133	5-3/4	146	10-1/2	267	38	17	5	
	15	15-SP	5-1/8	130	5-3/4	146	12-3/4	324	47	21	5	
	30	30-SP	8	203	8	203	15	381	119	54	5	
	50	50-SP	8-15/16	227	8	203	21	533	197	89	7	
	Swivel Diamond 	3.75	3.75-SD	4-3/4	121	5-3/4	146	10-1/2	267	33	15	5
		7.5	7.5-SD	5	127	5-3/4	146	10-1/2	267	36	16	5
10		10-SD	5	127	5-3/4	146	10-1/2	267	37	17	5	
15		15-SD	4-7/8	124	5-3/4	146	12-3/4	331	46	21	5	
30		30-SD	7-1/8	181	8	203	15	381	120	54	5	
50		50-SD	8-1/16	205	8	203	21	534	196	89	7	
Rigid Padded 	.75	.75-RP	3	76	3-5/8	92	6-1/2	165	9	4	5	
	2	2-RP	3-9/16	90	4-1/8	105	6-1/2	165	15	7	4	
	3.75	3.75-RP	4-1/8	105	5-3/4	146	10-1/2	267	30	14	5	
	7.5	7.5-RP	4-7/16	113	5-3/4	146	10-1/2	267	32	15	5	
	10	10-RP	4-7/16	113	5-3/4	146	10-1/2	267	35	15	5	
	15	15-RP	4-1/4	108	6-3/8	162	12-3/4	324	42	19	5	
	30	30-RP	6-3/4	171	8	203	15	381	106	48	5	
50	50-RP	7-3/4	197	8	203	21	533	182	83	7		
Rigid Diamond 	3.75	3.75-RD	4*	102	5-5/8	143	10-1/2	267	29	13	5	
	7.5	7.5-RD	4-1/4*	108	5-5/8	143	10-1/2	267	32	15	5	
	10	10-RD	4-1/4*	108	5-5/8	143	10-1/2	267	33	15	5	
	15	15-RD	4-3/32*	104	6-3/8	162	12-3/4	324	41	19	5	
	30	30-RD	6-1/8*	156	8	203	15	381	104	47	5	
	50	50-RD	7-1/8*	181	8	203	21	533	182	83	7	
Rigid Smooth 	.75	.75-RS	2-3/4	70	3-5/8	92	6-1/2	165	9	4	5	
	2	2-RS	3-1/4	83	4-1/8	105	6-1/2	165	15	7	4	
	3.75	3.75-RS	3-5/8	92	5-5/8	143	10-1/2	267	29	13	5	
	7.5	7.5-RS	3-7/8	98	5-5/8	143	10-1/2	267	32	15	5	
	10	10-RS	3-7/8	98	5-5/8	143	10-1/2	267	33	15	5	
	15	15-RS	3-13/16	97	6-3/8	162	12-3/4	324	42	19	5	
	30	30-RS	5-3/4	146	8	203	15	381	104	47	5	
	50	50-RS	6-3/4	171	8	203	21	533	181	82	7	

*Measurement to top of spike


HILMAN Tri-Glide System

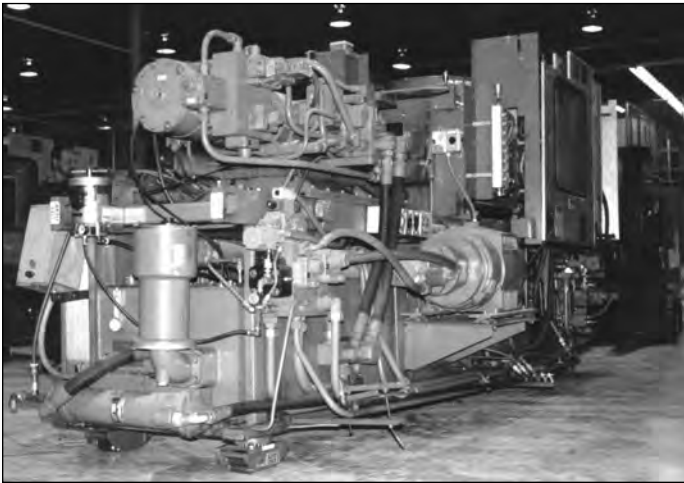
The HILMAN Tri-Glide System is a 3-Point Heavy Moving System that is both lightweight and low in height. Less than 4" high, it keeps the load center of gravity low and, therefore, is very safe to use.

Tri-Glides are available in three types of wheels—nylon, polyurethane and steel.

Toe Jacks

Hilman Toe Jacks allow you to get under and lift equipment with just over 1" of ground clearance. Since there are lifting points on both the toe and the top of the Jack, these are the perfect complement to Hilman Rollers.



Kits and Sets – Nytron

**The Chain Action
Roller with Floor
Protection**
**High Impact
Nylon Roll
Material**
Nytron Kits

Need to move heavy equipment on new, painted or special floors? Hilman Nytron Roller Kits are ideal. The chain rolls are made of a high impact Nylon that is forgiving to special floors. To further protect floors, all Nytron Roller tops are padded. This helps to insure that the entire chain footprint contacts the floor. Everything needed to roll heavy equipment in showrooms, laboratories, schools and modern factories is included in the Deluxe Nytron Kit.



Model No.	Metric Ton Capacity	Contents	Weight
KNRS-2-4S	2 Tons	4 - .5 Ton capacity rollers with SP style top 2 - Steering handles 1 - Steel storage case	47 lbs. (21kgs.)
KNRS-4-4S	4 Tons	4 - 1 Ton capacity rollers with SP style top 2 - Steering handles 1 - Steel storage case	71 lbs. (31kgs.)
KNRS-8-SLP	8 Tons	4 - 2 Ton capacity rollers with SLP style top 2 - Steering handles 1 - Steel storage case	172 lbs. (78kgs.)
KNRS-12-SLP	12 Tons	4 - 3 Ton capacity rollers with SLP style top 2 - Steering handles 1 - Steel storage case	176 lbs. (78kgs.)
KNRS-24-SLP	24 Tons	4 - 6 Ton capacity rollers with SLP style top 2 - Steering handles 1 - Steel storage case	196 lbs. (89kgs.)

Nytron Sets

Need to move heavy equipment on new, painted or special floors? Hilman Roller Sets are ideal. The chain rolls are made of a high impact Nylon that is forgiving to special floors. To further protect floors, all Nytron Roller tops are padded. This helps to insure that the entire chain footprint contacts the floor. Everything needed to roll heavy equipment in showrooms, laboratories, schools and modern factories is included in the Deluxe Nytron Set.



Model No.	Metric Ton Capacity	Contents	Weight
NRS-2-4S	2 Tons	4 - .5 Ton capacity rollers with SP style top 2 - Steering handles	44 lbs. (20kgs.)
NRS-4-4S	4 Tons	4 - 1 Ton capacity rollers with SP style top 2 - Steering handles	62 lbs. (27kgs.)
NRS-8-SLP	8 Tons	4 - 2 Ton capacity rollers with SLP style top 2 - Steering handles	130 lbs. (59kgs.)
NRS-12-SLP	12 Tons	4 - 3 Ton capacity rollers with SLP style top 2 - Steering handles	134 lbs. (61kgs.)
NRS-24-SLP	24 Tons	4 - 6 Ton capacity rollers with SLP style top 2 - Steering handles	158 lbs. (72kgs.)
NRS-40-SLP	40 Tons	4-10 Ton capacity rollers with SLP style top 2 - Steering handles	458 lbs. (208kgs.)

ERS Kits and Sets

Deluxe Kit Capacities: 15-50 Tons

Complete Set Capacities: 15-400 Tons



ERS Kits

ERS Series Kits are the versatility-leaders of the Hilman line. The Roller height can be changed by removing the swivel attachment from the Roller, thus providing even a lower height! Rollers can be used with two or four swivel attachments depending upon the amount of maneuvering that the project calls for. Three Rollers can also be used with one or three swivels. Three or four Roller bases can be used if the project calls for straight line movement. All attachments have swivel-locking capability.



Model No.	Metric Ton Capacity	Contents	Weight
KRS-15-ERSD	15 Tons	4 - 3.75 Ton capacity ERS rollers 4 - Swivel Locking Attachments 4 - Preload Pads 2 - Steering handles 1 - Steel storage case	176 lbs. (80kgs.)
KRS-20-ERSD	20 Tons	4 - 5 Ton capacity ERS rollers 4 - Swivel Locking Attachments 4 - Preload Pads 2 - Steering handles 1 - Steel storage case	196 lbs. (89kgs.)
KRS-40-ERSD	40 Tons	4 - 10 Ton capacity ERS rollers 4 - Swivel Locking Attachments 4 - Preload Pads 2 - Steering handles 1 - Steel storage case	236 lbs. (107kgs.)
KRS-50-ERSD	50 Tons	4 - 12.5 Ton capacity ERS rollers 4 - Swivel Locking Attachments 4 - Preload Pads 2 - Steering handles 1 - Steel storage case	244 lbs. (111kgs.)

ERS Sets

ERS Series Sets are the versatility-leaders of the Hilman line. The Roller height can be changed by removing the swivel attachment from the Roller, thus providing even a lower height! Rollers can be used with two or four swivel attachments depending upon the amount of maneuvering that the project calls for. Three Rollers can also be used with one or three swivels. Three or four Roller bases can be used if the project calls for straight line movement. All attachments have swivel-locking capability.



Model No.	Metric Ton Capacity	Contents	Weight
RS-15-ERSD	15 Tons	4 - 3.75 Ton capacity ERS rollers 4 - Swivel Locking Attachments 4 - Preload Pads 2 - Steering handles	130 lbs. (59kgs.)
RS-20-ERSD	20 Tons	4 - 5 Ton capacity ERS rollers 4 - Swivel Locking Attachments 4 - Preload Pads 2 - Steering handles	150 lbs. (68kgs.)
RS-40-ERSD	40 Tons	4 - 10 Ton capacity ERS rollers 4 - Swivel Locking Attachments 4 - Preload Pads 2 - Steering handles	196 lbs. (89kgs.)
RS-50-ERSD	50 Tons	4 - 12.5 Ton capacity ERS rollers 4 - Swivel Locking Attachments 4 - Preload Pads 2 - Steering handles	204 lbs. (93kgs.)
RS-100-ERSD	100 Tons	4 - 25 Ton capacity ERS rollers 4 - Swivel Locking Attachments 4 - Preload Pads 2 - Steering handles	500 lbs. (227kgs.)
RS-260-ERSD	260 Tons	4 - 65 Ton capacity ERS rollers 4 - Swivel Locking Attachments 4 - Preload Pads 2 - Steering handles	860 lbs. (390kgs.)
RS-400-ERSD	400 Tons	4 - 100 Ton capacity ERS rollers 4 - Swivel Locking Attachments 4 - Preload Pads 2 - Steering handles	896 lbs. (406kgs.)



MATERIAL HANDLING

Drywall Carts

For drywall, marble, tile, doors and windows

Model #WB100
Industry Standard Top Quality

- Specifications:**
- Strong welded steel frame made in USA.
 - 3000 pound capacity.
 - Weight - 80 pounds.
 - 48" L x 48" H x 23" W.
 - All swivel 8" mold-on rubber caster standard (bolted on).
 - Completely assembled, ready to use.
 - Optional: Phenolic or 2-rigid, 2-swivel caster.



Steel Deck Platform Trucks

Specifications:

- Rugged welded construction.
- 2000 pound capacity.
- Weight - 80 pounds.
- 48" L x 48" H x 23" W.
- Large 8" x 2" mold-on rubber caster (2 swivel, 2 rigid - bolted on for easy replacement).
- Removable handle with 2 cross braces.



Model #	Deck Size	Weight
PT48-24	48" x 24"	90 lbs.
PT48-30	48" x 30"	95 lbs.
PT60-30	60" x 30"	110 lbs.
PT72-30	72" x 30"	120 lbs.



The Fairbanks Company

LEVER DOLLIES

"C" SERIES OAK LEVER DOLLIES – Capacity to 5,000 lbs.



C60, C72, C84 Lever Dollies

Fairbanks "C" Series Lever Dollies feature kiln dried 1¾" thick oak handles with rounded edges. Reversed beveled nose iron is 6" wide x 3" deep and bolted to handle and heavy duty axle. Handle lengths are 60", 72" and 84" to fit most any lifting application. Wheel options are semi-steel with plainbore (IW), solid hard rubber with delrin bearings (HRI) and rubber mold-on cast iron (RT). Lever dollies are typically used in pairs.

E-Series (Oak)

Handle Length	Order Number	Load Capacity	Weight (lbs.)	Wheel Order No.
60	C60-IW	3500	30	124-A
	C60-RT	3500	28	525-RC
	C60-HRI	1000	27	2-315-CC
72	C72-IW	4250	33	124-A
	C72-RT	4250	31	525-RC
	C72-HRI	1000	30	2-315-CC
84	C84-IW	5000	35	124-A
	C84-RT	5000	33	525-RC
	C84-HRI	1000	32	2-315-CC

Dolly Number	Handle Order No.	Weight (lbs.)	Nose Iron Order No.	Weight (lbs.)	Axle Order No.	Weight (lbs.)	Axle Order No.	Weight (lbs.)
C60	C60-HDL	12	C72 Nose Iron	12	C72 Axle*	2.9	C72-L Axle**	2.6
C72	C72-HDL	14	C72 Nose Iron	12	C72 Axle*	2.9	C72-L Axle**	2.6
C84	C84-HDL	16	C72 Nose Iron	12	C72 Axle*	2.9	C72-L Axle**	2.6
E60	E60-HDL	10	E72 Nose Iron	8	E72 Axle*	2.6	E72-L Axle**	2.3
E72	E72-HDL	12	E72 Nose Iron	8	E72 Axle*	2.6	E72-L Axle**	2.3
E84	E84-HDL	14	E72 Nose Iron	8	E72 Axle*	2.6	E72-L Axle**	2.3

*Axle for IW wheels **Axle for HRI, RT and PO wheels

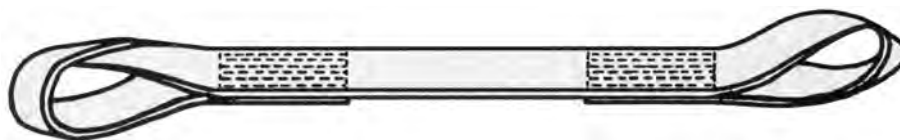


Eye and Eye Slings

Type IV, our most popular sling, is versatile enough to be used for vertical, basket and choker hitches. Commonly used for a basket hitch, this type of sling has a loop or eye at each end. The eyes are at right angles to the lay of the webbing. A choker hitch can also be made by passing one eye around the load and through the other eye to form a slip noose, because it squeezes the load, a choker can often be used singly.

Item Number	Sling Width	Eye Width	Eye Length	Rated Capacity* (Vertical)	Rated Capacity* (Choker)	Rated Capacity* (Basket)
EE1-61	1"	1"	9"	1275 Lbs.	1020 Lbs.	2550 Lbs.
EE1-91	1"	1"	9"	1615 Lbs.	1290 Lbs.	3230 Lbs.
EE2-61	1"	1"	9"	2350 Lbs.	1880 Lbs.	4700 Lbs.
EE2-91	1"	1"	9"	2940 Lbs.	2350 Lbs.	5880 Lbs.
EE1-62	2"	2"	9"	2550 Lbs.	2040 Lbs.	5100 Lbs.
EE1-92	2"	2"	9"	3230 Lbs.	2585 Lbs.	6460 Lbs.
EE2-62	2"	2"	9"	4640 Lbs.	3715 Lbs.	9280 Lbs.
EE2-92	2"	2"	9"	6400 Lbs.	5000 Lbs.	12800 Lbs.
EE1-63	3"	1.5"	12"	3825 Lbs.	3060 Lbs.	7650 Lbs.
EE1-93	3"	1.5"	12"	4845 Lbs.	3875 Lbs.	9690 Lbs.
EE2-63	3"	1.5"	12"	6960 Lbs.	5570 Lbs.	13920 Lbs.
EE2-93	3"	1.5"	12"	8820 Lbs.	7055 Lbs.	17640 Lbs.
EE1-64	4"	2"	12"	5100 Lbs.	4080 Lbs.	10200 Lbs.
EE1-94	4"	2"	12"	6460 Lbs.	5165 Lbs.	12920 Lbs.
EE2-64	4"	2"	12"	9280 Lbs.	7420 Lbs.	18560 Lbs.
EE2-94	4"	2"	12"	12920 Lbs.	10335 Lbs.	25840 Lbs.
EE1-66	6"	3"	14"	7650 Lbs.	6120 Lbs.	15300 Lbs.
EE1-96	6"	3"	14"	9775 Lbs.	7820 Lbs.	19550 Lbs.
EE2-66	6"	3"	14"	13925 Lbs.	11140 Lbs.	27850 Lbs.
EE2-96	6"	3"	14"	17800 Lbs.	14240 Lbs.	35600 Lbs.
EE1-98	8"	3"	18"	13005 Lbs.	10405 Lbs.	26010 Lbs.
EE2-98	8"	3"	18"	24060 Lbs.	19245 Lbs.	48120 Lbs.
EE1-910	10"	3.5"	18"	16320 Lbs.	13055 Lbs.	32640 Lbs.
EE2-910	10"	3.5"	18"	28190 Lbs.	22550 Lbs.	56380 Lbs.
EE1-912	12"	4"	24"	21000 Lbs.	16200 Lbs.	42000 Lbs.
EE2-912	12"	4"	24"	29400 Lbs.	23500 Lbs.	58800 Lbs.

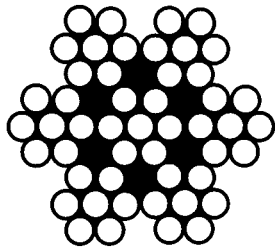
Type IV



***WARNING:** Never exceed rated capacities.

Endless Slings Also Available

Aircraft Cable

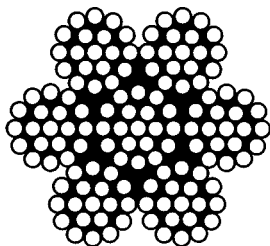


7 x 7

Galvanized Aircraft Cable

Size	Stock Number	Construction	Weight/1,000' (lbs.)	Breaking Strength (lbs.)
1/16*	GAC0627X7	7x7	7	480
3/32*	GAC0937X7	7x7	16	920
1/8*	GAC1257X7	7x7	28	1,700
3/16*	GAC1877X7	7x7	62	3,700
3/32*	GAC0937X19	7x19	17.4	1,050
1/8*	GAC1257X19	7x19	29	2,000
5/32*	GAC1567X19	7x19	45	2,800
3/16*	GAC1877X19	7x19	65	4,200
7/32*	GAC2187X19	7x19	86	5,600
1/4*	GAC2507X19	7x19	110	7,000
5/16*	GAC3127X19	7x19	173	9,800
3/8*	GAC3757X19	7x19	243	14,400

Standard Reel Lengths in Stock: 250', 500', 1,000' and 5,000'



7 x 19

Stainless Steel Aircraft Cable

Type 304

Size	Stock Number	Construction	Weight/1,000' (lbs.)	Breaking Strength (lbs.)
1/16*	SSAC0627X7	7x7	7.5	480
3/32*	SSAC0937X7	7x7	16	920
1/8*	SSAC1257X7	7x7	28	1,760
1/8*	SSAC1257X19	7x19	29	1,760
3/16*	SSAC1877X19	7x19	65	3,700
1/4*	SSAC2507X19	7x19	110	6,400
5/16*	SSAC3127X19	7x19	173	9,000
3/8*	SSAC3757X19	7x19	243	12,000

Standard Reel Lengths in Stock: 250', 500', 1,000' and 5,000'

Stainless Steel Aircraft Cable

Type 316

Size	Stock Number	Construction	Weight/1,000' (lbs.)	Breaking Strength (lbs.)
1/16	SSAC062T316	7x7	7.5	360
3/32	SSAC093T316	7x7	16	700
1/8	SSAC125T316	7x19	29	1,300
3/16	SSAC187T316	7x19	65	2,900
1/4	SSAC250T316	7x19	110	4,900
5/16	SSAC312T316	7x19	173	7,600
3/8	SSAC375T316	7x19	243	11,000

Standard Reel Lengths in Stock: 250', 500', 1,000' and 5,000'

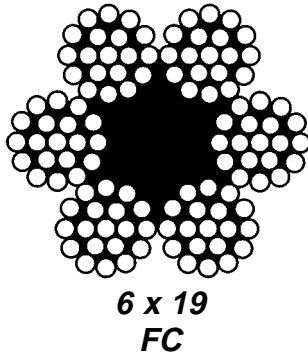
*According to Federal Specification

RR-W-410D

Wire Rope

Bright - Wire Rope

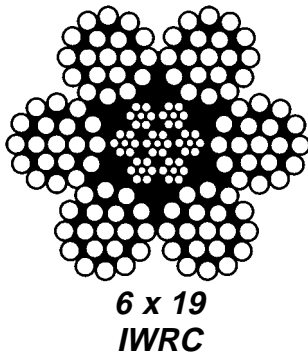
6 x 19 Class



Size	Fiber Core			IWRC		
	Stock Number	Weight 1000' (lbs.)	Breaking Strength (lbs.)	Stock Number	Weight 1000' (lbs.)	Breaking Strength (lbs.)
1/4	BFC2506X19	110	5,480	BIWRC2506X19	120	5,890
5/16	BFC3126X19	160	8,520	BIWRC3126X19	180	9,160
3/8	BFC3756X19	230	12,200	BIWRC3756X19	260	13,100
7/16	BFC4376X19	320	16,540	BIWRC4376X19	350	17,780
1/2	BFC5006X19	420	21,400	BIWRC5006X19	460	23,000
9/16	BFC5626X19	530	27,000	BIWRC5626X19	590	29,000
5/8	BFC6256X19	660	33,400	BIWRC6256X19	720	35,400
3/4	BFC7506X19	950	47,600	BIWRC7506X19	1,040	51,200
7/8	BFC8756X19	1,290	64,400	BIWRC8756X19	1,420	69,200
1	BFC1006X19	1,680	83,600	BIWRC1006X19	1,850	89,800

Bright - Wire Rope

6 x 37 Class

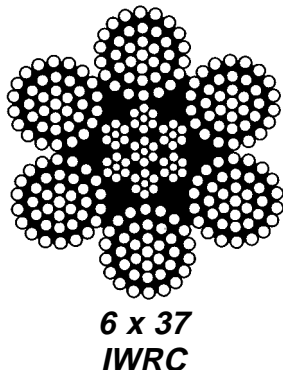


Size	Fiber Core			IWRC		
	Stock Number	Weight 1000' (lbs.)	Breaking Strength (lbs.)	Stock Number	Weight 1000' (lbs.)	Breaking Strength (lbs.)
1/4	BFC2506X37	110	5,480	BIWRC2506X37	120	6,890
5/16	BFC3126X37	160	8,520	BIWRC3126X37	180	9,160
3/8	BFC3756X37	240	12,200	BIWRC3756X37	260	13,100
7/16	BFC4376X37	320	16,540	BIWRC4376X37	350	17,780
1/2	BFC5006X37	420	21,400	BIWRC5006X37	460	23,000
9/16	BFC5626X37	530	27,000	BIWRC5626X37	590	29,000
5/8	BFC6256X37	660	33,400	BIWRC6256X37	720	35,800
3/4	BFC7506X37	950	47,600	BIWRC7506X37	1,040	51,200

Available upon request: Galvanized Wire Rope 6 x 37 Class.

Galvanized - Wire Rope

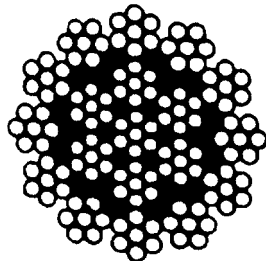
6 x 19 Class



Size	Fiber Core			IWRC		
	Stock Number	Weight 1000' (lbs.)	Breaking Strength (lbs.)	Stock Number	Weight 1000' (lbs.)	Breaking Strength (lbs.)
3/8	GFC3756X19	230	10,980	GIWRC3756X19	260	11,800
7/16	GFC4376X19	320	14,880	GIWRC4376X19	350	16,000
1/2	GFC5006X19	420	19,260	GIWRC5006X19	460	20,300
9/16	GFC5626X19	530	24,200	GIWRC5626X19	590	26,000
5/8	GFC6256X19	660	30,000	GIWRC6256X19	720	32,200
3/4	GFC7506X19	950	42,800	GIWRC7506X19	1,040	46,000

Note: According to Federal Specifications RR-W-410D, preformed right regular lay.

Wire Rope



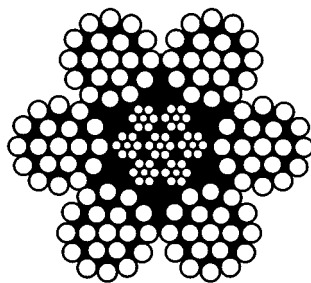
**19 x 7
Non-Rotating**

Non-Rotating Wire Rope

19 x 7 Class

Size	Stock Number	Weight/1000' (lbs.)	Breaking Strength (lbs.)
3/8	BIWRC37519X7	250	11,200
7/16	BIWRC43719X7	350	16,000
1/2	BIWRC50019X7	450	19,700
9/16	BIWRC56219X7	570	26,000
5/8	BIWRC62519X7	710	30,600
3/4	BIWRC75019X7	1,020	43,600

Available upon request: Spin Resistant Wire Rope 8 x 25 Class.



**6 x 25
Stainless Steel**

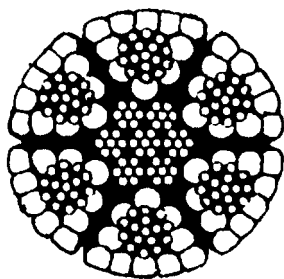
Stainless Steel IWRC Wire Rope

6 x 25 Class

Size	Stock Number	Weight/1000' (lbs.)	Breaking Strength (lbs.)
7/16	SSIWRC437	356	16,300
1/2	SSIWRC500	460	22,800
9/16	SSIWRC562	590	28,500
5/8	SSIWRC625	720	35,000
3/4	SSIWRC750	1,040	49,600
7/8	SSIWRC875	1,420	58,000
1	SSIWRC100	1,850	75,200

Stainless Steel IWRC Wire Rope

6 x 37 Class



**6 x 26
Super Swaged**

Size	Stock Number	Weight/1000' (lbs.)	Breaking Strength (lbs.)
3/8	SSIWRC3756X37	240	11,700
7/16	SSIWRC4376X37	330	15,800
1/2	SSIWRC5006X37	460	18,300
9/16	SSIWRC5626X37	540	25,600
5/8	SSIWRC6256X37	720	28,200

Available upon request: Stainless Steel Fiber Core Wire Rope and Stainless Steel 316 Wire Rope, 6 x 19 and 6 x 37.

Other Wire Ropes Available Upon Request

6x31, 4x26 Scaffolding Ropes	All Crane Ropes
35x7 Non-Rotating Cable	Cable Laid 7x7x7
6x26, 3x7 Super Swaged	Large Diameter
6x15 FC Lashing Rope	316 Stainless Steel 6x19 & 6x37

Note: Breaking strength ratings are listed for comparison purposes only. Actual operating loads may vary but should not exceed the recommended design factor of 20% of the product's breaking strength.



IMPACT CUTTERS

The original portable tools invented in 1928 by Morse-Starrett to cut wire rope. Actuated by striking with a hammer, they are easy to operate and give superior performance without jamming. They are precision-engineered to deliver a clean cut without affecting the original roundness of the wire rope. The blades and dies are made of the finest tool steel available, heat-treated and ground to close tolerances.

- Model 1** 3/4" capacity
(light duty)
- Model 1A** 1-1/16" capacity
(heavy-duty)
- Model 2** 1-1/2" capacity
(extra heavy-duty)



MANUAL CUTTERS

These self-contained hydraulic cutters are precision engineered tools designed to give a clean cut with minimum effort. Just pump the handle, no outside power is required. Able to be easily carried, these models are favorites of contractors, rigging lofts and elevator repairmen, and are recommended by wire rope manufacturers worldwide. All three models will operate under water with special factory modifications.

- Model W-075** 3/4" capacity
- Model P-1125** 1-1/8" capacity
- Model C-1750** 1-3/4" capacity



POWER OPERATED

This model can be activated by any electric, gasoline, hand, battery or air operated hydraulic pump capable of developing 10,000 p.s.i. and having free flow return through the pressure line. The pumps are then hose-connected to the Hydrashear body.

- POC 2500** 2-1/2" capacity
- POC 1750** 1-3/4" capacity
- POC 1125** 1-1/8" capacity

CABLE BANDS

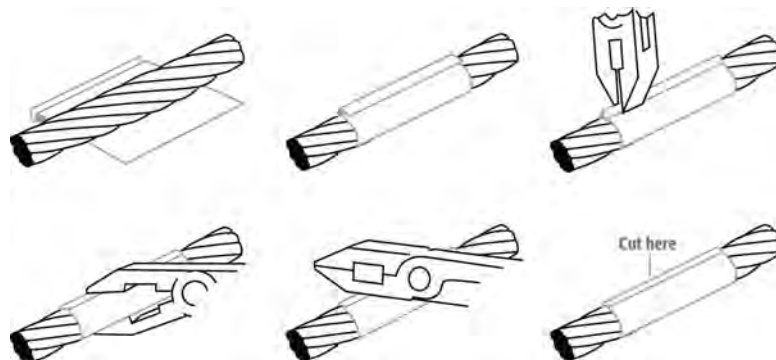


Designed for use with the Morse-Starrett cutter, bands are made of pliable material indented with a groove and lock seam at one edge. Application of the band is simple, requires no special tools and may be made in seconds with an ordinary pair of pliers.

Note: Each rope requires a band of corresponding size. All bands packed and sold in boxes of 50. One size per box.

Cable band sizes

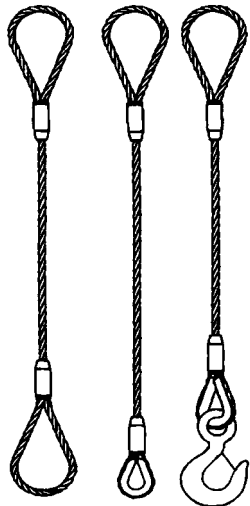
3/16"	9/16"	15/16"
1/4"	5/8"	1"
5/16"	11/16"	1-1/8"
3/8"	3/4"	1-1/4"
7/16"	13/16"	1-3/8"
1/2"	7/8"	1-1/2"



Wire Rope Slings

Wire Rope Sling - 6 x 25 IWRC

Single



Single Wire Rope Slings

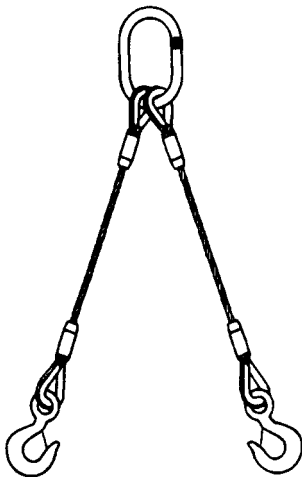
Size	Standard Loop Inside Diameter (in.)	Hook Capacity (tons)	Working Load Limit (lbs.)			
			Vertical 90°	30°	Angle 45°	60°
3/8	3 x 6	2.0	2,400	4,200	3,400	2,400
1/2	4 x 8	3.0	4,400	7,600	6,200	4,400
5/8	5 x 10	4.5	6,800	11,800	9,600	6,800
3/4	6 x 12	7.0	9,800	17,000	13,800	9,800
7/8	7 x 14	11.0	13,200	22,000	18,600	13,200
1	8 x 16	11.0	17,000	30,000	24,000	17,000

Sling Types

Call for part number	Standard Loop	-	Standard Loop
	Thimble Eye	-	Thimble Eye
	Hook	-	Hook
	Standard Loop	-	Thimble Eye
	Standard Loop	-	Hook
	Thimble Eye	-	Hook

Wire Rope Sling - 6 x 25 IWRC

Double



Double Wire Rope Slings

Size	Master Link Diameter x Inside Length (in.)	Hook Capacity (tons)	Working Load Limit (lbs.)		
			30°	Angle 45°	60°
3/8	5/8 x 3-3/4	2.0	4,200	3,600	2,400
1/2	7/8 x 5-1/4	3.0	7,600	6,200	4,400
5/8	1-1/4 x 7-3/4	4.5	11,800	9,600	6,800
3/4	1-1/4 x 7-3/4	7.0	16,800	13,800	9,800
7/8	1-1/4 x 8-3/4	11.0	22,000	18,600	13,200
1	1-1/2 x 10-1/2	11.0	30,000	24,000	17,000

Sling Types

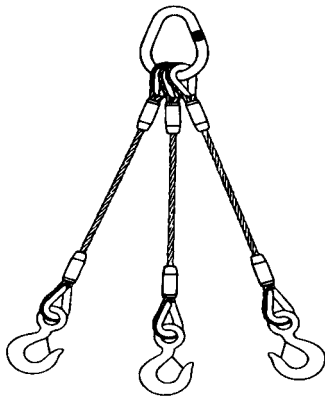
Call for part number	Standard Loop
	Thimble Eye
	Hook

Please note: Any and all sizes are available.

Wire Rope Slings

Wire Rope Sling - 6 x 25 IWRC

Triple



Triple Wire Rope Slings

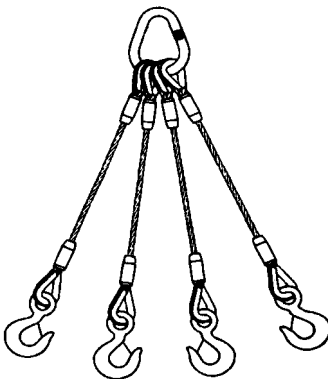
Size	Master Link Diameter x Inside Length (in.)	Hook Capacity (tons)	Working Load Limit (lbs.)		
			30°	Angle 45°	60°
1/2	1-1/4 x 7-3/4	3.0	11,400	9,200	6,600
5/8	1-1/4 x 8-3/4	4.5	17,600	14,400	10,200
3/4	1-1/2 x 10-1/2	7.0	26,000	20,000	14,600
7/8	1-3/4 x 12	11.0	34,000	28,600	19,800
1	2 x 14	11.0	44,000	36,000	26,000

Sling Types

Call for part number	Standard Loop
	Thimble Eye
	Hook

Wire Rope Sling - 6 x 25 IWRC

Quadruple



Quadruple Wire Rope Slings

Size	Master Link Diameter x Inside Length (in.)	Hook Capacity (tons)	Working Load Limit (lbs.)		
			30°	Angle 45°	60°
3/8	7/8 x 5-1/4	2.0	8,600	7,000	4,800
1/2	1-1/4 x 7-3/4	3.0	15,200	12,400	8,800
5/8	1-1/4 x 8-3/4	4.5	24,000	19,200	13,600
3/4	1-1/2 x 10-1/2	7.0	34,000	28,000	19,600
7/8	1-3/4 x 12	11.0	46,000	36,000	26,000
1	2 x 14	11.0	58,000	48,000	34,000

Sling Types

Call for part number	Standard Loop
	Thimble Eye
	Hook

Please note: Any and all sizes are available.



Binder Chain Assemblies G43

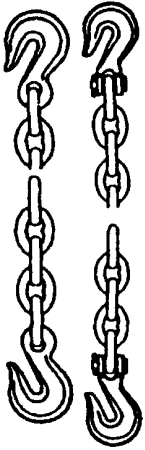
Features:

- High strength steel.
- Meets FMCSA, CVSA, NACM & ASTM requirements.
- Welded & Clevis assemblies.
- No worries concerning ultra-violet degrading.
- Chain links 100% proof tested.
- Proudly embossed with company logo and date code.

Binder Chain Assemblies G70

Features:

- High strength steel.
- Meets FMCSA, CVSA, NACM & ASTM requirements.
- Chain links 100% proof tested.
- 4:1 design factor vs. 3:1 for webbing.
- No worries concerning ultra-violet degrading.
- Made to order assemblies with 3 days or less lead time.
- Permanent identification: Grade, CM USA, and Trace Code.
- Gold finish for quick recognition.
- Proudly made in USA.



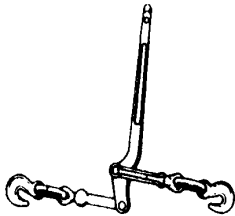
**G43 & G70 CHAIN ASSEMBLIES
CLEVIS GRAB HOOKS EACH END**

Part Number	Grade	Size	Package	Load Limit (lbs)	Weight ea. (lbs)
638219	G43	3/8" x 20'	Bulk	5,400	30.0
639082	G70 LL	5/16" x 16'	Bulk	4,700	15.3
638284	G70	5/16" x 20'	Bulk	4,700	21.1
639084	G70 LL	5/16" x 20'	Bulk	4,700	19.4
639084BG	G70 LL	5/16" x 20'	Bagged	4,700	18.8
638279	G70 LL	5/16" x 25'	Bulk	4,700	24.0
639079BG	G70 LL	5/16" x 25'	Bagged	4,700	24.0
639094	G70 LL	3/8" x 20'	Bulk	6,600	30.2
638294	G70	3/8" x 20'	Bulk	6,600	32.9
639094BG	G70 LL	3/8" x 20'	Bagged	6,600	29.7

**G70 CHAIN ASSEMBLIES
EYE HOOKS EACH END**

Part Number	Grade	Size	Package	Load Limit (lbs)	Weight ea. (lbs)
639024	G70 LL	5/16" x 20'	Bulk	4,700	19.5

FORGED LEVER LOAD BINDERS – Painted – Packed 4 Per Carton



Item No.	Chain Grade & Size (inches)				Handle Length (inches)	Take-up (inches)	Working Load Limit (lbs)	Approx. Weight (lbs)
	G30	G43	G70	G80				
48304	1/4	1/4	-	-	11.25	4	2,600	3.75
48305	3/8	3/8	5/16	-	16.12	8	5,400	4.50
48406	1/2	1/2	3/8	-	16.62	8	9,200	4.75
48769	3/8	3/8	3/8	3/8	16.62	8	7,100	4.50

FORGED RATCHET LOAD BINDERS – Painted – Packed 4 Per Carton



Item No.	Chain Grade & Size (inches)			Handle Length (inches)	Take-up (inches)	Working Load Limit (lbs)	Approx. Weight (lbs)
	G30	G43	G70				
48364	1/4	1/4	-	10-1/4	4	2,600	4.3
48811	eye/eye (no hooks)			12	8	5,400	7.0
48363	eye/eye (no hooks)			14	8	13,000	11.0
48810	3/8	3/8	5/16	12	8	5,400	7.7
48360	3/8	3/8	3/8	14	8	7,100	12.25
48365	3/8	3/8	5/16	14	8	5,400	12.25
48366	1/2	3/8	3/8	14	8	9,200	12.25
48367	5/8	5/8	1/2	14	8	13,000	14.0

Fist Grip® Wire Rope Clips

G-429 Fist Grip Clips

**New Style
Fist Grip® Clips
3/16" - 5/8"**



**Fist Grip® Clips
3/4" - 1-1/2"**



- Entire clip is Galvanized to resist corrosive and rusting action.
- Bolts are an integral part of the saddle. Nuts can be installed in such a way as to enable the operator to swing the wrench in a full arc for fast installation.
- All sizes have forged steel saddles.
- All Clips are individually bagged or tagged with proper application instructions and warning information.
- Crosby products meet or exceed all the requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, Crosby products meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.
- Assembled with standard heavy hex nuts.

Rope Size (in.)*	G-429 Stock No.	Std. Package Qty.	Weight Per 100 (lbs.)
3/16 - 1/4	1010471	100	23
5/16	1010499	100	28
3/8	1010514	50	40
7/16 - 1/2	1010532	50	62
9/16 - 5/8	1010550	50	103
3/4	1010578	25	175
7/8	1010596	25	225
1	1010612	10	300
1-1/8	1010630	10	400
1-1/4	1010658	10	400
1-3/8 - 1-1/2	1010676	Bulk	700

*Sizes through 5/8" incorporate New Style design.

Forged Wire Rope Clips

G-450 Crosby® Clips



- Each base has a Product Identification Code (PIC) for material traceability, the name CROSBY or "CG," and a size forged into it.
- Entire Clip-Galvanized to resist corrosive and rusting action
- Sizes 1/8" through 2-1/2" have forged bases.
- All Clips are individually bagged or tagged with proper application instructions and warning information.
- Clip sizes up through 1-1/2" have rolled threads.
- Look for the Red-U Bolt®, your assurance of Genuine Crosby Clips.

Rope Size (in.)	G-450 Stock No. Galv.	Std. Package Qty.	Weight Per 100 (lbs.)
1/8*	1010015	100	6
3/16*	1010033	100	10
1/4	1010051	100	19
5/16	1010079	100	28
3/8	1010097	100	48
7/16	1010113	50	78
1/2	1010131	50	80
9/16	1010159	50	109
5/8	1010177	50	110
3/4	1010195	25	142
7/8	1010211	25	212
1	1010239	10	252
1-1/8	1010257	10	283
1-1/4	1010275	10	438
1-3/8	1010293	10	442
1-1/2	1010319	10	544
1-5/8	1010337	Bulk	704
1-3/4	1010355	Bulk	934
2	1010373	Bulk	1300
2-1/4	1010391	Bulk	1600
2-1/2	1010417	Bulk	1900
2-3/4**	1010435	Bulk	2300
3	1010453	Bulk	3100
3-1/2**	1010426	Bulk	4000

*Electro-plated U-Bolt and Nuts. ** 2-3/4" and 3-1/2" base is made of cast steel.

S-421T Wedge Sockets

- Basket is cast steel.
- Wedge socket terminations have an efficiency rating of 80% based on the catalog strength of XXIP wire rope.
- Individually magnetic particle inspected.
- Pin diameter and jaw opening allow wedge and socket to be used in conjunction with open swage and spelter sockets.
- Secures the tail or "dead end" of the wire rope to the wedge, thus eliminates loss or "Punch out" of the wedge.
- Eliminates need for an extra piece of rope, and is easily installed.
- The TERMINATOR™ wedge eliminates the potential breaking off of the tail due to fatigue.
- The tail, which is secured by the base of the clip and the wedge, is left undeformed and available for reuse.
- Incorporates Crosby's patented QUIC-CHECK® "Go" and "No-Go" feature cast into the wedge. The proper size rope is determined when the following criteria are met:
 - The wire rope should pass thru the "Go" hole in the wedge.
 - The wire rope should **not** pass thru the "No-Go" hole in the wedge.
- Utilizes standard Crosby Red-U-Bolt® wire rope clip.
- Standard S-421 wedge socket can be retrofitted with the new style TERMINATOR™ wedge.
- Available with Bolt, Nut and Cotter Pin.
- U.S. patent 5,553,360 and foreign equivalents.



S-421T Wedge Sockets

Wire Rope Dia. (in.)	S421T Stock No.*	Weight Each (lbs.)	S-421 TW Stock No. Wedge Only	Wedge Only Weight Each (lbs.)	Optional G-4082 Bolt, Nut & Cotter	
					G-4082 Stock No.	Weight Each (lbs.)
3/8	1035000	3.18	1035555	.50	1092227	.38
1/2	1035009	6.15	1035564	1.05	1092236	.69
5/8	1035018	9.70	1035573	1.79	1092254	1.15
3/4	1035027	14.50	1035582	2.60	1092281	1.91
7/8	1035036	21.50	1035591	4.00	1092307	3.23
1	1035045	30.75	1035600	5.37	1092325	5.40
1-1/8	1035054	45.30	1035609	7.30	1092343	7.50
1-1/4	1035063	64.90	1035618	10.60	1092372	10.34

*S-421T Terminator™ Assembly includes Socket, Wedge, Pin and Wire Rope Clip.

Crosby® Round Pin Shackles

Round Pin Anchor Shackles G-213 S-213



- Capacities 1/2 thru 35 metric tons.
- Forged – Quenched and Tempered, with alloy pin.
- Working Load Limit permanently shown on every shackle.
- Hot Dip galvanized or Self-Colored.
- Fatigue Rated.
- Shackles can be furnished proof tested with certificates to designated standards, such as ABS, DNV, Lloyds or other certification. Charged for proof testing and certification available when requested at the time of order.
- Shackles are Quenched and Tempered and can meet DNV impact requirements of 42 joules at -20 degrees C.
- Look for the Red Pin®... the mark of genuine Crosby quality.

Round Pin Chain Shackles G-215 S-215



Crosby® Screw Pin Shackles

Screw Pin Anchor Shackles G-209 S-209



- Capacities 1/3 thru 55 metric tons.
- Forged – Quenched and Tempered, with alloy pin.
- Working Load Limit permanently shown on every shackle.
- Hot Dip galvanized or Self-Colored.
- Fatigue Rated.
- Shackles can be furnished proof tested with certificates to designated standards, such as ABS, DNV, Lloyds or other certification. Charged for proof testing and certification available when requested at the time of order.
- Quenched and Tempered, they can meet DNV impact requirements of 42 joules at -20°C.
- Crosby products meet or exceed all the requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, Crosby products meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.
- Look for the Red Pin® ... the mark of genuine Crosby quality.

Screw Pin Chain Shackles G-210 S-210



Round Pin Anchor Shackles

Nominal Size (in.)	Working Load Limit (t)*	Stock No.		Weight Each (lbs.)
		G-213	S-213	
1/4	1/2	1018017	1018026	.13
5/16	3/4	1018035	1018044	.18
3/8	1	1018053	1018062	.29
7/16	1-1/2	1018071	1018080	.38
1/2	2	1018099	1018106	.71
5/8	3-1/4	1018115	1018124	1.50
3/4	4-3/4	1018133	1018142	2.32
7/8	6-1/2	1018151	1018160	3.49
1	8-1/2	1018179	1018188	5.00
1-1/8	9-1/2	1018197	1018204	6.97
1-1/4	12	1018213	1018222	9.75
1-3/8	13-1/2	1018231	1018240	13.25
1-1/2	17	1018259	1018268	17.25
1-3/4	25	1018277	1018286	29.46
2	35	1018295	1018302	45.75

Round Pin Chain Shackles

Nominal Size (in.)	Working Load Limit (t)*	Stock No.		Weight Each (lbs.)
		G-215	S-215	
1/4	1/2	1018810	1018829	.10
5/16	3/4	1018838	1018847	.18
3/8	1	1018856	1018865	.25
7/16	1-1/2	1018874	1018883	.40
1/2	2	1018892	1018909	.50
5/8	3-1/4	1018918	1018927	1.21
3/4	4-3/4	1018936	1018945	2.00
7/8	6-1/2	1018954	1018963	3.28
1	8-1/2	1018972	1018981	4.75
1-1/8	9-1/2	1018990	1019007	6.30
1-1/4	12	1019016	1019025	9.00
1-3/8	13-1/2	1019034	1019043	12.00
1-1/2	17	1019052	1019061	16.15
1-3/4	25	1019070	1019089	29.96
2	35	1019098	1019105	43.25

*NOTE: Maximum Proof Load is 2.0 times the Working Load Limit. Minimum Ultimate Strength is 6 times the Working Load Limit.

Round pin shackles are not suitable for side loading applications.

Screw Pin Anchor Shackles

Nominal Size (in.)	Working Load Limit (t)*	Stock No.		Weight Each (lbs.)
		G-209	S-209	
3/16	1/3	1018357	—	.06
1/4	1/2	1018375	1018384	.10
5/16	3/4	1018393	1018400	.19
3/8	1	1018419	1018428	.31
7/16	1-1/2	1018437	1018446	.38
1/2	2	1018455	1018464	.72
5/8	3-1/4	1018473	1018482	1.37
3/4	4-3/4	1018491	1018507	2.35
7/8	6-1/2	1018516	1018525	3.62
1	8-1/2	1018534	1018543	5.03
1-1/8	9-1/2	1018552	1018561	7.41
1-1/4	12	1018570	1018589	9.50
1-3/8	13-1/2	1018598	1018605	13.53
1-1/2	17	1018614	1018623	17.20
1-3/4	25	1018632	1018641	27.78
2	35	1018650	1018669	45.00
2-1/2	55	1018678	1018687	85.75

Screw Pin Chain Shackles

Nominal Size (in.)	Working Load Limit (t)*	Stock No.		Weight Each (lbs.)
		G-210	S-210	
1/4	1/2	1019150	1019169	.11
5/16	3/4	1019178	1019187	.17
3/8	1	1019196	1019203	.28
7/16	1-1/2	1019212	1019221	.43
1/2	2	1019230	1019249	.59
5/8	3-1/4	1019258	1019267	1.25
3/4	4-3/4	1019276	1019285	2.63
7/8	6-1/2	1019294	1019301	3.16
1	8-1/2	1019310	1019329	4.75
1-1/8	9-1/2	1019338	1019347	6.75
1-1/4	12	1019356	1019365	9.06
1-3/8	13-1/2	1019374	1019383	11.63
1-1/2	17	1019392	1019409	15.95
1-3/4	25	1019418	1019427	26.75
2	35	1019436	1019445	42.31
2-1/2	55	1019454	1019463	71.75

*NOTE: Maximum Proof Load is 2.0 times the Working Load Limit. Minimum Ultimate Strength is 6 times the Working Load Limit.

Crosby® Alloy Bolt Type Shackles

- Quenched and Tempered.
- Alloy bows, Alloy bolts.
- Forged Alloy Steel 30 thru 175 metric tons.
Cast Alloy Steel 200 thru 400 metric tons.
- Working Load Limit is permanently shown on every shackle.
- All sizes are individually proof tested to 2.0 times the Working Load Limit.
- Pins are galvanized and painted red.
- Certification must be requested at time of order.
- Shackles are Quenched and Tempered and can meet DNV impact requirements of 42 joules at -20 C.
- Crosby products meet or exceed all the requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, Crosby products meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.
- Shackles 200 metric tons and larger are provided as follows.
 - Non Destructive Tested
 - Serialized Pin and Bow
 - Material Certification (Chemical)
 - Magnetic Particle Inspected

G-2140 / S-2140 Alloy Bolt Type Anchor Shackles



Nominal Shackle Size (in.)	Working Load Limit (t)*	Stock No.		Weight Each (lbs.)
		G-2140 Galv.	S-2140 S.C.	
1-1/2	30	1021110	1021129	20.8
1-3/4	40	1021138	1021147	33.9
2	55	1021156	1021165	52.0
2-1/2	85	1021174	1021183	96.0
3	120	1021192	-	178.0
3-1/2	150†	1021218	-	265.0
4	175†	1021236	-	338.0
4-3/4**	200†	1021414	-	450.0
5**	250†	1021432	-	600.0
6**	300†	1021450	-	775.0
7**	400†	1021478	-	1102.0

* Note: Maximum Proof Load is 2.0 times the Working Load Limit. Minimum Ultimate Load is 4 times the Working Load Limit on 200 - 400 metric Tons. For sizes 30 - 175 metric Tons, Minimum Ultimate Load is 5.4 times the Working Load Limit.
** Cast Alloy Steel. † Furnished with Round Head Bolts with welded handle.

Crosby® Swivel Hooks

- Forged - Quenched and Tempered.
- Proper design, careful forging and precision controlled quench and tempering gives maximum strength without excessive weight and bulk.
- Every Crosby Swivel hoist hook has a pre-drilled cam which can be equipped with a latch. Even years after purchase of the original hook, latch assemblies can be added.
- Load rating codes stamped on each hook. 322 Swivel Hooks use the same load rating code as 319 Shank Hooks.
- Hoist hooks incorporate markings forged into the product which address two (2) QUIC-CHECK® features:
 - Deformation Indicators – Two strategically placed marks, one just below the shank or eye and the other on the hook tip, which allow for a QUIC-CHECK® measurement to determine if the throat opening has changed, thus indicating abuse or overload.
 - Angle Indicators – Indicate the maximum included angle which is allowed between two (2) sling legs in the hook. These indicators also provide the opportunity to approximate other included angles between two slings legs.

S-322CN / S-322AN



Working Load Limit (t)*		Stock No.		Weight Each (lbs.)
Carbon	Alloy	S-322CN	S-322AN	
3/4	1	1048600	1048804	.75
1	1-1/2	1048609	1048813	1.25
1-1/2	2	1048618	1048822	2.25
2	3	1048627	1048831	2.30
3	5	1048636	1048837	4.96
5	7	1048645	1048854	10.29
7-1/2	11	1048654	1048865	16.18
10	15	1048663	1048877	23.25
15	22	1048672	1048886	47.00
--	30	--	1025688	70.50

* NOTE: Carbon swivel hooks .75tC-15tC: proof load is 2 times working load limit. Designed with a 5:1 design factor. Alloy swivel hooks 1.5tA-22tA: proof load is 2.5 times the working load limit. Designed with a 4.5:1 design factor. Alloy swivel hooks 30tA: proof load is 2 times working load limit. Designed with a 4:1 design factor.

Crosby® Eye Hooks

All Crosby 320 Eye Hoist Hooks incorporate the following features:

- Designed with a 5:1 Design Factor.
- Chemical analysis and tensile tests performed on each PIC to verify chemistry and mechanical properties.
- The most complete line of Eye hoist hooks.
- Proper design, careful forging and precision controlled quenched and tempering give maximum strength without excessive weight and bulk.
- Every eye hook has a pre-drilled cam which can be equipped with a latch. Years after purchase of the original hook, latch assemblies can be added.
- Eye hooks are load rated.
- Hoist hooks incorporate two types of strategically placed markings forged into the product which address two (2) QUIC-CHECK® features:
 - Deformation Indicators and Angle Indicators.

Additional features incorporated in the Crosby S-320N Eye Hoist Hooks:

- A new cross section design that enhances the overall performance.
- Fatigue rated at 1-1/2 times the Working Load Limit at 20,000 cycles.
- Can be proof tested to 2-1/2 times the working Load Limit.
- Can be Metric Rated at 5:1 Design Factor.
- Low profile hook tip.
- New integrated latch (S-4320) meets the World class standard for lifting.
- Heavy-duty stamped latch interlocks with the hook tip.
- High cycle, long life spring.
- When secured with proper cotter pin through the hole in the tip of hook, meets the intent of OSHA Rule 1926.550(g) for personnel hoisting.

S-320 & S-320N Eye Hooks



* Eye Hooks (3/4 TC - 22TA), Proof load is 2.5 times Working Load Limit. Eye Hooks (20 TC - 60TA), Proof Load is 2 times Working Load Limit. All carbon hooks-average straightening loads (ultimate load) is 5 times Working Load Limit. Alloy eye hooks 1 ton through 22 ton-average straightening load (ultimate load) is 5 times Working Load Limit. Alloy eye hooks 30 tons through 60 tons-average straightening load (ultimate load) is 4.5 times Working Load Limit. † New 320N style hook.

Crosby® Forged Hooks

BH-313 Weld-On Hooks



- Wide range of sizes available: 1-10 Metric Ton capacity.
- Forged Alloy Steel.
- Designed for attachment to mobile lifting equipment to provide a pick point for easy sling attachment.
- Large weld pad.
- Heavy-duty latch interlocks with the hook tip.
- Replacement latches available.
- Detailed installation and application instructions included with each hook.

Working Load Limit (t)*	Stock No. BH-313	Weight Each (lbs.)
1	1029105	1.15
2	1029114	1.85
3	1029123	2.60
4	1029132	4.19
5	1029141	5.62
8	1029150	7.28
10	1029169	11.02

*Ultimate Load is 5 times the Working Load Limit.

G-3315 Snap Hooks



- Forged Alloy Steel – Quenched and Tempered.
- Pressed steel latches and stainless steel springs, bolts and nuts.
- For replacement latch kit, order Stock No. 9900299.

Hook Size (in.)	G-3315 Stock No. Galv.	Working Load Limit* (lbs.)	Weight Each (lbs.)
7/16	1023056	750	.23
9/16	1023074	1000	.48

*Ultimate Load is 4 times the Working Load Limit.

Crosby® Forged Swivels

G-402 Regular Swivels



- Meets the performance requirements of Federal Specification RR-C-271D, Type VII, Class 1, except for those provisions required of the contractor.

G-403 Regular Swivels



- Meets the performance requirements of Federal Specification RR-C-271D, Type VII, Class 1, except for those provisions required of the contractor.
- U.S. Patent 5,381,650 and other equivalents.

G-402 Regular Swivels

Hook Size (in.)	G-402 Stock No. Galv.	Working Load Limit* (lbs.)	Weight Each (lbs.)
1/4	1016019	850	.21
5/16	1016037	1250	.39
3/8	1016055	2250	.71
1/2	1016073	3600	1.32
5/8	1016091	5200	2.49
3/4	1016117	7200	4.02
7/8	1016135	10000	6.25
1	1016153	12500	8.95
1-1/4	1016199	18000	16.37
1-1/2	1016215	45200	45.79

*Ultimate Load is 5 times the Working Load Limit.

G-403 Regular Swivels

Hook Size (in.)	G-403 Stock No. Galv.	Working Load Limit* (lbs.)	Weight Each (lbs.)
1/4	1016395	850	.21
5/16	1016411	1250	.34
3/8	1016439	2250	.66
1/2	1016457	3600	1.34
5/8	1016475	5200	2.48
3/4	1016493	7200	3.88
7/8	1016518	10000	5.87
1	1016536	12500	9.84
1-1/4	1016572	18000	15.75
1-1/2	1016590	45200	54.75

*Ultimate Load is 5 times the Working Load Limit.

Crosby® Swivels

- All swivels individually proof tested with certification.
- EQUIPPED WITH TAPERED ROLLER THRUST BEARING.
- Suitable for frequent rotation under load.
- All hooks furnished with latches assembled.
- All jaws complete with bolts, nuts and cotter pins.
- Pressure lube fitting provided.
- NOT TO BE USED ON DEMO-LITION (WRECKING) BALLS.
- Other types and capacities, up to 600 tons, available to meet your requirements.



IMPORTANT - Crosby Swivels should only be used with the recommended wire rope. Contact the wire rope manufacturer for the proper wire rope to be used with Crosby Swivel.

S-1 Jaw & Hook

Swivel No.	S-1 Stock No.	Working Load Limit* (lbs.)	Wire Rope Size (in.)	Weight Each (lbs.)
3-S-1	297011	3	1/2	9.81
5-S-1	297217	5	5/8	15.51
8-S-1	297413	8-1/2	3/4	29.42
10-S-1	297618	10	7/8	46.75
15-S-1	297814	15	1	73.75
25-S-1	298118	25	–	140.00
35-S-1	298216	35	–	220.00
45-S-1	298314	45	–	251.00

*Individually Proof Tested to 2 times the Working Load Limit. Ultimate Load is 5 times the Working Load Limit.

S-2 Jaw & Jaw

Swivel No.	S-2 Stock No.	Working Load Limit* (lbs.)	Wire Rope Size (in.)	Weight Each (lbs.)
3-S-2	297020	3	1/2	9.63
5-S-2	297226	5	5/8	13.69
8-S-2	297422	8-1/2	3/4	26.16
10-S-2	297627	10	7/8	45.75
15-S-2	297823	15	1	62.75
25-S-2	298127	25	–	140.00
35-S-2	298225	35	–	155.00
45-S-2	298323	45	–	235.00

*Individually Proof Tested to 2 times the Working Load Limit. Ultimate Load is 5 times the Working Load Limit.

S-3 Jaw & Eye

Swivel No.	S-3 Stock No.	Working Load Limit* (lbs.)	Wire Rope Size (in.)	Weight Each (lbs.)
3-S-3	297039	3	1/2	9.12
5-S-3	297235	5	5/8	13.50
8-S-3	297431	8-1/2	3/4	24.90
10-S-3	297636	10	7/8	43.50
15-S-3	297832	15	1	61.00
25-S-3	298136	25	–	135.00
35-S-3	298234	35	–	150.00
45-S-3	298332	45	–	225.00

*Individually Proof Tested to 2 times the Working Load Limit. Ultimate Load is 5 times the Working Load Limit.

Wire Rope Thimbles

G-414



- Available in Hot Dip galvanized or Stainless Steel (Type 304).
- Stainless steel recommended for more corrosive environments where greater protection is required.
- Greater protection against wear and deformation of the wire rope eye.
- Longer service life.

G-414 Extra Heavy Wire Rope Thimbles

Rope Dia. (in.)	S-414 Galv.	SS-414 Stainless	Weight Per 100 (lbs.)
1/4*	1037639	1037960	6.50
5/16*	1037657	1037988	11.80
3/8*	1037675	1038004	21.60
7/16	1037693	-	34.70
1/2 - 9/16*	1037719	1038022	51.00
5/8*	1037755	1038040	75.70
3/4*	1037773	1038068	158.10
7/8	1037791	-	177.80
1	1037817	-	313.90
1-1/8 - 1-1/4	1037835	-	400.00
1-1/4 - 1-3/8	1037853	-	811.00
1-3/8 - 1-1/2	1037871	-	1294.80
1-5/8	1037899	-	1700.00
1-3/4	1037915	-	1775.00
1-7/8 - 2	1037933	-	2775.00
2-1/4	1037951	-	3950.00

Forged Eye Bolts

G-277



- Forged Steel.
- Fatigue rated at 1-1/2 times the Working Load Limit at 20,000 cycles.
- Recommended for in-line pull.
- Crosby products meet or exceed all the requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, Crosby products meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.
- All Bolts Hot Dip galvanized after threading (UNC).
- Furnished with standard Hot Dip galvanized hex nuts.

G-277 Shoulder Nut Eye Bolts

Shank Diameter & Length (in.)	G-277 Galv.	Working Load Limit* (lbs.)	Weight Per 100 (lbs.)
1/4 x 2	1045014	650	6.60
1/4 x 4	1045032	650	9.10
5/16 x 2-1/4	1045050	1200	12.50
5/16 x 4-1/4	1045078	1200	18.80
3/8 x 2-1/2	1045096	1550	21.40
3/8 x 4-1/2	1045112	1550	25.30
1/2 x 3-1/4	1045130	2600	42.60
1/2 x 6	1045158	2600	56.80
5/8 x 4	1045176	5200	68.60
5/8 x 6	1045194	5200	102.40
3/4 x 4-1/2	1045210	7200	144.50
3/4 x 6	1045238	7200	167.50
7/8 x 5	1045256	10600	225.00
1 x 6	1045292	13300	366.30
1 x 9	1045318	13300	422.50
1-1/4 x 8	1045336	21000	650.00
1-1/4 x 12	1045354	21000	795.00
1-1/2 x 15	1045372	24000	1425.00

*Ultimate Load is 5 times the Working Load Limit. Working Load Limit shown is for in-line pull. Proof Load is 2 times the Working Load Limit.

Forged Eye Bolts

G-291



- Forged Steel - Quenched and Tempered.
- Fatigue rated at 1-1/2 times the Working Load Limit at 20,000 cycles
- All Bolts Hot Dip galvanized after threading (UNC).
- Furnished with standard Hot Dip galvanized hex nuts.
- Recommended for in-line pull.
- Crosby products meet or exceed all the requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, Crosby products meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.

G-291 Regular Nut Eye Bolts

Shank Diameter & Length (in.)	G-291 Galv.	Working Load Limit* (lbs.)	Weight Per 100 (lbs.)
1/4 x 2	1043230	650	8.20
1/4 x 4	1043258	650	11.70
5/16 x 2-1/4	1043276	1200	13.30
5/16 x 4-1/4	1043294	1200	25.00
3/8 x 2-1/2	1043310	1550	23.30
3/8 x 4-1/2	1043338	1550	29.50
3/8 x 6	1043356	1550	35.20
1/2 x 3-1/4	1043374	2600	50.30
1/2 x 6	1043392	2600	66.10
1/2 x 8	1043418	2600	82.00
1/2 x 10	1043436	2600	88.00
1/2 x 12	1043454	2600	114.20
5/8 x 4	1043472	5200	103.10
5/8 x 6	1043490	5200	118.20
5/8 x 8	1043515	5200	135.10
5/8 x 10	1043533	5200	153.60
5/8 x 12	1043551	5200	167.10
3/4 x 4-1/2	1043579	7200	168.60
3/4 x 6	1043597	7200	184.50
3/4 x 8	1043613	7200	207.90
3/4 x 10	1043631	7200	235.00
3/4 x 12	1043659	7200	257.50
3/4 x 15	1043677	7200	298.00
7/8 x 5	1043695	10600	270.00
7/8 x 8	1043711	10600	308.00
7/8 x 12	1043739	10600	400.00
1 x 6	1043757	13300	421.00
1 x 9	1043775	13300	468.50
1 x 12	1043793	13300	540.00
1 x 18	1043819	13300	650.00
1-1/4 x 8	1043837	21000	750.00
1-1/4 x 12	1043855	21000	900.00
1-1/4 x 20	1043873	21000	1210.00

*Ultimate Load is 5 times the Working Load Limit. Working Load Limit shown is for in-line pull. Proof Load is 2 times the Working Load Limit.

**One COMPLETE
Source for
INDUSTRIAL
Supplies**

Crosby® Turnbuckles



HG-223
Hook & Hook



HG-225
Hook & Eye



HG-226
Eye & Eye



HG-227
Jaw & Eye



HG-228
Jaw & Jar

- Turnbuckle assembly combinations include: Eye and Eye, Hook and Hook, Hook and Eye, Jaw and Jaw, Jaw and Eye.
- End fittings are Quenched and Tempered, bodies heat treated by normalizing.
- Crosby's Quenched and Tempered end fittings and normalized bodies have enhanced impact properties for greater toughness at all temperatures.
- Hot Dip galvanized.
- Hooks are forged with a greater cross sectional area that results in a stronger hook with better fatigue properties.
- Modified UNJ thread on end fittings for improved fatigue properties. Body has UNC threads.
- Turnbuckle eyes are forged elongated, by design, to maximize easy attachment in system and minimize stress in the eye. For turnbuckle sizes 1/4" through 2-1/2", a shackle one size smaller can be reeved through eye.
- Forged jaw ends are fitted with bolts and nuts on sizes 1/4" through 5/8", and pins and cotters on sizes 3/4" through 2-3/4".
- TURNBUCKLES RECOMMENDED FOR STRAIGHT OR IN-LINE PULL ONLY.
- Lock Nuts available for all sizes.
- Typical hardness levels, Tensile Strengths and Ductility Properties are available for all sizes.
- Turnbuckles can be furnished proof tested or magnaflux inspected with certificates if requested at time of order.
- Crosby products meet or exceed all the requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, Crosby products meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.

HG-223 Hook & Hook Turnbuckles

Thread Diameter & Take Up (in.)	HG-223 Stock No.	Working Load Limit (lbs.)*	Weight Each (lbs.)
1/4 x 4	1030011	400	.30
5/16 x 4-1/2	1030039	700	.47
3/8 x 6	1030057	1000	.78
1/2 x 6	1030075	1500	1.60
1/2 x 12	1030119	1500	2.28
5/8 x 6	1030137	2250	2.75
5/8 x 12	1030173	2250	3.50
3/4 x 6	1030191	3000	3.89
3/4 x 12	1030235	3000	5.43
3/4 x 18	1030253	3000	8.12
7/8 x 12	1030271	4000	8.10
1 x 12	1030333	5000	11.93
1 x 18	1030351	5000	14.00
1 x 24	1030379	5000	17.25
1-1/4 x 12	1030397	6500	20.58
1-1/4 x 18	1030413	6500	23.00
1-1/4 x 24	1030431	6500	27.00
1-1/2 x 12	1030459	7500	27.50
1-1/2 x 18	1030477	7500	31.00
1-1/2 x 24	1030495	7500	37.50

HG-225 Hook & Eye Turnbuckles

Thread Diameter & Take Up (in.)	HG-225 Stock No.	Working Load Limit (lbs.)*	Weight Each (lbs.)
1/4 x 4	1030636	400	.29
5/16 x 4-1/2	1030654	700	.49
3/8 x 6	1030672	1000	.78
1/2 x 6	1030690	1500	1.61
1/2 x 12	1030734	1500	2.26
5/8 x 6	1030752	2250	2.70
5/8 x 12	1030798	2250	3.78
3/4 x 6	1030814	3000	3.89
3/4 x 12	1030850	3000	5.83
3/4 x 18	1030878	3000	6.33
7/8 x 12	1030896	4000	8.10
1 x 12	1030958	5000	11.93
1 x 18	1030976	5000	14.00
1 x 24	1030994	5000	17.25
1-1/4 x 12	1031010	6500	19.00
1-1/4 x 18	1031038	6500	23.00
1-1/4 x 24	1031056	6500	24.00
1-1/2 x 12	1031074	7500	27.50
1-1/2 x 18	1031092	7500	31.00
1-1/2 x 24	1031118	7500	37.50

HG-226 Eye & Eye Turnbuckles

Thread Diameter & Take Up (in.)	HG-226 Stock No.	Working Load Limit (lbs.)*	Weight Each (lbs.)
1/4 x 4	1031252	500	.26
5/16 x 4-1/2	1031270	800	.45
3/8 x 6	1031298	1200	.76
1/2 x 6	1031314	2200	1.54
1/2 x 12	1031350	2200	2.14
5/8 x 6	1031378	3500	2.40
5/8 x 12	1031412	3500	3.42
3/4 x 6	1031430	5200	3.79
3/4 x 12	1031476	5200	5.48
3/4 x 18	1031494	5200	7.19
7/8 x 12	1031519	7200	7.22
7/8 x 18	1031537	7200	9.95
1 x 6	1031555	10000	9.04
1 x 12	1031573	10000	11.50
1 x 18	1031591	10000	14.00
1 x 24	1031617	10000	17.25
1-1/4 x 12	1031635	15200	19.00
1-1/4 x 18	1031653	15200	23.00
1-1/4 x 24	1031671	15200	27.00
1-1/2 x 12	1031699	21400	27.50
1-1/2 x 18	1031715	21400	31.00
1-1/2 x 24	1031733	21400	37.50
1-3/4 x 18	1031779	28000	52.50
1-3/4 x 24	1031797	28000	58.00
2 x 24	1031813	37000	85.25
2-1/2 x 24	1031831	60000	144.25
2-3/4 x 24	1031859	75000	194.00

*Proof Load is 2.5 times the Working Load Limit. Ultimate Load is 5 times the Working Load Limit.

Crosby® Turnbuckles (Continued)

HG-227 Jaw & Eye Turnbuckles

Thread Diameter & Take Up (in.)	HG-227 Stock No.	Working Load Limit (lbs.)*	Weight Each (lbs.)
1/4 x 4	1031877	500	.30
5/16 x 4-1/2	1031895	800	.50
3/8 x 6	1031911	1200	.80
1/2 x 6	1031939	2200	1.51
1/2 x 9	1031957	2200	1.71
1/2 x 12	1031975	2200	2.08
5/8 x 6	1031993	3500	2.35
5/8 x 9	1032019	3500	3.17
5/8 x 12	1032037	3500	3.61
3/4 x 6	1032055	5200	4.00
3/4 x 9	1032073	5200	4.75
3/4 x 12	1032091	5200	5.93
3/4 x 18	1032117	5200	7.00
7/8 x 12	1032135	7200	8.36
7/8 x 18	1032153	7200	9.75
1 x 6	1032171	10000	8.92
1 x 12	1032199	10000	11.20
1 x 18	1032215	10000	13.30
1 x 24	1032233	10000	17.00
1-1/4 x 12	1032251	15200	19.42
1-1/4 x 18	1032279	15200	24.18
1-1/4 x 24	1032297	15200	28.50
1-1/2 x 12	1032313	21400	28.99
1-1/2 x 18	1032331	21400	35.00
1-1/2 x 24	1032359	21400	39.18
1-3/4 x 18	1032395	28000	53.75
1-3/4 x 24	1032411	28000	60.68
2 x 24	1032439	37000	89.00
2-1/2 x 24	1032457	60000	150.00
2-3/4 x 24	1032475	75000	183.00

HG-228 Jaw & Jaw Turnbuckles

Thread Diameter & Take Up (in.)	HG-228 Stock No.	Working Load Limit (lbs.)*	Weight Each (lbs.)
1/4 x 4	1032493	500	.36
5/16 x 4-1/2	1032518	800	.52
3/8 x 6	1032536	1200	.81
1/2 x 6	1032554	2200	1.56
1/2 x 9	1032572	2200	1.74
1/2 x 12	1032590	2200	2.40
5/8 x 6	1032616	3500	2.72
5/8 x 9	1032634	3500	3.43
5/8 x 12	1032652	3500	3.91
3/4 x 6	1032670	5200	4.11
3/4 x 9	1032698	5200	5.46
3/4 x 12	1032714	5200	6.56
3/4 x 18	1032732	5200	8.03
7/8 x 12	1032750	7200	8.17
7/8 x 18	1032778	7200	10.78
1 x 6	1032796	10000	10.18
1 x 12	1032812	10000	12.20
1 x 18	1032830	10000	15.14
1 x 24	1032858	10000	18.08
1-1/4 x 12	1032876	15200	20.59
1-1/4 x 18	1032894	15200	24.68
1-1/4 x 24	1032910	15200	28.20
1-1/2 x 12	1032938	21400	30.69
1-1/2 x 18	1032956	21400	36.75
1-1/2 x 24	1032974	21400	41.60
1-3/4 x 18	1033018	28000	54.00
1-3/4 x 24	1033036	28000	63.36
2 x 24	1033054	37000	94.25
2-1/2 x 24	1033072	60000	165.00
2-3/4 x 24	1033090	75000	198.00

*Proof Load is 2.5 times the Working Load Limit. Ultimate Load is 5 times the Working Load Limit.

Crosby® Connecting Links

A-1337 LOK-A-LOY® Connecting Link



- Suitable for use with both Grade 80 and Grade 100 chain.
- Individually Proof Tested at 2-1/2 times Working Load Limit with certification.
- Locking system that provides for simple assembly and disassembly – no special tools needed.
- 25% stronger than Grade 80 Alloy.
- Meets ASTM A-952-96 standards for Grade 100 chain fittings.
- Forged Alloy Steel – Quenched and Tempered.
- Fatigue rated.

Chain Size (in.) (mm)	A-1337 Stock No.	Pkg. Qty.	Working Load Limit (lbs.)*	Weight Each (lbs.)
9/32 (1/4)	1015109	60	4300	.28
5/16	1015118	50	5700	.33
3/8	1015127	40	8800	.73
1/2	1015136	12	15000	1.67
5/8	1015145	10	22600	2.86
3/4	1015154	1	35300	5.00
7/8	1015163	1	42700	7.50
1	1015172	1	59700	11.03
1-1/4	1015181	1	90400	20.38

*Ultimate Load is 4 times the Working Load Limit.

A-336 LOK-A-LOY® 6 Connecting Link



- Forged Alloy Steel – Quenched and Tempered.
- Individually Proof Tested.
- Easy to assemble.

Chain Size (in.)	A-336 Stock No.	Working Load Limit (lbs.)*	Weight Each (lbs.)	Dia. of Hole To Accept Link
1/4	1014397	3250	.24	.50
3/8	1014413	6600	.58	.66
1/2	1014431	11300	1.20	.88
5/8	1014459	16500	2.42	1.06
3/4	1014477	23000	3.89	1.19
7/8	1014495	28750	6.08	1.38
1	1014510	38750	7.03	1.47
1-1/4	1014538	57500	13.20	1.73

*Ultimate Load is 4 times the Working Load Limit.

The WLL of the A-336 are less than Grade 80 chain ratings. When using in Grade 80 chain slings, ANSI B30.9c requires that the Working Load Limit of a sling must not exceed the lowest Working Load Limit of the components in the system.

Alloy Master Links

A-342



- Alloy Steel - Quenched and Tempered.
- Individually proof tested to values shown, with certification.
- Proof tested with fixture sized to prevent localized point loading per ASTM A952.
- Proof test certification shipped with each link.
- Sizes from 1/2" to 2" are drop forged and have a Product Identification Code (PIC) for material traceability, along with the size and the name Crosby and USA in raised lettering.

"A" Size (in.)	A-342 Stock No.	Working Load Limit (lbs.)*	Weight Each (lbs.)	Proof Load (lbs.)**
1/2	1014262	7000	.82	14000
5/8	1014280	9000	1.52	18000
3/4	1014306	12300	2.07	28400
7/8	1014315	15000	3.40	30000
1	1014324	24360	4.85	48700
1-1/4	1014342	36200	9.57	72400
1-1/2	1014360	54300	16.22	113200
1-3/4	1014388	84900	25.22	169800
2	1014404	102600	37.04	205200
2-1/4†	1014422	143100	54.10	289200

** Minimum Ultimate Load is 5 times Working Load Limit. Based on single leg sling (in-line load), or resultant load on multiple legs with an included angle less than or equal to 120.

** Proof test load equals or exceeds the requirement of ASTM A952(8.1) and ASME B30.9-1.4 for the chain size and number of legs.

† Welded Master Link.

Crosby® Grab Hooks

- Forged Steel - Quenched and Tempered.
- Design factor is 4:1.
- Quick and easy assembly.
- H-330 and H-323 are designed for Crosby Spectrum 4® chain.
- A-330 and A-323 are designed for Crosby Spectrum 7® chain.

H-330 / A-330



H-323 / A-323



H-330 / A-330 Clevis Grab Hooks

Chain Size (in.)	Stock No.		Working Load Limit (lbs.)*		Weight Each (lbs.)
	H-330 Carbon	A-330 Alloy*	H-330 Carbon	A-330 Alloy	
1/4	1027105	1026249*	2600	3500	.36
5/16	1027123	1027267*	3900	4700	.62
3/8	1027141	1027285*	5400	7100	1.00
7/16	1027169	1027301	7200	8750	1.31
1/2	1027187	1027329*	9200	12000	2.22
5/8	1027203	1027347	13000	15800	4.41
3/4	1027221	1027365	20200	24700	6.50

H-323 / A-323 Eye Grab Hooks

Chain Size (in.)	Stock No.		Working Load Limit (lbs.)*		Weight Each (lbs.)
	H-323 Carbon	A-323 Alloy*	H-323 Carbon	A-323 Alloy	
1/4	1026204	1026384*	2600	3500	.28
5/16	1026222	1026400*	3900	4700	.45
3/8	1026240	1026428*	5400	7100	.79
1/2	1026286	1026464*	9200	12000	1.75
5/8	1026302	1026482	13000	15800	3.25
3/4	1026320	1026507	20200	24700	5.94

*These A-330 and A323 hooks are forged with an "8" designating Grade 80, and are suitable for use with Grade 8 chain in overhead lifting applications as long as hook is Proof Tested as part of the chain sling assembly or as an individual component per ANSI B30.9c.

Crosby® Grade 100 Clevis Hooks

- Forged Alloy Steel – Quenched and Tempered.
- Individually Proof Tested to 2-1/2 times the Working Load Limit with certification.
- Each hook has a Product Identification Code (PIC) for material traceability, along with the size and the name Crosby & U.S.A. in raised letters.
- Hoist hooks incorporate two types of strategically placed markings forged into the product which address two (2) QUIC-CHECK® features : Deformation Indicators and Angle Indicators.
- New integrated latch (S-4320) meets the world standard for lifting.
 - Heavy-duty stamped latch interlocks with the hook tip.
 - High cycle, long life spring.
 - When secured with the proper cotter pin through the hole in the tip of hook, meets the intent of OSHA Rule 1926.550(g) for personnel lifting.
- Suitable for use with Grade 100 chain in overhead lifting applications as long as hook is Proof Tested as part of the chain sling assembly or as an individual component. Per ANSI B30.9-1.
- Fatigue rated at 1-1/2 times the Working Load Limit at 20,000 cycles.
- "Look for the Platinum Color – Crosby Grade 100 Alloy Products."

A-1339



A-1339 Clevis Sling Hook

Chain Size (in.)	(mm)	A-1339 Stock No.	Hook ID Code	Working Load Limit (lbs.)*	Weight Each (lbs.)
-	6	1048982	DA	3200	.60
1/4	7	1048991	HA	4300	1.60
5/16	8	1049000	HA	5700	1.60
3/8	10	1049009	IA	8800	2.50
1/2	13	1049018	JA	15000	5.00
5/8	16	1049027	KA	22600	9.60

*Minimum Ultimate Load is 4 times the Working Load Limit.

- Forged Alloy Steel - Quenched and Tempered.
- Innovative cradle design allows for 100% efficiency of Grade 100 chain.
- Individually Proof Tested to 2-1/2 times the Working Load Limit with certification.
- The use of A-1338 Cradle Grab Hook will allow 100 percent of the chain sling capacity. When used to hook back to chain leg to form a choker, the angle of the choke must be 120 degrees or greater. When used as a chain shortener, minimize twist of chain and ensure chain is fully engaged in hook.
- Each hook has a Product Identification Code (PIC) for material traceability, along with the size and the name Crosby and U.S.A. in raised letters.
- Suitable for use with Grade 100 and Grade 80 chain in overhead lifting applications as long as hook is Proof Tested as part of the chain sling assembly or as an individual component. Per ANSI B30.9-1.
- Fatigue rated at 1-1/2 times the Working Load Limit at 20,000 cycles.
- "Look for the Platinum Color - Crosby Grade 100 Alloy Products."

A-1338



A-1338 Cradle Grab Hook

Chain Size (in.)	(mm)	A-1339 Stock No.	Working Load Limit (lbs.)*	Weight Each (lbs.)
1/4	7	1049417	4300	1.10
5/16	8	1049426	5700	1.10
3/8	10	1049435	8800	1.80
1/2	13	1049444	15000	3.70
5/8	16	1049453	22600	6.70

*Minimum Ultimate Load is 4 times the Working Load Limit.

Crosby® Slip Hooks

- Forged Carbon Steel or Forged Alloy Steel – Quenched and Tempered.
- All Pins Alloy Steel – Quenched and Tempered.
- **Not Suitable for use with Grade 80 chain and chain slings used in overhead lifting. For slings or lifting chains, Grade 80 or 100 alloy components are recommended.**

H-331 / A-331



H-324



H-331 / A-331 Clevis Slip Hooks

Chain Size (in.)	Stock No.		Working Load Limit (lbs.)*		Weight Each (lbs.)
	H-331 Carbon	A-331 Alloy*	H-331 Carbon	A-331 Alloy	
1/4	1027383	1027524	1950	2750	.55
5/16	1027409	1027542	2875	4300	.79
3/8	1027427	1027560	4000	5250	1.21
7/16	1027445	1027588	5000	7000	2.06
1/2	1027463	1027604	6500	9000	2.75
5/8	1027481	1027622	9250	13500	4.75
3/4	–	1027640	–	19250	11.28

H-324 Eye Slip Hooks

Chain Size (in.)	H-324 Stock No.	Working Load Limit (lbs.)*	Weight Each (lbs.)
1/4	1026749	1950	.40
5/16	1026767	2875	.64
3/8	1026785	4000	1.10
7/16	1026801	5000	1.56
1/2	1026829	6500	2.09
5/8	1026847	9250	3.90
3/4	1026865	12500	6.93

*Ultimate Load is 4 times the Working Load Limit.

McKissick Snatch Blocks

New Improved Light Champion

- Forged alloy heat treated hooks.
- Forged steel swivel tees, yokes and shackles.
- Hook and shackle assemblies on 4-1/2" through 14" sizes can be interchanged.
- Can be furnished with bronze bushings or roller bearings.
- Opening feature permits insertion of rope while block is suspended from gin-pole.
- 3" thru 18" 418 and 419 blocks have exclusive bolt retaining spring to assure no lost bolts.
- Can be furnished with SS-4055 hook latch.
- Pressure lube fittings.
- Fatigue rated.
- 3" - 10" feature dual rated wireline sheaves.



418 With Hook



419 With Shackle



404 Tail Board

Sheave Diameter (in.)	Bearing Code	Stock No.			Wire Rope Size (in.)††	Working Load Limit (t)*	Weight Each (lbs.)			Rep. Sheave Stock No.	Rep. Latch Stock No.
		418 with Hook	419 with Shackle	404 Tail Board			418 with Hook	419 with Shackle	404 Tail Board		
3*	BB	–	109091	–	5/16 - 3/8	2	–	4	–	460147	–
3**	BB	108038	109037†	102016	5/16 - 3/8	2	5	4	3	460147	1096421
4-1/2**	BB	108065	109064	102025	3/8 - 1/2	4	12	12	7	2000232	1096468
6	BB	108127	109126	102098	5/8 - 3/4	8	27	28	15	460815	1096562
6	RB	108154	109153	102114	5/8 - 3/4	8	27	28	15	472688	1096562
8	BB	108225	109224	102169	5/8 - 3/4	8	33	34	21	461164	1096562
8	RB	108252	109251	102187	5/8 - 3/4	8	33	34	21	473277	1096562
10	BB	108323	109322	102230	5/8 - 3/4	8	41	42	29	461805	1096562
10	RB	108350	109359	102258	5/8 - 3/4	8	41	42	29	473776	1096562
12	BB	169169	202961	178890	5/8	8	48	49	36	462270	1096562
12	RB	199911	169347	178934	5/8	8	48	49	36	474141	1096562
12	BB	108421	109420	102301	3/4	8	48	49	36	462289	1096562
12	RB	108458	109457	102329	3/4	8	48	49	36	474150	1096562
14	BB	194920	169356	–	5/8	8	55	56	–	463625	1096562
14	RB	199948	167857	–	5/8	8	55	56	–	474766	1096562
14	BB	108528	109527	–	3/4	8	55	56	–	463634	1096562
14	RB	108546	109545	–	3/4	8	55	56	–	474775	1096562
16	BB	199975	203041	–	3/4	15	130	135	–	4100056	1096609
16	RB	200008	203087	–	3/4	15	130	135	–	4200028	1096609
16	BB	108608	109607	–	7/8	15	130	135	–	4100065	1096609
16	RB	108626	109625	–	7/8	15	130	135	–	4200037	1096609
18	BB	200099	203130	–	7/8	15	150	155	–	464571	1096609
18	RB	200151	203176	–	7/8	15	150	155	–	475792	1096609
18	BB	108644	109643	–	1	15	150	155	–	4104640	1096609
18	RB	108662	109661	–	1	15	150	155	–	600000	1096609

* Ultimate Load is 4 times the Working Load Limit.

** Available in Bronze Bushed only. 3" and 4-1/2" have self lubricating Bronze Bushing.

† Fitted with 1-1/4" ID Swivel Eye.

†† May be furnished in other wire rope sizes.

NOTE: When ordering, please specify: size, block number, hook or shackle, bronze bushed or roller bearing, and wire rope size.

McKissick Snatch Blocks (continued)

Champion

- Hooks and side plates are forged alloy steel and heat treated.
- Shackles and yokes are forged and heat treated steel.
- All parts are forged.
- Side plates are designed to eliminate possibility of rope jamming.
- Can be furnished with bronze bushings or sealed roller bearings.
- Opening feature permits insertion of rope while block is suspended from gin-pole.
- Can be furnished with S-4320 hook latch.
- Pressure lube fittings.
- Fatigue rated.
- Hook and shackle assemblies can be interchanged.
- Blocks furnished with dual rated wireline sheaves.



Sheave Diameter (in.)	Bearing Code	Stock No.			Wire Rope Size (in.)†	Working Load Limit (t)*	Weight Each (lbs.)			Rep. Sheave Stock No.	Rep. Latch Stock No.
		420 with Hook	421 with Shackle	406 Tail Board			420 with Hook	421 with Shackle	406 Tail Board		
6	BB	169374	169481	167973	3/4 - 7/8	12	40	48	24	460940	1096609
6	RB	169392	204120	167982	3/4 - 7/8	12	40	48	24	473035	1096609
8	BB	169418	169515	167991	3/4 - 7/8	15	51	57	30	461360	1096609
8	RB	169445	204193	168008	3/8 - 7/8	15	51	57	30	473534	1096609
10	BB	110221	110720	103186	3/4 - 7/8	15	63	69	42	462001	1096609
10	RB	110258	110757	103020	3/4 - 7/8	15	63	69	42	474025	1096609

Super Champion

- Drop forged, heat treated swivel hook or swivel shackle.
- Hook and shackle assemblies on 8" through 14" sizes can be interchanged.
- Can be furnished with bronze bushings or roller bearings.
- Pressure lube fittings.
- 8" thru 10" 430 and 431 blocks have exclusive bolt retaining spring to assure no lost bolts.
- Can be furnished with hook latch.
- 8" and 10" models furnished with dual wireline sheaves.
- Fatigue Rated.



Sheave Diameter (in.)	Bearing Code	Stock No.			Wire Rope Size (in.)†	Working Load Limit (t)*	Weight Each (lbs.)			Rep. Sheave Stock No.	Rep. Latch Stock No.
		430 with Hook	431 with Shackle	407 Tail Board			430 with Hook	431 with Shackle	407 Tail Board		
8	BB	120023	121022	103523	1 - 1-1/8	20	75	87	42	461440	1096657
8	RB	120041	121040	103541	1 - 1-1/8	20	75	87	42	473614	1096657
10	BB	120096	121095	103603	1 - 1-1/8	20	89	101	55	462083	1096657
10	RB	120112	121111	103621	1 - 1-1/8	20	89	101	55	474105	1096657
12	BB	208536	169917	184375	1	20	103	115	70	462680	1096657
12	RB	208554	209303	184393	1	20	103	115	70	474524	1096657
12	BB	120176	121175	103685	1 - 1-1/8	20	103	115	70	462699	1096657
12	RB	120194	121193	103701	1 - 1-1/8	20	103	115	70	474533	1096657
14	BB	208572	209321	184419	1	20	123	135	90	463457	1096657
14	RB	208590	170424	184437	1	20	123	135	90	475024	1096657
14	BB	120256	121255	103765	1 - 1-1/8	20	123	135	90	463466	1096657
14	RB	120274	121273	103783	1 - 1-1/8	20	123	135	90	475033	1096657
18	BB	208689	209410	184552	1	25	240	260	165	4100298	1090143
18	RB	208732	209465	184605	1	25	240	260	165	4200331	1090143
18	BB	119482	119561	119641	1 - 1-1/8	25	240	260	165	4103348	1090143
18	RB	119491	119570	119650	1 - 1-1/8	25	240	260	165	4200322	1090143
20	BB	208750	209483	184623	1 - 1-1/8	30	375	400	215	4103936	1090189
20	RB	208787	169864	184650	1 - 1-1/8	30	375	400	215	4200769	1090189
20	BB	119507	119589	119669	1 - 1-1/4	30	375	400	215	4103945	1090189
20	RB	119516	119598	119678	1 - 1-1/4	30	375	400	215	4200778	1090189
24	BB	208812	209526	184687	1 - 1-1/8	30	450	475	290	4104114	1090189
24	RB	208858	209553	184721	1 - 1-1/8	30	450	475	290	4200983	1090189
24	BB	119525	119605	119687	1 - 1-1/4	30	450	475	290	4104123	1090189
24	RB	119534	119614	119696	1 - 1-1/4	30	450	475	290	4200992	1090189

* Ultimate Load is 4 times the Working Load Limit.

† May be furnished in other Wire Rope sizes.

Western Regular Wood Blocks

Regular Wood Blocks for Manila Rope

- Becketts furnished on all blocks.



Block Size (in.)	Fitting	Single Sheave			Double Sheave			Triple Sheave	
		21 B Stock No.	21 C Stock No.	21 R Stock No.	22 B Stock No.	22 C Stock No.	22 R Stock No.	23 B Stock No.	23 R Stock No.
3	HS	603813	602217	603617	604616	602618	604411	605410	-
4	HS	603831	602235	603635	604634	602636	604439	605438	605232
5	HS	603859	602253	603653	604652	602654	604457	605456	-
6	HS	603877	602271	603671	604670	602672	604475	605474	605278
8	HS	603911	602315	603715	604714	602716	-	605517	605312
3	N	606419	-	-	606810	-	-	607212	-
4	N	606437	-	606231	606838	-	606632	607230	607034
5	N	606455	-	-	606856	-	606650	607258	-
6	N	606473	-	-	606874	-	606678	607276	607070
8	N	606516	-	-	606918	-	-	607310	-
3	N	610011	-	-	611617	-	-	613214	-
4	N	610039	-	-	611635	-	-	613232	-
5	N	610057	-	-	611653	-	-	613250	-
6	N	610075	-	-	611671	-	611476	613278	-
8	N	610119	-	-	611715	-	611519	613312	-

Block Size (in.)	Sheave Dimensions (in.)			Manila Rope Size (in.)	Working Load Limit (lbs.)*			Weight Each (lbs.)		
	Outside Dia.	Rim Thickness	Center Pin Dia.		21 Single	22 Double	23 Triple	21 Single	22 Double	23 Triple
3	1.75	.50	.38	3/8	500	800	1200	1.00	1.75	2.50
4	2.25	.63	.38	1/2	1000	1400	1800	1.75	3.00	4.00
5	3.00	.75	.38	5/8	1200	1800	2400	3.25	5.60	6.50
6	3.50	1.00	.50	3/4	1800	2500	3200	5.00	8.50	11.50
8	4.75	1.13	.63	7/8 - 1	2800	3800	4800	9.00	14.00	21.50

*Ultimate Load is 4 times the Working Load Limit.
 Bearing Code: B - Bronze Bushed Self Lubricating
 C - Common Iron
 R - Roller Bearing

Western Blocks for Manila Rope

Gin Blocks for Manila Rope

- For light housing by Roofers and Contractors.
- Furnished with drop forged swivel latch hooks. Can be furnished with SS-4055 hook latch.

Block Size (in.)	Fitting	Gin Block Stock No.			Sheave Size (in.)			Manila Rope Size (in.)	Working Load Limit (lbs.)*	Weight Each (lbs.)
		T-350-C	T-350-R	T-350-B	Outside Dia.	Rim Thickness	Bearing Dia.			
8	T	710001	710207	710403	8.00	1.25	.75	7/8	1000	9.0
10	T	710029	710225	710421	10.00	1.25	.88	1	1000	9.8
12	T	710047	710243	710449	12.00	1.38	.88	1	1000	12.7

*Ultimate Load is 3 times the Working Load Limit.
 Bearing Code: B - Bronze Bushed Self Lubricating
 C - Common Iron
 R - Roller Bearing



PULLEYS

No. 0173 SWIVEL EYE PULLEYS Single wheel electro plated gray iron



Size Sheave	Diameter Rope	Weight Lbs./100
1/2"	5/32"	10
3/4"	3/16"	12
1"	1/4"	15
1-1/4"	5/16"	22
1-1/2"	6/16"	28
2"	7/16"	50

No. 0174 SOLID EYE PULLEYS Single wheel electro plated gray iron



Size Sheave	Diameter Rope	Weight Lbs./100
1/2"	5/32"	8
3/4"	3/16"	11
1"	1/4"	14
1-1/4"	5/16"	21
1-1/2"	5/16"	29
2"	7/16"	53
*2-1/2"	1/2"	88

*Unavailable in zinc die cast.

No. 0176 SOLID EYE PULLEYS Double wheel electro plated gray iron



Size Sheave	Diameter Rope	Weight Lbs./100
1/2"	5/32"	12
3/4"	3/16"	21
1"	1/4"	25
1-1/2"	5/16"	74
2"	7/16"	143

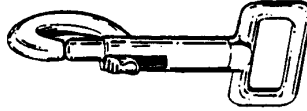
No. 0178 SWIVEL EYE PULLEYS Double wheel electro plated gray iron



Size Sheave	Diameter Rope	Weight Lbs./100
3/4"	3/16"	21
1"	1/4"	26
1-1/2"	5/16"	35
2"	7/16"	124

RUST-PROOF METAL SNAPS

No. 25 LOOP EYE BOLT SNAPS Nickel plated rust-proof metal



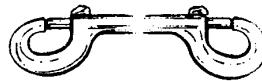
Size eye	3/4"	1"	2"
Length overall	3"	3-1/4"	4"
Snap opening	5/16"	3/8"	7/16"
Wgt. per 100	9 lbs.	9 lbs.	23 lbs.

No. 125 ROUND EYE BOLT SNAPS Nickel plated rust-proof metal



Size eye	1/2"	5/8"	3/4"
Length overall	3-1/4"	3-1/2"	3-1/2"
Snap opening	3/8"	3/8"	3/8"
Wgt. per 100	10 lbs.	11 lbs.	11 lbs.

DOUBLE PATTERN CHAIN SNAPS Nickel plated rust-proof metal



Number	161	162	163
Length overall	3-1/2"	4"	4-5/8"
Snap opening	1/4"	3/8"	3/8"
Wgt. per 100	9 lbs.	15 lbs.	17 lbs.

No. 202 RIGID EYE SNAPS Nickel plated rust-proof metal



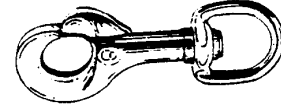
Size eye	5/8"	3/4"
Length overall	3-1/4"	3-3/8"
Snap opening	5/16"	3/8"
Wgt. per 100	8 lbs.	11 lbs.

No. 222 SWIVEL EYE SNAPS Nickel plated rust-proof metal



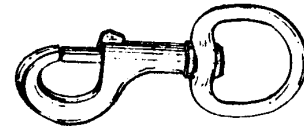
Size eye	5/8"	3/4"
Length overall	3-1/2"	3-5/8"
Snap opening	9/32"	9/32"
Wgt. per 100	9 lbs.	10 lbs.

No. 224 SWIVEL EYE SNAPS Nickel plated rust-proof metal Beautifully die-cast



Size eye	5/8"	3/4"
Length overall	3-1/4"	3-3/8"
Snap opening	3/8"	3/8"
Wgt. per 100	13 lbs.	14 lbs.

No. 225 SWIVEL EYE SNAPS Nickel plated rust-proof metal

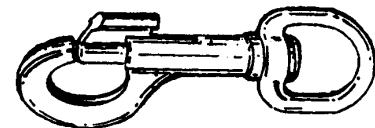


Size eye	3/8"	1/2"	5/8"
Length overall	3-1/4"	3-3/8"	3-1/2"
Snap opening	3/8"	3/8"	3/8"
Wgt. per 100	9 lbs.	9 lbs.	10 lbs.

Size eye	3/4"	7/8"	1-L
Length overall	3-1/2"	3-1/2"	3-3/4"
Snap opening	3/8"	3/8"	3/8"
Wgt. per 100	11 lbs.	12 lbs.	12 lbs.

Size eye	1-H	1-1/8"	1-1/4"
Length overall	4"	4"	4-1/8"
Snap opening	3/8"	7/16"	1/2"
Wgt. per 100	16 lbs.	14 lbs.	16 lbs.

No. 227 SWIVEL EYE BOLT SNAPS Nickel plated rust-proof metal



Size eye	3/8"	1/2"	5/8"
Length overall	3-1/4"	3-3/8"	3-1/2"
Snap opening	3/8"	3/8"	3/8"
Wgt. per 100	10 lbs.	10 lbs.	10 lbs.

Size eye	3/4"	7/8"	1"
Length overall	3-5/8"	3-3/4"	4"
Snap opening	3/8"	3/8"	3/8"
Wgt. per 100	10 lbs.	13 lbs.	16 lbs.



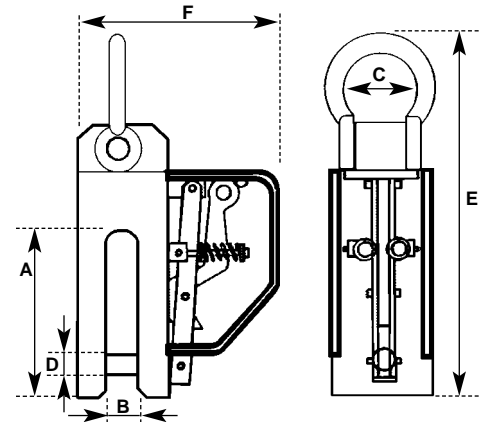
PILE PITCHING AND PLATE CLAMPS

CP Pile pitching clamp



These clamps are designed specifically for pitching sheet steel piling and have the advantage that a rope is fitted for easy release from ground level. This presents a quicker method than the laborious procedure of release when using a standard shackle. These clamps are not designed to extract a driven pile and must not be used for this under any circumstances.

Working load limit (lbs.)	Product code	Dimensions (in.)						Weight (lbs.)
		A	B	C	D	E	F	
4,400	CP2	9	3/4	2	3/4	16-3/4	8-1/2	42
6,600	CP3	9	1	2-1/2	1-1/4	17-7/8	8-7/8	51
11,000	CP5	9	1-3/8	3-1/4	1-1/4	19-7/8	9-1/2	73



COOPER Hand Tools

LIFTING CLAMPS

GX plate clamps

Campbell®



- Drop-forged and heat treated components.
 - Can be used for both vertical and horizontal-to-vertical through 180°.
 - Exclusive feature is a patented wear indicator system.
 - When convex teeth are flattened between unique wear indicator grooves, it is time to change the cam.
- Note:* The Pad and Cam should be replaced at the same time.
- Clamps 100% Proof Tested, a Certificate of Test supplied with each clamp.
 - Fewer stress points and less chance of side loading damage.
 - Order unit is "Each."

Catalog No.	UPC Code (020418)	Grip Range (in.)	Working Load Limit (metric ton)	Weight (lbs.)
6423000	172199	1/16 - 5/8	1/2	4
6423005	172205	1/16 - 3/4	1	8
6423010	172229	1/16 - 1	3	17
6423015	177583	1/2 - 2	5	40
6423920	175657	5/8 - 1-1/8	1/2	5
6423923	175664	3/4 - 1-3/8	1	9

WARNING

- Select proper size clamp for the job.
- Determine the weight of the plate to be lifted.
- Do not exceed WLL (Working Load Limit) shown on clamp.
- Plate thickness must be within grip range shown on clamp.



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Supply, Inc. of Virginia
Form Rentals

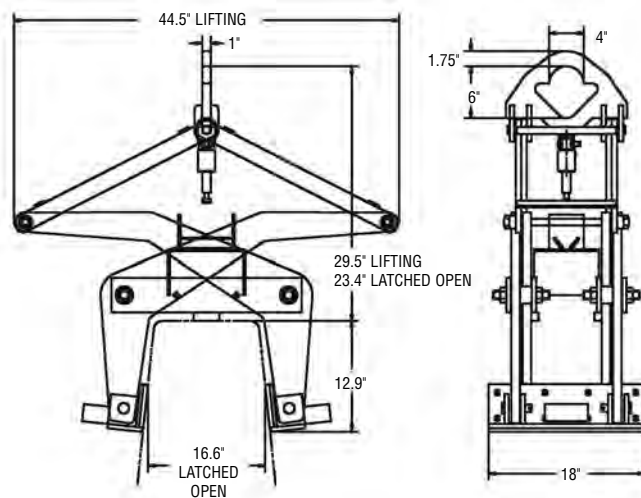
NJ (856) 662-6935 • PA (215) 925-8800
Metro (703) 569-6660 • VA (703) 455-6700
Clinton, MD (301) 877-8640



Model 74 – Barrier Grabs

FEATURES:

- Hands-off operation. No need to attach and secure lifting chains or slings.
- The barrier suffers far less damage when moving. This means longer barrier life and reduced cost.
- The grab is able to move barriers quicker and easier than manual methods, resulting in less man-hours.
- There is no need to drill holes in the barriers to accommodate chains or slings.
- Replaceable urethane lifting pads are standard.



SPECIFICATIONS:

Model Number	Rated Capacity (Lbs.)	Weight (Lbs.)
74-4 1/4	8,500	450
74-7 1/4	14,500	505

Note: States of CA, OR and WA may require special grips with steel "Dog Points" in lieu of standard pads. Specify "Dog Points" with order.

Optional Extended Barrier Grab Kit

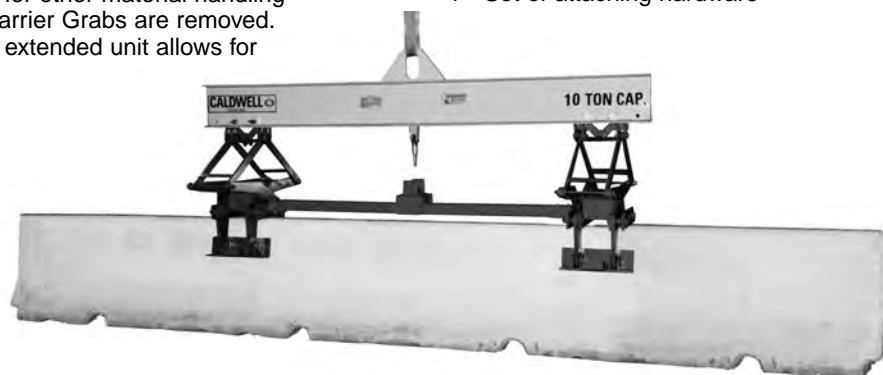
FEATURES:

- Attach two Barrier Grabs, and expand your barrier handling capabilities.
- Handles barriers up to 40' in length.
- Capacities up to 29,000 lbs.
- Beams can be used for other material handling applications when Barrier Grabs are removed.
- Single auto-latch for extended unit allows for smooth operation.

BARRIER GRABS MUST BE PURCHASED SEPARATELY

Each kit consists of:

- 1 - Model 20 lifting beam, with Autolatch lug welded in place.
- 1 - Autolatch
- 1 - Stabilizer bar
- 1 - Set of attaching hardware





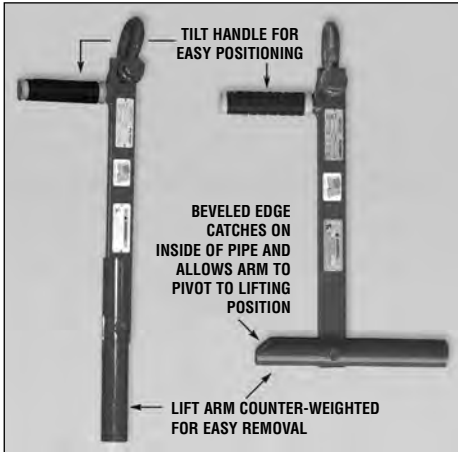
PIPE HANDLING

Pipe Pick™

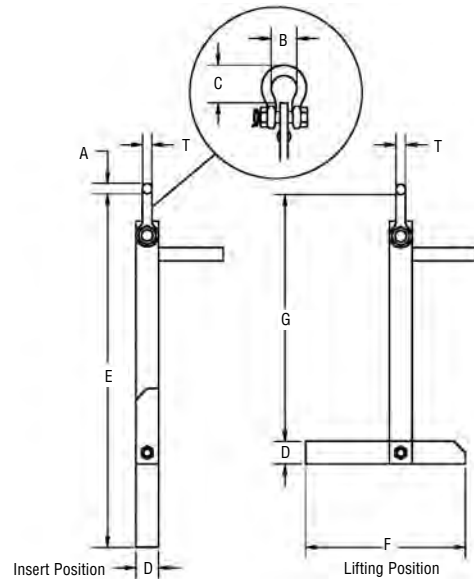
The patented new concrete Pipe Pick™ is a quicker, safer and cleaner way of handling precast concrete pipe.

FEATURES:

- Simple and fast / No need to reach inside the pipe.
- Worker remains above the pipe at all times.
- Conforms to applicable standards so you are in compliance with OSHA.



Simply insert the Pipe Pick™ into the lifting hole in the pipe—tilt—to engage the beveled edge—and lift up! You can now lift and set the pipe. Once the pipe is set, lower the Pipe Pick™; the counterweighted lift arm automatically falls straight and the Pipe Pick™ can be removed from the pipe.



SPECIFICATIONS

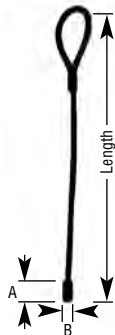
Model No.	Cap. (Tons)	Min. Pipe I.D.	Dimensions in Inches							Wght. (Lbs.)	
			D	E	F	G	A	B	C		T
CPP-1.5	1-1/2	12	1.50	23.5	12.25	16.25	0.69	1.69	2.50	0.63	10
CPP-3	3	14	2.00	28.5	12.00	20.50	0.81	2.00	2.88	0.75	18
CPP-5	5	16	2.75	44.0	13.50	36.13	1.06	2.69	4.00	1.00	46

Pat. No. 5,820,186

Model PC – “Tea Cup” Pipe Carrier

FEATURES:

- Efficiently handles concrete water and sewer pipes, saving you time and money.
- Optional “Spoon” handle allows the “Tea Cup” to be guided into small diameter pipes.



SPECIFICATIONS - Model PC

Model Number	Rated Capacity (Tons)	Lifting Plate Dia.	Pipe Insert O.D.	Pipe Insert Height	Weight (Lbs.)
PC-3/4*	6.6	5-9/16	2	1-7/8	9
PC-1	13	6	2-1/2	2	12
PC-1 1/2	18	8	3	3	22

* Has standard “lip” for use with the “Spoon Handle.”
* Keep concrete hole lifting to 1/8” of insert diameter.

New Model

Low Profile “Tea Cut” Pipe Carrier
Same as standard model plus:

- Only wire rope needs to be inserted through pipe.

SPECIFICATIONS - Low Profile

Model Number	Rated Capacity (Tons)	Lifting Plate Dia.	Pipe Insert O.D.	Weight (Lbs.)
PC-3/4-F*	6.6	5-9/16	2-1/8	9
PC-1-F	13	6	2-5/8	12
PC-1 1/2-F	18	8	3-1/4	22

* Can use “Spoon Handle” with this model.

Tea Cup Lifting Sling Option - LS

SPECIFICATIONS - Model LS

Use With	Model Number	Rated Capacity (Tons)	Sling Dia. (In.)	Standard Length (Ft.)	After Swage Dim. (In.)		Weight (Lbs.)
					A	B	
PC-3/4	LS-3/4	4.9	3/4	5	3.25	1.55	9
	LS-7/8	6.6	7/8	5	3.86	1.80	14
	LS-1	8.5	1	5	4.36	2.05	19
PC-1	LS-1 1/8	10	1-1/8	5	4.81	2.30	25
	LS-1 1/4	13	1-1/4	5	5.42	2.56	33
PC-1 1/2	LS-1 1/2	18	1-1/2	5	6.52	3.00	52



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Clinton, MD (301) 877-8640



Model MHL – Concrete Housing Lifter

FEATURES:

- 2- or 3-leg models available.
- Handles 4" - 6" concrete wall thickness.
- Will not damage concrete seat.
- Legs can be quickly positioned to balance load.
- Requires constant tension to maintain positive load contact.

SPECIFICATIONS

Model Number	Description	Capacity (Lbs.)	Weight (Lbs.)
MHL-5	2-Leg Model – Two 42" Legs	10,000	95
MHL-7½-72	3-Leg Model – Two 42" Legs and One 72" Leg	15,000	145



Model MCL – Manhole Sleeve Lifter

FEATURES:

- Easily attaches to, and releases from the load.
- Quick and efficient way to place cast manhole sleeves.

SPECIFICATIONS

Model Number	Description	Capacity (Lbs.)	Weight (Lbs.)
MCL-1/2	2-Leg Version	1,000	30
MCL-3/4	Two 18" Legs, One 30" Leg with Shortener	1,500	25



Model MML – Magnetic Manhole Lifter

FEATURES:

- Makes moving heavy manhole covers an easy one-person operation.
- Dolly handle breaks down for easy storage.
- Reduces potential for injury.
- Use for covers or grates.

SPECIFICATIONS

Model Number	Description	Weight (Lbs.)
MML-26	Up to 26" Diameter	77
MML-35	30" to 35" Diameter	108
MML-36	36" Diameter and Up	106



Model MML-26 or MML-35



Model MML-36

Model CPL – C-Hook Pipe Lifter

FEATURES:

- Handles precast concrete pipe from 4' to 8' in length.
- Multiple lift points allow pick point to be positioned over load center of gravity.
- Non-skid urethane saddle prevents pipe from slipping off lifter.
- Quick, efficient way to pick and place.



SPECIFICATIONS

Model Number	Max. Pipe Diameter	Throat	Arm	Headroom	Capacity (Lbs.)	Weight (Lbs.)
CPL-1.5	24	8	6.62	33.8	3,000	300
CPL-3	36	8	6.87	35.63	6,000	500
CPL-4.5	48	8	7.44	37.31	9,000	700
CPL-6	60	8.5	8.38	39.25	12,000	750
CPL-9	72	10	8.25	41.63	18,000	1100
CPL-15	96	12	10.75	48.12	30,000	1550



REMOTE RELEASING HOOK

Model RR - Rig-Release™ Remote Releasing Hooks

Caldwell's Rig-Releasing Hooks are a safe and simple way to release rigging remotely.

COMMON FEATURES:

- Designed for rugged outdoor use.
- Allow rigging to be released from the ground.
- Conform to ASME B30.20 and B30.9 standards.
- Easy to use—simply rig, lift, set and release.
- Lock engages with very little load weight.
- Oversized bail for easy mounting on crane hook. Five-, 10- and 15-ton units provided with fixed bail (Manual Release Unit). Five-ton unit provided with fixed bail (Radio Release Unit).

Manual Release Unit

- Locking mechanism can be adjusted to accommodate a wide variety of lifting slings.

SAFETY FEATURES

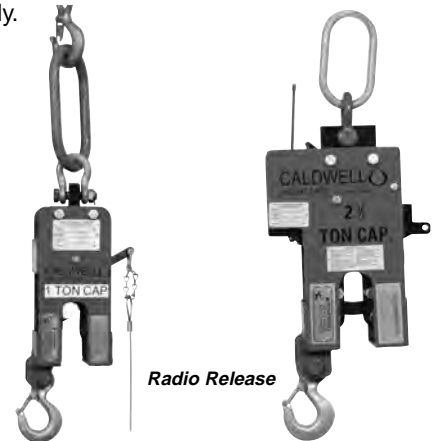
- Rated capacity can be supported from either Sling Release Point or the Lower Safety Hook.
- Floating Lever Assembly is seated and captured during hoisting and **CAN NOT** be released.
- Lever Release Assembly only works when the weight of the load is absent or "taken off."
- Release cord has built in overload protection to prevent inadvertent release or damage to the Lower Release Assembly Mechanism.
- Additional springs can be added to accommodate for heavier sling weights.

Radio Release Unit with Remote Control

- Includes two 12 VDC 0.8 Amp Hr. sealed maintenance free lead acid battery (rechargeable).
- Includes one Float Charger (power to vehicle is 12 VDC outlet or port), and one DC to AC converter.
- Battery life lasts an 8-hour shift, depending on setting of cycle.
- 1 - 2 minute cycle.

SAFETY FEATURES

- Radio active solenoid is mechanically "blocked" when the unit is under load, preventing load release.
- Transmitter "times out" in 10 seconds, which prevents inadvertent release of load.
- Multiple Rig Release™ Hooks can safely be used for "Christmas Tree" application due to the dual mechanical feature.
- Two step, two button activation (release) sequence prevents inadvertent release signal.
- Range up to 400' (with clear line of site).

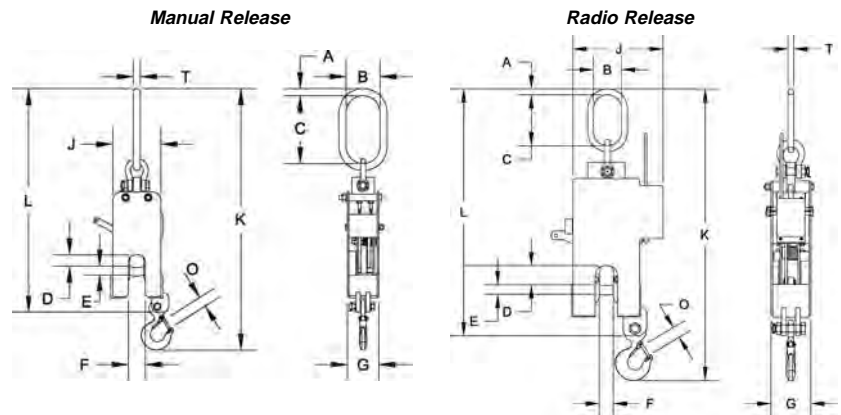


Model Number	Rated Capacity	WEIGHT OF LOAD			WEIGHT OF RIGGING	
		Minimum Load Capacity (Lbs.)		Lifting Slings Required Rope Dia. (In.)	Maximum Allowable Rigging Wght. (Lbs.)	
		Basket	Choker		Basket	Choker
MANUAL RELEASE						
RR-1**	1 Ton	30	15	3/8	14	7
RR-2.5**	2.5 Ton	80	40	5/8	28	14
RR-5**	5 Ton	230	115	7/8	80	30
RR-10**	10 Ton	230	115	1-1/4	100	50
RR-15**	15 Ton	400	200	1-1/2	100	50
RADIO RELEASE						
RR-2.5R**	2.5 Ton	80	40	5/8	28	14
RR-5R**	5 Ton	250	125	7/8	60	30

** Chart data is based upon the minimum number of springs.

If the maximum allowable rigging weight needs to be increased, add additional springs, refer to the Technical Data Sheet.

Rig-Release Hooks can **NOT** under any circumstances be used to lift a load weighing less than the minimum load capacity shown.



SPECIFICATIONS

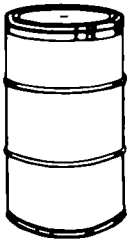
Model No.	Rated Cap.	Dimensions in Inches												Weight (Lbs.)
		D	E	F	G	J	K	L	A	B	C	T	O	
MANUAL RELEASE														
RR-1	1 Ton	1.15	0.76	1.25	2.77	4.25	23.10	19.75	0.63	3.00	6.00	0.63	0.89	14
RR-2.5	2.5 Ton	1.75	1.00	1.50	4.25	9.56	31.67	26.88	0.63	3.00	6.00	0.63	1.09	45
RR-5	5 Ton	1.83	1.50	1.50	5.00	11.13	36.40	30.75	2.00	4.00	7.00	1.25	1.36	110
RR-10	10 Ton	2.25	1.75	2.00	8.31	11.00	41.16	32.13	2.00	4.00	7.00	1.25	2.08	200
RR-15	15 Ton	3.00	2.50	2.50	6.31	15.00	49.25	39.25	2.50	5.00	9.00	1.50	2.27	325
RADIO RELEASE														
RR-2.5R	2.5 Ton	1.75	1.00	1.50	4.25	9.56	31.15	26.88	0.63	3.00	6.00	0.63	1.09	50
RR-5R	5 Ton	1.83	1.50	1.50	5.00	11.13	36.40	30.75	2.00	4.00	7.00	1.25	1.36	115



Chain



**Grade 30
Proof Coil Chain**



Drums



Pails



**Grade 43
High Test Chain**



**Grade 70
Transport Chain**

Grade 30 Proof Coil Chain

Self Colored, Bright Zinc, Hot Galvanized

Stock Number			Size	Feet/ Drum	Weight/ Foot (lbs.)	Working Load Limit (lbs.)
Self Colored	Bright Zinc	Hot Galvanized				
SCPC187	ZPPC187	HGPC187	3/16	750, 1500	0.41	750
SCPC250	ZPPC250	HGPC250	1/4	400, 800	0.68	1,250
SCPC312	ZPPC312	HGPC312	5/16	275, 550	1.02	1,900
SCPC375	ZPPC375	HGPC375	3/8	200, 400	1.47	2,650
SCPC500	ZPPC500	HGPC500	1/2	100, 200	2.52	4,500
SCPC625	ZPPC625	HGPC625	5/8	75, 150	4.06	6,900
SCPC750	ZPPC750	HGPC750	3/4	50, 100	5.81	9,750
100# Dealer Pails:						
SCPC187X250	ZPPC187X250	HGPC187X250	3/16	250	0.41	750
SCPC250X141	ZPPC250X133/141	HGPC250x141	1/4	133, 141	0.68	1,250
SCPC312X92	ZPPC312X92	HGPC312X92	5/16	92	1.02	1,900
SCPC375X66	ZPPC375X66	HGPC375X66	3/8	66	1.47	2,650
SCPC500X35	ZPPC500X35	HGPC500X35	1/2	35	2.52	4,500

Grade 43 High Test Chain

Self Colored, Bright Zinc, Hot Galvanized

Stock Number			Size	Feet/ Drum	Weight/ Foot (lbs.)	Working Load Limit (lbs.)
Self Colored	Bright Zinc	Hot Galvanized				
SCHT250	ZPHT250	HGHT250	1/4	400, 800	0.71	2,600
SCHT312	ZPHT312	HGHT312	5/16	275, 550	1.04	3,900
SCHT375	ZPHT375	HGHT375	3/8	200, 400	1.48	5,400
SCHT500	ZPHT500	HGHT500	1/2	100, 200	2.51	9,200
SCHT625	ZPHT625	HGHT625	5/8	75, 150	3.58	11,500
SCHT750	ZPHT750	HGHT750	3/4	100	5.48	16,200
100# Dealer Pails:						
SCHT250X133	ZPHT250X133	HGHT250X133	1/4	133, 141	0.71	2,600
SCHT312X92	ZPHT312X92	HGHT312X92	5/16	92	1.04	3,900
SCHT375X66	ZPHT375X66	HGHT375X66	3/8	66	1.48	5,400
SCHT500X33	ZPHT500X33	HGHT500X33	1/2	35	2.51	9,200

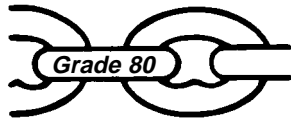
Grade 70 Transport Chain

Yellow Chromate

Stock Number	Size	Feet/Drum-Pail	Weight/ Foot (lbs.)	Working Load Limit (lbs.)
G70250	1/4	400, 800	0.63	3,150
G70312	5/16	275, 550	0.93	4,700
G70375	3/8	200, 400	1.41	6,600
G70500	1/2	100, 200	2.40	11,300
100# Dealer Pails:				
G70250X133	1/4	133	0.63	3,150
G70312X92	5/16	92	0.93	4,700
G70375X66	3/8	66	1.41	6,600
G70500X33	1/2	33	2.40	11,300

Note: Proof coil chain, high test grade 43 chain and grade 70 transport chain are not suitable for overhead lifting.

Alloy Chain



Grade 80 Alloy Chain

Grade 80 Alloy Chain

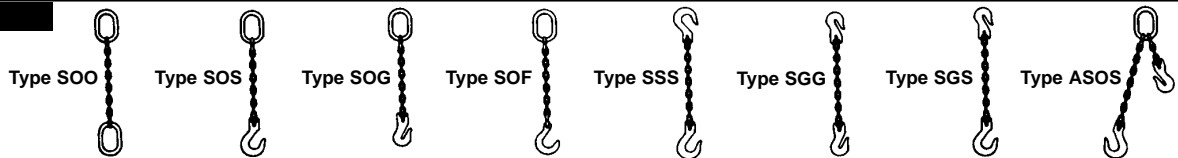
Self Colored

Stock Number	Size	Feet/Drum	Working Load Limit (lbs.)	Weight/Foot (lbs.)
G80281	9/32	400, 800	3,500	0.72
G80312	5/16	275, 550	4,500	1.06
G80375	3/8	200, 400	7,100	1.50
G80500	1/2	100, 200	12,000	2.61
G80625	5/8	75, 150	18,100	3.61
G80750	3/4	50, 100	28,300	6.22

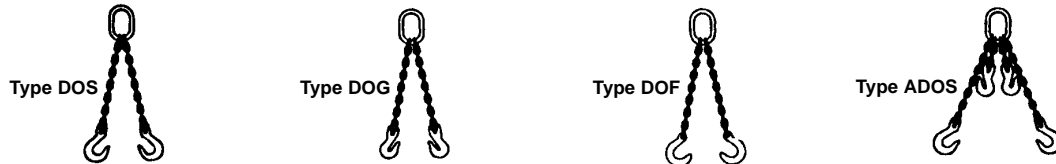
Note: Grade 80 alloy chain is approved by OSHA for overhead lifting.

Alloy Chain, Slings

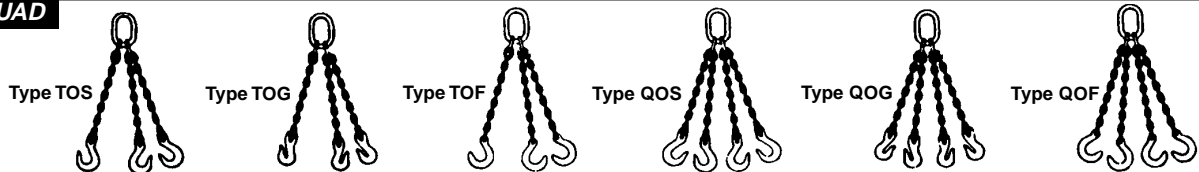
SINGLE



DOUBLE



TRIPLE/QUAD



Note: 1st Letter Indicates: S = Single Branch, D = Double Link, T = Triple Branch, Q = Quadruple Branch
 2nd Letter Indicates Top of Fitting: O = Oblong Link, S = Sling Hook, G = Grab Hook, F = Foundry Hook
 3rd Letter Indicates Lower Fitting: O = Oblong Link, S = Sling Hook, G = Grab Hook, F = Foundry Hook

Alloy Chain Sling Specifications

Chain Size Inches	Single Sling At 90° Angle	Double Sling At 60° Angle	Double Sling At 45° Angle	Double Sling At 30° Angle	Triple/Quadruple At 65° Angle	Triple/Quadruple At 45° Angle	Triple/Quadruple At 30° Angle	Chain Size Inches
1/4	4,100	7,100	5,800	4,100	10,600	8,700	6,150	1/4
3/8	7,300	12,600	10,300	7,300	19,000	15,500	11,000	3/8
1/2	13,000	22,500	18,400	13,000	33,500	27,500	19,500	1/2
5/8	20,300	35,000	28,500	20,300	53,000	43,000	30,500	5/8
3/4	29,300	50,500	41,500	29,300	76,000	62,000	44,000	3/4
7/8	39,900	69,000	56,500	39,900	104,000	85,000	60,000	7/8

Straight Link Machine Chain

Campbell®



- Uses: General utility; farm and animal.
- Standard Material: Low carbon steel.
- Standard Finish: Bright (BRT) and Blu-Krome (B.K.).
- Proof tested. **Do not use for overhead lifting.**

Carton - Straight Link Machine Chain (Order Unit is "Feet")

Trade Size	Nominal Dimensions (in. and mm)						Bright		Blu-Krome		Galvanized		Working Length				
	Mat. Dia.		Inside Dimensions Length		Width		Cat. No.	UPC No. 020418	Cat. No.	UPC No. 020418	Cat. No.	UPC No. 020418	Load Limit lb.	kg	ft./ Ctn.	Lb./ 100'	Links/ ft.
	in.	mm	in.	mm	in.	mm											
4	.12	3	.55	14	.21	5	--	--	0310424	060908	--	--	215	98	100	11	21.8
3	.14	3	.59	15	.24	6	--	--	0310324	060878	--	--	270	122	100	15	20.3
2	.15	4	.61	15	.26	7	--	--	0310224	060847	--	--	325	147	100	19	19.7
1	.16	4	.63	16	.28	7	--	--	0310124	060816	--	--	390	177	100	23	19.0
1/0	.18	4	.74	19	.31	8	--	--	0311024	060946	--	--	465	211	100	27	16.2
2/0	.19	5	.78	20	.34	9	0312014	060977	0312024	060984	--	--	545	247	100	33	15.4
3/0	.21	5	1.01	26	.36	9	--	--	0313024	061011	--	--	635	288	100	37	11.9
4/0	.23	6	1.03	26	.38	10	0314014	061035	0314024	061042	--	--	700	318	100	47	11.7
5/0	.25	6	1.07	27	.44	11	0315014	061073	0315024	061080	--	--	925	420	100	52	11.2

Twist Link Machine Chain



- Uses: General utility.
- Standard Material: Low carbon steel.
- Standard Finish: Bright (BRT), Blu-Krome (B.K.) and Galvanized (GALV).
- **Do not use for overhead lifting.**

Carton - Twist Link Machine Chain (Order Unit is "Feet")

Trade Size	Nominal Dimensions (in. and mm)						Bright		Blu-Krome		Galvanized		Working Length				
	Mat. Dia.		Inside Dimensions Length		Width		Cat. No.	UPC No. 020418	Cat. No.	UPC No. 020418	Cat. No.	UPC No. 020418	Load Limit lb.	kg	ft./ Ctn.	Lb./ 100'	Links/ ft.
	in.	mm	in.	mm	in.	mm											
3	.14	3	.56	14	.20	5	0320314	061158	0320324	061165	--	--	255	116	100	16	21.4
2	.15	4	.58	15	.21	5	0320214	061127	0320224	061134	--	--	310	141	100	20	20.7
1/0	.18	4	.68	17	.26	7	--	--	0321024	061219	--	--	440	200	100	28	17.6
2/0	.19	5	.73	19	.28	7	0322014	061233	--	--	--	--	520	236	100	34	16.4
4/0	.23	6	.89	23	.32	8	--	--	0324024	061301	--	--	670	304	100	48	13.5
5/0	.25	6	1.00	25	.37	9	--	--	--	--	0325034	061349	880	399	100	56	12.0

Lock Link, Single Loop Chain



Wrapped

Sheared

- Uses: Ideal for sprocket wheel, overhead door chains, general utility use.
- Standard Material: Low carbon steel, also available in stainless and brass.
- Standard Finish: Blu-Krome (B.K.) and Galvanized (GALV).
- **Do not use for overhead lifting.**

Carton - Lock Link, Single Loop Chain (Order Unit is "Feet")

Trade Size	Nominal Dimensions (in. and mm)						Bright		Blu-Krome		Standard End Types		Working Length				
	Mat. Dia.		Inside Dimensions Length		Width		Cat. No.	UPC No. 020418	Cat. No.	UPC No. 020418	Wrapped	Sheared	Load Limit lb.	kg	ft./ Ctn.	Lb./ 100'	Links/ ft.
	in.	mm	in.	mm	in.	mm											
2	.09	2	1.08	27	--	--	0740224	066238	0740234	066252	--	x	155	70	100	9	11.1
1/0	.12	3	1.29	33	--	--	0741024	066290	0741034	066320	x	--	265	120	100	16	9.3
2/0	.14	3	1.48	38	--	--	0742024	066375	0742034	066399	x	--	340	154	100	23	8.1
3/0	.15	4	1.63	41	--	--	0743024	066412	--	--	x	--	405	184	100	26	7.4
4/0	.16	4	1.80	46	--	--	0744024	066481	0744034	066511	x	--	485	220	100	29	6.7
5/0	.18	4	2.15	55	--	--	0745024	066566	0745034	066597	x	--	580	263	100	34	5.6



TWISTED MANILA 3-STRAND

Dia. (in.)	Size		Circ. (mm)	Weight (lbs. per 100 ft.)	Average Tensile Strength
	Dia. (mm)	Circ. (in.)			
3/16"	5	5/8"	15	1.5	405 lbs.
1/4"	6	3/4"	18	2	540 lbs.
5/16"	8	1"	24	2.9	900 lbs.
3/8"	9	1-1/8"	27	4.1	1,215 lbs.
7/16"	11	1-1/4"	33	5.3	1,575 lbs.
1/2"	12	1-1/2"	36	7.5	2,385 lbs.
9/16"	14	1-3/4"	42	10.4	3,105 lbs.
5/8"	16	2"	48	13.3	3,960 lbs.
3/4"	18	2-1/4"	54	16.7	4,860 lbs.
13/16"	20	2-1/2"	60	19.5	5,580 lbs.
7/8"	22	2-3/4"	66	22.5	6,930 lbs.
1"	24	3"	72	27.0	8,100 lbs.
1-1/16"	26	3-1/4"	78	31.3	9,450 lbs.
1-1/8"	28	3-1/2"	84	36.0	10,800 lbs.
1-1/4"	30	3-3/4"	90	41.8	12,150 lbs.
1-5/16"	32	4"	96	48.0	13,500 lbs.
1-1/2"	36	4-1/2"	108	60.0	16,650 lbs.
1-5/8"	40	5"	120	74.4	20,250 lbs.
1-3/4"	44	5-1/2"	132	89.5	23,850 lbs.
2"	48	6"	144	108.0	27,900 lbs.
2-1/8"	52	6-1/2"	156	125.0	32,400 lbs.
2-1/4"	56	7"	168	146.0	36,900 lbs.
2-1/2"	60	7-1/2"	180	167.0	41,850 lbs.
2-5/8"	64	8"	192	191.0	46,800 lbs.
2-7/8"	68	8-1/2"	204	215.0	52,200 lbs.
3"	72	9"	215	242.0	57,600 lbs.
3-1/4"	80	10"	240	299.0	69,300 lbs.
3-1/2"	88	11"	264	367.0	81,900 lbs.
4"	96	12"	288	436.0	94,500 lbs.



**Meets Federal Spec.
TR605, Type M**

Packaging:

- Coils 100 lbs. or less are packaged in cartons.
- Coils 100 lbs. or more are wrapped in poly cloth.

Manila Rope (Natural), 3 Strand

Manila Rope is a natural rope made from the fibers of the abaca plant. It is economical and strong but is affected by chemicals and mildew. Low stretch, holds knots well, resistant to UV rays, must be stored dry, does not melt, Natural in color. Military specifications available. Ranging from 1/4" to 4" in diameter. Variety of lengths available.





TWISTED POLYPRO 3-STRAND

Dia. (in.)	Size		Circ. (mm)	Weight (lbs. per 100 ft.)	Average Tensile Strength
	Dia. (mm)	Circ. (in.)			
3/16"	5	5/8"	15	0.7	720 lbs.
1/4"	6	3/4"	18	1.2	1,130 lbs.
5/16"	8	1"	24	1.8	1,710 lbs.
3/8"	9	1-1/8"	27	2.8	2,430 lbs.
7/16"	11	1-1/4"	33	3.8	3,150 lbs.
1/2"	12	1-1/2"	36	4.7	3,780 lbs.
9/16"	14	1-3/4"	42	6.1	4,590 lbs.
5/8"	16	2"	48	7.5	5,580 lbs.
3/4"	18	2-1/4"	54	10.7	7,650 lbs.
13/16"	20	2-1/2"	60	12.7	8,910 lbs.
7/8"	22	2-3/4"	66	15.0	10,400 lbs.
1"	24	3"	72	18.0	12,600 lbs.
1-1/16"	26	3-1/4"	78	20.4	14,400 lbs.
1-1/8"	28	3-1/2"	84	23.7	16,500 lbs.
1-1/4"	30	3-3/4"	90	27.0	18,900 lbs.
1-5/16"	32	4"	96	30.5	26,700 lbs.
1-1/2"	36	4-1/2"	108	38.5	32,400 lbs.
1-5/8"	40	5"	120	47.5	38,700 lbs.
1-3/4"	44	5-1/2"	132	57.0	46,800 lbs.
2"	48	6"	144	69.0	54,900 lbs.
2-1/8"	52	6-1/2"	156	80.0	62,100 lbs.
2-1/4"	56	7"	168	92.0	72,000 lbs.
2-1/2"	60	7-1/2"	180	107.0	81,000 lbs.
2-5/8"	64	8"	192	120.0	90,900 lbs.
2-7/8"	68	8-1/2"	204	137.0	103,000 lbs.
3"	72	9"	215	153.0	123,000 lbs.
3-1/4"	80	10"	240	190.0	146,000 lbs.
3-1/2"	88	11"	264	232.0	171,000 lbs.
4"	96	12"	288	275.0	324,000 lbs.



Applications:

- Floating tow lines.
- Mooring and tie-up lines.
- Pulling lines.
- Hand and block lines.

Properties:

- Good abrasion resistance, internal and surface.
- Able to float – Yes.
- Excellent resistance to rot, mildew and deterioration due to marine organisms.

Twisted Polypropylene, 3 Strand

Polypropylene is very light and floatable, spliceable, many colors to choose from, low stretch, and has a high resistance to chemicals. Military specifications available. Ranging from 1/8" to 4" in diameter. Variety of lengths available.



TWISTED NYLON 3-STRAND

Dia. (in.)	Size		Circ. (mm)	Weight (lbs. per 100 ft.)	Average Tensile Strength
	Dia. (mm)	Circ. (in.)			
3/16"	5	5/8"	15	1.0	900 lbs.
1/4"	6	3/4"	18	1.5	1,490 lbs.
5/16"	8	1"	24	2.5	2,300 lbs.
3/8"	9	1-1/8"	27	3.5	3,350 lbs.
7/16"	11	1-1/4"	33	5.0	4,500 lbs.
1/2"	12	1-1/2"	36	6.5	5,750 lbs.
9/16"	14	1-3/4"	42	8.3	7,200 lbs.
5/8"	16	2"	48	10.5	9,350 lbs.
3/4"	18	2-1/4"	54	14.5	12,800 lbs.
13/16"	20	2-1/2"	60	17.0	15,300 lbs.
7/8"	22	2-3/4"	66	20.0	18,000 lbs.
1"	24	3"	72	26.0	22,500 lbs.
1-1/16"	26	3-1/4"	78	29.0	25,900 lbs.
1-1/8"	28	3-1/2"	84	34.0	29,700 lbs.
1-1/4"	30	3-3/4"	90	40.0	33,750 lbs.
1-5/16"	32	4"	96	45.0	38,750 lbs.
1-1/2"	36	4-1/2"	108	55.0	47,700 lbs.
1-5/8"	40	5"	120	68.0	58,500 lbs.
1-3/4"	44	5-1/2"	132	83.0	70,200 lbs.
2"	48	6"	144	95.0	82,800 lbs.
2-1/8"	52	6-1/2"	156	109.0	95,400 lbs.
2-1/4"	56	7"	168	129.0	113,000 lbs.
2-1/2"	60	7-1/2"	180	149.0	126,000 lbs.
2-5/8"	64	8"	192	168.0	146,000 lbs.
2-7/8"	68	8-1/2"	204	189.0	162,000 lbs.
3"	72	9"	215	210.0	180,000 lbs.
3-1/4"	80	10"	240	263.0	225,000 lbs.
3-1/2"	88	11"	264	316.0	270,000 lbs.
4"	96	12"	288	379.0	324,000 lbs.



Applications:

- Mooring lines.
- Tie-up lines.
- Anchor lines.
- Slings.
- Tow lines.
- Shock lines.

Properties:

- High elongation and strength.
- Good abrasion resistance.
- Excellent resistance to rot, mildew and deterioration due to marine organisms.

Twisted Nylon, 3 Strand

Nylon rope is a synthetic fiber rope that has good resistance to abrasion and will usually last 4 - 5 times longer than natural ropes. It is ideal for use in situations where sudden shock is applied to the rope. It loses some of its strength when wet. Nylon rope resists chemicals and abrasion, is spliceable, for docking, anchoring or pulling and there are many colors to choose from. Military specifications available. Ranging from 3/16" - 4" in diameter. Variety of lengths available.



WATER HOSE

FOR THE TRANSFER OF WATER, WASHDOWN, JETTING AND IRRIGATION

4450

RUBBER WATER SUCTION HOSE

TUBE: EPDM blend, smooth, black
REINFORCEMENT: Synthetic fabric with wire helix
COVER: EPDM blend, weather and ozone resistant, fabric impression
COLOR: Black
BRANDING: Jason Logo 4450 Water S/D; Yellow Mylar Longitudinal Stripe
TEMPERATURE RANGE: -25°F to +185°F
FEATURES: ... Resistant to water-based ag fertilizers and salt water. Flexible and economical.
APPLICATION: For suction, discharge or gravity flow of water in construction
 mining, oil exploration, agriculture and equipment rental.
STANDARD LENGTHS: 1-1/4" through 5" 100 foot, 6" 20, 50 and 100 foot, 8", 10", 12" 20 foot

Part Number	I.D.		O.D.		Max. W.P. PSI	Wt. Per Ft.	Vac In. Hg.	Bend Radius (In.)
	In.	mm	In.	mm				
4450-0125-100	1-1/4	32.0	1.70	43.0	150	0.75	28	6
4450-0150-100	1-1/2	38.0	1.96	50.0	150	0.80	28	6.5
4450-0200-100	2	51.0	2.49	63.0	150	1.11	28	8
4450-0250-100	2-1/2	64.0	2.99	76.0	150	1.75	28	10
4450-0300-100	3	76.0	3.50	89.0	150	2.24	28	12
4450-0400-100	4	102.0	4.53	115.0	150	2.79	28	18
4450-0500-100	5	127.0	5.68	144.0	150	3.25	28	26
4450-0600-020	6	152.0	6.54	166.0	150	5.75	28	31
4450-0600-050	6	152.0	6.54	166.0	150	5.75	28	31
4450-0600-100	6	152.0	6.54	166.0	150	5.75	28	31
4450-0800-020	8	203.0	8.79	223.0	100	6.59	28	42
4450-1000-020	10	254.0	10.91	277.0	75	10.25	25	50
4450-1200-020	12	305.0	12.91	328.0	75	13.50	25	60



4502

BLUE PVC WATER DISCHARGE HOSE

COLOR: Blue
BRANDING: Jason Logo XX ID XX PSI WP
TEMPERATURE RANGE: -14°F to +150°F
FEATURES: Light and easy to handle; rolls flat for storage. Homogeneous construction
 eliminates tube and cover separation. Reinforced with polyester yarn, both
 tube and cover are extruded simultaneously to achieve maximum bonding.
APPLICATION: For general purpose water discharge in
 construction, agriculture and drip irrigation.
STANDARD LENGTHS: 300 foot; 2" and 3" also available in 50 foot lengths

Part Number	I.D.		Wall Thickness Prox.	Max. W.P. PSI	Wt. Per Ft.
	In.	mm			
4502-1500	1-1/2	38.0	.056"	85	0.21
4502-2000	2	51.0	.056"	85	0.25
4502-2000-050	2	51.0	.056"	85	0.25
4502-2500	2-1/2	64.0	.060"	75	0.29
4502-3000	3	76.0	.062"	70	0.39
4502-3000-050	3	76.0	.062"	70	0.39
4502-4000	4	102.0	.062"	70	0.60
4502-6000	6	152.0	.077"	50	1.15
4502-8000	8	203.0	.089"	45	1.20



WATER HOSE

FOR THE TRANSFER OF WATER, WASHDOWN, JETTING AND IRRIGATION

4705

MUNICIPAL GRADE SJ MILL DISCHARGE HOSE

TUBE: SBR, smooth
REINFORCEMENT: N/A
COVER: 100% Polyester Single Jacket
COLOR: White
BRANDING: ID SJ Mill XXX PSI WP (XX Bar)
TEMPERATURE RANGE: -25°F to +185°F
FEATURES: Heavy-duty synthetic cover for better abrasion resistance and abuse. Higher working pressures.
APPLICATION: For water discharge service in rental yards, fleet service, municipal washdown, utility dewatering.
STANDARD LENGTHS: 50 foot

Part Number	I.D. In.	I.D. mm.	Coupling Bowl	Service PSI	Burst PSI	Wt. Per Ft.	Ctn. Qty.
4705-0150-050	1-1/2	38.0	1-13/16	230 (16 BAR)	600	0.23	6
4705-0200-050	2	51.0	2-5/16	230 (16 BAR)	600	0.28	4
4705-0250-050	2-1/2	64.0	2-13/16	200 (14 BAR)	550	0.39	3
4705-0300-050	3	76.0	3-3/8	200 (14 BAR)	550	0.50	3
4705-0400-050	4	102.0	4-3/8	200 (14 BAR)	550	0.66	2



MATERIAL HANDLING HOSE

FOR TRANSFER OF BULK MATERIAL, ABRASIVES, CONCRETE AND CEMENT

4312

2-PLY SANDBLAST HOSE

COLOR: SBR/NR, black, static dissipating
REINFORCEMENT: Synthetic fabric
COVER: SBR/NR, abrasion and weather resistant, pinpricked
COLOR: Black
BRANDING: None
TEMPERATURE RANGE: -25°F to +185°F
FEATURES: Highly abrasion resistant tube to handle any blast grit.
APPLICATION: For the conveyance of highly abrasive materials in sandblasting/cleaning and general maintenance in construction, shipyards, power plants and equipment rental.
STANDARD LENGTHS: 50 foot

Part Number	I.D. In.	I.D. mm	O.D. In.	O.D. mm	Max W.P. PSI	Wt. Per Ft.
4312-0050-050	1/2	12.7	1	25.4	150	0.31
4312-0051-050	1/2	12.7	1-1/16	27.0	150	0.33
4312-0052-050	1/2	12.7	1-1/8	29.0	150	0.38
4312-0075-050	3/4	19.05	1-1/2	38.0	150	0.60



AIR HOSE

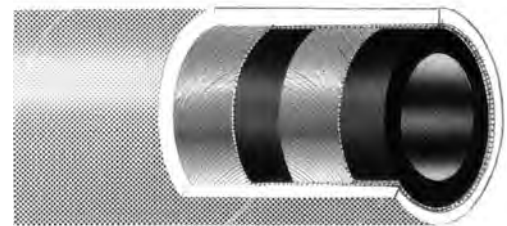
FOR TRANSFER OF AIR, WATER AND MODERATE CHEMICAL SOLUTIONS

4805

WIRE REINFORCED AIR HOSE

TUBE: Nitrile blend, smooth, black
REINFORCEMENT: Steel wire
COVER: SBR, weather, ozone and abrasion resistant, fabric impression, pin pricked
COLOR: Yellow
BRANDING: Jason Logo 4805 WIRE AIR 600 PSI WP 40 BAR, Red Mylar Longitudinal Stripe
TEMPERATURE RANGE: -25°F to +200°F
FEATURES: Oil mist resistant tube, high working pressure, visible yellow cover
APPLICATION: For heavy-duty air supply in mining, quarries, construction, industrial air placement, sandblasting and heavy-duty equipment rental.
STANDARD LENGTHS: 1/2" 100 foot, 3/4" through 4" 50 foot and 100 foot

Part Number	I.D.		O.D.		Max. W.P. PSI	Wt. Per Ft.	Spiral.	Length Ft.
	In.	mm	In.	mm				
4805-0050-100	1/2	12.70	0.91	23	600	0.36	2	100
4805-0075-050	3/4	19.05	1.22	31	600	0.60	2	50
4805-0075-100	3/4	19.05	1.22	31	600	0.60	2	100
4805-0100-050	1	25.40	1.49	38	600	0.80	2	50
4805-0100-100	1	25.40	1.49	38	600	0.80	2	100
4805-0125-050	1-1/4	31.75	1.81	46	600	1.05	2	50
4805-0125-100	1-1/4	31.75	1.81	46	600	1.05	2	100
4805-0150-050	1-1/2	38.10	2.04	52	600	1.24	2	50
4805-0150-100	1-1/2	38.10	2.04	52	600	1.24	2	100
4805-0200-050	2	50.80	2.60	66	600	1.80	2	50
4805-0200-100	2	50.80	2.60	66	600	1.80	2	100
4805-0250-050	2-1/2	63.50	3.15	80	600	2.40	2	50
4805-0250-100	2-1/2	63.50	3.15	80	600	2.40	2	100
4805-0300-050	3	76.20	3.70	94	600	3.22	4	50
4805-0300-100	3	76.20	3.70	94	600	3.22	4	100
4805-0400-050	4	101.60	4.88	124	600	4.70	4	50
4805-0400-100	4	101.60	4.88	124	600	4.70	4	100



WHARTON ALSO OFFERS

FOR TRANSFER OF AIR, WATER AND MODERATE CHEMICAL SOLUTIONS

RED AIR and WATER HOSE

TUBE: Epdm, black (extruded)
REINFORCEMENT: Spiral polyester yarn
COVER: Black or red abrasion- and ozone-resistant Epdm
COLOR: Red
BRANDING: Gp Air and Water
TEMPERATURE RANGE: -25°F to +200°F
FEATURES: Oil resistance - Limited
STANDARD LENGTHS: 1/4" - 3/4" I.D. 700 foot, 1" - 1-1/2" I.D. 700 feet on plastic reels

I.D.		O.D.		Max. W.P. PSI	Wt. Per Ft.	I.D.		O.D.		Max. W.P. PSI	Wt. Per Ft.
In.	mm	In.	mm			In.	mm	In.	mm		
1/4	6.35	9/16	14.28	250	12.5	3/4	19.05	25/32	19.90	250	37.3
5/16	7.93	19/32	15.08	200	12.0	1	25.40	1-5/16	33.30	200	51.0
3/8	9.52	11/16	17.46	250	17.0	1-1/4	31.75	1-25/32	45.24	150	81.0
1/2	12.70	27/32	21.43	250	25.5	1-1/2	38.10	2-1/32	51.59	150	95.0

ACCESSORIES

HYDRANT ADAPTERS BRASS

For industrial utility and fire department applications, these adapters allow easy connections from hydrant to smaller size hose. Made of heavy-duty cast brass with satin finish, all female ends are supplied with pin lug wrenching. All threads are V cut.

Female Size	Female Thread	Male Size	Male End Thread	Part No.
1-1/2	NPT	1-1/2	NST	HAB1516
1-1/2	NST	1-1/2	NPT	HAB1615
2	NPT	1-1/2	NST	HAB2016
2-1/2	NST	3/4	GHT	HAB075
2-1/2	NST	3/4	NPSM	HAB076
2-1/2	NST	1	NPSM	HAB100
2-1/2	NST	1-1/2	NPSM	HAB150
2-1/2	NST	1-1/2	NPT	HAB150NPT
2-1/2	NST	1-1/2	NST	HAB150NST
2-1/2	NST	2	NPSM	HAB200
2-1/2	NST	2	NPT	HAB200NPT
2-1/2	NST	2-1/2	NPT	HAB250NPT



Other thread combinations and particular city/municipal hydrant threads are available in brass with minimal factory order.

Special LONG HANDLE, CAST ALUMINUM ADAPTERS for industrial, utility and fire department use are available with requested thread combinations. Long handles eliminate the need for wrenching in cities such as Detroit, Chicago, Philadelphia etc. Special HYDRANT WRENCHES, CAPS and PLUGS are also available with minimal factory order.

ADJUSTABLE HYDRANT WRENCH

A complete tool for the fire hydrant operation. The pentagonal nut head is adjustable to fit hydrant valves to 1-3/4" for on/off operation. The head also operates pin lug or rocker lug connections from 1-1/2" to 6".

Part No. HYD-1



SPANNER WRENCH FOR PIN LUG COUPLINGS

Made from ductile iron with easy grip handle, contour head to fit the coupling curve and special round hole to engage the pin lug.

Size:	1-1/2	2	2-1/2	2 x 2-1/2	3	4
Part No.	SW150	SW200	SW250	SW2025	SW300	SW400



1000-1100 series FILTERS

MICRO FILTERS

- All micro filters supplied with preassembled AUTOMATIC OVERNIGHT DRAIN.
- Porous bronze 40 micron filter element allows less pressure drop and longer cleaning intervals.
- Safety metal bowl guards or metal bowls available with 1/4", 3/8", 1/2" models.
- Metal bowls only on 3/4" and 1" models.
- 3 stage baffle system for exceptional moisture removal.
- Sintered bronze elements are permanent and cleanable.
- Lightweight aluminum die-cast housing.
- Element range 10 or 40 microns exactly matching filter and air flow needs.
- Corrosion resistant metal bowls.
- 1022-8 and 1022-10 include sight glass for visual check of condensation collection.

WARNING: FOR COMPRESSED AIR SERVICE ONLY. NOT TO BE USED ON LIFE SUPPORT SYSTEMS OR BREATHING AIR SYSTEMS. NEVER USE POLYCARBONATE PLASTIC BOWLS ON AIR SUPPLIED BY A COMPRESSOR LUBRICATOR WITH SYNTHETIC OILS OR OILS CONTAINING PHOSPHATE ESTERS OR CHLORINATE HYDROCARBONS. THEY CAN CARRY OVER INTO THE AIR DISTRIBUTION SYSTEMS AND CHEMICALLY ATTACK AND POSSIBLY RUPTURE THE BOWLS. FOR THESE APPLICATIONS USE A METAL BOWL. MATERIALS SUCH AS TRICHLOROETHYLENE, ACETONE, PAINT THINNER OR CLEANING FLUIDS WILL CRAZE AND/OR RUPTURE A POLYCARBONATE BOWL. WHEN THESE MATERIALS ARE PRESENT EITHER INSIDE OR OUTSIDE THE BOWL, USE METAL BOWLS. FOR A MORE COMPLETE LIST OF KNOWN HARMFUL CHEMICALS CHECK INSTRUCTION SHEET.



1018
1019
1020



1018-8
1019-8
1020-8



1120-8



1022-10

POLYCARBONATE BOWLS WITH METAL BOWL GUARDS

Part No.	NPT Size	Bowl Capacity	Max. Pressure	Temperature	Max. SCFM
1018	1/4"	5 oz.	150 PSI	40-120°F	48
1019	3/8"	5 oz.	150 PSI	40-120°F	75
1020	1/2"	5 oz.	150 PSI	40-120°F	100

METAL BOWLS HEAVY-DUTY 250 PSI

Part No.	NPT Size	Bowl Capacity	Max. Pressure	Temperature	Max. SCFM
1018-8	1/4"	6 oz.	250 PSI	40-160°F	48
1019-8	3/8"	6 oz.	250 PSI	40-160°F	75
1020-8	1/2"	6 oz.	250 PSI	40-160°F	100
1120-8	1/2"	9 oz.	250 PSI	40-160°F	115
1022-8	3/4"	10 oz.	250 PSI	40-160°F	230
1022-10	3/4"	20 oz.	250 PSI	40-160°F	245
1122-8	1"	29 oz.	250 PSI	40-160°F	300



1022-8



1122-8

WARNING: POLYCARBONATE BOWLS CAN BE CHEMICALLY ATTACKED AND RUPTURE. CHECK INSTRUCTION SHEET WITH EACH FILTER FOR LIST OF HARMFUL CHEMICALS.

1000-1100 series FILTERS, REGULATORS

COALESCING FILTERS

An extremely efficient filter designed for applications that require air free of oil and all foreign particles. Effective filtration and low pressure drop make these filters perfect for fluidics, body shop, spray painting, food processing, instrumentation and pharmaceuticals.

- Automatic overnight drain.
- Metal bowl.
- .03 SUB-MICRON = 99.97 efficiency.
- 1037-8 includes sight glass for visual check of condensation collection.



1035
1036
1037

1037-8

HEAVY-DUTY COALESCING FILTER

Part No.	NPT Size	Bowl Capacity	Max. Pressure	Temperature	Max. SCFM
1035	1/4"	6 oz.	250 PSI	40-200°F	24
1036	3/8"	6 oz.	250 PSI	40-200°F	37
1037	1/2"	6 oz.	250 PSI	40-200°F	37
1037-8	3/4"	10 oz.	250 PSI	40-160°F	60

MID-SIZE AND HEAVY-DUTY REGULATORS

The Milton heavy-duty and mid-size RELIEVING TYPE regulators offer stable downstream air pressure over a wide range of air flows with accurate control, fast response and minimal pressure drop. Offset 1/4" gage ports can also serve as two 1/4" supply lines, allowing up to three regulated full flow-out ports. Gage not included, but available as an accessory.

- Inlet pressure: 250 PSI.
- Operating temperature: 40°F to 120°F.
- Aluminum die-cast body.
- Buna-N diaphragm and O rings.
- Balanced piston, molded rubber seat.



1113
1113-8
1114
1114-8
1115
1115-8

WARNING: REGULATORS SHOULD ALWAYS BE PRECEDED BY A FILTER TO ELIMINATE DAMAGE TO THE UNIT OR INACCURATE AIR FLOW.

REGULATORS 5-125 PSI

Part No.	NPT Size	Max. SCFM
1113	1/4"	50
1114	3/8"	80
1115	1/2"	100
1026	3/4" mid-size	220
1027	1" mid-size	250



1026
1026-8
1027
1027-8

REGULATORS HI-PRESSURE 10-250 PSI

Part No.	NPT Size	Max. SCFM
1113-8	1/4"	50
1114-8	3/8"	80
1115-8	1/2"	100
1026-8	3/4" mid-size	220
1027-8	1" mid-size	250

1000-1100 series LUBRICATORS

PRECISION LUBRICATORS

Ideal for the customer who wants trouble-free protection and tamper proof reliability. Drop style allows precise setting and then removal of adjustment knob. Perfect for lubrication of air motors, tools, valves or where low air flow is encountered or where extremely fine adjustments are necessary.

- Sight glass dome on drop type allows observation for instant drip rate adjustment.
- Tamper proof.
- Lubricator may be filled without shutting down line pressure.
- Oil supply tube check valve guarantees INSTANT START-UP LUBRICATION.
- Low pressure drop at full air flow.
- Oil delivered at an air flow as low as 2 SCFM.
- Safety bowl guards or metal bowls.
- All lubricators are drop type except the 1" which is a wick type.

WARNING: POLYCARBONATE BOWLS CAN BE CHEMICALLY ATTACKED AND RUPTURE. CHECK INSTRUCTION SHEET WITH EACH LUBRICATOR FOR LIST OF KNOWN HARMFUL CHEMICALS.



1028
1029
1030



1028-8
1029-8
1030-8
1031-8



1131-9

POLYCARBONATE BOWLS WITH METAL BOWL GUARDS

Part No.	NPT Size	Bowl Capacity	Max. Pressure	Temperature	Max. SCFM
1028	1/4"	5 oz.	150 PSI	40-125°F	16
1029	3/8"	5 oz.	150 PSI	40-125°F	82
1030	1/2"	5 oz.	150 PSI	40-125°F	142

Synthetic lubricants should not be used with lubricators that have polycarbonate bowls.

METAL BOWLS WITH SIGHT GLASS HEAVY-DUTY

Part No.	NPT Size	Bowl Capacity	Max. Pressure	Temperature	Max. SCFM
1028-8	1/4"	6 oz.	200 PSI	40-160°F	16
1029-8	3/8"	6 oz.	200 PSI	40-160°F	82
1030-8	1/2"	6 oz.	200 PSI	40-160°F	142
1031-8	1/2"	9 oz.	200 PSI	40-160°F	142
1131-9	3/4"	10 oz.	250 PSI	40-160°F	142
1131-10	3/4"	20 oz.	250 PSI	40-160°F	142
1132-8	1"	29 oz.	250 PSI	40-160°F	175



1131-10



1132-8

100 series BLO-GUNS

Milton "safety" blo-guns in this section meet OSHA requirements of special relief holes in nozzle which limits pressure to 30 PSI when dead ended (static pressure). For use on regulated compressed air lines maximum PSI 150. Always use personal protective equipment such as safety goggles and ear protection.

SAFETY BUTTON BLO-GUN

Compact hand held unit can be used anywhere with compressed air. Streamlined comfort fit and full volume control. Many uses such as cleaning fuel and oil lines, or air cleaners, drying out wet ignition systems and spark plugs or blowing out dirt, filings and metal chips.

107 SAFETY BUTTON BLO-GUN
S 107

- Maximum working pressure: 150 PSI.
- Maximum nozzle pressure: 30 PSI when dead ended.
- SCFM 11.4 @ 100 PSI.
- 1/4" NPT air inlet, nozzle thread 5/16"-24.
- Zinc die cast body.
- OSHA compliant.



107

SAFETY LEVER BLO-GUN

Use anywhere with compressed air. Full flow control. Extra large hang-up hook for easy storage.

120 SAFETY LEVER BLO-GUN
S 120

- Maximum inlet pressure: 150 PSI.
- Maximum nozzle pressure: 30 PSI when dead ended.
- SCFM 10.6 @ 100 PSI.
- 1/4" NPT air inlet, nozzle thread 1/8"-27.
- Zinc die cast body, steel plated handle.
- OSHA compliant.



120

FULL-FLOW SAFETY LEVER BLO-GUN

150 FULL-FLOW SAFETY LEVER BLO-GUN
S 150

- Maximum working pressure: 150 PSI.
- SCFM 10.0 @ 100 PSI.
- 1/4" NPT air inlet, nozzle thread 7/16"-27.
- Body outlet thread size 1/2"-27.
- OSHA compliant.



150

500 series INFLATOR GAGES

WINDOW INFLATOR GAGES

Heavy-duty construction provides long service life even with constant use. Gage cartridge and valve cartridge replaceable. All window inflator gages equipped with magnifying lens for full view of scale.

501 For high pressure truck tires. 10 lbs. to 160 lbs., in 2 lb. increments. Gage complete with 5' hose with a dual head straight foot chuck for inner duals with lock on threads both ends (Full swivel). Built in deflator to relieve excess pressure. Meets OSHA regulation No. 1910.177 on inflation.

All gages listed below are 10 lbs. to 120 lbs., in 2 lb. increments. All gages listed below are available as metric gages: Readings in kPa increments.

- 502** GAGE COMPLETE, KWIK GRIP SAFETY AIR CHUCK WITH 3' HOSE.
- 503** GAGE COMPLETE, CHUCK CLIP WITH SINGLE HEAD CHUCK (Full swivel), 3' HOSE.
- 504** GAGE COMPLETE, STRAIGHT HEAD CHUCK, 15" HOSE.
- 505** GAGE COMPLETE, SINGLE HEAD CHUCK (Full swivel), 15" HOSE.
- S 505** GAGE COMPLETE, SINGLE HEAD CHUCK (Full swivel), 15" HOSE.
- 506** GAGE COMPLETE, DUAL HEAD CHUCK (Full swivel), 15" HOSE.
- S 506** GAGE COMPLETE, DUAL HEAD CHUCK (Full swivel), 15" HOSE.
- 516** GAGE COMPLETE, DUAL HEAD STRAIGHT FOOT CHUCK WITH LOCK ON THREADS BOTH ENDS FOR INNER DUAL (Full swivel), 15" HOSE.
- S 516** GAGE COMPLETE, DUAL HEAD STRAIGHT FOOT CHUCK WITH LOCK ON THREADS BOTH ENDS FOR INNER DUAL (Full swivel), 15" HOSE.



501



502



503



504

REPLACEMENT PARTS

- 507** REPLACEMENT GAGE CARTRIDGE. New factory set cartridge easily replaced "on the spot."
- 507-2** REPLACEMENT GAGE CARTRIDGE FOR #501.
- 508** HOSE WHIP ASSEMBLY COMPLETE, replaces whip on #505. (15" hose 3/8-24 thread)
- 509** HOSE WHIP ASSEMBLY COMPLETE, replaces whip on #506. (15" hose 3/8-24 thread)
- 510** HOSE WHIP ASSEMBLY COMPLETE, replaces whip on #504. (15" hose 3/8-24 thread)
- 511** HOSE WHIP ASSEMBLY COMPLETE, replaces whip on #503. (36" hose 3/8-24 thread)
- 512** REPLACEMENT VALVE CARTRIDGE
- 513** HOSE WHIP ASSEMBLY COMPLETE, replaces whip on #502. (36" hose 3/8-24 thread)
- 514** HOSE WHIP ASSEMBLY COMPLETE, replaces whip on #501. (5' hose 3/8-24 thread)
- 519** HOSE WHIP ASSEMBLY COMPLETE, replaces whip on #516. (15" hose 3/8-24 thread)



516



506



505

700-1700-1800 series AIR COUPLERS & PLUGS

M-STYLE INDUSTRIAL INTERCHANGE SERIES 1/4" BASIC SIZE

Milton M-style "Kwik-change" couplers and plugs will interchange with all manufacturers who comply with the dimensional requirements of military specification MIL-C-4109.

- M-style coupler bodies are brass with brass sleeves.
- M-style plugs are case hardened steel, plated to resist rust.
- Maximum inlet pressure: 300 PSI.
- Maximum temperature: 250°F.
- Air flow: 40 SCFM.
- Seals: Buna-N.

WARNING: COUPLERS IN THIS SECTION ARE FOR USE WITH SHOP AIR ONLY.

M-STYLE 1/4" COMBINATION COUPLER/PLUG & COUPLER KITS

Part No.	Contents
711 / S 711	One #715 and one #727
S 211	One #715, one #728 and three #727
S212	One #715, three #728 and three #727

M-STYLE COUPLERS

Part No.	Connection	Description
715 / S 715	1/4" NPT female	
716 / S 716	1/4" NPT male	
718 / S 718	3/8" NPT female	
719 / S 719	3/8" NPT male	
755 / S 755	1/4" NPT female	Push type, steel sleeve, drag guard
756	1/4" NPT male	Push type, steel sleeve, drag guard
713	1/4" NPT female	Case hardened steel drag guard
714	1/4" NPT male	Case hardened steel drag guard
717	1/4" hose barb	Case hardened steel drag guard
717-6	3/8" hose barb	Case hardened steel drag guard
1717-4	1/4" push on and lock hose barb	Case hardened steel drag guard
1717-6	3/8" push on and lock hose barb	Case hardened steel drag guard

M-STYLE PLUGS

Part No.	Connection	Note
726	1/8" NPT male	
729	1/8" NPT female	
727 / S 727	1/4" NPT male	2/cd
728 / S 728	1/4" NPT female	2/cd
731	.305-32 female re-cap	
732 / S 732	3/8" NPT female	2/cd
733 / S 733	3/8" NPT male	2/cd
736	1/4" hose barb	
736-6	3/8" hose barb	
1736-4	1/4" push on and lock hose barb	
1736-6	3/8" push on and lock hose barb	

Replacement parts M-style:

701	M-STYLE COUPLER REPAIR KIT
768	M-STYLE SYNTHETIC WASHER



715
718



716
719



755



756



713



1717-4
1717-6



714



717
717-6



726
727
733



728
729
731
732



736
736-6



1736-4
1736-6

700-1700-1800 series AIR COUPLERS & PLUGS

H-STYLE INDUSTRIAL INTERCHANGE SERIES 3/8" BASIC SIZE

- H-style coupler bodies are heavy-duty steel.
- H-style plugs are case hardened steel. Plated to resist rust.
- Maximum inlet pressure: 300 PSI.
- Maximum temperature: 250°F.
- Air flow: 67 SCFM.
- Seals: Buna-N.

WARNING: COUPLERS IN THIS SECTION ARE FOR USE WITH SHOP AIR ONLY.

H-STYLE COUPLERS

Part No.	Connection
1833 / S 1833	1/4" NPT female
1834	1/4" NPT male
1835 / S 1835	3/8" NPT female
1836 / S 1836	3/8" NPT male
1836-6	3/8" hose barb
1796-6	3/8" push on and lock hose barb

H-STYLE PLUGS

Part No.	Connection	Note
1839 / S 1839	1/4" NPT male	2/cd
1840 / S 1840	1/4" NPT female	2/cd
1837 / S 1837	3/8" NPT male	2/cd
1838 / S 1838	3/8" NPT female	2/cd
1837-6	3/8" hose barb	
1797-6	3/8" push on and lock hose barb	

Replacement parts H-style:

1831 H-STYLE COUPLER REPAIR KIT

G-STYLE INDUSTRIAL INTERCHANGE SERIES 1/2" BASIC SIZE

- G-style coupler bodies are heavy-duty steel.
- G-style plugs are case hardened steel. Plated to resist rust.
- Maximum inlet pressure: 300 PSI.
- Maximum temperature: 250°F.
- Air flow: 99 SCFM.
- Seals: Buna-N.

WARNING: COUPLERS IN THIS SECTION ARE FOR USE WITH SHOP AIR ONLY.

G-STYLE COUPLERS

Part No.	Connection
1813	3/8" NPT female
1814	3/8" NPT male
1815 / S 1815	1/2" NPT female
1816 / S 1816	1/2" NPT male

G-STYLE PLUGS

Part No.	Connection
1855	1/4" NPT male
1859	3/8" NPT male
1860	3/8" NPT female
1857	1/2" NPT male
1858	1/2" NPT female

Note: G-style couplers will work with G-style Industrial Interchange and Parker/Tru-Flat plugs.

Replacement parts G-style:

1811 G-STYLE COUPLER REPAIR KIT



1833
1835

1834
1836



1837-6

1838
1840

1837
1839



1836-6

1796-6

1797-6



1813
1815

1814
1816



1855
1857
1859

1858
1860

700-1700-1800 series AIR COUPLERS & PLUGS

A-STYLE ARO "210" STYLE SERIES 1/4" BASIC SIZE

- A-style couplers are push type.
- A-style coupler bodies are heavy-duty steel.
- A-style plugs are case hardened steel. Plated to resist rust.
- Maximum inlet pressure: 300 PSI.
- Maximum temperature: 250°F.
- Air flow: 35 SCFM.
- Seals: Buna-N.

WARNING: COUPLERS IN THIS SECTION ARE FOR USE WITH SHOP AIR ONLY.



A-STYLE COUPLERS

Part No.	Connection
775 / S 775	1/4" NPT female
776 / S 776	1/4" NPT male
776-4	1/4" hose barb
776-6	3/8" hose barb
1776-4	1/4" push on and lock hose barb
1776-6	3/8" push on and lock hose barb



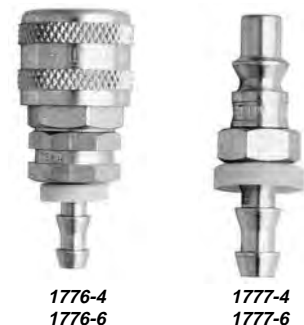
A-STYLE PLUGS

Part No.	Connection	Note
777 / S 777	1/4" NPT male	2/cd
778 / S 778	1/4" NPT female	2/cd
777-4	1/4" hose barb	
777-6	3/8" hose barb	
1797-6	1/4" push on and lock hose barb	
1777-6	3/8" push on and lock hose barb	



A-STYLE 1/4" COUPLER/PLUG KITS

Part No.	Contents
S 772	One #775 and one #777
S 213	One #775, one #778 and three #777



AA-STYLE ARO "310" STYLE INTERCHANGE SERIES 3/8" BASIC SIZE

- AA-style couplers are push type.
- AA-style coupler bodies are heavy-duty steel.
- AA-style plugs are case hardened steel. Plated to resist rust.
- Maximum inlet pressure: 300 PSI.
- Maximum temperature: 250°F.
- Air flow: 59 SCFM.
- Seals: Buna-N.

WARNING: COUPLERS IN THIS SECTION ARE FOR USE WITH SHOP AIR ONLY.



AA-STYLE COUPLERS

Part No.	Connection
1875	3/8" NPT female

A-STYLE PLUGS

Part No.	Connection
1877	3/8" NPT male
1878	3/8" NPT female





The Right Connection™

SHANK FITTINGS

King Short Shank Suction Couplings, NPSM Thread

Complete Coupling



Female



Male



All 3" to 6" males have pin lugs.

	Complete Coupling	Female	Male
Size	Aluminum w/Brass Nut Part #	Aluminum w/Brass Nut Part #	Aluminum Part #
1-1/2"	CAB150	FAB150	MA150
2"	CAB200	FAB200	MA200
2-1/2"	CAB250	FAB250	MA250
3"	CAB300	FAB300	MA300
4"	CAB400	FAB400	MA400
6"	CAB600	FAB600	MA600

	Complete Coupling	Female	Male
Size	Brass Part #	Brass Part #	Brass Part #
1-1/4"	CBB125	FBB125	MB125
1-1/2"	CBB150	FBB150	MB150
2"	CBB200	FBB200	MB200
2-1/2"	CBB250	FBB250	MB250
3"	CBB300	FBB300	MB300
4"	CBB400	FBB400	MB400

	Complete Coupling	Female	Male
Size	Plated Iron Part #	Plated Iron Part #	Plated Iron Part #
1"	S33	S12	S10
1-1/4"	S48	S17	S15
1-1/2"	S63	S22	S20
2"	S78	S27	S25
2-1/2"	S93	S32	S30
3"	S111	S38	S36
4"	S123	S42	S40
5"	S168	S57	S55
6"	S183	S62	S60
8"	S243	S82	STC80

	Complete Coupling	Female	Male
Size	Plated Iron w/Brass Nut Part #	Plated Iron w/Brass Nut Part #	Plated Iron Part #
1"	SB33	SB12	S10
1-1/4"	SB48	SB17	S15
1-1/2"	SB63	SB22	S20
2"	SB78	SB27	S25
2-1/2"	SB93	SB32	S30
3"	SB111	SB38	S36
4"	SB123	SB42	S40
5"	SB168	SB57	S55
6"	SB183	SB62	S60
8"	SB243	SB82	STC80

Nylon Short Shank Suction Couplings, NPSM Thread



Complete Coupling



Female



Male

Size	Reinforced Nylon Part #	Reinforced Nylon Part #	Reinforced Nylon Part #
1-1/4" *	TCS48	TCF17	TCM15
1-1/2"	TCS63	TCF22	TCM20
2"	TCS78	TCF27	TCM25
3"	TCS111	TCF38	TCM36

* 1-1/4" fittings have a 1-1/2" NPSM thread.

Brass Long Shank Coupling (NST Thread)

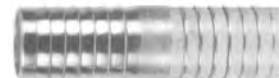


Complete Coupling Female Male

Hose ID	NST Thread	Part #	Part #	Part#
1-1/2"	1-1/2"	BLS63NST	BLS150NST	BLS20NST
2-1/2"	2-1/2"	BLS93NST	BLS250NST	BLS30NST

Dixon Steel Hose Menders

Size	Stainless Steel Part #	Size	Zinc Plated Steel Part #	Size	Zinc Plated Steel Part #
1/4"	RDMA	1/4"	DMA	2"	DM26
3/8"	RDMB	3/8"	DMB	2"	DMXL26*
1/2"	RDM1	1/2"	DM1	2-1/2"	DM31
3/4"	RDM6	5/8"	DM5	3"	DM36
1"	RDM11	3/4"	DM6	4"	DM46
1-1/4"	RDM16	1"	DM11	5"	DM51
1-1/2"	RDM21	1-1/4"	DM16	6"	DM66
2"	RDM26	1-3/8"	DM18	8"	DM86
3"	RDM36	1-1/2"	DM21	10"	DM100
4"	RDM46	1-1/2"	DMXL21*	12"	DM120



* XL series is extra long.

- They are not for compressible products such as air, nitrogen or steam.
- The working pressure may vary with the construction of the hose, the type of clamping system used and the application. Consult Wharton for recommendations.
- In accordance with R.M.A. bulletin for oil suction and discharge hose, a coupled length of hose in any size, should be tested to 1-1/2 times the working pressure and held for fifteen minutes without leaking or coupling movement. For additional information and detailed instruction on testing procedures, see the Rubber Manufacturers Association (R.M.A.) handbook.





The Right Connection™

FOOT VALVES / STRAINERS / SKIMMERS / NIPPLES

Cast Iron Threaded Foot Valves



Complete Threaded Assembly (painted) **Strainer Only (painted)** **Flapper Valve Assembly** **Valve Rubber** **Seat Plate**

NPT Size	Part #	Part #	Part #	Part #	Part #
1-1/2"	DFVS20	FVS20	FVFA20	FVL20	FVSP20
2"	DFVS25	FVS25	FVFA25	FVL25	FVSP25
2-1/2"	DFVS30	FVS30	FVFA30	FVL30	FVSP30
3"	DFVS35	FVS35	FVFA35	FVL35	FVSP35
4"	DFVS40	FVS40	FVFA40	FVL40	FVSP40
6"	DFVS60	FVS60	FVFA60	FVL60	FVSP60
8"	DFVS80	FVS80	FVFA80	FVL80	FVSP80

Must be installed in the vertical position.

Strainers and Skimmers



Standard Threaded Round Hole Type* **304 Stain. Steel Round Hole Type** **Standard Threaded Square Hole Type*** **Long Thin Round Hole type*** **Skimmer Bottom Round Hole Type*** **Skimmer Top Round Hole Type***

Size	Part #	Part #	Part #	Part #	Part #	Part #
1-1/2"	RHS20	RRHS20	SHS20	RSS20	DSB20	DST20
2"	RHS25	RRHS25	SHS25	RSS25	DSB25	DST25
2-1/2"	RHS30	--	SHS30	RSS30	--	--
3"	RHS35	RRHS35	SHS35	RSS35	DSB35	DST35
4"	RHS40	RRHS40	SHS40	RSS40	--	--
5"	RHS50	--	--	--	--	--
6"	RHS60	RRHS60	SHS60	--	--	--
8"	RHS80	--	--	--	--	--
10"	RHS100	--	--	--	--	--
12"	RHS120	--	--	--	--	--

* Zinc plated steel.



NPT Size	Black Polyethylene Part #
1-1/2"	TSS20
2"	TSS25
3"	TSS35

3500 Steel Nipples



Hose Shank x Male NPT

Hose Size	NPT Size	Zinc Plated Part #
1/4"	1/8"	3501
1/4"	1/4"	3502
1/4"	3/8"	3504
3/8"	1/4"	3505
3/8"	3/8"	3506
3/8"	1/2"	3508
1/2"	1/4"	3509
1/2"	3/8"	3510
1/2"	1/2"	3512
1/2"	3/4"	3511
3/4"	1/2"	3513
3/4"	3/4"	3514
3/4"	1"	3515
1"	3/4"	3516
1"	1"	3518



Hose Shank x Female NPT

Hose Size	NPT Size	Part #
1/4"	1/4"	3542
3/8"	1/4"	3545
3/8"	3/8"	3546
1/2"	3/8"	3550
1/2"	1/2"	3552
3/4"	3/4"	3554



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The Right Connection™

HOSE ACCESSORIES

Brass Short Shank Fittings

Brass Short Shank Fittings - NPSM Thread



Machined (Complete)

Hose ID	Thread	Part #
1/2"	3/4"	BS406
--	--	---
3/4"	3/4"	BS606
1"	1"	BS808



Machined Female with Swivel Nut

Hose ID	Thread	Part #
1/2"	3/4"	BS446
5/8"	3/4"	BS546
3/4"	3/4"	BS646
1"	1"	BS848



Machined Male

Hose ID	Thread	Part #
1/2"	3/4"	BS416
--	--	---
3/4"	3/4"	BS616
1"	1"	BS818

Brass Short Shank Fittings - GHT Thread



Complete Coupling
Cast (sets only)

Size	Part #
1/2"	CBC74
5/8"	CBC75
3/4"	CBC76
1"*	CBC88



Complete Coupling
Machined

Size	Part #
3/8"	BC73
1/2"	BC74
5/8"	BC75
3/4"	BC76



Female with Swivel Nut
Machined

Size	Part #
3/8"	BCF73
1/2"	BCF74
5/8"	BCF75
3/4"	BCF76



Machined
Male

Size	Part #
3/8"	BCM73
1/2"	BCM74
5/8"	BCM75
3/4"	BCM76

* 1" cast has
NPSM threads.

Brass GHT Adapters



Female Swivel

Female x Female	Part #
GHT x GHT	BA977



Rigid Female GHT x Female NPTF

Female x Female	Part #
GHT x 1/8" NPTF	BA971
GHT x 1/4" NPTF	BA972
GHT x 3/8" NPTF	BA973
GHT x 1/2" NPTF	BA974
GHT x 3/4" NPTF	BA976



Male GHT x NPTF Adapter

Male x Male	Part #
GHT x 3/8" NPTF	BA73
GHT x 1/2" NPTF	BA74
GHT x 3/4" NPTF	BA776 *

* Also has 1/2" female NPT on
ID of 3/4" male side



Female Swivels

Female x Female	Part #
GHT x 1/2" NPTF	BAS974
GHT x 3/4" NPTF	BAS976



Garden Hose Cap

Female	Part #
GHT	GHC7



Female GHT x Male NPTF

Female x Male	Part #
GHT x 3/8" NPTF	BMA973
GHT x 1/2" NPTF	BMA974
GHT x 3/4" NPTF	BMA976
GHT x 1" NPTF	FM7610T



Male GHT x Female NPT

Male x Female	Part #
GHT x 1/4" NPTF	507-1204
GHT x 3/8" NPTF	507-1206
GHT x 1/2" NPTF	BA794
GHT x 3/4" NPTF	BA796
GHT x 1" NPTF	FM1076



Threaded Male

Male x Male	Part #
GHT x GHT	BA777
1" NPSH x GHT	509-1612



Female GHT Swivels x Male NPT

Female x Male	Part #
GHT x 1/4" NPTF	504-1204
GHT x 3/8" NPTF	504-1206
GHT x 1/2" NPTF	504-1208
GHT x 3/4" NPTF	504-1212



The Right Connection™

CLAMPS

Dixon Worm Gear Clamps

Style HS Clamps



Combination 5/16" hexagon and screwdriver slotted screw.

- SAE 300 series stainless band and housing with SAE 1018 case-hardened steel, zinc plated and chromate dip screw.
- Upgraded to four-piece construction.

1/2" Band width

9/16" Band width

Hose O.D. Range		Part #	Master *
To:	From:		
28/64"	50/64"	HS6	200
32/64"	58/64"	HS8	200
36/64"	1-4/64"	HS10	500
44/64"	1-16/64"	HS12	500
52/64"	1-32/64"	HS16	500
52/64"	1-48/64"	HS20	500
1-4/64"	2"	HS24	500
1-20/64"	2-16/64"	HS28	500
1-36/64"	2-32/64"	HS32	500
1-52/64"	2-48/64"	HS36	500
2-4/64"	3"	HS40	200
2-20/64"	3-16/64"	HS44	200
2-36/64"	3-32/64"	HS48	200
2-52/64"	3-48/64"	HS52	200
3-4/64"	4"	HS56	200
3-20/64"	4-16/64"	HS60	200
3-36/64"	4-32/64"	HS64	200
1-56/64"	5"	HS72	100
2-32/64"	5-32/64"	HS80	100
3-8/64"	6"	HS88	100
3-40/64"	6-32/64"	HS96	100
4-8/64"	7"	HS104	100
5-40/64"	8-32/64"	HS128	100
7-8/64"	10"	HS152	100
9-24/64"	12-16/64"	HS188	100
10-8/64"	13"	HS200	100
10-56/64"	13-48/64"	HS212	100
11-40/64"	14-32/64"	HS224	100
12-24/64"	15-16/64"	HS236	100
13-8/64"	16"	HS248	100
17-8/64"	20"	HS312	100

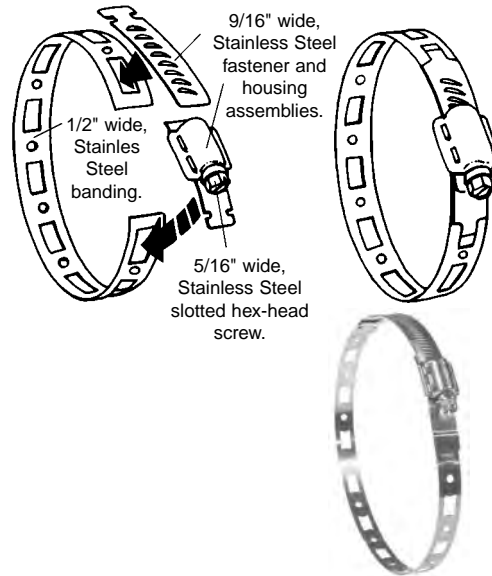
This clamp meets SAEJ1508 which supercedes Mil Spec WW-C-440B.

Maximum recommended torque 30 in. lbs.

* All clamps sold 10 per box

Torque ratings given on this page correspond to the torque rating of the screw of the clamp and are not an indication of the working pressure of any hose assembly installed with this clamp.

Make-A-Clamp Kits



This is a maintenance clamp system in a box. By simply cutting off a piece of banding from a continuous roll, you can make any size 301 stainless steel worm-driven clamp from 2" diameter and up. It is a must for anyone likely to encounter requirements for varying sized large clamps.

- 1/2" band width.
- .023 thickness.
- Reusable.

Part #	Contents
4000	Retail kit; 8 1/2' band, 3 adjustable fasteners, 1 band splice.
4001	Kit with 100' band, 25 adjustable fasteners, 10 band splices.
4002	Kit with 50' band, 10 adjustable fasteners, 5 band splices.
4004	Adjustable fastener. Priced per box. Shipped 10 fasteners per box.
4005	Box with 100' band, 10 band splices.
4006	Box with 50' band, 5 band splices.
4007	6" demonstrator kit with clamps.
4008	Priced per box. Shipped 10 band splices per box.



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The Right Connection™

FIRE HOSE FITTINGS

Brass Female to Male Hex Nipples

Female NPSH Thread	Male NPT Thread	Part #
3/4" GHT 1"	1" 3/4" GHT	FM7610T FM10S76
1-1/2" 2-1/2"	1-1/2" 2-1/2"	FM15S15T FM25S25T
Female NPSH Thread	Male NST (NH) Thread	Part #
1-1/2" 2" 2" 2-1/2" 3"	1-1/2" 1-1/2" 2-1/2" 2-1/2" 2-1/2"	FM15S15F FM20S15F FM20S25F FM25S25F FM30S25F
Female NPSH Thread	Male NPSH Thread	Part #
2"	1-1/2"	FM20S15
Female NST (NH) Thread	Male NPT Thread	Part #
1" 1-1/2" 1-1/2" 1-1/2" 2-1/2" 2-1/2" 2-1/2" 2-1/2" 2-1/2" 2-1/2" 3" 3" 4" 4-1/2"	1" 1-1/2" 2" 2-1/2" 1" 1-1/2" 2" 2-1/2" 3" 2-1/2" 3" 3" 4" 4"	FM10F10T FM15F15T FM15F20T FM15F25T FM25F75T FM25F10T FM25F15T FM25F20T FM25F25T FM25F30T FM30F25T FM30F30T FM40F40T FM45F40T
Female NST (NH) Thread	Male NST (NH) Thread	Part #
1-1/2" 1-1/2" 1-1/2" 2-1/2" 2-1/2"	1-1/2" 2-1/2" 3" 2-1/2" 3"	FM15F15F FM15F25F FM15F30F FM25F25F FM25F30F

Reducer



Same Size



Increaser



Female NPT Thread	Male NPSH Thread	Part #
1"	3/4" GHT	FM1076
1" 1-1/2" 2" 2-1/2"	1" 1-1/2" 2" 2-1/2"	FM1010 FM1515 FM2020 FM2525
Female NPT Thread	Male NST (NH) Thread	Part #
1" 1" 1-1/2" 1-1/2" 1-1/2" 2" 2" 2-1/2" 3" 3" 4" 4" 4" 6"	1" 1-1/2" 1-1/2" 2-1/2" 3" 1-1/2" 2-1/2" 2-1/2" 2-1/2" 2-1/2" 3" 3" 2-1/2" 4" 4-1/2" 6"	FM1010F FM1015F FM1515F FM1525F FM1530F FM2015F FM2025F FM2525F FM3025F FM3030F FM4025F FM4040F FM4045F FM6060F
Female NPT Thread	Male NPT Thread	Part #
3"	2-1/2"	FM3025T

Brass Double Male Hex Nipples

Male NPT Thread	Male NST (NH) Thread	Part #
3/4"	1-1/2"	DMH7515F
1"	1"	DMH1010F
1"	1-1/2"	DMH1015F
1"	2-1/2"	DMH1025F
1-1/2"	1"	DMH1510F
1-1/2"	1-1/2"	DMH1515F
1-1/2"	2-1/2"	DMH1525F
2"	1-1/2"	DMH2015F
2"	2-1/2"	DMH2025F
2-1/2"	1-1/2"	DMH2515F
2-1/2"	2-1/2"	DMH2525F
2-1/2"	3"	DMH2530F
3"	2-1/2"	DMH3025F
3"	3"	DMH3030F
4"	4"	DMH4040F
4"	4-1/2"	DMH4045F
5"	5"	DMH5050F
6"	4-1/2"	DMH6045F
6"	6"	DMH6060F
Male NPT Thread	Male NPT Thread	Part #
1-1/2" 2-1/2"	1-1/2" 3"	DMH15T15T DMH25T30T

Male NPT Thread	Male NPSH Thread	Part #
1"	3/4" GHT	DMH1076
1" 1" 1-1/2" 1-1/2" 1-1/2" 2" 2" 2-1/2" 2-1/2" 2-1/2" 2-1/2" 3" 3" 4" 6"	1" 1-1/2" 1-1/2" 1-1/2" 2" 1-1/2" 2" 2-1/2" 2" 2-1/2" 3" 2-1/2" 3" 4" 6"	DMH1010 DMH1015 DMH1510 DMH1515 DMH1520 DMH2015 DMH2020 DMH2025 DMH2520 DMH2525 DMH2530 DMH3025 DMH3030 DMH4040 DMH6060
Male NST (NH) Thread	Male NST (NH) Thread	Part #
1-1/2" 1-1/2" 2-1/2" 2-1/2"	1-1/2" 2-1/2" 2-1/2" 3"	DMH15F15F DMH15F25F DMH25F25F DMH25F30F
Male NST (NH) Thread	Male NPSH Thread	Part #
1-1/2"	1-1/2"	DMH15F15

Reducer



Same Size



Increaser



Brass Ball Valves

- Red polycarbonate with brass stem.
- For use up to **100 PSI (water only)**.
- Adjusts from straight stream to fog.



For cabinet use.

Size	Thread	90° Spray GPM @ 100 PSI	Part # with Bumper	Part # without Bumper
3/4"	GHT	30.9 **	FNB75GHT	---
3/4"	NPS	30.9 **	FNB75S	---
1"	NPS	11.4	FNB100S	FN100S
1"	NPS	30.9 **	HGB100S	---
1-1/2"	NPS	83.6	FNB150S	FN150S
1"	NST (NH)	11.4	FNB100NST	FN100NST
1"	NST (NH)	30.9 **	HGB100NST	---
1-1/2"	NST (NH)	83.6	FNB150NST	FN150NST

** 120° spray for 3/4" nozzle.

Plain Hose Nozzles

- Brass with satin finish.
- Operating pressure up to **100 PSI (water only)**.



Size	Thread	Length	Orifice	Part #
3/4"	GHT	6"	1/4"	BN6
3/4"	NPSH	6"	1/4"	BN7
1"	NPSH	8"	5/16"	BN10
1-1/4"	NPSH	10"	3/8"	BN12
1-1/2"	NPSH	10"	1/2"	BN15
2"	NPSH	12"	9/16"	BN20
2-1/2"	NPSH	12"	1"	BN25
1"	NST (NH)	8"	5/16"	BN10F
1-1/2"	NST (NH)	10"	1/2"	BN15F
2-1/2"	NST (NH)	12"	1"	BN25F

Valves

Malleable Iron Drum Gate Valves

- Manually operated.
- Ideal for drawing non-flammable liquids from drums and tanks.
- Iron body.
- Machined and lapped brass faceplate designed for oval discharge to ensure no splashing and smooth operation.
- Black Japanned finish.
- Male NPT.
- Can be padlocked.



NPT Size	Part #
3/4"	D71
2"	D75

Drum Faucets

- Gold polyethylene.
- Faucets are not to be used in applications where temperatures exceed **140°F (60°C)**.
- No wrench needed for screwing into drum opening.
- 2" faucet is shipped with a gasket; the 3/4" does not require a gasket.



NPT Size	Part #
3/4"	PEDF75
2"	PEDF200

Bronze Drum Plug Wrench

- Sparkproof, natural finish is safe around flammables.
- Offset handle design reduces user stress and minimizes knuckle injury.



Part #
DPW

FOOT VALVES FOR WATER SUCTION HOSE

Foot valves are used on the submersed end of the water suction hose to prevent the pump from losing its prime when shut down. The foot valve stops the water from draining by a closing leather flapper gate. Each valve has a built in strainer that prevents debris from entering during operation. All sizes have NPS threads and complete valves are painted red.

Part Number	Size
FV150	1-1/2
FV200	2
FV250	2-1/2
FV300	3
FV400	4
FV600	5
FV800	6



STRAINERS FOR WATER SUCTION HOSE

Used on the submersed end of suction hose to prevent debris from entering the pump during operation. All threads are NPS (trash strainers are square hole).



Size	Round Hole Part No.	Square Hole Part No.	Bottom Hole Part No.	Polypropylene Part No.
1-1/2	RHS150	SHS150	BHS150	PS150
2	RHS200	SHS200	BHS200	PS200
2-1/2	RHS250	SHS250		
3	RHS300	SHS300	BHS300	
4	RHS400	SHS400		
6	RHS600	SHS600		
8	RHS800			

CAM AND GROOVE COUPLINGS

Separate parts provide unique quick coupling hose connections for liquids or solids. All parts are manufactured to meet or exceed MIL Spec C27487 and dimensionally conform to MIL Spec A-A-59326A. They will interchange with couplings manufactured to the same standards (excluding 1/2" and 8"). Female couplers are supplied with safety pins. Cam arms on aluminum couplings and brass couplings are brass, stainless steel arms provided on stainless steel couplings, polypropylene and nylon.

PART A MALE ADAPTER x FEMALE THREAD
Male end fits Coupler or Dust Cap. Female end thread is NPT.

Size	Part Number	
	Aluminum	Stainless Steel
1/2	–	A050S
3/4	A075A	A075S
1	A100A	A100S
1-1/4	A125A	A125S
1-1/2	A150A	A150S
2	A200A	A200S
2-1/2	A250A	A250S
3	A300A	A300S
4	A400A	A400S
5	A500A	–
6	A600A	A600S
8	A800A	–



PART B FEMALE COUPLER x MALE THREAD
Female end fits male adapter or Dust Plug. Male end thread is NPT. Bowl has recess for washer replacement.

Size	Part Number	
	Aluminum	Stainless Steel
1/2	–	B050S
3/4	B075A	B075S
1	B100A	B100S
1-1/4	B125A	B125S
1-1/2	B150A	B150S
2	B200A	B200S
2-1/2	B250A	B250S
3	B300A	B300S
4	B400A	B400S
5	B500A	–
6	B600A	B600S
8	B800A	–



PART C FEMALE COUPLER x HOSE SHANK
Female end fits male adapter or Dust Plug. Shank fits into hose ID. Bowl has recess for washer replacement.

Size	Part Number	
	Aluminum	Stainless Steel
1/2	–	C050S
3/4	C075A	C075S
1	C100A	C100S
1-1/4	C125A	C125S
1-1/2	C150A	C150S
2	C200A	C200S
2-1/2	C250A	C250S
3	C300A	C300S
4	C400A	C400S
5	C500A	–
6	C600A	C600S
8	C800A	–



PART D FEMALE COUPLER x FEMALE THREAD
Female end fits male adapter or Dust Plug. Female end thread is NPT. Bowl has recess for washer replacement.

Size	Part Number	
	Aluminum	Stainless Steel
1/2	–	D050S
3/4	D075A	D075S
1	D100A	D100S
1-1/4	D125A	D125S
1-1/2	D150A	D150S
2	D200A	D200S
2-1/2	D250A	D250S
3	D300A	D300S
4	D400A	D400S
5	D500A	–
6	D600A	D600S
8	D800A	–



PART E MALE ADAPTER x HOSE SHANK

Male end fits female coupler or Dust Plug.
Shank fits into hose ID.

Size	Part Number	
	Aluminum	Stainless Steel
1/2	-	E050S
3/4	E075A	E075S
1	E100A	E100S
1-1/4	E125A	E125S
1-1/2	E150A	E150S
2	E200A	E200S
2-1/2	E250A	E250S
3	E300A	E300S
4	E400A	E400S
5	E500A	-
6	E600A	E600S
8	E800A	-



PART F MALE COUPLER x MALE THREAD

Male end fits female coupler or Dust cAP. Male end thread
Male end thread is NPT.

Size	Part Number	
	Aluminum	Stainless Steel
1/2	-	F050S
3/4	F075A	F075S
1	F100A	F100S
1-1/4	F125A	F125S
1-1/2	F150A	F150S
2	F200A	F200S
2-1/2	F250A	F250S
3	F300A	F300S
4	F400A	F400S
5	F500A	-
6	F600A	F600S
8	F800A	-



PIN LUG COUPLINGS

Threaded couplings for suction or discharge of water or other fluids. Standard threading is NPSM; National Pipe Straight Hose. 1-1/2" and 2-1/2" are available with additional NST thread; American National Fire Hose Straight Thread. (NST does not interchange). Pin lugs are on all sizes of female end. 2-1/2" through 6" have pin lugs on male end.

SET (M x F) PIN LUG SHANK COUPLINGS

Size	Thread	Aluminum	Brass
		W/Brass Swivel	W/ Brass Swivel
1-1/2	NPSM	AB150	BR150
1-1/2	NST	AB150NST	BR150NST
2	NPSM	AB200	BR200
2-1/2	NPSM	AB250	BR250
2-1/2	NST	AB250NST	BR250NST
3	NPSM	AB300	BR300
4	NPSM	AB400	BR400
6	NPSM	AB600	BR600



FEMALE PIN LUG SHANK COUPLINGS

Size	Thread	Aluminum	Brass
		W/Brass Swivel	W/ Brass Swivel
1-1/2	NPSM	AB150F	BR150F
1-1/2	NST	AB150NSTF	BR150NSTF
2	NPSM	AB200F	BR200F
2-1/2	NPSM	AB250F	BR250F
2-1/2	NST	AB250NSTF	BR250NSTF
3	NPSM	AB300F	BR300F
4	NPSM	AB400F	BR400F
6	NPSM	AB600F	BR600F





The Right Connection™

CAM AND GROOVE

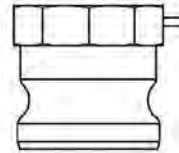
EZ BOSS-LOCK

No more fumbling with clamps, wire, clips or pins . . .
Just close the handles and the locking mechanism is engaged.

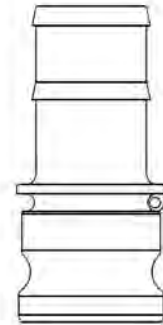


Unlike other safety couplings . . .

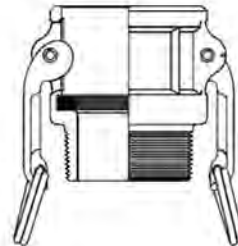
- *The EZ Boss-Lock is extremely EASY TO OPEN!!!* The release lever is under your thumb when you want to open the fitting. ERGONOMIC.
- *The EZ Boss-Lock is resistant to accidental disconnection when being dragged.* The release lever opens in the direction opposite to the cam arm, so movements that tend to open the release lever also tend to close the cam arm!!!
- *The EZ Boss-Lock alerts you if it is not properly engaged.* If the rotating lever is not flush with the handle, it is not properly engaged.
- *The EZ Boss-Lock has no sliding pins to jam.* The EZ Boss-Lock's rotating action helps keep the locking device free of debris.
- *The EZ Boss-Lock has no sliding pins to pop open.* The EZ Boss-Lock is designed to protect critical parts from impact and to withstand rugged use.
- *The EZ Boss-Lock can be supplied with special shanks custom suited to your needs.* The EZ Boss-Lock is available with Swaged and PF shank designs, for hard to couple chemical hoses.
- *The EZ Boss-Lock cam arm assemblies are made of investment cast Stainless Steel with plated Carbon Steel pull rings.*
- *The EZ Boss-Lock is easier to insert into the hose tubes on Tank Trucks, and easier to use in restricted spaces.* This is due to the smaller maximum O.D. and a more snag free exterior.
- *The EZ Boss-Lock Cam Arm assemblies can be retrofitted onto Undamaged Stainless Steel Boss-Lock.* This allows you to protect your investment in Stainless Steel Boss-Lock couplings while you upgrade.
- *The EZ Boss-Lock is Made in the USA.*



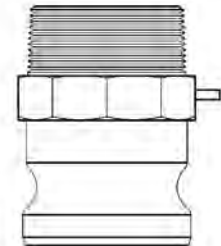
TYPE A
(male adapter x female NPT)



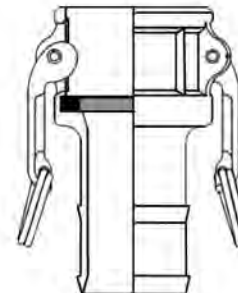
TYPE E
(male adapter x hose shank)



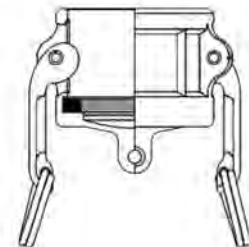
TYPE B
(female coupler x male NPT)



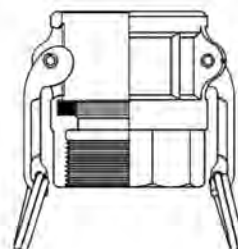
TYPE F
(male adapter x male NPT)



TYPE C
(female coupler x hose shank)



TYPE DC *
(dust cap)



TYPE D
(female coupler x female NPT)



TYPE DP *
(dust plug)

NOTE: Line drawings are representative of the Dixon line of cam and groove.

**Dust Caps and Dust Plugs are NOT to be used in Pressure Applications for safety and environmental reasons.*

WARNING:
UNDER NO CIRCUMSTANCES
should Cam and Groove couplings
be used for compressed air
or steam service!



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CAM AND GROOVE ADAPTERS

Dixon Boss-Lock Type A Adapters



Male Adapter x Female NPT

Size	Material					
	Aluminum	Aluminum Hard Coat	Brass	Unplated Iron	Plated Iron	Stainless Steel
1/2"	50-A-AL	----	50-A-BR	----	----	50-A-SS
3/4" x 1/2"	7550-A-AL	----	7550-A-BR	----	----	7550-A-SS
3/4"	75-A-AL	----	75-A-BR	----	75-A-PM	75-A-SS
1"	100-A-AL	----	100-A-BR	----	100-A-PM	100-A-SS
1-1/4"	125-A-AL	----	125-A-BR	----	----	125-A-SS
1-1/2"	150-A-AL	150-A-ALH	150-A-BR	150-A-MI	150-A-PM	150-A-SS
2"	200-A-AL	200-A-ALH	200-A-BR	200-A-MI	200-A-PM	200-A-SS
2-1/2"	250-A-AL	----	250-A-BR	----	250-A-PM	250-A-SS
3"	300-A-AL	300-A-ALH	300-A-BR	300-A-MI	300-A-PM	300-A-SS
4"	400-A-AL	400-A-ALH	400-A-BR	400-A-MI	400-A-PM	400-A-SS
5"	500-A-AL	----	----	500-A-MI	----	500-A-SS
6"	600-A-AL	600-A-ALH	600-A-BR	----	600-A-PM	600-A-SS
8" DIX*	800-A-AL	----	----	----	----	----
8" BL*	801-A-AL	----	----	----	----	----

Dixon Boss-Lock Type F Adapters



Male Adapter x Male NPT

Size	Material					
	Aluminum	Aluminum Hard Coat	Brass	Unplated Iron	Plated Iron	Stainless Steel
1/2"	50-F-AL	----	50-F-BR	----	----	50-F-SS
3/4" x 1/2"	7550-F-AL	----	7550-F-BR	----	----	7550-F-SS
3/4"	75-F-AL	----	75-F-BR	----	75-F-PM	75-F-SS
1"	100-F-AL	----	100-F-BR	----	100-F-PM	100-F-SS
1-1/4"	125-F-AL	----	125-F-BR	----	----	125-F-SS
1-1/2"	150-F-AL	150-F-ALH	150-F-BR	150-F-MI	150-F-PM	150-F-SS
2"	200-F-AL	200-F-ALH	200-F-BR	200-F-MI	200-F-PM	200-F-SS
2-1/2"	250-F-AL	----	250-F-BR	----	250-F-PM	250-F-SS
3"	300-F-AL	300-F-ALH	300-F-BR	300-F-MI	300-F-PM	300-F-SS
4"	400-F-AL	400-F-ALH	400-F-BR	400-F-MI	400-F-PM	400-F-SS
5"	500-F-AL	----	----	----	----	----
6"	600-F-AL	600-F-ALH	600-F-BR	----	600-F-PM	600-F-SS
8" DIX*	800-F-AL	----	----	----	----	----
8" BL*	801-F-AL	----	----	----	----	----

Dixon Boss-Lock Type E Adapters



Male Adapter x Hose Shank

Size	Material					
	Aluminum	Aluminum Hard Coat	Brass	Unplated Iron	Plated Iron	Stainless Steel
1/2"	50-E-AL	----	50-E-BR	----	----	50-E-SS
3/4" x 1/2"	7550-E-AL	----	7550-E-BR	----	7550-E-PM	7550-E-SS
3/4"	75-E-AL	----	75-E-BR	----	75-E-PM	75-E-SS
1"	100-E-AL	----	100-E-BR	----	100-E-PM	100-E-SS
1-1/4"	125-E-AL	----	125-E-BR	----	125-E-PM	125-E-SS
1-1/2"	150-E-AL	150-E-ALH	150-E-BR	150-E-MI	150-E-PM	150-E-SS
2"	200-E-AL	200-E-ALH	200-E-BR	200-E-MI	200-E-PM	200-E-SS
2-1/2"	250-E-AL	----	250-E-BR	----	----	250-E-SS
3"	300-E-AL	300-E-ALH	300-E-BR	300-E-MI	300-E-PM	300-E-SS
4"	400-E-AL	400-E-ALH	400-E-BR	400-E-MI	400-E-PM	400-E-SS
5"	500-E-AL	----	----	----	----	500-E-SS
6"	600-E-AL	600-E-ALH	600-E-BR	----	600-E-PM	600-E-SS
8" DIX*	800-E-AL	----	----	----	----	----
8" BL*	801-E-AL	----	----	----	----	----

* Boss-Lock Cam and Groove couplings **DO NOT INTERCHANGE IN THE 8" SIZE.**



The Right Connection™

DUST CAPS / PLUGS

Dixon Boss-Lock Type DP Dust Plugs

	Aluminum	Aluminum Hard Coat	Brass	Unplated Iron	Plated Iron	Stainless Steel
Size	Part #	Part #	Part #	Part #	Part #	Part #
1/2"	50-DP-AL	----	50-DP-BR	----	----	50-DP-SS
3/4"	75-DP-AL	----	75-DP-BR	----	----	75-DP-SS
1"	100-DP-AL	----	100-DP-BR	----	100-DP-PM	100-DP-SS
1-1/4"	125-DP-AL	----	125-DP-BR	125-DP-MI	125-DP-PM	125-DP-SS
1-1/2"	150-DP-AL	150-DP-ALH	150-DP-BR	150-DP-MI	150-DP-PM	150-DP-SS
2"	200-DP-AL	200-DP-ALH	200-DP-BR	200-DP-MI	200-DP-PM	200-DP-SS
2-1/2"	250-DP-AL	----	250-DP-BR	----	250-DP-PM	250-DP-SS
3"	300-DP-AL	300-DP-ALH	300-DP-BR	300-DP-MI	300-DP-PM	300-DP-SS
4"	400-DP-AL	400-DP-ALH	400-DP-BR	400-DP-MI	400-DP-PM	400-DP-SS
5"	500-DP-AL	----	----	----	----	----
6"	600-DP-AL	600-DP-ALH	600-DP-BR	----	----	600-DP-SS
8" DIX*	800-DP-AL	----	----	----	----	----
8" BL*	801-DP-AL	----	----	----	----	----



Dust Plug

* Boss-Lock Cam and Groove couplings **DO NOT INTERCHANGE IN THE 8" SIZE.**

Dixon Type DC Dust Cap

	Aluminum	Aluminum Hard Coat	Brass	Unplated Iron	Stainless Steel
Size	Part #	Part #	Part #	Part #	Part #
1/2"	50-DC-AL	----	50-DC-BR	----	50-DC-SS
3/4"	75-DC-AL	----	75-DC-BR	----	75-DC-SS
1"	100-DC-AL	----	100-DC-BR	----	100-DC-SS
1-1/2"	150-DC-AL	150-DC-ALH	150-DC-BR	----	150-DC-SS
2"	200-DC-AL	200-DC-ALH	200-DC-BR	200-DC-MI	200-DC-SS
3"	300-DC-AL	300-DC-ALH	300-DC-BR	----	250-DC-SS
4"	400-DC-AL	400-DC-ALH	400-DC-BR	300-DC-MI	300-DC-SS
5"	500-DC-AL	----	500-DC-BR	400-DC-MI	400-DC-SS
6"	600-DC-AL	600-DC-ALH	----	----	500-DC-SS
8" *	800-DC-AL	----	----	----	600-DC-SS



Type DC Dust Cap

* Boss-Lock Cam and Groove Couplings **DO NOT INTERCHANGES IN THE 8" SIZE.**

- ** See Boss-Lock for 1-1/4" and 2-1/2" couplers.
- The 8" Dust Cap has 2 cam arms, unlike the Type D, which has 4.
- Finger rings are not supplied on 1/2" -1" couplings.
- 1/2" has only one arm.

Dixon Boss-Lock Type H Dust Cap



Type H Dust Cap

	Aluminum	Brass	Plated Iron	Stainless Steel
Size	Part #	Part #	Part #	Part #
3/4"	AH075	BH075	IH075	RH075BL
1"	AH100	BH100	IH100	RH100BL
1-1/2"	AH125	BH125	----	RH125BL
1-1/2"	AH150	BH150	IH150	RH150BL
2"	AH200	BH200	IH200	RH200BL
2-1/2"	AH250	BH250	IH250	----
3"	AH300	BH300	IH300	RH300BL
4"	AH400	BH400	IH400	RH400BL
6"	AH600	BH600	IH600	----
8" *	AH800	----	----	----

* Boss-Lock Cam and Groove Couplings **DO NOT INTERCHANGES IN THE 8" SIZE.**

- The 8" Boss-Lock design has 2 cam arms.
- All Boss-Lock Couplers come with **SAFETY CLIPS.**

Dixon EZ Boss-Lock Type H Dust Cap



Dust Cap

	Aluminum	Brass	Stainless Steel
Size	Part #	Part #	Part #
3/4"	----	BH075EZ	RH075EZ
1"	AH100EZ	BH100EZ	RH100EZ
1-1/4"	----	----	RH125EZ
1-1/2"	AH150EZ	BH150EZ	RH150EZ
2"	AH200EZ	BH200EZ	RH200EZ
2-1/2"	AH250EZ	----	----
3"	AH300EZ	BH300EZ	RH300EZ
4"	AH400EZ	BH400EZ	RH400EZ
6"	AH600EZ	----	RH600EZ

UNDER NO CIRCUMSTANCES should the EZ-Boss-Lock cam arms be used on any fitting not specifically produced for their use.

The Aluminum, Brass and Iron are made from sand castings. To insure proper functioning of the EZ Boss-Lock cam arm assemblies, we sort the castings to insure there is sufficient length and orientation on the lugs on the main casting to engage the lever. We also buff or grind the rougher sand cast surface to insure that the lever will move freely. The EZ Boss-Lockcam arms **CANNOT** be retrofitted onto existing Aluminum, Brass or Plated Iron Boss-Lock already in service.

Dust Caps and Dust Plugs are NOT to be used in Pressure Applications for safety and environmental reasons.



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The Right Connection™

CAM AND GROOVE COUPLERS

Dixon Type C Couplers



Female Coupler x Hose Shank

- * Boss-Lock Cam and Groove Couplings **DO NOT INTERCHANGE IN THE 8" SIZE.**
- See Boss-Lock for 1-1/4" and 2-1/2" couplers.
- The 8" design has 4 cam arms. 1/2" has only one cam arm.
- Finger rings are not supplied on 1/2" - 1" couplings.

Size	Aluminum Part #	Aluminum Hard Coat Part #	Brass Part #	Unplated Iron Part #	Stainless Steel Part #
1/2"	50-C-AL	-----	50-C-BR	-----	50-C-SS
3/4"	75-C-AL	-----	75-C-BR	-----	75-C-SS
1"	100-C-AL	-----	100-C-BR	-----	100-C-SS
1-1/4"	-----	-----	-----	-----	125-C-SS
1-1/2"	150-C-AL	150-C-ALH	150-C-BR	150-C-MI	150-C-SS
2"	200-C-AL	200-C-ALH	200-C-BR	200-C-MI	200-C-SS
2-1/2"	-----	-----	-----	-----	250-C-SS
3"	300-C-AL	300-C-ALH	300-C-BR	300-C-MI	300-C-SS
4"	400-C-AL	400-C-ALH	400-C-BR	400-C-MI	400-C-SS
5"	500-C-AL	-----	-----	-----	500-C-SS
6"	600-C-AL	600-C-ALH	600-C-BR	-----	600-C-SS
8" *	800-C-AL	-----	-----	-----	-----

Boss-Lock Type C Couplers



Female Coupler x Hose Shank

- * Boss-Lock Cam and Groove Couplings **DO NOT INTERCHANGE IN THE 8" SIZE.**
- The 8" Boss-Lock design has 2 cam arms.
- All Boss-Lock Couplers come with **SAFETY CLIPS.**

Size	Aluminum Part #	Brass Part #	Plated Iron Part #	Stainless Steel Part #
3/4" 1/2"	-----	-----	-----	RC050BL
3/4"	AC075	BC075	IC075	RC075BL
1"	AC100	BC100	IC100	RC100BL
1-1/4"	AC125	BC125	-----	RC125BL
1-1/2"	AC150	BC150	IC150	RC150BL
2"	AC200	BC200	IC200	RC200BL
2-1/2"	AC250	BC250	-----	-----
3"	AC300	BC300	IC300	RC300BL
4"	AC400	BC400	IC400	RC400BL
6"	AC600	BC600	IC600	-----
8" *	AC800	-----	-----	-----

EZ Boss-Lock Type C Couplers



Female Coupler x Hose Shank

- * Boss-Lock Cam and Groove Couplings **DO NOT INTERCHANGE IN THE 8" SIZE.**
- The 8" EZ Boss-Lock design has 2 cam arms.
- **UNDER NO CIRCUMSTANCES** should the EZ Boss-Lock cam arms be used on any fitting not specifically produced for their use.
- The EZ Boss-Lock cam arms **CANNOT** be retrofitted onto existing Aluminum, Brass or Plated Iron Boss-Lock already in service.

Size	Aluminum Part #	Brass Part #	Stainless Steel Part #
1/2"	-----	-----	RC050EZ
3/4"	AC075EZ	BC075EZ	RC075EZ
1"	AC100EZ	BC100EZ	RC100EZ
1-1/4"	-----	BC125EZ	RC125EZ
1-1/2"	AC150EZ	BC150EZ	RC150EZ
2"	AC200EZ	BC200EZ	RC200EZ
2-1/2"	AC250EZ	BC250EZ	-----
3"	AC300EZ	BC300EZ	RC300EZ
4"	AC400EZ	BC400EZ	RC400EZ
6"	AC600EZ	-----	RC600EZ
8"*	AC800EZ	-----	-----



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CAM AND GROOVE COUPLERS

Dixon Type D Couplers

	Aluminum	Aluminum Hard Coat	Brass	Unplated Iron	Stainless Steel
Size	Part #	Part #	Part #	Part #	Part #
1/2"	50-D-AL	-----	50-D-BR	-----	50-D-SS
3/4"	75-D-AL	-----	75-D-BR	-----	75-D-SS
1"	100-D-AL	-----	100-D-BR	-----	100-D-SS
1-1/4"	-----	-----	-----	-----	125-D-SS
1-1/2"	150-D-AL	150-C-ALH	150-C-BR	150-C-MI	150-C-SS
2"	200-D-AL	200-C-ALH	200-C-BR	200-C-MI	200-C-SS
2-1/2"	-----	-----	-----	-----	250-C-SS
3"	300-D-AL	300-C-ALH	300-C-BR	300-C-MI	300-C-SS
4"	400-C-AL	400-C-ALH	400-C-BR	400-C-MI	400-C-SS
5"	500-C-AL	-----	500-C-BR	500-C-MI	500-C-SS
6"	600-C-AL	600-C-ALH	600-C-BR	-----	600-C-SS
8" *	800-C-AL	-----	-----	-----	-----

- * Boss-Lock Cam and Groove Couplings **DO NOT INTERCHANGE IN THE 8" SIZE**. The 8" design has 4 cam arms.
- See Boss-Lock for 1-1/4" and 2-1/2" couplers.
- Finger rings are not supplied on 1/2" - 1" couplings.
- 1/2" has only one cam arm.



Female Coupler x Female NPT

Boss-Lock Type D Couplers

	Aluminum	Brass	Plated Iron	Stainless Steel
Size	Part #	Part #	Part #	Part #
3/4" x 1/2"	AD050	BD050	-----	RD050BL
3/4"	AD075	BD075	ID075	RD075BL
1"	AD100	BD100	ID100	RD100BL
1-1/4"	AD125	BD125	-----	RD125BL
1-1/2"	AD150	BD150	ID150	RD150BL
2"	AC200	BD200	ID200	RD200BL
2-1/2"	AD250	BD250	-----	-----
3"	AD300	BD300	ID300	RD300BL
4"	AD400	BD400	ID400	RD400BL
5"	AD500	-----	-----	-----
6"	AD600	BD600	ID600	-----
8" *	AD800	-----	-----	-----

- * Boss-Lock Cam and Groove Couplings **DO NOT INTERCHANGE IN THE 8" SIZE**.
- The 8" Boss-Lock design has 2 cam arms.
- All Boss-Lock Couplers come with **SAFETY CLIPS**.



Female Coupler x Female NPT

EZ Boss-Lock Type D Couplers

	Aluminum	Brass	Stainless Steel
Size	Part #	Part #	Part #
3/4" x 1/2"	-----	-----	RD050EZ
3/4"	AD075EZ	BD075EZ	RD075EZ
1"	AD100EZ	BD100EZ	RD100EZ
1-1/4"	-----	BD125EZ	RD125EZ
1-1/2"	AD150EZ	BD150EZ	RD150EZ
2"	AD200EZ	BD200EZ	RD200EZ
2-1/2"	AD250EZ	BD250EZ	-----
3"	AD300EZ	BD300EZ	RD300EZ
4"	AD400EZ	BD400EZ	RD400EZ
5"	AD500EZ	-----	-----
6"	AD600EZ	-----	RD600EZ
8" *	AD800EZ	-----	-----

- **UNDER NO CIRCUMSTANCES** should the EZ Boss-Lock cam arms be used on any fitting not specifically produced for their use.
- The EZ Boss-Lock cam arms **CANNOT** be retrofitted onto existing Aluminum, Brass or Plated Iron Boss-Lock already in service.

- * Boss-Lock Cam and Groove Couplings **DO NOT INTERCHANGE IN THE 8" SIZE**.
- The 8" Boss-Lock design has 2 cam arms.



Female Coupler x Female NPT



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CAM AND GROOVE COUPLERS

Dixon Type B Couplers



Female Coupler x Male NPT

- * Boss-Lock Cam and Groove Couplings **DO NOT INTER-CHANGE IN THE 8" SIZE**. The 8" design has 4 cam arms.
- See Boss-Lock for 1-1/4" and 2-1/2" couplers.
- **Finger rings are not supplied on 1/2" - 1" couplings.**
- 1/2" has only one cam arm.

	Aluminum	Aluminum Hard Coat	Brass	Unplated Iron	Stainless Steel
Size	Part #	Part #	Part #	Part #	Part #
1/2"	50-B-AL	----	50-B-BR	----	50-B-SS
3/4"	75-B-AL	----	75-B-BR	----	75-B-SS
1"	100-B-AL	----	100-B-BR	----	100-B-SS
1-1/2"	150-B-AL	150-B-ALH	150-B-BR	150-B-MI	150-B-SS
2"	200-B-AL	200-B-ALH	200-B-BR	200-B-MI	200-B-SS
2-1/2"	----	----	----	----	250-B-SS
3"	300-B-AL	300-B-ALH	300-B-BR	----	300-B-SS
4"	400-B-AL	400-B-ALH	400-B-BR	300-B-MI	400-B-SS
5"	500-B-AL	----	----	400-B-MI	600-B-SS
6"	600-B-AL	600-B-ALH	----	----	----
8" *	800-B-AL	----	----	----	----

Boss-Lock Type B Couplers



Female Coupler x Male NPT

- * Boss-Lock Cam and Groove Couplings **DO NOT INTER-CHANGE IN THE 8" SIZE**.
- The 8" Boss-Lock design has 2 cam arms.
- All Boss-Lock Couplers come with **SAFETY CLIPS**.

	Aluminum	Brass	Plated Iron	Stainless Steel
Size	Part #	Part #	Part #	Part #
3/4" x 1/2"	AB050	BB050	IB050	RB050BL
3/4"	AB075	BB075	IB075	RB075BL
1"	AB100	BB100	IB100	RB100BL
1-1/4"	AB125	BB125	----	RB125BL
1-1/2"	AB150	BB150	IB150	RB150BL
2"	AB200	BB200	IB200	RB200BL
2-1/2"	AB250	BB250	----	----
3"	AB300	BB300	IB300	RB300BL
4"	AB400	BB400	IB400	RB400BL
5"	----	----	----	----
6"	AB600	BB600	----	----
8" *	AB800	----	----	----

EZ Boss-Lock Type B Couplers



Female Coupler x Male NPT

UNDER NO CIRCUMSTANCES should the EZ Boss-Lock cam arms be used on any fitting not specifically produced for their use.

The Aluminum, Brass and Iron are made from sand castings. To insure proper functioning of the EZ Boss-Lock cam arm assemblies, we sort the castings to insure there is sufficient length and orientation on the lugs on the main casting to engage the lever. We also buff or grind the rougher sand cast surface to insure that the lever will move freely.

The EZ Boss-Lock cam arms CANNOT be retrofitted onto existing Aluminum, Brass or Plated Iron Boss-Lock already in service.

	Aluminum	Brass	Stainless Steel
Size	Part #	Part #	Part #
3/4" x 1/2"	----	----	RB050EZ
3/4"	----	BB075EZ	RB075EZ
1"	----	BB100EZ	RB100EZ
1-1/4"	AB100EZ	BB125EZ	RB125EZ
1-1/2"	AB150EZ	BB150EZ	RB150EZ
2"	AB200EZ	BB200EZ	RB200EZ
3"	AB300EZ	BB300EZ	RB300EZ
4"	AB400EZ	BB400EZ	RB400EZ
6"	AB600EZ	----	RB600EZ



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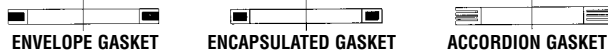
CAM AND GROOVE ACCESSORIES

Cam and Groove Gaskets

Available sizes 1/2" to 8" in Buna N, Viton®-A, Extra thick Buna N, Ethylene Propylene, Neoprene, White Neoprene, White Buna N and Silicone.



Teflon Gaskets



Envelope Gasket available in Teflon® Buna filler, Teflon® Viton®-A filler, Teflon® White Buna filler and Teflon® Ethylene Propylene filler. Encapsulated Gasket available in Teflon® Silicone and Teflon® Viton®. Accordion Gaskets available in Teflon®. Sizes: 1/2" to 6".

Carbon Steel Clip Assembly

For Boss-Lock couplings.

Description	Part #
Pull ring, chain and AC3 clip	BLCA152CS



Stainless Steel Pull Rings

Description	Part #
2" 304 stainless steel	R200SS



Clips and Lanyard for Boss-Lock Couplings

Carbon steel clips with nylon lanyard.



Size	Part #	Size	Part #	Size	Part #
3/4" & 1"	ACL4	1-1/4" to 4"	ACL2	6"	ACL3

Stainless Steel Clip and Lanyard for Boss-Lock Couplings

Description	Part #
Clip	AC7



Description	Part #
Lanyard	LR7



Jack Chains with S-Hooks



Description	Part #	Pkg. Qty.
6" Brass	CH-B-6	10
12" Brass	CH-B-12	10
24" Brass	CH-B-24	-----
12" Carbon Steel	CH-C-12	10
6" Stainless Steel	CH-SS-6	10
12" Stainless Steel	CH-SS-12	10
24" Stainless Steel	CH-SS-24	10

Sash Chains with Pull Rings



Description	Part #
4-1/2" Brass	J125
6-1/2" Brass	J150
8-1/2" Brass	J300
12-3/4" Brass	J500

Pull Ring Safety Clips for Boss-Lock

PVC Coated Lanyards



Description	Part #
15" long PVC coated carbon steel with aluminum crimp sleeves. One end factory crimped, one end uncrimped for field installation.	CAL15
25" long PVC coated carbon steel with aluminum crimp sleeves. One end factory crimped, one end uncrimped for field installation.	CAL25



Coupler Size	Carbon Steel Part #	Stainless Steel Part #
3/4" x 1"	-----	100PRSCSS
1-1/4" to 2-1/2"	200PRSCCS	200PRSCSS
3" and 4"	300PRSCCS	300PRSCSS



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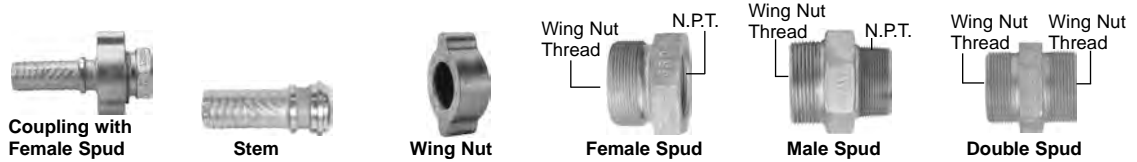
The Right Connection™

COUPLERS / AIR FITTINGS

Boss Ground Joint Seal

- A leakproof seal is formed when the metal head of the stem makes contact with the patented polymer seat in the spud.
- The non-metallic polymer seat resists most chemicals found in manufacturing facilities.
- Recommended for steam service up to 450°F.
- Easy to seal.
- Works with existing ground joint fittings.

PLATED STEEL and/or IRON



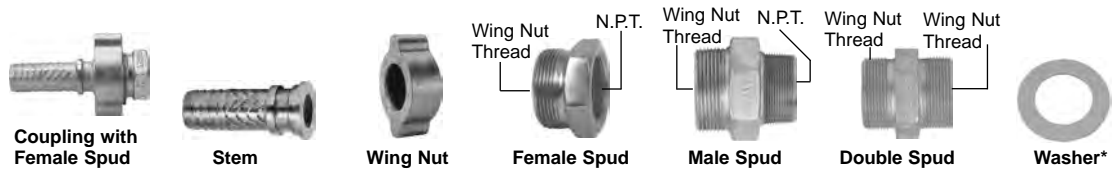
Hose Shank x NPT	Part #	Part #	Part #	Part #	Part #	Part #
1/4" *	GF1	GBA	BA2	GBC	-----	-----
3/8" *	GF3	GCA	CB	GCC	GMC	-----
1/2"	GF6	GB1	B2	GB3	GM3	GDB3
3/4"	GF26	GB6	B12	GB8	GM8	GDB13
1"	GF36	GB11	B12	GB13	GM13	GDB13
1-1/4"	GF51	GB16	B17	GB18	GM18	GDB23
1-1/2"	GF61	GB21	B17	GB23	GM23	GDB23
2"	GF81**	GB26**	B27	GB28	GM28	GDB28
2-1/2"	GF96	GB31	B32	GB33	GM33	GDB33
3"	GF111	GB36	B37	GB38	GM38	GDB38
4"	GF141	GB46	B47	GB48	-----	-----
6" *	GF201	GB66	B67	GB68	-----	-----

* 1/4", 3/8" and 6" come only with copper seat spuds.
 ** Not to be used with #250, #275 or #306 Boss Clamps.

Boss Washer Seal

- A Klinger washer is inserted between the stem and spud.
- A leakproof seal is formed by rotating the wing nut and hammering it tight.

PLATED STEEL and/or IRON



Hose Shank x NPT	Part #	Part #	Part #	Part #	Part #	Part #	Part #
3/8"	WF3	SS337	CB	CC	WMC	-----	WBC
1/2"	WF6	B1	B2	B3	WM3	DB3	W2
3/4"	WF26	B6	B12	B8	WM8	DB13	W12
1"	WF36	B11	B12	B13	WM13	DB13	W12
1-1/4"	WF51	B16	B17	B18	WM18	DB23	W17
1-1/2"	WF61	B21	B17	B23	WM23	DB23	W17
2"	WF81**	B26**	B27	B28	WM28	DB28	W27
2-1/2"	WF96	B31	B32	B33	-----	-----	W32
3"	WF111	B36	B37	B38	WM38	DB38	W37
4"	-----	B46†	B47	B48†	-----	-----	W47†

* Washer is a Klinger nylon, nitrile bonded, Kevlar® reinforced material.
 ** Not to be used with #250, #275 or #306 "Boss" clamps.
 † Item will be discontinued when stock is depleted.

Boss Spud x Hose



Size	Polymer Seat Part #
1"	GH1311
2"	GH2826



The Right Connection™

COUPLERS / CLAMPS

Boss Hose Menders



Size	Part #	Size	Part #
1/2"	M1	2-1/2"	M31
3/4"	M6	3"	M36
1"	M11	4"	M46
1-1/4"	M16	6"	M66
1-1/2"	M21	--	---
2"	M26	--	---

Collars to engage grip fingers of Boss clamps. 3/4" - 4", plated iron; 1/2" and 6", plated steel.

Boss Male Stems



Steel Bar Stock

Hose x NPT Size	Part #
1/4" x 1/8"	MS4X2
1/4" x 1/4"	MSA
1/4" x 3/8"	MSB
3/8" x 1/4"	MS6X4
3/8" x 3/8"	MSC
3/8" x 1/2"	MS6X8
1/2" x 1/4"	MS8X4
1/2" x 3/8"	MS8X6
1/2" x 1/2"	MS1
1/2" x 3/4"	MS8X12
3/4" x 1/2"	MS12X8
3/4" x 3/4"	MS6
3/4" x 1"	MS12X16
1" x 3/4"	MS16X12
1" x 1"	MS11



Brass

Size	Part #
3/4"	BMS6
1"	BMS11
1-1/4"	BMS16
1-1/2"	BMS21
2"	BMS26
3"	BMS36



Iron

316 Stainless Steel

Size	Part #	Size	Part #
---	---	1/2"	RMS1
---	---	3/4"	RMS6
---	---	1"	RMS11
1-1/4"	MS16	1-1/4"	RMS16
1-1/2"	MS21	1-1/2"	RMS21
2"	MS26	2"	RMS26
2-1/2"	MS31	2-1/2"	RMS31
3"	MS36	3"	RLP36 *
4"	MS46	4"	RLP46 *

* Tubular Steel.

Boss Clamps

Hose I.D.	Hose O.D.		Plated Iron Part #	Stainless Steel Part #	Torque ³	Brass Part #
	From:	To:				
1/4"	36/64"	42/64"	BD ⁴	---	6	---
3/8"	44/64"	56/64"	CD ⁴	---	6	---
1/2"	52/64"	60/64"	DD ⁴	---	6	---
1/2"	60/64"	1-4/64"	B4 ⁴	RB4	12	BB4
1/2"	1-4/64"	1-12/64"	B5	---	12	---
3/4"	1-10/64"	1-20/64"	BU9 ⁴	RBU9	21	BBU9
3/4"	1-20/64"	1-32/64"	B9	RB9	21	BB9
3/4"	1-32/64"	1-44/64"	B10	---	21	BB10
1/2"	58/64"	1-2/64"	968	---	6	---
1"	1-26/64"	1-36/64"	156 ¹	---	21	---
1"	1-34/64"	1-46/64"	BU14	RBU14	21	BBU14
1"	1-44/64"	1-60/64"	B14	RB14	21	BB14
1"	1-60/64"	2-8/64"	B15	---	21	---
1-1/4"	1-32/64"	1-50/64"	BU18	---	40	40
1-1/4"	1-44/64"	1-56/64"	187 ¹	---	21	21
1-1/4"	1-50/64"	2-6/64"	BU19	---	40	40
1-1/4"	1-56/64"	2-4/64"	206 ¹	---	21	21
1-1/4"	2-8/64"	2-24/64"	B19	RB19	40	40
1-1/2"	1-52/64"	2"	BU22	---	40	40
1-1/2"	2"	2-14/64"	B22	---	40	---
1-1/2"	2"	2-8/64"	212 ¹	---	21	---
1-1/2"	2-4/64"	2-16/64"	225 ¹	---	40	---
1-1/2"	2-12/64"	2-24/64"	BU24	RBU24	40	BBU24 ²
1-1/2"	2-24/64"	2-36/64"	B24	RB24	40	---
1-1/2"	2-36/64"	2-48/64"	B25	---	40	---
2"	2-16/64"	2-32/64"	250 ^{1,5}	---	40	---
2"	2-22/64"	2-34/64"	BU28	---	60	---
2"	2-32/64"	2-48/64"	275 ^{1,5}	---	40	---
2"	2-32/64"	2-50/64"	BU29	RBU29	60	BBU29 ²
2"	2-48/64"	3-4/64"	B29	RB29	60	BB29 ²
2"	2-48/64"	3-4/64"	306 ^{1,5}	---	60	---
2"	3-6/64"	3-28/64"	B30	---	60	---
2-1/2"	3-4/64"	3-32/64"	350 ¹	---	60	---
2-1/2"	3-6/64"	3-28/64"	BU34	---	60	---
2-1/2"	3-32/64"	3-60/64"	B34	---	150	---
3"	3-32/64"	3-48/64"	375 ¹	---	60	---
3"	3-32/64"	3-60/64"	BU35	RBU35	150	---
3"	3-48/64"	4"	401 ¹	---	150	---
3"	3-52/64"	4-4/64"	B35	---	150	---
3"	4"	4-12/64"	418 ¹	---	200	---
3"	4-4/64"	4-28/64"	B39	---	200	---
3"	4-12/64"	4-32/64"	450 ¹	---	200	---



2-Bolt Type



4-Bolt Type
2 Gripping Fingers



4-Bolt Type
4 Gripping Fingers¹

¹ 4 gripping fingers

² Will become obsolete as inventory is depleted.

³ Torque applies to plated iron and stainless steel clamps.

⁴ Investment cast carbon steel.

⁵ Not to be used with GF81, GB26, WF81, RGF81, BGF81, BGB26, RWF81, RB26.

Replacement nuts and bolts are available, contact Wharton for more information.

The bolts used in the Boss interlocking clamps are not standard bolts. They vary from standard bolts in their length, diameter, overall thread length and material hardness. These bolts can be re-torqued, but it is **not** recommended that the bolts or clamps

be reused, as they are designed for single bend only. Dixon recommends using only factory supplied replacement bolts.

Torque values for clamps are based on dry bolts. The use of lubricant on bolts will adversely affect clamp performance.

Do not lubricate nuts and bolts. Recommended torque rating is give in ft. lbs.

LP-Boss Male Stems

Plated Steel
Male NPT End

316 Stainless Steel
Male NPT End

Plated Carbon Steel
Schedule 80 *
*Meets NFPA 58

Unplated Steel
Beveled End



Size	Part #	Part #	Part #	Part #
1-1/4"	LP16	---	LP16-80	---
1-1/2"	LP21	---	LP21-80	---
2"	LP26	---	LP26-80	LPB26
2 1/2"	LP31	---	---	---
3"	LP36	RLP36	---	LPB36
4"	LP46	RLP46	---	---
6"	LP66	---	---	---



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The Right Connection™

AIR FITTINGS / ACCESSORIES

Air King 4 - Lug Quick-Acting Couplings

Size	Iron Part #	Brass Part #
1-1/4"	AM16	AB16
1-1/2"	AM21	AB21
2"	AM26	AB26
1-1/4"	AM18	AB18
1-1/2"	AM23	AB23
2"	AM28	AB28



Hose End

Washers for 4-Lug

Rubber Part #

AWR14



Female N.P.T.

- Rated to **150 PSI**.
 - Boss clamps recommended.
- Warning:** Must use safety clips. Not to be used for steam service.
- Note:** Safety clips are same size for both 2-lug and 4-lug Universal Couplings.

Sand Blast Couplings



Quick Couplings

Hose Size	Hose O.D.	Brass Part #	Aluminum Part #
3/4"	1-1/2"	BSB75	ASB75
1"	1-7/8"	BSB100	ASB100
1-1/4"	2-5/32"	BSB125	ASB125
1-1/2"	2-3/8"	BSB150	ASB150



Nozzle Holders

Hose Size	Hose O.D.	Brass Part #	Aluminum Part #
3/4"	1-1/2"	BNH75	ANH75
1"	1-7/8"	BNH100	ANH100
1-1/4"	2-5/32"	BNH125	ANH125
1-1/2"	2-3/8"	BNH150	ANH150

Sand blast couplings are designed for use on sand blast hose.

- Supplied with screws.
- Nozzle holders have 1-1/4" NPSM thread.
- Rated to **110 PSI**.



Threaded Couplings

NPT Size	Brass Part #	Aluminum Part #
1-1/4"	BSC125	ASC125
1-1/2"	BSC150	ASC150

Replacement Gaskets

Black Nitrile Part #	Urethane Part #
SBG	USBG

Replacement Screws

Part #

SBSCS

Air King Universal Couplings

Air King is for air and water service

Size	Iron Part #	Brass Part #	316 Stainless Steel Part #
3/8"	AMH	ABH	RAMH
1/2"	AM1	AB1	RAM1
5/8"	AM5	AB5	---
3/4"	AM6	AB6	RAM6
1"	AM11	AB11	RAM11

Hose Ends



Size	Iron Part #	Brass Part #	316 Stainless Steel Part #
1/4"	AMB1	ABB1	---
3/8"	AMB	ABB	RAMB
1/2"	AM2	AB2	RAM2
3/4"	AM7	AB7	RAM7
1"	AM12	AB12	RAM12

Male NPT Ends



Size	Iron Part #	Brass Part #	316 Stainless Steel Part #
1/4"	AMC1	ABC1	---
3/8"	AMC	ABC	RAMC
1/2"	AM3	AB3	RAM3
3/4"	AM8	AB8	RAM8
1"	AM13	AB13	RAM13

Female NPT Ends



Blank Ends



Iron Part #	Brass Part #	316 Stainless Steel Part #
AM0	AB0	RAM0

Triple Connections



Iron Part #	Brass Part #
AM10	AB10

- The use of an Air King safety clip or wire type retainer is necessary to assure Air King universal couplings will not become accidentally disconnected. This guarantees the fittings are properly connected as pin will not go through holes in mating flanges until couplings are locked in place. Only one Air King safety clip or wire type retainer is required for each Air King universal coupling.
- Made in the USA.
- Air King is rated to **150 PSI** at ambient temperature (**70°F**).
- Standard Air King fittings come with AWR4 washers.
- Air King available to meet pressure requirements as specified in A-A-59553 commercial item description superseding Mil Spec. WWC-633D.



The Right Connection™

AIR FITTING / ACCESSORIES

Air King Accessories *Air King is for air and water service only*

The use of an Air King safety clip or wire type retainer is necessary to ensure Air King universal couplings will not become accidentally disconnected. This guarantees the fittings are properly connected as the pin will not go through the holes in the mating flanges until couplings are locked in place. Only one Air King safety clip or wire type retainer is required for each Air King universal coupling.

Standard Safety Clip



- Same size for all coupling sizes.

Wire Diameter	Part #
.080	AC1

Air King Safety Pins



- Heavy duty.
- Oversized.

Wire Diameter	Part #
.058	AKSP1
.091	AKSP25

Stainless Steel Clip



- Same size for all coupling sizes.

Wire Diameter	Part #
.072	AC7

Lanyards



Part #
ACL8

- Synthetic cord.
- Same size for all coupling sizes.

Part #
LR7

- Stainless steel cable.

Washers



- Same size for all coupling sizes.
- Rubber temperature range: **-20°F to 160°F.**
- Neoprene temperature range: **-20°F to 190°F.**
- Neoprene is oil resistant.

Black natural rubber Part #	Neoprene Part #
AWR4	AWS6

In-Line Lubricators

Designed to protect portable or stationary air tools by efficiently oiling the tool mechanisms. Each time an air tool is operated, a fine mist of oil is injected into it along with the air from the compressor. Installation is recommended within 25 feet of the tool to be lubricated. Refer to the arrow for proper air flow direction. Transparent sight disc allows visual inspection of oil level. Oil flow regulated by screwdriver screw adjustment. Not recommended for constant flow applications. For reciprocating tools only. Minimum flow rate is 30 SCFM.



Type of Oil to use:

Use any petroleum-base, non-detergent lightweight oil (SAE 10/150SSU) which will readily break up into a mist, i.e., Mobil DTE light or comparable oil. Do not use any synthetic oil or oils containing additives or solvents.

NPT Sizes	Oil Capacity	Maximum Working Pressure	Air Flow at 70 PSI	Part #
1/2"	1.4 fluid ozs.	500 PSI	30 SCFM	PL300
3/4"	3.7 fluid ozs.	200 PSI	70 SCFM	PL400
3/4"	11.0 fluid ozs.	300 PSI	70 SCFM	PL400L
1"	16.0 fluid ozs.	250 PSI	100 SCFM	PL500

Compressor Y



- Converts a single supply source to a dual outlet.

Female NPT Inlet (1)	Male NPT Outlet (2)	Iron Part #
1"	3/4"	Y10075

Air / Oil In-Line Filters

Designed specifically for the protection of small air tools, such as impact wrenches, nut runners, grinders and screwdrivers. The all-anodized, lightweight aluminum housing is compact and can be used directly before the air tool.

- Maximum operating pressure: **500 PSI.**
- Operating temperatures: **35°F to 200°F.**
- Air flow is 140 SCFM.
- Standard element is 40 micron, which ensures minimum pressure drop.
- Elements can be replaced quickly.



Male NPT	Overall Length	Diameter	Weight Lbs.	Aluminum Part #
3/4"	3-13/16"	1-1/2"	.46	9076M

Dual Y Valves

- Dual action valve, ideal for compressor applications.
- Female NPT threads.
- Non-vented rated to 600 PSI WOG.
- Vented rated to 125 CWP (Cold Working Pressure).



Inlet Size	Outlet Size	Description	Part #
1"	3/4" (2x)	non-vented	BBV100DW
1-1/4"	3/4" (2x)	non-vented	BBV125DW
1"	3/4" (2x)	vented	BBV100DWW
1-1/4"	3/4" (2x)	vented	BBV125DWW



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The Right Connection™

HOSE REELS / SHANK TYPE FITTINGS

Spring Driven Hose Reels

Reelcraft® 5000 Series

- Maximum temperature is 150°F.
- Reel inlet 3/8" NPTF.
- All steel construction.
- Full shaft and swivel.
- Furnished standard with PVC hose.
- Compressed air hose should not be converted to oxygen service. Compressed air hoses are often contaminated with an oil coating, which can react explosively when oxygen is introduced.



With Hose

Hose I.D.	Hose Length	Service	PSI	Weight	Part #
1/4"	50'	Air / Water	300	26	5450LP
3/8"	35'	Air / Water	300	25	5635LP
3/8"	50'	Air / Water	300	37	5650LP

Without Hose

Hose Capacity	Service	PSI	Weight	Part #
50' of 1/4" or 35' of 3/8"	Air / Water	500	21	5600LP
50' of 3/8"	Air / Water	500	31	5605LP

Reelcraft® 7000 Series

- All steel construction.
- "LP" Low Pressure reels:
Maximum temperature 150°F.
Reel inlet 1/2" NPTF.
PVC hose is standard.
- "MP" Medium Pressure reels:
Maximum temperature 210°F.
Reel inlet 1/2" NPTF.
SAE 100 R1T 1-wire braid hose standard.
- "HP" Low Pressure reels:
Maximum temperature 210°F.
Reel inlet 1/4" NPTF.
SAE 100 R2T 2-wire braid hose standard.



With Hose

Hose I.D.	Hose Length	Service	PSI	Weight	Part #
3/8"	70'	Air / Water	300	50	7670LP
1/2"	50'	Air / Water	300	51	7850LP

Without Hose

Hose Capacity	Service	PSI	Weight	Part #
70' of 3/8", 50' of 1/2"	Air / Water	500	43	7800LP
50' of 3/8" or 50' of 1/2"	Oil	3000	44	7800MP
50' of 1/4" or 50' of 3/8"	Grease	5000	46	7600HP

Size	Aluminum Part #	316 Stainless Steel Part #	Hastelloy Part #
2-1/2"	AST30	RST30	---
3"	AST35	RST35	HST35
4"	AST40	RST40	---
5"	AST50	RST50	---
6"	AST60	RST60	---
8"	---	RST80	---

Reelcraft® 80000 Series

- Maximum temperature is 150°F with hose.
- Maximum temperature is 210°F without hose.
- Furnished standard with PVC hose.
- Reel inlet 3/4" NPTF.
- Five-in-one heat treated aluminum casting incorporates main shaft, ratchet, spring arbor and inlet/outlet plumbing in one piece casting.
- High pressure cast steel.
- The most compact 3/4" x 50' hose reel of its capacity available.



With Hose

Hose I.D.	Hose Length	Service	PSI	Weight	Part #
1/2"	75'	Air / Water	300	90	82075LP
1/2"	100'	Air / Water	300	99	82100LP
3/4"	50'	Air / Water	250	89	83050LP

Without Hose

Hose Capacity	Service	PSI	Weight	Part #
50' of 3/4" or 100' of 1/2"	Air / Water	500	74	83000LP

King Combination Nipples

NPT threaded end with knurled wrench grip

Size	Unplated Steel Part #	Plated Steel Part #	Brass Part #	Aluminum Part #
1/2"	ST1	STC1	BST1	AST1
3/4"	ST5	STC5	BST5	AST5
1"	ST10	STC10	---	---
1-1/4"	ST15	STC15	---	---
1-1/2"	ST20	STC20	---	---
2"	ST25	STC25	---	---



NPT threaded end no knurl

Size	Brass Part #	Aluminum Part #	316 Stainless Steel Part #	Hastelloy Part #
1/2"	---	---	RST1	---
3/4"	---	---	RST5	---
1"	BST10	AST10	RST10	---
1-1/4"	BST15	AST15	RST15	---
1-1/2"	BST20	AST20	RST20	---
2"	BST25	AST25	RST25	HST25



NPT threaded end no knurl

Size	Unplated Steel Part #	Plated Steel Part #	Brass Part #
2-1/2"	ST30	STC30	BST30
3"	ST35	STC35	BST35
4"	ST40	STC40	BST40
5"	ST50	STC50	---
6"	ST60	STC60	---
8"	ST80	STC80	---
10"	ST100	STC100	---
12"	ST120	STC120	---



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Store and Dispense Hoses Neatly, Efficiently

General Industrial Spring Retractable Reels Series RT

Reelcraft presents ReelTek, a new hybrid, lighter, spring-driven hose reel with a composite spool designed for applications that are less demanding, yet require a product that can withstand industrial use. Easy to install and maintain, ReelTek conveniently keeps hose organized for a more efficient, safer work area. **Hose included.**



Model	Hose I.D.	Hose Length	Max. PSI	(M)NPTF Outlet	(F)NPTF Inlet	Reel Dimensions (in.) L x W x H
Low Pressure Air/Water Reels (Max. Temp. 150°F (65°C))						
RT435-OLP	1/4"	35'	300	1/4"	3/8"	16.5x5.75x17.625
RT450-OLP	1/4"	50'	300	1/4"	3/8"	16.5x5.75x17.625
RT635-OLP	3/8"	35'	300	1/4"	3/8"	16.5x5.75x17.625
RT650-OLP	3/8"	50'	300	1/4"	1/2"	16.5x6.25x17.625

Premium Duty Spring Retractable Reels Series 4000, 5000 & 5005

Series 4000, 5000 and 5005 reels are durable and compact for a wide range of applications with critical space requirements. A full flow shaft and swivel assures maximum product delivery. The Quiet Speed latch mechanism offers quiet operation combined with latch cam technology insuring longer latching life and trouble-free performance. The Series 5005 reel can handle hose lengths up to 50 feet. Reels are all steel construction and compact for different applications. The standard low pressure hose is for air or water service only. **Hose Included, all models listed.**



Model	Hose I.D.	Hose Length	Max. PSI	(M)NPTF Outlet	(F)NPTF Inlet	Reel Dimensions (in.) L x W x H
Low Pressure Air/Water Reels (Max. Temp. 150°F (65°C))						
4425 OLP	1/4"	25'	300	1/4"	3/8"	12.625x5.375x12.875
4435 OLP	1/4"	35'	300	1/4"	3/8"	12.625x5.375x12.875
4625 OLP	3/8"	25'	300	1/4"	3/8"	12.625x5.375x12.875
5635 OLP	3/8"	35'	300	1/4"	3/8"	13.5x6x14.5
5650 OLP	3/8"	50'	300	1/4"	3/8"	16.5x6x17.5
Medium Pressure Oil Reels (Max. Temp. 210°F (99°C))						
5630 OMP	3/8"	30'	2250	3/8"	3/8"	13.5x6x14.5
High Pressure Grease Reels (Max. Temp. 210°F (99°C))						
5435 OHP	1/4"	35'	5000	1/4"	1/4"	16.5x6x17.5

Heavy Industrial Spring Retractable Reels Series 7000 & 8000

Series 7000 is ideal for the most demanding applications. The reel's base and guide arms are formed from high-grade steel and engineered with structural forms and gussets to yield the greatest amount of strength. The Series 7000 and 8000 incorporate all steel construction and a baked-on powder coat finish to produce a rugged corrosion resistant product suitable for a wide variety of heavy-duty applications. Mounts to floor, wall, ceiling or truck. **Hose included.**



Model	Hose I.D.	Hose Length	Max. PSI	(M)NPTF Outlet	(F)NPTF Inlet	Reel Dimensions (in.) L x W x H
Low Pressure Air/Water Reels (Max. Temp. 150°F (65°C))						
7670 OLP	3/8"	70'	300	1/4"	1/2"	19x7x20.25
81100 OLP	3/8"	100'	300	3/8"	1/2"	24x10.5x25.375
7850 OLP	1/2"	50'	300	3/8"	1/2"	19x7x20.25
82075 OLP	1/2"	75'	300	1/2"	1/2"	24x10.5x25.375
7925 OLP	3/4"	25'	250	3/4"	3/4"	19x7x20.25
Medium Pressure Oil Reels (Max. Temp. 210°F (99°C))						
7850 OMP	1/2"	50'	2000	1/2"	1/2"	19X7X20.25
High Pressure Grease Reels (Max. Temp. 210°F (99°C))						
7650 OHP	3/8"	50'	4000	1/4"	1/2"	19X7X20.25

Premium Hand Crank / Heavy-Duty Hand Crank / Motor Driven Reels

Series H & 30000

The Series 30000 reel features vibration-proof, self-locking fasteners to ensure assembly integrity. The Series H is an economical reel designed for medium duty applications requiring long lengths of hose. Equally suited for plant or field use such as lawn care, pest control and more. Many sizes not listed available as standard. **Hose not included.**



Model	Hose I.D.	Hose Capacity	Max. PSI	(F)NPTF Inlet	Reel Dimensions (in.) L x W x H
Premium Hand Crank Reels					
H18000 M	1/2"	200'	1000	1/2"	20x18.25x19
H29000 M	3/4"	150'	1000	3/4"	20x24.25x19
Heavy-Duty Hand Crank Reels					
CA32112 L	1/2"	200'	1000	1/2"	25x17.75x20.25
Motor Driven Reels - 12VDC (24 VDC, 115 VAC & Air Motors available as standard)					
EA32118 L12D	1/2"	325'	1000	1/2"	31.25x17.75x20.25
EA33112 L12D	3/4"	100'	1000	3/4"	25.25x17.75x20.25

Power Cord & Light Reels

Series 4000 & 5000

Series 4000 and 5000 power cord and light reels offer many different styles of outlets and lamps. Easy to mount and structurally strong, the power cord and light reels have robotically welded heavy gauge steel frame that attaches to most structurally sound surfaces. Multiple guide arm positions allow for versatile uses and easier field adjustment. The drive mechanism is enclosed for protection against the environment. Fewer components increase the service life of the reel and improve performance. **For indoor use only.**



Model	Accessory	Cord Specifications			Type	Volts	Amps
		Lgth	No. Cond.	AWG			
L 4035 163 3	Single Receptacle	35'	3	16	SJTOW	115	13
L 4050 163 3	Single Receptacle	50'	3	16	SJTOW	115	13
L 4545 123 7	Dup. Outlet w/GFCI (F)	45'	3	12	SJEOW	115	*20
L 4050 163 1	Incandescent	50'	3	16	SJTOW	115	13

*Inlet plug is NEMA5-15P configuration.

Gas Welding Reels

Series TW & BA (Spring Retractable)

Has an independent dual swivel body manufactured from aluminum and hard coated for wear resistance. This unique design assures positive separation of gases. Double-sealed, special molded "O" rings prevent leakage. Swivel body and inlet are both permanently identified with machined grooves on the acetylene side to assure proper installation.



Safe-T-Reel Series (Hand Crank)

Feature a high rigidity due to a 1-inch shaft with tapered roller bearings. These reels are compact and flexible and made of non-conductive materials.

Model	Hose I.D.	Hose Length	Max. PSI	(F)NPTF Inlet	Reel Dimensions (in.) L x W x H
TW5425 OLPT	1/4"	25'	200	1/4"	13.75x6x14.5
TW7450 OLPT	1/4"	50'	200	1/4"	19x7x20.25
TW7460 OLPT	1/4"	60'	200	1/4"	19x7x20.25
TW84100 OLPT	1/4"	100'	200	1/4"	24x13x25.375
TW86075 OLPT	3/8"	75'	200	1/4"	24x13x25.375
BA36106 LT	1/4"	*125'	200	1/4"	17.75x16.625x20.625
BA36112 LT	1/4"	*250'	200	1/4"	17.75x22.625x20.625
T-1225-04	1/4"	*150'	200	9/16-18 UNF	15.75x18x19

*Hose not included.

BAND-IT Band

- Available in stainless steel, Monel® and galvanized bands.
- Light duty to superior corrosion resistant.
- Wide range of widths and thicknesses.
- EASY SCALE - Patented imprint on the band to quickly determine band length without waste.
- Durable plastic dispensers available only on those Part Numbers with added letter to indicate Y=yellow, B=blue, G=green and R=red below.



201 Stainless Steel BAND-IT BAND

Package Quantity 100'/roll

Part No.	Width		Thickness		Average Breaking Strength (lbs.)	Pkg. Wt. Lbs.
	In.	mm	In.	mm		
C20299	1/4	6	0.020	0.51	500	1.7
C20399	3/8	9	0.025	0.63	900	3.2
C203Y9*	3/8	9	0.025	0.63	900	3.6
C20499	1/2	12	0.030	0.76	1500	5.1
C204B9*	1/2	12	0.030	0.76	1500	5.5
C20599	5/8	15	0.030	0.76	1875	6.4
C205G9*	5/8	15	0.030	0.76	1875	6.8
C20699	3/4	19	0.030	0.76	2250	7.7
C206R9*	3/4	19	0.030	0.76	2250	8.2

*Are not available in mill coils because they are limited to the size of the plastic, colored tote containers.

316 Stainless Steel Band

Package Quantity 100'/roll

C40299	1/4	6	0.020	0.51	400	1.7
C40399	3/8	10	0.025	0.63	750	3.2
C40499	1/2	13	0.030	0.76	1200	5.1
C44499*	1/2	13	0.015	0.38	600	5.3
C40599	5/8	16	0.030	0.76	1500	6.4
C44599*	5/8	16	0.015	0.38	750	6.6
C40699	3/4	19	0.030	0.76	1800	7.7
C44699*	3/4	19	0.015	0.38	900	7.8

These products available in Mill coil. *Available in 200'/roll only.

Galvanized Carbon Steel Band

Package Quantity 100'/roll

C30399	3/8	10	0.020	0.63	700	3.3
C30499	1/2	13	0.020	0.76	1125	5.1
C30599	5/8	16	0.020	0.76	1405	6.4
C30699	3/4	19	0.020	0.76	1690	7.7

These products available in Mill coil.

BAND-IT Buckle Ear-Lokt Style

Package Quantity - 100/box

Type 201SS Part No.	Type 316 SS Part No.	Galvanized Carbon Steel Part No.	Width In. mm	Pkg. Wt. Lbs.
C25299**	C45299	—	1/4 6	0.3
C25399	C45399	C35399	3/8 10	0.8
C25499	C45499	C35499	1/2 13	2.1
C25599	C45599	C35599	5/8 16	2.4
C25699	C45699	C35699	3/4 19	3.7

** Free End clip style.



BAND-IT Preformed Jr. Smooth ID Clamps

201 SS* Part No.	316 SS* Part No.	GCS* Part No.	Width		Inside Diameter		Pkg. Wt. Lbs.	Pkg. Qty.
			In.	mm	In.	mm		
JS2409	NA	NA	1/4	6	13/16	20	2.0	100/box
JS2429	NA	NA	1/4	6	1	25	2.1	100/box
JS2419	NA	NA	1/4	6	1-3/8	34	2.5	100/box
JS2529	NA	NA	1/4	6	1-1/2	38	2.6	100/box
JS2539	NA	NA	1/4	6	2	50	3.2	100/box
JS2569	NA	NA	1/4	6	2-3/4	69	3.8	100/box
JS2449	NA	NA	1/4	6	3	76	4.2	100/box
JS2579	NA	NA	1/4	6	3-1/2	88	4.6	100/box
JS2599	NA	NA	1/4	6	4-1/2	114	5.7	100/box
JS2019	JS4019	JS3019	3/8	10	13/16	20	3.6	100/box
JS2439	NA	JS3439	3/8	10	1	25	3.9	100/box
JS2029	JS4029	JS3029	3/8	10	1-3/8	34	5.0	100/box
JS2459	JS4459	JS3459	3/8	10	2	50	5.9	100/box
JS2219	JS4219	JS3219	3/8	10	2-1/5	63	6.8	100/box
JS2469	NA	JS3469	3/8	10	3	76	7.5	100/box
JS2559	JS4559	JS3559	3/8	10	3-1/2	88	8.6	100/box
JS2489	JS4489	JS3489	3/8	10	4	101	9.5	100/box
JS2039	JS4039	JS3039	1/2	13	1	25	6.5	100/box
JS2049	JS4049	JS3049	1/2	13	1-1/4	31	7.2	100/box
JS2319	NA	JS3319	1/2	13	1-1/2	38	8.1	100/box
JS2369	NA	JS3369	1/2	13	1-3/4	44	8.7	100/box
JS2379	JS4379	JS3379	1/2	13	2	50	9.4	100/box
JS2309	NA	JS3309	1/2	13	2-3/4	69	11.3	100/box
JS2499	JS4499	JS3499	1/2	13	4	101	14.9	100/box
JS2059	JS4059	JS3059	5/8	16	1-1/5	38	10.4	100/box
JS2069	JS4069	JS3069	5/8	16	1-3/4	44	11.3	100/box
JS2079	JS4079	JS3079	5/8	16	2	50	12.2	100/box
JS2089	JS4089	JS3089	5/8	16	2-1/4	57	13.3	100/box
JS2099	JS4099	JS3099	5/8	16	2-1/2	63	13.9	100/box
JS2279	JS4279	JS3279	3/4	19	2	50	14.9	100/box
JS2109	JS4109	JS3109	3/4	19	2-3/4	69	9.2	50/box
JS2119	JS4119	JS3119	3/4	19	3	76	9.7	50/box
JS2129	JS4129	JS3129	3/4	19	3-1/2	88	10.8	50/box
JS2139	JS4139	JS3139	3/4	19	4	101	6.1	25/box
JS2149	JS4149	JS3149	3/4	19	4-1/2	114	6.7	25/box
JS2159	JS4159	JS3159	3/4	19	5	127	7.2	25/box
JS2169	JS4169	JS3169	3/4	19	6	152	8.2	25/box

Note: Band-It Jr. Preformed Clamps can be used with C00169 tool.



Hand Tools for Band and Buckle

Part No.	Description	Pkg. Wt. Lbs.
C00169	BAND-IT Tool - For band widths from 3/16" to 3/4"	4.3
J02069	Pok-It II Tool with cutter - For band widths from 3/16" to 3/8" wide band.	0.8

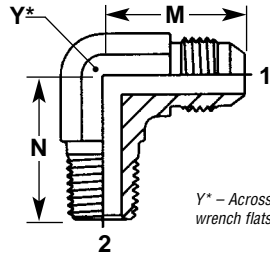


HYDRAULIC HOSES / TUBE ADAPTERS

CTX

Male Elbow
37° Flare / NPTF

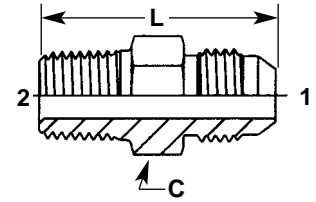
SAE 070202
HPD Base #2103



FTX

Male Connector
37° Flare / NPTF

SAE 070102
HPD Base #0103



TUBE FITTING PART #	END SIZE		M (in.)	N (in.)	Y (in.)	STANDARD Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 NPTF				-S	-SS	-B
2 CTX	1/8	1/8 - 27	0.77	0.72	5/16	6.0	6.0	3.3
3 CTX	3/16	1/8 - 27	0.83	0.72	3/8	6.0	6.0	3.3
4 CTX	1/4	1/8 - 27	0.89	0.78	7/16	6.0	6.0	3.3
4-4 CTX	1/4	1/4 - 18	1.05	1.09	9/16	6.0	6.0	3.3
4-6 CTX	1/4	3/8 - 18	1.13	1.22	3/4	6.0	6.0	6.0
4-8 CTX	1/4	1/2 - 14	1.23	1.44	7/8	6.0	6.0	6.0
5 CTX	5/16	1/8 - 27	0.95	0.78	9/16	6.0	6.0	3.3
5-4 CTX	5/16	1/4 - 18	1.05	1.09	9/16	6.0	6.0	3.3
5-6 CTX	5/16	3/8 - 18	1.13	1.22	3/4	6.0	6.0	6.0
6 CTX	3/8	1/4 - 18	1.06	1.09	9/16	6.0	6.0	3.3
6-2 CTX	3/8	1/8 - 27	1.06	0.90	9/16	6.0	6.0	3.3
6-6 CTX	3/8	3/8 - 18	1.14	1.22	3/4	6.0	6.0	3.3
6-8 CTX	3/8	1/2 - 14	1.22	1.47	7/8	6.0	6.0	3.3
8-12 CTX	3/8	3/4 - 14	1.31	1.59	1 1/16	4.0	4.0	6.0
8 CTX	1/2	3/8 - 18	1.25	1.22	3/4	6.0	6.0	3.3
8-4 CTX	1/2	1/4 - 18	1.25	1.22	3/4	6.0	6.0	3.3
8-8 CTX	1/2	1/2 - 14	1.33	1.47	7/8	6.0	6.0	3.3
8-12 CTX	1/2	3/4 - 14	1.42	1.59	1 1/16	4.0	4.0	2.6
8-16 CTX	1/2	1 - 11 1/2	1.52	1.97	1 5/16	3.0	3.0	6.0
10 CTX	5/8	1/2 - 14	1.45	1.47	7/8	5.0	5.0	3.3
10-6 CTX	5/8	3/8 - 18	1.45	1.28	7/8	5.0	5.0	3.3
10-12 CTX	5/8	3/4 - 14	1.53	1.59	1 1/16	4.0	4.0	
10-16 CTX	5/8	1 - 11 1/2	1.64	1.97	1 5/16	3.0	3.0	
12 CTX	3/4	3/4 - 14	1.66	1.59	1 1/16	4.0	4.0	2.6
12-6 CTX	3/4	3/8 - 18	1.66	1.41	1 1/16	5.0	5.0	2.9
12-8 CTX	3/4	1/2 - 14	1.66	1.59	1 1/16	5.0	5.0	2.9
12-16 CTX	3/4	1 - 11 1/2	1.76	1.97	1 5/16	3.0	3.0	
14 CTX	7/8	3/4 - 14	1.80	1.69	1 5/16	4.0	4.0	2.3
16 CTX	1	1 - 11 1/2	1.81	1.97	1 5/16	3.0	3.0	2.0
16-8 CTX	1	1/2 - 14	1.81	1.66	1 5/16	4.0	4.0	2.3
16-12 CTX	1	3/4 - 14	1.81	1.78	1 5/16	4.0	4.0	2.3
16-20 CTX	1	1 1/4 - 11 1/2	2.13	2.38	1 5/8	2.5	2.5	1.6
20 CTX	1 1/4	1 1/4 - 11 1/2	2.06	2.38	1 5/8	2.5	2.5	
20-16 CTX	1 1/4	1 - 11 1/2	2.06	2.06	1 5/8	3.0	3.0	
20-24 CTX	1 1/4	1 1/2 - 11 1/2	2.20	2.64	1 7/8	2.5	2.5	
24 CTX	1 1/2	1 1/2 - 11 1/2	2.33	2.64	1 7/8	2.5	2.5	
24-20 CTX	1 1/2	1 1/4 - 11 1/2	2.33	2.25	1 7/8	2.5	2.5	
24-32 CTX	1 1/2	2 - 11 1/2	2.81	3.00	2 1/2	2.0	2.0	
32 CTX	2	2 - 11 1/2	3.06	3.00	2 1/2	2.0	2.0	
32-24 CTX	2	1 1/2 - 11 1/2	3.06	2.97	2 1/2	2.0	2.0	
40 CTX	2 1/2	2 1/2 - 8	2.86	3.57	3 1/4			

TUBE FITTING PART #	END SIZE		C HEX (in.)	L (in.)	STANDARD Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 NPTF			-S	-SS	-B
2 FTX	1/8	1/8 - 27	7/16	1.11	6.0	6.0	3.3
3 FTX	3/16	1/8 - 27	7/16	1.14	6.0	6.0	3.3
4 FTX	1/4	1/8 - 27	1/2	1.22	6.0	6.0	3.3
4-4 FTX	1/4	1/4 - 18	9/16	1.42	6.0	6.0	3.3
4-6 FTX	1/4	3/8 - 18	3/4	1.44	6.0	6.0	6.0
4-8 FTX	1/4	1/2 - 14	7/8	1.69	6.0	6.0	3.3
5 FTX	5/16	1/8 - 27	9/16	1.22	6.0	6.0	3.3
5-4 FTX	5/16	1/4 - 18	9/16	1.42	6.0	6.0	3.3
5-6 FTX	5/16	3/8 - 18	3/4	1.44	6.0	6.0	6.0
6 FTX	3/8	1/4 - 18	5/8	1.43	6.0	6.0	3.3
6-2 FTX	3/8	1/8 - 27	5/8	1.24	6.0	6.0	3.3
6-6 FTX	3/8	3/8 - 18	3/4	1.44	6.0	6.0	3.3
6-8 FTX	3/8	1/2 - 14	7/8	1.69	6.0	6.0	3.3
6-12 FTX	3/8	3/4 - 14	1 1/8	1.75	5.5	5.5	
8 FTX	1/2	3/8 - 18	13/16	1.53	6.0	6.0	3.3
8-2 FTX	1/2	1/8 - 27	1 3/16	1.34	6.0	6.0	
8-4 FTX	1/2	1/4 - 18	13/16	1.53	6.0	6.0	3.3
8-8 FTX	1/2	1/2 - 14	7/8	1.78	6.0	6.0	3.3
8-12 FTX	1/2	3/4 - 14	1 1/8	1.85	5.5	5.5	2.6
8-16 FTX	1/2	1 - 11 1/2	1 3/8	2.05	4.5	4.5	
10 FTX	5/8	1/2 - 14	15/16	1.89	5.0	5.0	3.3
10-6 FTX	5/8	3/8 - 18	15/16	1.70	5.0	5.0	3.3
10-12 FTX	5/8	3/4 - 14	1 1/8	1.95	5.0	5.0	
12 FTX	3/4	3/4 - 14	1 1/8	2.06	5.0	5.0	2.6
12-6 FTX	3/4	3/8 - 18	1 1/8	1.88	5.0	5.0	
12-8 FTX	3/4	1/2 - 14	1 1/8	2.06	5.0	5.0	2.9
12-16 FTX	3/4	1 - 11 1/2	1 3/8	2.25	5.0	5.0	
12-20 FTX	3/4	1 1/4 - 11 1/2	1 11/16	2.36	5.0	5.0	
14 FTX	7/8	3/4 - 14	1 1/4	2.09	5.0	5.0	
16 FTX	1	1 - 11 1/2	1 3/8	2.30	4.5	4.5	2.0
16-8 FTX	1	1/2 - 14	1 3/8	2.11	4.5	4.5	
16-12 FTX	1	3/4 - 14	1 3/8	2.11	4.5	4.5	2.3
16-20 FTX	1	1 1/4 - 11 1/2	1 11/16	2.41	3.0	3.0	
16-24 FTX	1	1 1/2 - 11 1/2	2	2.50	3.0	3.0	
20 FTX	1 1/4	1 1/4 - 11 1/2	1 11/16	2.45	3.0	3.0	1.6
20-16 FTX	1 1/4	1 - 11 1/2	1 11/16	2.42	3.0	3.0	2.0
20-24 FTX	1 1/4	1 1/2 - 11 1/2	2	2.55	3.0	3.0	
24 FTX	1 1/2	1 1/2 - 11 1/2	2	2.67	3.0	3.0	1.3
24-16 FTX	1 1/2	1 - 11 1/2	2	2.62	3.0	3.0	
24-20 FTX	1 1/2	1 1/4 - 11 1/2	2	2.66	3.0	3.0	
24-32 FTX	1 1/2	2 - 11 1/2	2 5/8	2.86	2.0	2.0	
32 FTX	2	2 - 11 1/2	2 5/8	3.11	2.0	2.0	
32-24 FTX	2	1 1/2 - 11 1/2	2 5/8	3.08	2.0	2.0	
40 FTX	2 1/2	2 1/2 - 8	3 1/4	3.38	1.0	1.0	

302 Hydraulic Hose

Use with Parkrimp 43 Series fittings and field-attachable 30 Series.
ISO 1436-1 TYPE 2SN / SAE 100R2 TYPE AT / EN 853 TYPE 2SN

Part Number	Hose I.D.		Hose O.D.		Working Pressure		Minimum Bend Radius		Weight	
	(in.)	(mm)	(in.)	(mm)	(psi)	(MPa)	(in.)	(mm)	(lbs./ft.)	(kg/m)
302-4	1/4	6.3	0.59	15.0	5800	40	4	100	0.26	0.39
302-5	5/16	8	0.65	16.6	5000	35.0	4 1/2	115	0.28	0.42
302-6	3/8	10	0.75	19.0	4750	33	5	130	0.37	0.55
302-8	1/2	12.5	0.88	22.3	4000	28	7	180	0.45	0.67
302-10	5/8	16	1.00	25.5	3600	25	8	200	0.52	0.77
302-12	3/4	19	1.16	29.4	3100	21.5	9 1/2	240	0.67	1.00
302-16	1	25	1.50	38.1	2400	16.5	12	300	1.00	1.49
302-20	1 1/4	31.5	1.86	47.1	1800	12.5	16 1/2	420	1.16	1.73
302-24	1 1/2	38	2.14	54.5	1300	9	20	500	1.44	2.14
302-32	2	51	2.64	67.2	1150	8	25	630	1.99	2.96

Application and Temperature Range

Petroleum base hydraulic fluids and lubricating oils within a temperature range of -40°F to +212°F (-40°C to +100°C)



Construction
Tube: Nitrile
Reinforcement: Two braids steel wire
Cover: Synthetic rubber

We Can Make Hydraulic Hose Assemblies While You Wait!



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DC Rotary Vane Pump Series

This industry standard DC pump dispenses up to 15 GPM (57 LPM). The pump weighs less than 27 pounds (12.2kg), with hose and nozzle, and has a draw that's easy on the DC power source.

- Explosion-proof UL/cUL listed 1/4 HP motor with permanent magnet and ball bearings.
- Heavy-duty switch, thermal overload protection and junction box.
- Heavy-duty battery cable.
- Iron rotor.
- Automatic bypass valve.
- Built-in strainer.
- 12' (3.7m) hose with static ground wire.
- Manual nozzle with nozzle boot that protects against dirt and contamination.
- 2" threaded base for tank openings.
- Corrosion-Proof adjustable section pipe.
- Machined carbon vanes.
- Pump may be padlocked.
- No foot valve required.
- Rain proof.

Options:

- Series 800C meter in gallons/liters.
- Automatic nozzle.
- Series 2400C, 1/4 HP, 24 Volt DC 10 Amp motor.



Rotary Hand Pump

Rotary Hand Pumps Series 100. Especially effective with medium viscosity liquids, as well as oils, gasoline and diesel fuels, the rotary action of these easy-to-use pumps allows smooth, continuous transfer at up to 10 GPM (38 LPM) per 100 revolutions.

- Lightweight cast aluminum body.
- Built-in check valve and strainer.
- "Easy mount" 2" tank adapter.
- Corrosion-Proof adjustable suction pipe.
- Anti-siphoning device.
- Pump may be padlocked.
- All Models UL Listed.

Options:

- Series 800C meter or 20 gallon (76 liters) counter.
- Gooseneck spout and pail hook.
- Wall Mount Bracket.
- 8' hose and nozzle.
- Cast aluminum drip pan.



AC Powered Pumps

These rugged, positive displacement, economy pumps are UL/cUL listed and deliver flow rates up to 20 GPM (76 LPM).

- Explosion-proof UL/cUL listed 1/3 HP motor (115 VAC-60Hz) with sealed bearings.
- Heavy-duty switch, thermal overload protection and junction box.
- Carbon vanes and ceramic/carbon seal reduce wear and repair expense.
- Integral check valve with pressure relief on outlet side reduces pressure drop and improves vertical lift.
- Easy removable strainer.
- Automatic bypass valve.
- 2" threaded base for tank openings.
- No foot valve required.
- UL/cUL Listed.
- Rain proof.

Options:

- Explosion-proof UL/cUL listed 1/3 HP motor (230 VAC-50/60Hz).
- Series 800C meter in gallons/liters.
- Pedestal and adapter for use with underground tanks.
- Automatic nozzle.
- Nozzle holders for automatic nozzles.

MULTIPURPOSE

Sprayers Built to Last for All-around Use.

- In-tank anti-clog filter, for worry free spraying (2279).
- TRI-POXY® coated steel for maximum chemical resistance (1831).
- Wide mouth for no-mess filling and cleaning.
- Brass spray handle with “Lock-on” for fatigue-free continuous spraying.
- Brass fan tip nozzle for multi-purpose applications.

Sprayer Model Number: 2279

Description: Industrial Poly Viton Heavy-Duty - 3 gal.

Sprayer Model Number: 1831

Description: Industrial Open Head General Duty - 3 gal.



CONCRETE SPRAYERS

Sprays up to 30- 35% Solids

- Exclusive TRI-POXY® lined steel for triple protection against corrosion, rust and damage from denting.
- Wide mouth for easy filling and cleaning.
- Exclusive: Poly Holster keeps wand secure and tips.
- Metal Ergo Handle.
- Brass fan spray nozzle for even coverage .
- Brass spray handle with “Lock-on” and quick release design. Threaded coupling for easy removal.
- VITON™ o-rings and gaskets for maximum resistance to chemical attack.
- Hose reinforced with nylon braid and vinyl core to resist chemical attack, crimping, cracking and leaking.

Sprayer Model Number: 1949

Description: Industrial Viton Concrete Open Head - 3.5 gal.



PREMIER TRI-POXY®

- Spray handle and wand.
- Adjustable brass nozzle.
- Viton™ seals and gaskets.
- Funnel top on metal units.
- 1, 3 gal. Tri-Poxy® metal.

Sprayer Model Number: 1380

Description: Premier Steel Sprayer - 3 gal.

Sprayer Model Number: 1180

Description: Premier Steel Sprayer - 1 gal.



Model#	UPC # 0-23883	Capacity	Wand	Metal/Poly	Hose	Carton Dimensions (in.)	Wgt. lb.	Pallet Size	Pallet Cubes
1949	01949-5	3.5 gal.	24" curved	M	36"	8.4 x 8.4 x 26.8	10.9	43 x 43	49.9
2279	02279-2	3 gal.	18"	P	36"	8.4 x 8.4 x 25.8	6.7	43 x 43	40.7
1831	01831-3	3 gal.	18"	M	42"	8.4 x 8.4 x 24.6	9.7	43 x 43	48.7
1380	01380-6	3 gal.	18"	M	42"	8.4 x 8.4 x 23.6	8.0	43 x 43	46.6
1180	01180-2	1 gal.	12"	M	42"	8.4 x 8.4 x 13.9	6.0	43 x 43	48.6



INDUSTRIAL SPRAYERS

Better Quality Constructo® Sprayers for everyday jobs are an outstanding value.

Choose Endurall® epoxy-coated galvanized steel tank with quality brass pump or heavy-duty poly tank with poly pump. Both feature steel "D" pump handle, Viton® gaskets and seals, power sprayer-type hose, brass Roto Valve™ control and long, heavy-duty brass spray wand. Sprayers equipped with adjustable brass fan-pattern nozzle. Can also be used with optional TeeJet® nozzles. Designed and built for frequent, professional use and a wide variety of applications.

Model	Pack	US Gal.	Litre	UPC-A
91063	1	2.5	10	690247910639
91064	1	3.5	13	690247910646
90182	1	2	8	690247901828
90183	1	3	12	690247901835



Spray Thick™ Curing Compound Sprayer sprays the thicker, solvent-based cures and sealers.

For dependability and performance, look no farther. With Viton® seals, powerful brass pump and steel pump handle, larger inside diameters on discharge set, larger, heavy-duty brass shutoff and wand, hose with hydraulic style fittings, Goodyear® brand hose formulated for solvent-based cures. Tank is galvanized steel with Endurall® epoxy coating inside and out. Sprayer fills without removing pump. Pressure release built into filler lid. Comes standard with two nozzles — 110-10 and 8004.

Model	Pack	US Gal.	Litre	UPC-A
91004CCV	1	3.5	14	690247910042

Also available **Industro® Power Sprayer** holds **12.5 gallons, sprays up to 30 feet**. Handles many materials too thick for hand sprayers. Piston pump delivers constant volume and pressure. Mechanical and jet agitation keeps spray materials mixed and in solution of 20 feet of Kem Oil® hose and adjustable power gun.



TYPE 1 CANS / STORAGE CABINETS

These Eagle Safety products meet OSHA requirements and most are either Factory Mutual (FM) approved or listed by Underwriters Laboratories, Inc. (UL) and Underwriters Laboratories Canada (ULC).

Eagle Safety Containers are manufactured to exacting standards, reflecting sophisticated technology and superior workmanship. Eagle equals engineering excellence, providing you with the most dependable containers on the market.



Also in stock in Blue for kerosene and in Yellow for diesel.

EAGLE Galvanized Steel Type-1 Safety Cans

Model	Capacity	Approval	Diameter	Height	Weight
UI-2-S	1 qt.	UL, ULC, FM	5.25"	8.00"	1.96 lbs.
UI-4-S	2 qt.	UL, ULC, FM	6.75"	8.75"	2.59 lbs.
UI-10-S	1 gal.	UL, ULC, FM	9.00"	10.00"	3.31 lbs.
UI-10-FS**	1 gal.	UL, ULC, FM	9.00"	10.00"	3.52 lbs.
UI-20-S	2 gal.	UL, ULC, FM	11.25"	9.50"	5.00 lbs.
UI-20-FS**	2 gal.	UL, ULC, FM	11.25"	9.50"	5.25 lbs.
UI-50-S	5 gal.	UL, ULC, FM	12.50"	13.50"	6.75 lbs.
UI-50-FS**	5 gal.	UL, ULC, FM	12.50"	13.50"	7.00 lbs.

** F-15 Funnel included



Keep flammable liquids near work areas in Eagle Safety Storage Cabinets. All are constructed of 18-gauge steel. Sides, top, bottom, and doors are double-walled with a 1-1/2" air space between walls. Both vents, with 2" threaded fittings, have fire baffle and cap. Cabinets come in yellow high gloss powder finish with red warning, plus grounding attachment, 3-point key lock and 2" raised, leakproof door sill. Each shelf is adjustable, supported by 4 brackets, and can support 350 pounds.



EAGLE Flammable Storage Safety Cabinets

Model	Capacity	FM	Door Specs.	Size (W x D x H)	Weight
1903	4 gal.	-	1 Self-closing	17.5" x 18" x 22.5"	70 lbs.
1904	4 gal.	-	1 Manual	17.5" x 18" x 22.5"	69 lbs.
1924	12 gal.	-	1 Self-closing	23" x 18" x 35"	135 lbs.
1925	12 gal.	-	1 Manual	23" x 18" x 35"	133 lbs.
1905	16 gal.	-	1 Self-closing	23" x 18" x 44"	150 lbs.
1906	16 gal.	-	1 Manual	23" x 18" x 44"	150 lbs.
1923	24 gal.	-	1 Manual	23" x 18" x 65"	260 lbs.
2310	24 gal.	-	1 Self-closing	23" x 18" x 65"	270 lbs.
1930	30 gal.	Y	1 Sliding	43" x 18" x 44"	253 lbs.
1932	30 gal.	Y	2 Manual	43" x 18" x 44"	247 lbs.
3010	30 gal.	Y	2 Self-closing	43" x 18" x 44"	257 lbs.
1945	45 gal.	Y	1 Sliding	43" x 18" x 65"	340 lbs.
1947	45 gal.	Y	2 Manual	43" x 18" x 65"	342 lbs.
4510	45 gal.	Y	2 Self-closing	43" x 18" x 65"	353 lbs.
1946	48 gal.	Y	1 Manual	23" x 34" x 65"	360 lbs.
4610	48 gal.	Y	1 Self-closing	23" x 34" x 65"	370 lbs.
1962	60 gal.	Y	2 Manual	31 1/4" x 31 1/4" x 65"	354 lbs.
6010	60 gal.	Y	2 Self-closing	31 1/4" x 31 1/4" x 65"	364 lbs.
1992	90 gal.	Y	2 Manual	43" x 34" x 65"	475 lbs.
9010	90 gal.	Y	2 Self-closing	43" x 34" x 65"	485 lbs.



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SPILL CONTAINMENT / GUARDS / PROTECTORS

Spill Containment Pallets

All pallets feature:

- Polyethylene construction for excellent chemical resistance.
- Grating with 1-3/4" square opening that removes easily for cleaning.
- Forkliftable design with 3/4" drain plug.
- Model 1645 and 1646 are compatible with our Model 1689 ramp.
- Meet EPA requirements for secondary spill containment of hazardous materials (40 CFR 264.175).



Spill Containment Pallets Specifications

Model No.	Description	Spill Capacity	Weight	Dimensions	Load Capacity
1620	Two Drum Spill Pallet	66 gallons	48 lbs.	51" x 26.25" x 15"	2,000 lbs.
1640	Four Drum Spill Pallet	90 gallons	88 lbs.	51.5" x 51.5" x 18.5"	4,000 lbs.
1645	Low Profile Spill Pallet	66 gallons	65 lbs.	51.5" x 51.5" x 10"	8,000 lbs.
1646	Four Drum Spill Pallet	66 gallons	65 lbs.	58.5" x 58.5" x 7.75"	6,000 lbs.



Overpack Drums

All Overpacks are constructed of tough, chemical resistant 100% blow-molded high-density polyethylene, are lightweight and are nestable and include UV inhibitors.

When used with the plastic locking lever or screw top,

- These containers incinerate completely.
- United Nations certified to HM-181 1H2/X300/S, performance requirements of DOT 49 CFR 173.25, and can be used with packing groups I, II and III of hazardous materials.
- Overpacks have a heavy-duty metal lever locking ring or screw top lid that are ideal for storage, transportation, clean up and spill containment of larger containers (55 gallons or smaller).

Overpack Drums

Model No.	Description	Capacity	Weight	Dimensions
1661	65-Gallon Overpack with Screw Top Lid	65 gallons	45 lbs.	31" x 33.5"
1690	95-Gallon Overpack with Screw Top Lid	95 gallons	50 lbs.	31" x 41.5"

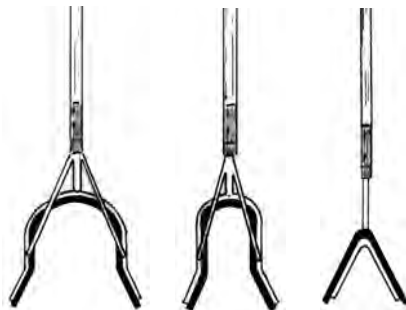
Bollard Posts

Add protection to your facility and prevent damage. Posts feature a durable baked on powder coat in safety yellow to provide high visibility. Each post is made of 1/4" thick steel mounted on 3/8" steel plates that are pre-drilled with 3/4" holes for easy installation. The black HDPE post caps are included and can be removed to fill posts with concrete for extra protection.

Machine Guards

Our machine guards provide superior protection for facilities and equipment. Create barriers between traffic areas and your valuable machinery. Anchor bolts not included.





U5

U2

VN
VS

CRACK FILLING SQUEEGEES

For properly filling and sealing long cracks and expansion joints in pavements. Used in conjunction with a Crack Pot, crack filling squeegees force liquid asphalt down into the crack, pushing excess material ahead. Less material is therefore used, with none left on the pavement surface to dry and cause "bumps." Black neoprene blades withstand temperature up to 260 degrees. Red silicone blades withstand temperatures up to 600 degrees. 54" long ash handle.

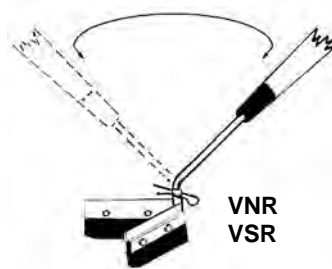
"U" Style Heavy Duty Models

(Larger capacity, 3/8" thick neoprene blades)

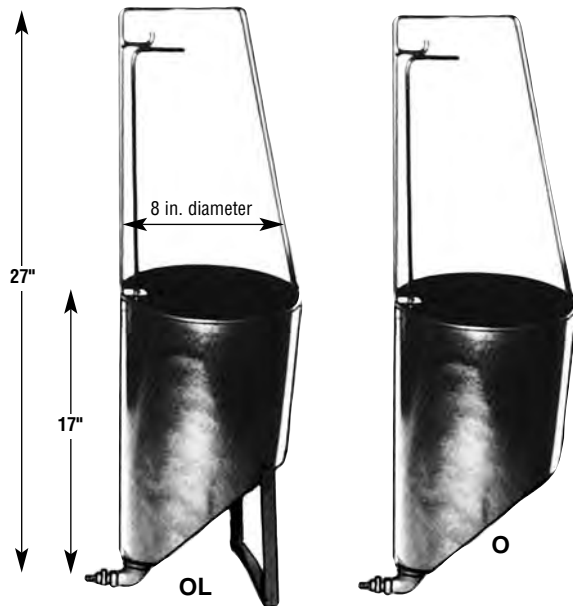
"V" Style Economy Models (1/4" thick blades)



U2R
U5R



VNR
VSR



CRACK POTS

OL AMERICA'S FAVORITE "CRACK POT," for crack and joint filling. Redesigned, now made of 20-gauge steel, stronger construction yet total weight of pot is lighter. Adjustable 3 size pouring nozzle. Non-drip finger-tip control valve. Worker walks facing traffic with stream of oil in plain sight, under instant control. All welded construction, can be burned clean repeatedly. Features leg stand that eliminates material spillage when pot is not in use. Weight 6 lbs. 10 oz. Capacity 2 gallons. Pot 8" dia. x 17" high. Overall height 27".

O CRACK POT Same as model "OL" but without leg stand. Weight 6 lbs. 4 oz. Capacity 2 gallons.

"Call Wharton for all of your Asphalt needs, including rakes, tack coats, diamond blades, inverted paints, roller rentals, traffic control cones and flags, safety vests and more."





GALVANIZED WARE

PAILS

"S & K Ware" pails are manufactured from bright spangled, zinc rich galvanized steel. Our unique triple interlocking "Gordon Seam" forms a six-layer, side security seam, assuring integrity in every 10, 12 and 16 qt. container. The smooth top edge is reinforced with a continuous covered rim wire. Bail is securely attached to the top pail rim. All pail bottoms are recessed to assist pouring action and limit pail to surface contact. 2 qt. model is also available in a variety of decorative colors and patterns.

Model No.	Capacity	Top Dia.	Ht.	Bndl. or Ctn. Pack	Wt./Ctn. or Bndl.	Cube
2QTG	2 qt.	6"	6"	12/ctn.	6 lbs.	.6
10100	10 qt.	10-5/8"	8-7/8"	12/Bndl.	22 lbs.	1.6
10101	10 qt.	10-5/8"	8-7/8"	12/Ctn.	22 lbs.	2.0
10120	12 qt.	11"	9-7/8"	12/Bndl.	25 lbs.	2.0
10121	12 qt.	11"	9-7/8"	12/Ctn.	25 lbs.	2.4
10161	16 qt.	13-7/8"	8-1/4"	12/Bndl.	28 lbs.	2.4
10172	16 qt.	13-7/8"	8-1/4"	12/Ctn.	28 lbs.	2.8



UTILITY PAN

General purpose galvanized steel utility pan for farm, home, automotive and industry. One-piece seamless construction, curled edge and tapered. Excellent as an oil drain pan, parts pan or animal feed/water pan.

Model No.	Capacity	Top Dia.	Ht.	Bndl. or Ctn. Pack	Wt./Ctn. or Bndl.	Cube
17007	13 qt.	15-1/2"	3-1/2"	12	21 lbs.	1.2



GARBAGE CANS

The quality is evident in every "S & K Ware" garbage can we produce. All cans are carefully manufactured from prime, heavy gauge galvanized steel, and feature deep body corrugations for superior strength and durability. Shielded wire reinforcement structure the top and bottom can edges. Dual drop side handles and recessed can bottom ease container handling. Corrugated galvanized lids fit securely. High strength handle attachments. 10 gal. model has bail handle. An excellent pet food/bird seed storage can.

Model No.	Capacity	Top Dia.	Ht.	Bndl. or Ctn. Pack	Wt./Ctn. or Bndl.	Cube
90263	10 gal.	15-1/4"	17-14"	6/Bndl.	35 lbs.	4.4
Lid	-	15-1/2"	2"	6/Bndl.	9 lbs.	9
90001	20 gal.	17-3/4"	23-1/4"	6/Bndl.	46 lbs.	7.7
Lid	-	18"	3-5/8"	6/Bndl.	11 lbs.	1.4
90146	32 gal.	21"	26-1/4"	6/Bndl.	57 lbs.	11.5
Lid	-	21-1/8"	3-3/4"	6/Bndl.	12 lbs.	2.0



TUBS

The applications are nearly endless for "S & K Ware" galvanized steel tubs, whether for shop use, as parts containers, nursery stock tubs, pet bath care, lawn and garden or a host of other uses. Our big 15 and 18-3/4 gal. tubs are produced from heavy, zinc rich galvanized steel, feature six layer interlocked side seams, recessed corrugated bottoms and dual drop side handles. Security covered wire reinforced rim adds strength and durability to the top edge.

Model No.	Capacity	Top Dia.	Ht.	Bndl. or Ctn. Pack	Wt./Ctn. or Bndl.	Cube
14200	15 gal.	22"	11"	6/Bndl.	33 lbs.	6.0
14300	18-3/4 gal.	24-1/2"	11"	6/Bndl.	36 lbs.	7.0





FUNNELS

NON-SWIRL FUNNELS

These are heavy-duty galvanized steel funnels with fully wired top band for added strength. Each is equipped with a 70-mesh brass strainer screen; the strainer is removable on the center spout styles and soldered in place on the side spout styles. Center spout styles have a fluted bottom to prevent swirling. Center spouts are 1" diameter, side spouts are 7/8" and all are grooved for air venting.

Model No.	Capacity	Spout Style	Ctn./ Pack	Wt./ Ctn.	Cube/ Ctn.
600	9 qt.	12" side	6	16 lbs.	4.0
601	9 qt.	12" cntr.	6	13 lbs.	2.3
620	6 qt.	10" side	6	10 lbs.	2.5
621	6 qt.	10" cntr.	6	10 lbs.	1.4
631	3 qt.	8" cntr.	6	6 lbs.	.75



SPECIAL FUNNELS

The 590 and 690 series are heavy-duty models with wired top, extra tall rim for rapid pouring without spilling. Fluted bottom prevents swirling. Supplied with removable 70-mesh brass strainer screen, 590S and 690S Models have a skirt for holding funnel on vessel being filled. The 490, 491, 605 and 641 Models are sturdy general purpose funnels; all have removable 70-mesh brass strainers except the 490 which is plain.

For transmissions and other hard-to-get-to filler openings, the 495 model is provided. This funnel has a 3/4" x 14" flex metal spout with 7/16" tip and removable 70-mesh brass strainer screen.

Model No.	Capacity	Spout Style	Ctn./ Pack	Wt./ Ctn.	Cube/ Ctn.
590	8 qt.	9" cntr.	12	22 lbs.	4.8
690	12 qt.	11" cntr.	6	16 lbs.	4.8
590S	8 qt.	9" cntr.	12	24 lbs.	4.8
690S	12 qt.	11" cntr.	6	17 lbs.	4.8
490	1 qt.	6" cntr.	24	10 lbs.	.79
491	1 qt.	6" cntr.	24	10 lbs.	.79
495	1 qt.	6" cntr.	12	10 lbs.	1.8
605	4 qt.	12" cntr.	6	12 lbs.	3.0
641	2 qt.	8" cntr.	12	8 lbs.	1.8



LOCK ON FUNNELS

Heavy-duty galvanized steel lock on funnel with wire reinforced top rim. Welded lock on arms. Non-swirl fluted base for swift drainage. Provided with 70-mesh brass strainer screen. Six-point progressive locking tabs to fit all openings.

Model No.	Capacity	Spout Style	Ctn./ Pack	Wt./ Ctn.	Cube/ Ctn.
590-LX	8 qt.	9" cntr.	12	24 lbs.	4.8
590-LX	8 qt.	9" cntr.	6	12 lbs.	2.4



PLASTIC FUNNELS

Model No.	Capacity	Spout Style	Ctn./ Pack	Wt./ Ctn.	Cube/ Ctn.
31-P	1 pt.	4-1/2" cntr.	12	2 lbs.	.17
32-P	2 qt.	6-1/2" cntr.	6	2.5 lbs.	.48
33-P	6 qt.	8-1/2" cntr.	6	5 lbs.	.65



Plews/LubriMaticTM Brand Lever Action Grease Guns

Standard Duty Grease Gun

Ideal for household and do-it-yourself automotive use. Uses standard 14 oz. cartridge. Develops up to 6,000 psi. Delivers 1 oz. of grease/40 strokes.

30-200 5 per master.

30-449 Polybagged. 10 per master.

Industrial Grease Gun

Made for the punishing day-in and day-out service required by industrial customers. Variable/short stroke for easy use in confined areas. Rugged fully zinc-plated finish. Dual port head cap with bulk loader fitting for 3-way loading (14 oz. cartridge, bulk or suction) and air bleeder valve. 5-3/8" pipe and coupler. Plated lever with comfortable oversized grip. Develops up to 10,000 psi. Delivers 1.8 oz./40 strokes.

30-465 Individually boxed. 5 per master.

Professional Grease Gun

Our heavy-duty grease gun for automotive professionals. Variable/short stroke for easy use in confined areas. Air bleeder and bulk loader fitting for 3-way loading (14 oz. cartridge, bulk or suction). 5-3/8" pipe and coupler. Plated lever with comfortable oversized grip. Develops up to 10,000 psi and delivers 1.8 oz./40 strokes.

30-475 Individually boxed. 5 per master.

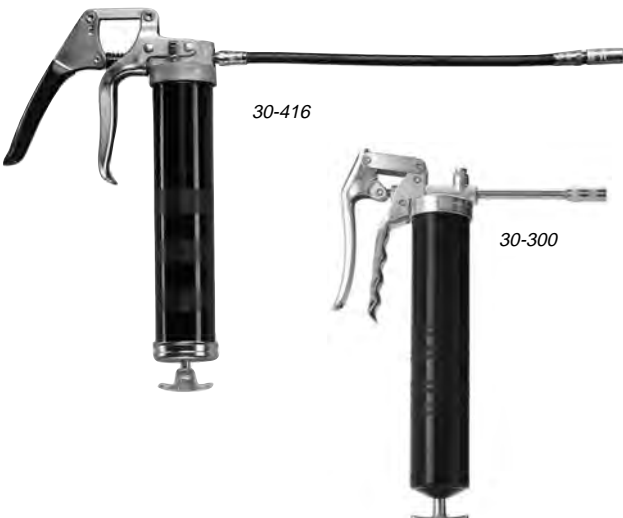
The Ultimate[®] Grease Gun

Equipped with 10" grease pipe, HD coupler, longer lever, barrel and lever comfort grips, air bleeder valve, bulk loader fitting, variable stroke and 3-way loading (14 oz. cartridge, bulk or suction). Develops up to 10,000 psi, delivers 3.33 oz./40 strokes. Built to take extreme punishment.

30-480 Individually boxed. 5 per master.



Plews/LubriMaticTM Pistol Grease Guns



Standard Duty Pistol Grease Gun

Convenient, easy one-hand operation. 2-Way loading, cartridge or bulk load. Equipped with 3-1/2" grease pipe and coupler. Delivers up to 5,000 psi.

30-300 Individually boxed. 5 per master.

Professional Pistol Grease Gun

Features variable stroke for use in tight places. 3-way loading: 14 oz. cartridge, bulk or suction. Includes air bleeder valve and bulk loader fitting. Develops up to 7,000 psi. Delivers 1 oz./40 strokes.

30-416 Includes 18" flex hose and vinyl handle grip. 5 per master.

Standard Industrial Casters



General Duty
Series 100/500
90 - 450 Lbs.



Light Medium Duty
Series 400/7700
100 - 400 Lbs.



Light Medium Duty
Series 800/8700
180 - 325 Lbs.



Light Medium Duty (SS)
Series S800/S8700
180 - 325 Lbs.



Medium Heavy Duty
Series 1400/3400
300 - 1,050 Lbs.



Heavy Duty
Series H1400/H3400
420 - 1,800 Lbs.



Forged Trailer Duty
Series HX1200/HX3200
350 - 2,000 Lbs.



Forged Trailer Duty
Series HX1300/HX3300
600 - 2,500 Lbs.



X-Heavy Forged Trailer Duty
Series HX1400/HX3400
600 - 3,500 Lbs.



Super X-Heavy Forged Trailer Duty
Series H1500/H3500
2,000 - 10,000 Lbs.



Super X-Heavy Forged Trailer Duty
Series HX1600/HX3600
2,000 - 15,000 Lbs.



Kingpinless Medium Heavy Duty
Series KPL1400/KPL3400
350 - 1,500 Lbs.



Kingpinless Medium Heavy Duty
Series KP1400/KP3400
350 - 2,000 Lbs.



Kingpinless Forged Trailer Duty
Series KP1300/KP3300
600 - 3,500 Lbs.



Kingpinless X-Heavy Forged Trailer Duty
Series KPHX1400/KPHX3400
1,600 - 6,000 Lbs.



Kingpinless Super Heavy Forged Trailer Duty
Series KP1500/KP3500
2,000 - 10,000 Lbs.

5-Ton Forged Light Duty Pintle Hook

Capacity
2,000 lbs. maximum vertical load
10,000 lbs. M.G.T.W.

Description
Light-duty rigid type pintle hook. Finished with black powder coat for durability and corrosion resistance.

Drawbar Eye Dimensions
2" to 3" I.D. with 1-1/4"-1-5/8" diameter section. Hitches are shipped individually boxed and include mounting information, specification sheet and drilling template.



Part No.	Description	Weight (lbs.)
PH5	5-Ton Light Duty Pintle Hook	8.0
PH5WMK	5-Ton Light Duty Pintle Hook with Mounting Kit	8.25

Interchanges with Holland® PH-T-60-AL

8-Ton Forged Alloy Steel Combination Hitch

Capacity
3,000 lbs. maximum vertical load
16,000 lbs. M.G.T.W.

Description
Drop-forged combination pintle hook/ball hitch. Forged steel ball. Interchangeable hitch balls. Finished with black powder coat for durability and corrosion resistance.

Drawbar Eye Dimensions
2-1/2" to 3" up to 1-9/16 cross section. Hitches are shipped with drilling template, capacity decal, and are individually boxed.



Part No.	Description	Ball Size	Weight (lbs.)
BH81780	8-Ton Forged Alloy Steel Combination Hitch	1-7/8"	13
BH82000	8-Ton Forged Alloy Steel Combination Hitch	2"	13
BH82516	8-Ton Forged Alloy Steel Combination Hitch	2-5/16"	13
BH850MM	8-Ton Forged Alloy Steel Combination Hitch	50 mm	13
BH81780WMK	8-Ton Forged Alloy Steel Combination Hitch	1-7/8"	13.73
BH82000WMK	8-Ton Forged Alloy Steel Combination Hitch	2"	13.73
BH82516WMK	8-Ton Forged Alloy Steel Combination Hitch	2-5/16"	13.73
P11C	Clip w/chain	-	.13
8520	Mounting Kit	-	.75
RB1780	Replacement Ball	1-7/8"	2.25
RB2000	Replacement Ball	2"	2.50
RB2516	Replacement Ball	2-5/16"	2.75
RB50MM	Replacement Ball	50 mm	2.75

Forged Alloy Steel Drawbar with Nut

Capacity
3,000 lbs. maximum vertical load
15,000 lbs. M.G.T.W.

Description
Alloy steel forging.
2-1/2" I.D. eye with 1-1/2" section draw bar with nut, cotter pin and washer.



Part No.	Description	Weight (lbs.)
BDB12503	Forged Alloy Steel Drawbar w/Nut	9.0

15-Ton Forged Heavy-Duty Pintle Hook

Capacity
6,000 lbs. maximum vertical load
30,000 lbs. M.G.T.W.

Description
Drop-forged alloy steel rigid type pintle hook. Finished with black powder coat for superior durability and corrosion resistance.

Drawbar Eye Dimensions
2" to 3" I.D. with 1-1/4" to 1-5/8" diameter section. Pintle hooks are individually boxed and include mounting information sheet, spec. sheet, adhesive backed drilling template, and vehicle capacity decal. Optional fastener kit (part #8520) contains:
- four 1/2" x 2" long grade 8 cap screws.
- four 1/2" grade 8 hex nuts.
- four 1/2" heavy lockwashers.
- four 1/2" flat washers.



Part No.	Description	Weight (lbs.)
PH15	15-Ton Heavy-Duty Pintle Hook	10.0
PH15WMK	15-Ton Heavy-Duty Pintle Hook with Mounting Kit	11.73
8520	Mounting Kit	.75

Interchanges with Holland® PH-T-60-AOL-8

Forged 4-Bolt Mount Drawbar

One-piece forged design for safety and capacity.

Capacity
7,000 lbs. maximum vertical load
42,000 lbs. M.G.T.W.

Description
Alloy steel forging.
2-1/2" I.D. eye with 1-1/2" section draw bar with 4 hole sq. mounting plate.



Part No.	Description	Weight (lbs.)
BDB125015	Forged 4-Bolt Mount Drawbar	17.1

4-Bolt Mount Drawbar

Capacity
8,400 lbs. maximum vertical load
42,000 lbs. M.G.T.W.

Description
Alloy steel forging.
2-1/2" I.D. eye with 1-1/2" section draw bar welded to 4 hole sq. mounting plate.



Part No.	Description	Weight (lbs.)
BDB125015W	Welded 4-Bolt Mount Drawbar	14.0

30-Ton, Heavy-Duty Forged 4-Bolt Mount Drawbar

Capacity
15,000 lbs. maximum vertical load
60,000 lbs. M.G.T.W.

Description
Alloy steel forging with 3" I.D. eye and 1.62" section drawbar. Heat treated wear surface with 4-hole square mounting base.



Part No.	Description	Weight (lbs.)
BDB1385	Heavy-Duty Forged 4-Bolt Mount Drawbar	20.0

15-Ton Forged Swivel-Type Pintle Hook

Capacity

6,000 lbs. maximum vertical load
30,000 lbs. M.G.T.W.

Description

Swivel-type pintle hook with spring cushion. Swivel action provides torsional relief of the coupling. Recommended for off-road application (capacities reduced by 25%).

Drawbar Eye Dimensions

2-3/8" to 3" I.D. with 1-1/4" to 1-5/8" diameter section.

Pintle hooks are individually boxed and include mounting information sheet, spec sheet, and vehicle capacity decal.

#8620 MOUNTING FASTENER KIT

For BP100A Pintle Hook contains:

- Six 1/2" x 2-1/2" long grade-8 cap screws
- Six 1/2" grade-8 hex nuts
- Six 1/2" heavy lockwashers



Part No.	Description	Weight (lbs.)
BP100A	15-Ton Forged Swivel-Type Pintle Hook	34.0
8620	Mounting Fastener Kit for BP100A / BP200	1.3

Interchanges with Holland® PH-T-100-A

Forged Heavy-Duty Swivel-Type Pintle Hook

Capacity

12,000 lbs. maximum vertical load
60,000 lbs. M.G.T.W.

Description

Swivel-type pintle hook. Swivel action provides torsional relief at the coupling.

Drawbar Eye Dimensions

3" I.D. with 1-5/8" diameter section.

Forged alloy steel.

Includes mounting hardware and capacity decal.



Part No.	Description	Weight (lbs.)
BP760A	Forged Heavy-Duty Swivel-Type Pintle Hook	38.25
7626	Pin and Chain Assembly for BP760	0.1
3006875	1/4" Zinc Plated Safety Pin	0.1

Pintle Hook Mount

Designed to adapt receiver tubes to multi-height pintle hook applications.

Features

Continuous welds

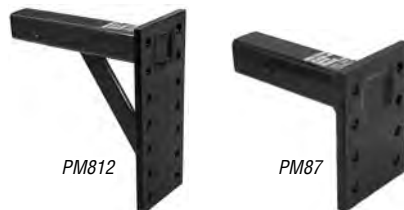
Black powder coat finish

High and low positioning

Welded support bracket

Solid shank (*tubular shank on PM25612)

These mounts accept PH5, PH8, PH15, PH20, BH8 or similar pintle hooks.



Part No.	Description	Shank Dimensions	Plate Dimensions	Pairs of Holes	M.V.L. (lbs.)	M.G.T.W. (lbs.)	Weight (lbs.)
PM84	Pintle Hook Mount	2" x 9"	5" x 3.75"	2	4,000	20,000	12
PM87	Pintle Hook Mount	2" x 9"	5" x 7.38"	4	2,000	10,000	15
PM105	Pintle Hook Mount	2" x 10.25"	5" x 5.75"	3	2,800	14,000	16
PM107	Pintle Hook Mount	2" x 10.25"	5" x 7.38"	4	2,000	10,000	17
PM812	Pintle Hook Mount	2" x 12.25"	5" x 12.50"	7	2,000	10,000	24
PM1012	Pintle Hook Mount	2" x 14.50"	5" x 12.50"	7	2,000	10,000	26
PM25612	Pintle Hook Mount	2.50" x 12"	5" x 6.13"	3	3,200	16,000	12

15-Ton Forged Swivel-Type Pintle Hook

Capacity

6,000 lbs. maximum vertical load
30,000 lbs. M.G.T.W.

Description

Swivel-type pintle hook with spring cushion. Swivel action provides torsional relief of the coupling. Recommended for off-road application (capacities reduced by 25%).

Drawbar Eye Dimensions

2-3/8" to 3" I.D. with 1-1/4" to 1-5/8" diameter section.

Pintle hooks are individually boxed and include mounting information sheet, spec sheet, and vehicle capacity decal.

#8620 MOUNTING FASTENER KIT

For BP100A Pintle Hook contains:

- Six 1/2" x 2-1/2" long grade-8 cap screws
- Six 1/2" grade-8 hex nuts
- Six 1/2" heavy lockwashers



Part No.	Description	Weight (lbs.)
BP125A	15-Ton Forged Swivel-Type Pintle Hook	42.0

Interchanges with Holland® PH-T-125-A

Drop-Forged Normal Duty Towing Hook

Shipped in pairs of right and left hand patterns.

Available in plain finish, powder coat or polished and chrome plated.

Right hand hook shown.



Part No.	Description	Safe Working Load per Hook	Weight Per Pair (lbs.)
B2800A	Plain Finish	13,500 lbs.	9.4
B2800AB	Black Powder Coat Finish	13,500 lbs.	9.4
B2800AC	Polished and Chrome Plated	13,500 lbs.	9.4

Drop-Forged 3-Hole Towing Hook

Shipped in pairs of right and left hand patterns.

Right hand hook shown.



Part No.	Safe Working Load per Hook	Weight Per Pair (lbs.)
B2801C	44,500 lbs.	10.0

Steel Packaging Hand Tools and Accessories

QS-S290

Regular Duty Feedwheel Strap Tensioner
Strap Width: 3/8" to 3/4"
Up to gauge .035



QS-S296

Heavy-Duty High Tension
Feedwheel Strap Tensioner
Strap Width: 3/8" to 3/4"
Up to gauge .035



QS-S298

Heavy-Duty High Tension
Feedwheel Strap Tensioner
With Extra Long Labor Saving Handle
Strap Width: 3/4" to 1-1/4"
Up to gauge .035



QS-C3103 / 04 / 05 / 06

Regular Duty Steel Strapping Sealer
Double Notched
QS-C3103 if for 3/8" Steel Strapping
QS-C3104 if for 1/2" Steel Strapping
QS-C3105 if for 5/8" Steel Strapping
QS-C3106 if for 3/4" Steel Strapping



QS-Deluxe Cart Dispenser

This portable strapping cart dispenser will keep your strapping tools and supplies handy. It has a large tool tray with plenty of storage space for buckles and seals. Moves easily around a warehouse on heavy-duty wheels. Break system keeps strapping rolls from unwinding when you finish pulling the strap.



Steel Strapping

In stock in 100 lb. rolls: 3/8", 1/2", 5/8", 1-1/4" and 3/4" perforated.

Open Seals

Snap-on type:
Place over the overlapping strapping ends during or after tensioning.
Size: 3/8", 1/2", 5/8" and 3/4"



Closed Seals

Sleeve type: Pre-threaded over the overlapping strapping ends before the tensioning tool is applied.
Size: 1-1/4"



STRAPPING PROBLEMS? GIVE US A CALL – WE CAN HELP!



ISO Certified

Regular Duty – Standard Strength / Machine Grade Quality

Width (in.)	Thickness (in.)	Avg. Strength (lbs.)	Yield ft./lb.	Coil Winding		Finish Painted
				Osc.	Ribbon	
3/8	.015	675	52.4	X		X
	.020	880	39.3	X		X
1/2	.015	900	39.3	X		X
	.020	1170	29.4	X		X
	.023	1300	25.6	X		X
5/8	.015	1125	31.4	X		X
	.020	1460	23.6	X		X
	.023	1670	20.5	X		X
3/4	.015	1350	26.2	X		X
	.020	1760	19.6	X		X
	.023	2000	17.1	X		X
	.028	2300	14.0	X		X



Oscillated Wound

Regular duty strapping is a low carbon, cold rolled steel strapping manufactured with close tolerances in order to conform with US government specifications. This strapping meets the requirements for general applications and can be used in both manual and combination tools.

High Tensile – High Strength / High Shock Resistance

Width (in.)	Thickness (in.)	Avg. Strength (lbs.)	Yield ft./lb.	Coil Winding		Finish Painted
				Osc.	Ribbon	
1/2	.020	1450	29.4	X		X
	.023	1660	25.6	X		X
5/8	.020	1810	23.6	X		X
	.023	2050	20.5	X		X
3/4	.020	2150	19.6	X		X
	.023	2450	17.1	X		X
	.025	2620	15.7	X	X	X
	.029	3050	13.1	X	X	X
	.031	3250	12.7	X	X	X
1 1/4	.020	3825	11.8		X	X
	.025	4780	9.4		X	X
	.029	5250	8.1		X	X
	.031	5450	7.6		X	X
	.035	6150	6.7		X	X
	.044	7610	5.3		X	X
2	.044	12300	3.3		X	X



Ribbon Wound

High Tensile strapping is a specially blended cold rolled steel product that is heat treated and quickly cooled to give maximum elongation for high shock specifications. Our high tensile steel strapping conforms to government specifications and is approved by the American Association of Railroads (AAR). This strapping is used where high elongation is required. Many heavy duty applications such as load dumping, structural steel transportation, and banding of heavy coils are good examples.

We stock regular duty 3/8", 1/2", 5/8", 3/4" x .020" thickness, and high tensile 3/4" x .031" and 1-1/4" x .031" thickness.



STEEL HAND TRUCKS

Capacity – 800 lbs.

- Robotic welded for greater consistency.
- Green epoxy powder coated for a longer lasting finish.
- D-Lock axle flattened on one side; cannot rotate and cause wear.
- Back lip on nose plate adds strength, while holding small loads in place.
- Large 8" x 14" nose plate with Super Slik™ raised runners to help slide load on and off with minimal effort.
- Curved crossbars hold load in place.
- Extra-long stair climbers provide added frame strength and ease loads over stairs and curbs.
- Rugged ball bearing wheels for longer wear.



A-1448-10PN C114-10PN C118-10PN CVN-1500-10PN

A-1448-10PN Dual – Grip Handle: Two-hand operation balances difficult loads with ease. General purpose truck for moving merchandise in shipping rooms, factories, stores and offices.

C114-10PN – Loop Handle: Excellent one-handed maneuverability for a wide range of materials handling. Loop permits easier "breaking" of the load and acts as leg when truck is placed horizontally for loading.

C118-10PN – Continuous Handle: Push or pull style for excellent mobility with one or two hands. A tall truck for handling bulky loads in terminals, warehouses, offices and factories.

CVN-1500-10PN – Convertible Handtruck: Converts from a 2-wheeler to 4-wheeler and back quickly and easily with a new unique adjustable height snap button system.

Item #	Height	Width	Weight	Wheel Type
A-1448-10PN	47	14	35	Semi-Pneumatic
C114-10PN	50	14	38	Semi-Pneumatic
C118-10PN	52	14	37	Semi-Pneumatic
CVN-1500-10PN	52	14	48	Semi, Full or Foam Filled Pneumatic

DRUM CRADLES

Capacity – 700 lbs.



55-H-PH, with 2 Wheels, 2 Casters and Steel Handle

All Steel Drum Cradles Knocked Down Models (KD)

Knocked Down (KD) Model drum cradles are packaged in convenient, protective UPS shippable cartons. Both are constructed with rugged steel angle iron for long life and service. We offer the largest variety of models available in the industry.

Item #	Name	Overall Height	Drain Height	Load Capacity	Wheel Size	Wheel Type
54	Knocked Down Model	18	16	700	N/A	N/A
55-H-PH	Knocked Down Model	18	16	700	2½ x1-1/8	polyolefin

Capacity – 700 lbs.



EA-2460-6HR – Ratchet Type Appliance Truck: Heavy-duty double locking geared ratchet system security tightens the 10-foot nylon web belt. Belt can be easily positioned high or low on shaft to handle various appliance heights.

Heavy constructed tubular steel frame appliance truck with 2" wide web belt. Truck features include V-Belt stair crawlers, ratchet belt take-up system, roll-lock strap buckle, vinyl contact protection on front of frame and extra wide nose iron for the largest of appliances. Powder coated green finish for durability.

Wheel Type: Hard Rubber
Load Capacity: 700
Height / Width: 60½"H / 16"W

Wheel Size: 6"
Nose Iron Size: 4¾"x24"
Ship Weight: 50 lbs.

DOLLIES

Capacity – 1,000 lbs.



427-HR

Weight: 19 lbs.
Frame Diameter: 24"
Wheel: Solid Rubber Hard
Caster: Plate
Caster Number: 21-3-HR

Circular Drum Dollies

Outrigger plate caster dolly easily transports 30 and 55 gallon drums. Steel outrigger design provides wide, stable stance for swivel casters and also protects casters. Available with welded-on or easily replaceable bolted-on casters. 2½" deep lip frame with cross straps. Available with non-spark polyolefin, hard rubber or semi-steel wheels. KD models have bolted-on casters, and are packaged in UPS shippable boxes with casters unmounted.

Oak Raised Cross Members



T-25-183Q-3PH

Deck Size: 18"x30"
Height: 6"
Load Capacity: 1000 lbs.
Weight: 14 lbs.
Wheel Type: 3" Polyolefin



DANDUX™ TILT TRUCKS

for Trash Collection, Moving and Dumping

FOUR CAPACITIES – One Half (.5), One (1), One and one half (1.5) and Two (2) CUBIC YARD
THREE STYLES – Utility, Standard and Heavy-Duty



Save Time
Save Effort
Save Money

COLLECTION – For ease of collecting, moving and dumping materials, there's no tilt truck that rivals the rugged, long lasting Dandux Tilt Truck. Waste material, recyclables, powders, scrap, drywall, even concrete! Extra large wheels make the unit easy to maneuver in tight, narrow spaces. The truck glides smoothly, quietly over concrete, macadam, wood flooring or high pile rugs and door sills. Ease of movement saves time, saves effort, saves money.

DUMPING – Disposal of waste and refuse into a compactor or dock container is simple, quick and easy. No ridges to catch or hold material. Speed and complete dumping saves time, saves effort, saves money.

ECONOMY – One of the most cost effective, durable trucks available to quickly collect, transport and dump material at your facility. Dandux Tilt Truck bodies are rotationally molded with top quality polyethylene resin. The seamless, non-stick body surface won't corrode; and the welded tubular steel support frame has a rust resistant black finish. Easy to clean and maintain through years of use . . . saves time, saves effort, saves money.

RANGE OF COLORS – Gray is the standard and most frequently requested body color, however with Dandux Tilt Trucks you can select from any of seven (7) colors for your tilt truck body, (gray, black, blue, red, green, yellow, or natural) with no minimum quantity and no extra charge, or specify a custom color to match your requirements.

Four Capacities / Three Styles

- **0.5 Cubic Yard Tilt Truck**
 52-1001 Utility—0.5 Cubic Yard Tilt Truck
 52-1003 Standard—0.5 Cubic Yard Tilt Truck
 52-1005 Heavy-Duty—0.5 Cubic Yard Tilt Truck
- **1.0 Cubic Yard Tilt Truck**
 52-2001 Utility—1.0 Cubic Yard Tilt Truck
 52-2003 Standard—1.0 Cubic Yard Tilt Truck
 52-2005 Heavy-Duty—1.0 Cubic Yard Tilt Truck
- **1.5 Cubic Yard Tilt Truck**
 52-2501 Utility—1.5 Cubic Yard Tilt Truck
 52-2503 Standard—1.5 Cubic Yard Tilt Truck
 52-2505 Heavy-Duty—1.5 Cubic Yard Tilt Truck
- **2.0 Cubic Yard Tilt Truck**
 52-3001 Utility—2.0 Cubic Yard Tilt Truck
 52-3003 Standard—2.0 Cubic Yard Tilt Truck
 52-3005 Heavy-Duty—2.0 Cubic Yard Tilt Truck

<i>Dimensions</i>	L	W	Depth	OAH	Wheel Size
0.5 Cubic Yard	51"	27"	31"	36"	10"
52-1001 Utility					
52-1003 Standard					
52-1005 Heavy-Duty					
1.0 Cubic Yard	68"	32"	36"	42"	12"
52-2001 Utility					
52-2003 Standard					
52-2005 Heavy-Duty					
1.5 Cubic Yard	81"	43"	43"	49"	12"
52-2501 Utility					
52-2503 Standard					
52-2505 Heavy-Duty					
2.0 Cubic Yard	83"	47"	44"	51"	12"
52-3001 Utility					
52-3003 Standard					
52-3005 Heavy-Duty					





COMMERCIAL CONTAINERS

Marino Plastic Containers



Available in Gray, Black, White, Red, Yellow or Blue.



- Added strength around interior stacking shoulder increases resistance and durability.
- High impact plastic is crush resistant, rugged and long lasting.
- Lock down lids snap securely in place allowing contents to remain within, in case container is overturned.
- Gladiator rims are reinforced for added strength and durability.
- Handles have increased wall thickness and are designed for easier lifting.
- Color is moulded into the plastic. Will not chip, crack or peel.
- Base is reinforced to provide greater stability and weight distribution when dragging over an uneven surface.

20 GALLON Container – 22½" H x 9¼" Dia.					
Product Code	Description	Pack Qty.	Pack Wt. lb(s).	Pack Wt. KG	Pack Cube/ft.
GB2020	20 Gal. Container	1	6.17	2.8	4.4
GB2020L	20 Gal. Lid	1	1.21	.55	.30
GB2020L-6	20 Gal. Lid (6 Pack)	6/1	9.47	4.3	1.75
20 GALLON MOBILE Container - 22½" H x 9¼" Dia.					
GB2020G-MO	20 Gal. Cont. Combo w/5 wheels	1	8.18	3.71	4.4

32 GALLON Container – 27½" H x 22" Dia.					
Product Code	Description	Pack Qty.	Pack Wt. lb(s).	Pack Wt. KG	Pack Cube/ft.
GB3232	32 Gal. Container	1	8.35	3.8	8.38
GB3232L	32 Gal. Lid	1	1.76	.8	.38
GB3232L-6	32 Gal. Lid (6 Pack)	6/1	13.0	5.9	2.2
32 GALLON MOBILE Container - 27½" H x 22" Dia.					
GB3232G-MO	32 Gal. Cont. Combo w/5 wheels	1	10.45	4.74	8.37

44 GALLON Container – 31½" H x 24" Dia.					
Product Code	Description	Pack Qty.	Pack Wt. lb(s).	Pack Wt. KG	Pack Cube/ft.
GB4444	44 Gal. Container	1	13.0	5.9	11.57
GB4444L	44 Gal. Lid	1	2.24	1.1	.56
GB4444L-6	44 Gal. Lid (6 Pack)	6/1	13.44	7.8	3.16
44 GALLON MOBILE Container - 31½" H x 24" Dia.					
GB4444G-MO	44 Gal. Cont. Combo w/5 wheels	1	14.99	6.8	11.57

DOLLY					
Product Code	Description	Pack Qty.	Pack Wt. lb(s).	Pack Wt. KG	Pack Cube/ft.
GB4000D	Dolly for 20 Gal., 32 Gal., 44 Gal.	2/1	11.9	5.4	1.73
MA909-G	Dolly Wheels (5 per set) (sold individually w/locknut)	1	.48	.22	.01

GLADIATOR CONTAINER WHEELS					
Product Code	Description	Pack Qty.	Pack Wt. lb(s).	Pack Wt. KG	Pack Cube/ft.
MA909-G	Dolly Wheels (5 per set) (sold individually)	1	.48	.22	.01

CADDY					
Product Code	Description	Pack Qty.	Pack Wt. lb(s).	Pack Wt. KG	Pack Cube/ft.
GB4001	Caddy for 20, 32 and 44 Gal. Container 20" x 20.5" Height	1	1.54	.7	.21



- Internal ribbed vents allow for smooth removal of garbage bags thereby reducing the risk of back injuries.



GB4001



GB4000D



MA909-G



SidePress Buckets and Wringers

SMOOTH EASY TO CLEAN SIDEPRESS WRINGER

- The durable stain resistant one-piece construction is easy to clean and sanitize and does not provide a breeding ground for bacteria.
- Eliminate the need to stock various sized wringers. The Marino SidePress wringer is designed to effectively wring all wet mops from 12 oz to 32 oz.

Marino SidePress Bucket and Wringer Combos are designed to meet the demanding requirements of the most sanitary environments at a fraction of stainless steel cost.

SIDEPRESS BUCKET & WRINGER COMBO					
Product Code	Description	Pack Qty.	Pack Wt. lb(s).	Pack Wt. KG	Pack Cube/ft.
MA1133	26-32 Qt. Bucket & Sidepress 1132 SD Wringer Combo (Yellow Only)	1	18.0	8.2	2.7



MA 1133

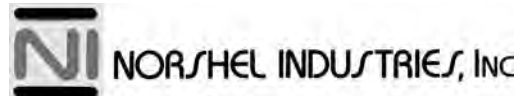
Metal Frame Floor Squeegees

- Heavy metal frames are zinc plated, therefore corrosion resistant and feature a built-in scraper designed for removal of stubborn stains.
- Durable white non-marking blades are secured in place with sturdy rust resistant screws.
- All floor squeegees use tapered handles, #354T or #360T, depending on choice of lengths, handle sold separately.
- These heavy-duty floor squeegees are designed for universal use. Ideal for all industries, professional and commercial.
- Replacement blades sold separately.

FLOOR SQUEEGEE W/STEEL FRAME (HANDLE NOT INCLUDED)					
Product Code	Description	Pack Qty.	Pack Wt. lb(s).	Pack Wt. KG	Pack Cube/ft.
FS 55618	18" Grey/White PVC Complete Head	2	.5	2.27	.36
FS 55624	24" Grey/White PVC Complete Head	2	5.8	2.64	.36
FS 55630	30" Grey/White PVC Complete Head	2	7.4	3.36	.53
FS 55636	36" Grey/White PVC Complete Head	2	8.8	4.0	.53
FS 55618-10	18" Grey/White PVC Complete Head	10	23.7	10.55	1.42
FS 55624-10	24" Grey/White PVC Complete Head	10	28.8	13.0	1.87
FS 55630-10	30" Grey/White PVC Complete Head	10	35.8	16.3	2.85
FS 55636-10	36" Grey/White PVC Complete Head	10	42.2	19.18	2.85

CURVED SQUEEGEE					
Product Code	Description	Pack Qty.	Pack Wt. lb(s).	Pack Wt. KG	Pack Cube/ft.
FS 55724	24" Grey/White PVC Complete Head (curve)	10	3.0	1.36	26.42
FS 55736	36" Grey/White PVC Complete Head (curve)	10	3.99	1.81	35.21

REPLACEMENT BLADES FOR FLOOR SQUEEGEE – STRAIGHT AND CURVED					
Product Code	Description	Pack Qty.	Pack Wt. lb(s).	Pack Wt. KG	Pack Cube/ft.
FS 556R18	18" Grey/White PVC Refills	10	.07	0.03	.1
FS 556R24	24" Grey/White PVC Refills	10	.07	0.03	.1
FS 556R30	30" Grey/White PVC Refills	10	.09	0.04	.1
FS 556R36	36" Grey/White PVC Refills	10	.11	0.05	.1



Bathroom Tissue

Two-ply washroom tissue is great for commercial, institutional and industrial facilities.



Paper Towels



C-Folded Paper Towels – are generally used folded, creating the effect of a 2-ply towel. Towels are not inter-locked, allowing one at a time dispensing.

Household Roll Towels – 70 sheet, two-ply, soft, highly embossed, 100% recycled paper towels.



Insulated Cold Beverage Containers



Keeps beverages cold for hours.

- Durable polyethylene material for crack-resistance and long life.
- Recessed spigot and convenient carry handles.

Item No.	Description	Height	Diameter	Volume Capacity
161001	Insulated Beverage Container, Orange	23-1/2" (59.7cm)	15-5/8" (39.7cm)	10 gal.
168301	Insulated Beverage Container, Orange	16-3/4" (42.5cm)	10-7/8" (27.6cm)	3 gal.
168501	Insulated Beverage Container, Orange	18-3/4" (47.6cm)	12-1/2" (31.8cm)	5 gal.

Truck Mounting Bracket

- Designed specifically for Rubbermaid water coolers.
- Durable, weather-resistant construction.
- Horizontal mounting.

Item No.	Description	Size	Color
164002	Mounting Unit	8"x13"x12.5" (20.3x33.0x31.8cm)	Black

Cup Dispenser

Item No.	Description	Size	Color
8257UN-82	Cup Dispenser	-	White

4 oz. Paper Cups

- Designed specifically for Rubbermaid water coolers.

Item No.	Description	Size	Color
1634	Cone Paper Cup Refill	4 oz. (.118 L)	White





*Electric/Cordless Drills • Trim/Reciprocating Saws
Rotary Hammerdrills • Circular/Steel Saws
Cut-Off Machines • Miters/Chop Saws
Planers • Grinders • Sanders • Routers
Screwdrivers • Impact Wrenches • Nibblers • Blades
Router/Cutter Bits
Magnetic/Heavy-Duty Drills
Rotary/Demolition Hammers
Band/Jig Saws • Blades
Heat/Caulk Guns
Drain Cleaners*

Air/Electrical Tools

7



*Notchers • Benders • Bevelers
Drill Presses • Die Grinders
Ratchet/Impact Wrenches
Needle Scalers • Flux Chippers
Rock/Pneumatic Drills
Clay/Trench Diggers
Sand Rammers • Rivet Busters
Chipping Hammers • Paving Breakers
Carbide Tipped Drills
Shears • Hacksaws • Blades
Bench Grinders
Wet/Dry Vacuums
Electric Nibblers • Chucks
Air/Demolition Tools*



Heavy-Duty XRP™ 12V Cordless Drill/Driver Kit DC940KA

- DEWALT® built high power, high efficiency motor delivers maximum performance.
- XRP™ extended run-time batteries provide long run-time and battery life.
- Patented 3-speed all-metal transmission matches the speed to the application.
- Heavy-Duty 1/2" axial locking chuck locks the sleeve; prevent bits from slipping and falling out.



Voltage12 V
 Max Power290 UWO
 # of Speed Settings3
 Max RPM0-450/0-1,450/0-1,800
 Clutch Settings22
 Chuck Size1/2"
 Chuck Type ..metal, single sleeve axial locking
 Tool Weight5.0 lbs.

Includes: 1-hour charger, (2) 12V XRP™ batteries and heavy-duty kit box.

Heavy-Duty 12V Cordless Drywall/Deck Screwdriver Kit DW979K-2

- Dual speed ranges (0-800/0-2,300 rpm); high speed for drywall, low speed for decking.
- Depth sensitive "set and forget" nosepiece for consistent fastener depth.
- DEWALT built high-performance motor with fan cooling delivers maximum power and durability.



Voltage12 V
 No Load Speed0-800/0-2,300 rpm
 Max. Torque180 in.-lbs.
 Capacity (CRS)12 ga.
 Tool Weight4.2 lbs.
 Shipping Weight8.9 lbs.
 Drive1/4" Hex

Includes: 1-hour charger, (2) 12V batteries, bit tip/magnetic holder, drywall nosepiece, TEKS® nosepiece and heavy-duty kit box.

Heavy-Duty XRP™ 14.4V Cordless Drill/Driver Kit DC930KA

- DEWALT® built high power, high efficiency motor delivers maximum performance.
- XRP™ extended run-time batteries provide long run-time and battery life.
- Patented 3-speed all-metal transmission matches the speed to the application.
- Heavy-duty 1/2" axial locking chuck locks the sleeve; prevent bits from slipping and falling out.



Voltage14.4 V
 Max Power335 UWO
 No. of Speed Settings3
 Max RPM0-450/0-1,450/0-1,800
 Clutch Settings22
 Chuck Size1/2"
 Chuck Type ..metal, single sleeve axial locking
 Tool Weight5.3 lbs.

Includes: 1-hour charger, (2) 14.4V XRP™ batteries and heavy-duty kit box.

Heavy-Duty XRP™ 18V Cordless Drill/Driver DC920KA

- DEWALT® built high power, high efficiency motor delivers maximum performance.
- XRP™ extended run-time batteries provide long run-time and battery life.
- Patented 3-speed all-metal transmission matches the speed to the application.
- Heavy-Duty 1/2" axial locking chuck locks the sleeve; prevent bits from slipping and falling out.



Voltage18 V
 Max Power510 UWO
 No. of Speed Settings3
 Max RPM0-450/0-1,500/0-2,000
 Clutch Settings22
 Chuck Size1/2"
 Chuck Type ..metal, single sleeve axial locking
 Tool Weight6.0 lbs.

Includes: 1-hour charger, (2) 18V XRP™ batteries, 360° side handle and heavy-duty kit box.

Heavy-Duty XRP™ 18V Cordless Hammerdrill/Drill/Driver Kit - DC925KA

- DEWALT® built high power, high efficiency motor delivers 510 unit watts out of power for maximum performance.
- XRP™ extended run-time batteries provide long run-time and battery life.
- Patented 3-speed all-metal transmission matches the speed to the application.
- Heavy-Duty 1/2" self-tightening chuck tightens throughout operation providing superior bit gripping torque.

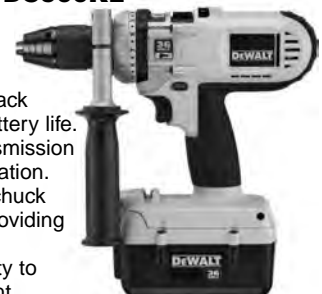


Voltage18 V
 Max Power510 UWO
 No. of Speed Settings3
 Max RPM0-450/0-1,500/0-2,000
 Max BPM0-7,650/0-25,500/0-34,000
 Clutch Settings22
 Chuck Size1/2"
 Chuck Typemetal, self tightening
 Tool Weight6.1 lbs.

Includes: 1-hour charger, (2) 18V XRP™ batteries, 360° side handle and heavy-duty kit box.

Heavy-Duty 36V Cordless 1/2" (13mm) Hammerdrill/Drill/Driver Kit - DC900KL

- DEWALT® built high power, high efficiency motor delivers maximum performance.
- 36V high performance battery pack provides longer run-time and battery life.
- Patented 3-speed all-metal transmission matches the speed to the application.
- Heavy-duty 1/2" self-tightening chuck tightens throughout operation providing superior bit gripping strength.
- Enhanced durability and reliability to withstand the jobsite environment.



Voltage36 V
 Max Power750 UWO
 No. of Speed Settings3
 Max RPM0-400/0-1,200/0-1,600
 Max BPM0-6,800/0-20,400/0-27,200
 Clutch Settings22
 Chuck Size1/2"
 Chuck Typeplastic, self tightening
 Tool Weight6.9 lbs.

Includes: (2) 36V batteries, 1-hour charger, 360° side handle and heavy-duty kit box.

Heavy-Duty XRP™ 18V Cordless Reciprocating Saw Kit - DC385K

- 1-1/8" stroke length for faster cutting speed 0-3,000 SPM for faster cutting speed.
- 4-Position blade clamp allows for flush cutting and increased versatility.
- Lever-action keyless blade clamp for quick and easy blade changes.
- Anti-slip comfort grip provides increased comfort and control.
- XRP™ extended run-time battery provides long run-time and battery life.
- Pivoting adjustable shoe with open top for maximum visibility.
- Variable speed with trigger lock for increased blade control.



Voltage18 V
 Keyless Blade ClampYes
 Strokes/Min0,3000 spm
 Stroke Length1-1/8"
 Electric BrakeYes
 Tool Weight8.2 lbs.
 Shipping Weight13 lbs.

Includes: 1-hour charger, 18V XRP™ PACK battery, wood cutting reciprocating saw blade and heavy-duty kit box.

Heavy-Duty 36V Cordless Reciprocating Saw Kit DC305K

- 1-1/8" stroke length and 0-3,000 spm for fast cutting.
- 4-Position keyless blade clamp allows quick blade change, flush cutting, and versatility.
- Anti-slip comfort grip for better control.
- 3-Position adjustable shoe for adjusting depth of cut and extends blade life.
- 36V high performance battery pack provides long run-time and battery life.
- DEWALT® built high power, and high efficiency motor with electric brake, powers through the toughest applications.



Voltage36 V
 Keyless Blade ClampYes
 Strokes/Min0-3,000 spm
 Stroke Length1-1/8"
 Electric BrakeYes
 Tool Weight8.4 lbs.
 Shipping Weight15.6 lbs.

Includes: 1-hour charger, 36V battery, reciprocating saw blade and heavy-duty kit box.

24V XR+™ Pack FAN COOLED Extended Run-Time Battery - DW0242

- FAN COOLED technology cools down battery quickly thus extending battery life.
- High capacity XR+™ Pack battery offers extended run time without sacrificing number of recharges.
- Powers entire DEWALT® line of 24V tools.
- Durable slide rail interface keeps battery securely in place even during the most extreme applications.



Voltage24 V
 FeaturesFAN COOLED technology
 Compatible withEntire line of 24 Volt tools
 Shipping Weight3.6 lbs.

Heavy-Duty 5-3/8" (136mm) 18V Cordless Trim Saw Kit - DW936K

- Lightweight and compact design allows for use in confined work areas.
- 5-3/8" (136mm) blade can cut a 2x4 in one pass.
- 50° bevel provides additional capacity for specialty applications.
- DEWALT® built high-performance motor with fan cooling delivers maximum power and durability.
- Rip fence adds accuracy and consistency to the cut line.
- Replaceable brushes for longer motor life.
- Spindle lock for easy blade changes.



Voltage18 V
 No Load Speed3,500 rpm
 Blade Diameter5-3/8"
 Bevel Capacity0-50 Degrees
 Arbor Size3/8"
 Depth Of Cut At 45 Degrees1-1/8"
 Depth Of Cut At 90 Degrees1-5/8"
 Tool Weight7.6 lbs.
 Shipping Weight21 lbs.

Includes: 1-hour charger, 18V battery pack, 16-tooth carbide saw blade, rip fence, blade wrench and heavy-duty kit box.

Heavy-Duty Worksite Radio/Charger - DC011

- 1-hour charger for 7.2V to 18V DEWALT battery packs (except Univolt®).
- Heavy-duty AM/FM radio with auxiliary port allows user to listen to the radio or CD (when plugged into auxiliary port).
- Digital Tuner with LCD display, built-in clock and 8-station memory presets.
- High efficiency weather resistant speakers with dual bass ports for maximum bass and range.
- Dual pivoting 11" flexible antenna provides more durability and better reception.
- Weather sealed door opens easily for fast battery changes.
- The DEWALT® 3-stage charging system provides maximum run-time and extends overall life of the battery.
- Heavy-Duty storage case allows storage for CD player and CDs.



Voltage7.2 to 18 (except Univolt) V
 Radio Output92 dB
 Charge Time1 hr. or less
 Tool Weight13.2 lbs.
 Shipping Weight13.2 lbs.

7.2V-18V 1 Hour Vehicle Charger - DW9109

- Charges DEWALT batteries from your vehicle's power outlet (except Univolt®).
- Charges in 1 hour or less.
- Automatic shut-off protects excessive discharge of vehicle's battery.
- Charges all DEWALT® 7.2V-18V batteries (except Univolt batteries) so users need only one charger for multiple cordless tools.
- Patented voltage booster circuitry charges whether vehicle motor is running or not for more flexible use and convenience for reduced downtime.
- Circuitry boosts input voltage to allow recharging one battery after another to save time and improve productivity.



VoltageAll 7.2-18 Volt batteries except for Univolt batteries V
 Tool Weight1.5 lbs.
 Compatible withAll 7.2-18 Volt Battery Packs except Univolt packs
 Shipping Weight1.5 lbs.

Heavy-Duty 3/8" VSR Drill with Metal Keyless Chuck - D21009

- All-metal chuck offers greater durability.
- The 6.0 Amp motor offers high performance and overload protection.
- 3/8" metal keyless chuck offers greater bit retention.
- All ball-bearing construction provides greater durability and longer tool life.
- Contoured textured handle provides better gripping surface and reduces user fatigue.
- Built-in two-way level for drilling accurate vertical and horizontal holes.
- Glass-filled nylon housing is durable, impact resistant and provides lower maintenance cost.



Heavy-Duty 1/2" (13mm) Spade Handle Drill (450 rpm) - DW131

- AC/DC, reversing switch.
- 5/8" spindle for increased durability in high torque applications.
- Top handle and back handle for improved control in all drilling and mixing applications.
- Triple gear reduction provides increased torque and reduces gear stress.
- Trigger switch and toggle reversing lever provides easy forward/reverse action and assists in backing out jammed bits and or mixing drywall mud.
- Low 450 rpm provides increased torque for drilling large diameter holes in wood and metal.



Includes: top handle and chuck key with holder.

Heavy-Duty 1/2" (13mm) Spade Handle Drill (1,000 rpm) - DW132

- AC/DC, reversing switch.
- 5/8" spindle for increased durability in high torque applications.
- Top handle and back handle for improved control in all drilling applications.
- Triple gear reduction provides increased torque and reduces gear stress.
- Trigger switch and toggle reversing lever provides easy forward/reverse action and assists in backing out jammed bits.
- 1,000 rpm speed is ideal for self-feed bits and small hole saw drilling applications.



Includes: top handle and chuck key with holder.

Heavy-Duty 3/4" (19mm) Drill/Power Unit (375 rpm) - DW138

- AC/DC switch.
- 10 Amp motor provides power and overload capacity for higher torque applications.
- Rotating brush ring for full power in forward and reverse.
- No. 3 taper chuck mount with key drive for the highest reliability.
- 375 rpm speed is ideal for driving speed reducers, light hoists and power heads.
- Triple gear reduction provides increased torque and reduces gear stress.
- Top handle and back handle for improved control in all high torque drilling applications.



Includes: top handle, chuck key with holder.

Heavy-Duty 3/8" (10mm) VSR Right Angle Drill (0-1200 rpm) - DW160V

- 100% ball-bearing construction provides durability and longer tool life.
- Compact right-angle design for easy access in tight places.
- Paddle switch is ideal for use in awkward positions and limited access areas.
- Shielded chuck protects user and improves grip in confined areas.
- Double gear reduction increases torque performance and decreases gear stress.



Includes: chuck key with holder.

Heavy-Duty 1/2" (13mm) Stud & Joist Drill DW124 / DW124K (Kit)

- 100% ball-bearing construction provides durability and longer tool life.
- Mechanical-slip clutch in low gear to prevent bit lock-up and to provide control of reactionary torque.
- Adjustable front handle and 2-position side handle provide maximum leverage and control.
- Mechanically controlled 2-speed to match rpm/torque to application requirement.
- Triple gear reduction increases torque and reduces gear stress.
- 21" overall length provides greater control and leverage.



DW124 includes: chuck key with holder, bail handle, 2-position side handle

DW124K includes: chuck key with holder, bail handle, 2-position side handle, heavy-duty kit box

Specifications	D21009	DW131	DW132	DW138	DW160V	DW124/DW124K
Chuck Size	3/8"	1/2"	1/2"	3/4"	3/8"	1/2"
No Load Speed	0-2,500 rpm	450 rpm	1,000 rpm	375 rpm	0-1,200 rpm	300/1,200 rpm
Amps	6 Amps	7.0 Amps	7.0 Amps	10 Amps	3.7 Amps	11.5 Amps
Max Watts Out	480 W	715 W	715 W	1,100 W	200 W	850 W
Gear Reduction	Single	Triple	Triple	Triple	Double	Triple
Capacity In Wood (Spade Bit)	1"	1-1/2"	1-1/2"	1-1/2"	1-1/8"	1-1/2"
Capacity In Wood (Self-Feed)	N/A"	2-9/16"	1-3/4"	2-9/16"	N/A"	4-5/8"
Capacity In Wood (Hole Saw)	1-1/8"	5"	3"	6"	1-1/8"	6"
Capacity In Wood (Auger Bit)	N/A"	1-1/2"	1-1/2"	1-1/2"	N/A"	1-1/2"
Capacity In Steel (Twist Bit)	3/8"	1/2"	1/2"	3/4"	3/8"	1/2"
Capacity In Steel (Hole Saw)	N/A"	4"	1-1/2"	4"	3/4"	5"
Tool Weight	3.5 lbs.	9.75 lbs.	9.75 lbs.	17.3 lbs.	3.75 lbs.	13.5 lbs.
Shipping Weight	3.95 lbs.	11.2 lbs.	11.2 lbs.	20.0 lbs.	4.5 lbs.	16.75 lbs.

Heavy-Duty 1-9/16" Spline Rotary Hammer Kit D25550K / D25551K

- 11.0 Amp motor delivers high output and overload protection.
- Electronic Variable Speed allows the user to control the speed of drilling and chipping.
- 7.3 ft.-lbs. of impact energy provides fast drilling and powerful chipping.
- Rubber grip helps reduce the level of vibration felt by the user when operating the tool.
- Rear handle mount means less bending over when using tool in down drilling applications.
- Factory clutch helps reduce the tools reaction to embedded steel when bits "lock-up" while in operation, preventing injury.
- Modular construction allows service technicians to repair tools quickly for less down time when you service tools.
- Bit Lock allows user to unwind jammed bits.
- 360° side handle allows user the ability to position the side handle wherever it best suits the application.



Concrete Drilling1-9/16"
 Impact Energy7.3 ft./lbs.
 Amps11.0 Amps
 ChippingYes
 No Load Speed140-280 rpm
 Loaded Speed1,330-2,660 bpm
 ClutchYes
 Tool Length18.5"
 Tool Weight14.5 lbs.

Includes: 360° side handle, depth rod, heavy-duty kit box.

Heavy-Duty 1-9/16" SDS Max Rotary Hammer D25500K (Kit)

- 11.0 Amp motor delivers high output and overload protection.
- Electronic Variable Speed allows the user to control the speed of drilling and chipping.
- 7.3 ft.-lbs. of impact energy provides fast drilling and powerful chipping.
- SDS max toolholder is compatible with most bits the user has.
- Rubber grip helps reduce the level of vibration felt by the user when operating the tool.
- Rear handle mount means less bending over when using tool in down drilling applications.
- Factory clutch helps reduce the tools reaction to embedded steel when bits "lock-up" while in operation, preventing injury.
- Modular construction allows service technicians to repair tools quickly for less down time when you service tools.
- 360° side handle allows user the ability to position the side handle wherever it best suits the application.



Concrete Drilling1-9/16"
 Impact Energy7.3 ft./lbs.
 ChippingYes
 Wood/Steel DrillingN/A"
 No Load Speed140-280 rpm
 Loaded Speed (bpm)1,330-2,660 bpm
 ClutchYes
 Tool Length18.5"
 Tool Weight13.0 lbs.
 Amps11.0 Amps

Includes: 360° side handle, depth rod, heavy-duty kit box.

Heavy-Duty 1/2" (13mm) VSR Dual Range Hammerdrill DW505 / DW505K (Kit)

- 7.8 Amp motor provides high performance and overload protection.
- High/low speed for high speed drilling or high torque applications.
- Dual mode: hammerdrill/drill for wood, steel or masonry applications.
- Lightweight design, less user fatigue.
- Two-finger trigger for increased comfort.
- 360° side handle with depth rod offers greater control, versatility, and increased depth accuracy.
- Variable speed allows for precise hole placement on work surface.



Amps7.8 Amps
 Max Watts Out650 W
 No Load Speed0-1,100 / 0-2,700 rpm
 Blows/Min0-19,000 / 0-46,000 bpm
 Capacity In Steel1/2"
 Capacity In Wood1-1/2"
 Concrete Optimum3/16 - 3/8"
 Concrete Maximum1/2"
 Tool Length13"
 Tool Weight4.8 lbs.

DW505 includes: 360° side handle, depth rod, chuck key.
DW505K includes: 360° side handle, depth rod, chuck key with holder, heavy-duty kit box.

Heavy-Duty 1/2" (13mm) VSR Dual Range Hammerdrill DW515K (Kit)

- 8.2 Amp motor provides high performance and overload protection.
- High/low gear for high speed drilling or high torque applications.
- Dual mode: hammerdrill/drill for wood, steel or masonry applications.
- Rubber grip and two-finger trigger for increased comfort.
- 360° side handle with depth rod offers greater control, versatility and increased depth accuracy.
- Lightweight design for less user fatigue.
- Variable speed allows for precise hole placement on work surface.



Amps8.2 Amps
 Max Watts Out750 W
 No Load Speed0-1,050 / 0-2,400 rpm
 Blows/Min0-18,000 / 0-41,000 bpm
 Capacity In Steel1/2"
 Capacity In Wood1-1/2"
 Concrete Optimum3/16 - 7/16"
 Concrete Maximum1/2"
 Tool Length14"
 Tool Weight5.5 lbs.

Includes: 360° side handle, depth rod, chuck key with holder, heavy-duty kit box.

DeWALT® High Performance Industrial Tools come with a warranty package that includes:

- 90-Day Money Back Guarantee
- 1-Year Free Service Contract
- 3-Year Limited Warranty

Heavy-Duty 1" Three Mode D-Handle SDS Hammer **D25203K** (Kit)

- 2.3 ft.-lbs. of impact energy provides fast drilling and powerful chipping.
- 7.5 Amp motor provides high performance and overload protection.
- Reverse feature assists in the removal of fasteners.
- Variable speed allows for precise hole placement on work surface.
- Factory set clutch reduces sudden, high torque reactions if bit jams.
- 360° side handle adjusts easily for preference or use in tight spaces.



Includes: Three mode hammer-drill/drill for wood, steel or concrete drilling, chip mode.

Concrete Drilling	1"
Impact Energy	2.3 ft./lbs.
Amps	7.5 Amps
Chipping	Yes
Loaded Speed	0-800 rpm
Wood/Steel Drilling	w/adaptor
No Load Speed	0-1,100 rpm
Blows/Min	0-4,200 bpm
Switch	VSR
Clutch	Factory Set
Tool Length	16.6"
Tool Weight	6.1 lbs.

Heavy-Duty Reciprocating Saw **DW304PK** (Kit)

- 4-Position Blade Clamp allows for flush cutting and increased versatility.
- Powerful 10.0 Amp motor designed for heavy-duty applications.
- Lever-action keyless blade clamp for quick and easy blade changing.
- 0-2,800 strokes per minute and 1-1/8" stroke length deliver fast cutting.
- Variable speed trigger provides improved control.



Amps	10.0 Amps
Strokes/Min	0-2,800 spm
Stroke Length	1-1/8"
Keyless Blade Clamp	Yes
4-Position Blade Clamp	Yes
Orbital Action	N/A
Counter Balance	N/A
Adjustable Shoe	Fixed
Variable Speed Dial	N/A
Tool Length	17.5"
Tool Weight	7.0 lbs.

Includes: Metal cutting blade, heavy-duty kit box.

Heavy-Duty 7-1/4" (184mm) Circular Saw with Rear Pivot Depth of Cut Adjustment and Electric Brake **DW364 / DW364K** (Kit)

- Rear pivot depth of cut adjustment allows your hand to remain behind the tool at all depth of cuts.
- Powerful 15.0 Amp, 2,075 MWO motor made for long life and difficult applications.
- Heavy-gauge, high-strength aluminum alloy base for increased durability on worksite.
- 50° beveling capacity increases capacity in various applications.
- Electric brake stops blade after use.



Amps	15.0 Amps
Max Watts Out	2,075 W
No Load Speed	5,800 rpm
Bevel Capacity	50 Degrees
Bevel Stops	N/A
Rear Pivot	Yes
Electric Brake	Yes
Blade Diameter	7-1/4"
Depth Of Cut At 90 Degrees	2-7/16"
Depth Of Cut At 45 Degrees	1-7/8"
Tool Weight	12.3 lbs.

DW364 includes: Carbide tipped blade, blade wrench
DW364K includes: Carbide tipped blade, blade wrench, heavy-duty kit box.

Heavy-Duty 7-1/4" (184mm) High-Torque Framing Saw **DW378G / DW378GT** (With Twist Lock Cordset)

- Lightweight - 13.0 lbs. to reduce user fatigue.
- 15.0 Amp, high-torque motor for increased productivity.
- 50° bevel capacity increases range of applications.
- Integrated saw hook to hang tool on rafters/trusses.
- High-strength cast aluminum base with integral stiffeners provides superior durability.
- Lower guard design improves performance when making bevel cuts and cutting shims.



Amps	15.0 Amps
Max Watts Out	2,000 W
No Load Speed	4,600 rpm
Bevel Capacity	50 Degrees
Bevel Stops	N/A
Rear Pivot	N/A
Electric Brake	N/A
Blade Diameter	7-1/4"
Depth Of Cut At 90 Degrees	2-7/16"
Depth Of Cut At 45 Degrees	1-7/8"
Tool Weight	13.0 lbs.

DW378G includes: Carbide tipped framing blade, grounded plug, blade wrench.

DW378GT includes: Carbide tipped blade, twist lock cordset, blade wrench.

Heavy-Duty 8-1/4" (210mm) Circular Saw with Rear Pivot Depth of Cut Adjustment and Electric Brake **DW384**

- Rear pivot depth of cut adjustment allows your hand to remain behind the tool at all depth of cuts.
- 15.0 Amp, high-torque motor for increased productivity.
- 50° bevel capacity increases range of applications.
- Heavy-gauge, high-strength aluminum alloy base for increased durability on worksite.
- Electric brake stops blade after use.



Amps	15.0 Amps
Max Watts Out	2,075 W
No Load Speed	5,800 rpm
Bevel Capacity	50 Degrees
Bevel Stops	N/A
Rear Pivot	Yes
Electric Brake	Yes
Blade Diameter	8-1/4"
Depth Of Cut At 90 Degrees	2-15/16"
Depth Of Cut At 45 Degrees	2-1/4"
Tool Weight	12.75 lbs.

Includes: Carbide tipped blade, blade wrench.

Heavy-Duty 12" Cut-Off Machine **D28754**

- 15.0 Amp/5.3 HP (maximum motor HP) motor provides high power and speed for metal and concrete cutting.
- Epoxy coated field and armature provide long service life against abrasion from debris.
- Adjustable guard for different cutting depths mounted at two points to maintain proper alignment.
- Rotation directs sparks and debris towards the front of the tool and helps prevent climbing in the cut.
- Dust sealed switch protects against dust ingestion for longer switch life.
- Automatic turn-off brushes shut down the tool when brushes need to be changed to avoid tool damage.
- 2-wire double insulated "S" jacket rubber cord provides increased durability and life in hot and cold climates.
- Spindle lock button for fast, easy wheel changing.



Amps	15.0 Amps
Max Capacity (Round)	5"
Tool Length	23.9"
Tool Weight	24.7 lbs.

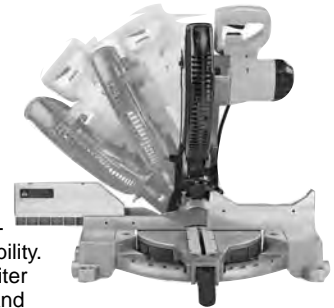
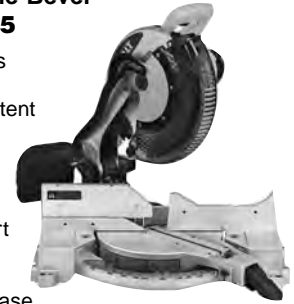
Includes: Wrench, masonry wheel, metal cutting wheel.

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- 90-Day Money Back Guarantee
- 1-Year Free Service Contract
- 3-Year Limited Warranty

Heavy-Duty 12" (305mm) Single-Bevel Compound Miter Saw - **DW715**

- 15 Amp motor, 4,000 rpm provides extended power and durability.
- Adjustable stainless steel miter detent plate with 11 positive stops delivers repeatable accuracy and worksite durability.
- Exclusive Precise Miter System and Machined Base Fence support deliver increased cutting accuracy.
- Tall sliding fence supports crown molding up to 5-1/4" nested and base molding up to 6-1/2" vertically against the fence while easily sliding out of the way for bevel cuts.
- Bevels 0°-48° to the left and 0°-3° to the right for increased capacity.
- 0°-50° left and right miter capacity for greater versatility.
- Lightweight (42 lbs.) with built-in carry handle for easy portability.
- Cam lock miter handle with miter detent override deliver quick and accurate miter angles.
- 4 Hardened Steel Bevel Stops at 0°, 33.9°, 45° and 48° delivers versatility at most common bevel angles.
- Designed for use with the DW7187 DEWALT Adjustable Miter Saw Laser System which delivers visibility to the cutting path.



Amps	15.0 Amps
No Load Speed	4,000 rpm
Blade Diameter	12"
Arbor Size	5/8" or 1"
Vertical Capacity: Baseboard Against Fence	6-1/2"
Vertical Capacity: Crown Molding Vertically Nested	5-1/4"
Horizontal Capacity: Baseboard Lying Flat	8"
Horizontal Capacity: Crown Molding Lying Flat	6-1/2"
45° Bevel Cut Capacity (dimensional lumber)	2 x 8
90° Cross-Cut Capacity (dimensional lumber)	4 x 6
90° Cross-Cut Capacity (Max Width)	2 x 8
45° Miter Cut Capacity (Max Height)	4 x 4 dimensional lumber
45° Miter Cut Capacity (Max Width)	2 x 6 dimensional lumber
Tool Weight	42 lbs.
Shipping Weight	49 lbs.

Includes: Carbide blade, extension kit, dust bag, blade wrench.

Heavy-Duty 14" (355mm) Chop Saw DW871

- Powerful 15.0 Amp/5.3 HP (maximum motor HP) motor provides more overload capacity, increasing performance and durability.
- Patented tool-free, 45° adjustable fence allows for fast and accurate angle cuts without using a wrench.
- Ergonomically designed "D" handle provides a more comfortable hand position reducing user fatigue and increasing productivity.
- Quick-lock vise allows for fast clamping on different size materials to increase productivity.
- Extra wide solid steel base provides increased stability when cutting longer material.
- Heavy-duty lock down pin allows head of the saw to be locked in the carrying position without the use of a chain.
- The solid steel base also allows users to weld jigs or stops directly to the base.
- On-board wheel change wrench allows for convenient storage greatly reducing the risk of lost wrenches.
- Heavy-duty compression spring provides smooth movement and greater durability than torsion springs.
- The four pre-drilled holes in the base allow easy bolt down to any work bench.
- Durable metal top handle allows saw to be carried easily.
- Spindle lock allows user to make wheel changes quickly and easily, saving time and money.
- Large cutting capacity (5" round / 4-1/2" x 6-1/2" rectangle) provides the ability to cut a wide variety of materials.
- Allows users to channel sparks.
- Easily accessible brushes allow for convenient servicing on the worksite minimizing downtime.



Amps15.0 AC/DC Amps
 No Load Speed3,800 rpm
 Spindle LockYes
 Quick Lock ViseYes
 Wheel Arbor1"
 Wheel Diameter14"
 Max Capacity (Round)5"
 Max Capacity (Rectangular) ...4-1/2" x 6-1/2"
 Tool Length21"
 Tool Weight40.0 lbs.
 Horsepower5.3 HP

Includes: 14" abrasive wheel, wrench.

Heavy-Duty 14" (355mm) Multi-Cutter Saw - DW872

- Multi-Cutter offers versatility by cutting a wide variety of materials including ferrous and non-ferrous metals.
- Utilizing a carbide tipped blade, the depth of cut remains constant throughout blade life.
- Multi-Cutter cuts 4 times faster than chop saws and 8 times faster than portable band saws in 2" x 2" x 1/4" angle iron.
- 14" 70-tooth carbide tipped blade delivers a lower cost-per-cut compared to cutting with abrasive wheels.
- Specially designed carbide teeth deliver fast, precise, virtually burr-free cuts reducing the need for preparation grinding, and finished cuts that are cool to the touch.
- Largest capacity in its class with even more capacity than a deep-cut portable band saw (5-3/16" round and 4-1/2" x 6-1/2" rectangular) allowing user to cut a wider variety of different size materials for more applications.
- Ergonomically designed horizontal handle puts user's wrist in a more comfortable position to help reduce user fatigue and increase productivity.
- 15 Amp / 4.0 HP motor provides more overload capacity to increase performance and durability.
- Patented tool-free, 45° adjustable fence allows for fast and accurate angle cuts without using a wrench.
- Quick-lock vise allows for fast clamping on different size materials to increase productivity.
- Extra wide solid steel base provides increased stability when cutting longer material. The four pre-drilled holes in the base allow easy bolt down to any work bench. The solid steel base also allows users to weld jigs or stops directly to the base.
- Durable metal top handle allows the saw to be carried easily.
- Heavy-duty lock down pin allows the head of the saw to be locked in the carrying position without the use of a chain.
- On-board wheel change wrench allows for convenient storage and greatly reduces the risk of lost wrenches.
- Spindle lock allows users to make wheel changes quickly and easily saving time and money.
- Adjustable chip deflector allows user to channel chips away from hazardous materials and co-workers.
- Easily accessible brushes allow for convenient servicing on the worksite to minimize downtime.
- Heavy-duty compression spring provides smooth movement and greater durability than torsion springs.
- Quick-retracting guard allows user to see the line of cut while protecting against chips.
- Vertical clamp provides the user with the most efficient clamping system in the industry.



Amps15.0 AC/DC Amps
 No Load Speed1,300 rpm
 Spindle LockYes
 Quick Lock ViseYes
 Wheel Arbor1"
 Wheel Diameter14"
 Max Capacity (Round)5-3/16"
 Max Capacity (Rectangular) ...6-1/2" x 4-1/2"
 Tool Length21"
 Tool Weight47.0 lbs.
 Horsepower4.0 HP

Includes: 14" carbide tipped blade, wrench, vertical clamp.

Heavy-Duty 4-1/2" (115mm) Small Angle Grinder Kit **D28402K**

- 10 Amp AC/DC 11,000 rpm motor designed for faster material removal and higher overload protection.
- Dust Ejection System™ provides durability by ejecting dust particles that enter the tool through the air intake vents.
- Jam-pot, low profile gear case provides precise gear alignment for a smoother, quieter transmission while allowing access to tight spaces.
- 1-piece brush arm prevents brush hang-up due to dust ingress.
- Quick-Change wheel release provides easier and quicker wheel removal without the need for a wrench.



Amps10.0 Amps
 Max Watts Out1,200 W
 No Load Speed11,000 rpm
 Use Wheels RPM Above12,000 rpm
 Spindle LockYes
 Spindle Thread5/8"-11
 Tool Length11-1/4"
 Tool Weight4.6 lbs.

Includes: 2-position side handle, depressed center wheel, keyless adjustable guard, wrench and heavy-duty kit box.

Heavy-Duty 7" / 9" Large Angle Sander - **D28497**

- High power 4 HP (maximum motor HP) 6,000 rpm motor with overload protection provides higher operating speeds under load.
- Epoxy coated field and armature provide long service life against abrasion from airborne debris.
- Durable magnesium gearcase is ergonomically shaped for easy control.
- Automatic turn-off brushes shut down the tool when brushes need to be changed to avoid tool damage.



Amps15.0 AC/DC Amps
 Max Watts Out3,084 W
 No Load Speed6,000 rpm
 Use Wheels RPM Above6,600 rpm
 Spindle LockYes
 Spindle Thread5/8"-11
 Tool Length19.2"
 Tool Weight12.9 lbs.

Includes: 3-position side handle.

Heavy-Duty 7" (180mm) Large Angle Grinder **D28474W**

- High power 4 HP (maximum motor HP) 8,000 rpm motor with overload protection provides higher operating speeds under load.
- Epoxy coated field and armature provide long service life against abrasion from airborne debris.
- Keyless adjustable guard allows for guard adjustments to be made without tools.
- Low profile gearcase allows for work in tight areas.
- Automatic turn-off brushes shut down the tool when brushes need to be changed to avoid tool damage.



Amps15.0 AC/DC Amps
 Max Watts Out3,084 W
 No Load Speed8,000 rpm
 Use Wheels RPMAbove 8,500 rpm
 Spindle LockYes
 Spindle Thread5/8"-11
 Tool Length19.2"
 Tool Weight13.15 lbs.

Includes: 7" guard, 5-position side handle, 7" grinding wheel.

Heavy-Duty 1-1/2" (40mm) Die Grinder - **DW887**

- 3.0 Amp, 25,000 rpm motor provides high power and speed for all 1-1/2" grinding applications.
- AC/DC capacity works off welding machines and generators for increased productivity and versatility.
- Convenient paddle switch with lock-on button for easy gripping.
- Precision 1/4" collet with 1/8" reducing sleeve securely holds all proper accessories.



Amps3.0 AC/DC Amps
 Max Watts Out350 W
 No Load Speed25,000 rpm
 Use Wheels RPMAbove N/A rpm
 Spindle LockN/A
 Spindle Thread1/4" collet & 1/8" sleeve
 Tool Length13.0"
 Tool Weight3.25 lbs.

Includes: 2 wrenches, 1/4" collet, 1/8" reducing sleeve.

Heavy-Duty 3" x 21" Belt Sander - **DW432**

- Powerful 8.0 Amp motor aggressively removes material in a variety of applications.
- All-metal housing increases durability during a drop.
- Three-wheel design delivers lowest center of gravity and longest 3" x 21" platen available.
- Innovative dust collection system is 20% more efficient than conventional dust bags.
- Dust collection shut-off eliminates dust stream toward users when collector is not in use.



Amps8.0 Amps
 Dust CollectionYes
 Paper Size/Type3" x 21"
 SFPM1,400
 Tool Weight12.0 lbs.

Includes: Sanding belt.

Heavy-Duty 3 HP (maximum motor HP) EVS Plunge Router - **DW625**

- 15.0 Amp motor uses state-of-the-art circuitry for soft starts and smooth operation.
- Full wave electronic variable speed motor runs at 8,000-22,000 rpm with constant speed under load to ensure a quality finish in all materials.
- Rack and pinion depth adjuster, magnified scale and micro-fine bit depth adjuster provides fast and accurate depth settings.
- Phosphorous bronze bushings provide a smooth and accurate plunge.
- Spindle lock button allows one-wrench bit changes when collector is not in use.



Amps15.0 Amps
 Horsepower3 HP
 No Load Speed8,000-22,000 rpm
 Collet Diameter1/2", 1/4"
 Plunge Stroke2-7/16"
 Depth Stop3-Stage Turret Stop
 Base Dimension5-5/8 x 6-11/16"
 Spindle LockYes
 Tool Weight11.2 lbs.

Includes: 1/4" collet, 1/2" collet, dust extraction adapter, template guide bushing adapter, wrench.

Heavy-Duty VSR Depth-Sensitive Screwdriver - DW266

- Ideal for use with TEKS® screws.*
- Helical-cut steel, heat-treated gears for long life and durability.
- Metal gear housing for increased durability.
- Depth-sensitive "set and forget" nosepiece for consistent fastener depth.
- Rubber grip and two-finger, rubber trigger for increased comfort.



Amps6.5 Amps
No Load Speed0-2,500 rpm
ClutchStandard
Torque132 in.-lbs.
Max FastenerSize #14
Tool Weight3.5 lbs.

*TEKS® is a registered trademark of ITW Buildex.

Heavy-Duty 1/2" (13mm) Impact Wrench - DW292

- 345 ft-lbs of deliverable torque in forward and reverse.
- 1/2" detent pin anvil.
- AC/DC forward/reverse rocking switch.
- Soft grip handle for superior ergonomics.
- Ball bearing construction for increased durability.



Amps7.5 Amps
No Load Speed2,100 rpm
Max. Torque345 ft.-lbs.
Impacts/Min2,700 bpm
Tool Length11-1/4"
Tool Weight7.0 lbs.

Heavy-Duty 3/4" (19mm) Impact Wrench with Detent Pin Anvil - DW294

- 345 ft-lbs of deliverable torque in forward and reverse.
- 3/4" detent pin anvil.
- AC/DC forward/reverse rocking switch.
- Soft grip handle for superior ergonomics.
- Ball bearing construction for increased durability.



Amps7.5 Amps
No Load Speed2,100 rpm
Max. Torque345 ft.-lbs.
Impacts/Min2,700 bpm
Tool Length11-1/4"
Tool Weight7.0 lbs.

Heavy-Duty 14-Gauge Shear DW892

- Dependable, 3.0 Amp, all ball-bearing motor for long life.
- Rugged aluminum alloy gear case for maximum durability.
- Paddle switch for convenient one-handed operation.
- Blades are easy to adjust and replace.
- Cuts radius as small as 1".



Amps3.0 AC/DC Amps
Max Watts Out384 W
Strokes/Min2,700 spm
Capacity (Mild Steel)14 ga.
Capacity (Stainless Steel)16 ga.
Tool Length9.5"
Tool Weight5.5 lbs.

Includes: blade kit DW8920 (upper and lower blades, screws, nuts and wrenches)

Heavy-Duty 12-Gauge Shear - DW893

- Powerful, 6.5 Amp, all ball-bearing motor for long life.
- Rugged aluminum alloy gear case for maximum durability.
- Paddle switch for convenient one-handed operation.
- Four-edge blade design provides four times the life of standard blades.
- Cuts radius as small as 1" for various applications.



Amps6.5 AC/DC Amps
Max Watts Out225 W
Strokes/Min1,950 spm
Capacity (Mild Steel)12 ga.
Capacity (Stainless Steel)14 ga.
Tool Length10.5"
Tool Weight4.5 lbs.

DW8930

Four-edge blade same for top and bottom.



Heavy-Duty 16-Gauge Nibbler - DW896

- Dependable, 3.0 Amp, all ball-bearing motor for long life.
- Round punch allows 360° pivot while cutting.
- Rotating head allows changing cutting directions as desired.
- Easy to change punch and die which saves time and money.
- No distortion of material being cut.
- Paddle switch for convenient one-handed operation.
- Gear case constructed of strong aluminum alloy for maximum durability.



Amps3.0 AC/DC Amps
Max Watts Out385 W
Strokes/Min2,100 spm
Capacity (Mild Steel)16 ga.
Capacity (Stainless Steel)18 ga.
Starting Hole1"
Tool Length9.75"
Tool Weight4.5 lbs.

DW8967

Set of Five Replacement Punches.



DW8966

Punch and Die Set.

CONSTRUCTION SAW BLADES Cordless Saw Blades



Cat. #	Description	Arbor	Teeth	Grind	Hook Angle	Plate	Kerf
5-3/8" Diameter Blades							
Ultra-thin kerf yields more cuts per charge by minimizing battery drain.							
DW9055	Fast Cutting	10mm	16	ATB	Pos 20°	.039"	.059"
DW9054	Smooth Cutting	10mm	24	ATB	Pos 20°	.039"	.059"
DW9052	Alum./Nonferrous Metals	10mm	30	FTB	Pos 3°	.039"	.059"
DW9053	Vinyl/Paneling	5/8"	78	Alt. Set	Neg 10/45°	.039"	.059"
DW9058	Combo (DW9052, DW9055)	10mm	16/30	ATB/FTG	+20/+3°	.039"	.059"
DW9059	Combo (DW9052, DW9053, DW9055)	10mm	30/78/24	ATB/Alt. Set	+18/-45/+20°	.039"	.059"
6-1/2" Diameter Blades							
DW9155	Fast Cutting	5/8"	16	ATB	Pos 20°	.039"	.059"
DW9154	Framing	5/8"	24	ATB	Pos 20°	.039"	.059"
DW9152	Aluminum	5/8"	36	FTB	Pos 3°	.039"	.059"
DW9158	Combo (DW9155, DW9154)	5/8"	16/24	ATB	Pos 20°	.039"	.059"
DW9153	Vinyl/Paneling	5/8"	90	Alt. Set	0/35°	.039"	.059"

Model 360

3" x 24" Belt Sander

- Powerful 12.0 amp motor provides 20% more power than before.
- Motor is located over platen for maximum performance and perfect balance.
- Belt and gear drive system transfers power from the motor to the sanding belt.
- Belt speed of 1,500 SFPM for rapid stock removal.
- Quick-release belt-change lever.
- Fingertip belt-tracking knob for quick, accurate belt adjustments.
- Large capacity dust collection bag swivels 360° so it's never in the way during sanding.
- User-friendly design with ergonomically correct handles.
- **Standard Equipment:** Sander, 100G ceramic aluminum oxide belt, **dust bag assembly #39334** and operating manual.



Additional Specifications

Power	120 VAC, 25-60 HZ/120 VDC
Motor Amps	12
Belt Speed (SFPM)	1,500
Belt Size	3" x 24"
Length	14"
Net Weight	14.5 Lbs.
Shipping Weight	16.5 Lbs.

Model 361

3" x 24" Belt Sander

- Powerful 12.0 amp motor provides 20% more power than before.
- Motor is located over platen for maximum performance and perfect balance.
- Belt and gear drive system transfers power from the motor to the sanding belt.
- Belt speed of 1,500 SFPM for rapid stock removal.
- Quick-release belt-change lever.
- Fingertip belt-tracking knob for quick, accurate belt adjustments.
- Large capacity dust collection bag swivels 360° so it's never in the way during sanding.
- User-friendly design with ergonomically correct handles.
- **Standard Equipment:** Sander, 100G ceramic aluminum oxide belt and operating manual.



Additional Specifications

Power	120 VAC, 25-60 HZ/120 VDC
Motor Amps	12
Belt Speed (SFPM)	1,500
Belt Size	3" x 24"
Length	14"
Net Weight	13.75 Lbs.
Shipping Weight	15.5 Lbs.

Model 363

4" x 24" Belt Sander

- Powerful 12.0 amp motor provides 20% more power than before.
- Motor is located over platen for maximum performance and perfect balance.
- Designed for flush sanding up to vertical surfaces.
- Belt speed of 1,500 SFPM for rapid stock removal.
- Quick-release belt-change lever.
- Fingertip belt-tracking knob for quick, accurate belt adjustments.
- Large capacity dust collection bag swivels 360° so it's never in the way during sanding.
- User-friendly design with ergonomically correct handles.
- Belt and gear drive system transfers power from the motor to the sanding belt.
- **Standard Equipment:** Sander, 100G ceramic aluminum oxide belt and operating manual.



Additional Specifications

Power	120 VAC, 25-60 HZ/120 VDC
Motor Amps	12
Belt Speed (SFPM)	1,500
Belt Size	4" x 24"
Length	14"
Net Weight	15 Lbs.
Shipping Weight	16 Lbs.

Model 352VS

3" x 21" Variable-Speed Sander

- 8 amp motor, AC only.
- Variable-speed dial 850-1,300 SFPM.
- Belt and gear drive.
- Designed for flush sanding up to vertical surfaces.
- Dust bag swivels 360°.
- Fingertip belt-tracking knob.
- Quick-release belt-change lever.
- Motor is located over platen for maximum performance and perfect balance.
- **Standard Equipment:** Sander, 100G ceramic aluminum oxide belt, **dust bag assembly #39334** and operating manual.

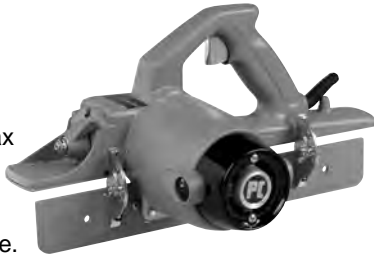


Additional Specifications

Power	120 VAC, 25-60 HZ
Motor Amps	8
Belt Speed (SFPM)	850-1,300
Belt Size	3" x 21"
Length	11-3/4"
Net Weight	10-3/4 Lbs.
Shipping Weight	12-1/2 Lbs.
Dust Collection System	Yes

Model 9118 Porta-Plane® Kit

- 7.0 amps, AC/DC.
- 22,000 RPM.
- Capacities: 2-13/32" max width, 3/32" max depth.
- Bevel adjustment: -15° to +45°.
- Top-side calibrated scale.
- 100% ball bearings.
- Replaceable, non-marking stainless steel shoes.
- **Standard Equipment:** Plane, carbide-tipped spiral cutter #43263, wrench #48302, carrying case, allen wrench and operating manual.



Additional Specifications

Power	120 VAC, 25-60 HZ/120 VDC
Motor Amps	7
Cutter Speed (RPM)	23,000
Cutter Type	Carbide Spiral
Bevel Adjustment	-15° to 45°
Cut Capacity	Width: 2-13/32" Depth: 3/32"
Length	10"
Net Weight	9 Lbs.
Shipping Weight	20 Lbs.

Model 505 Half-Sheet Finishing Sander Kit

- 2.3 amps, AC/DC.
- 1/8" orbit.
- 10,000 OPM.
- 100% ball bearings.
- Smooth, low vibration.
- Sands flush and into corners.
- Solid metal frame for precision seating and alignment of bearings, motor and fan, providing the maximum in long, trouble-free tool life.
- All-metal housing and trigger for reduced vibration and long trouble-free tool life.
- **Standard Equipment:** Sander, abrasive sheet and operating manual.



Additional Specifications

Power	120 VAC, 25-60 HZ/120 VDC
Motor Amps	2.3
Pad Speed (OPM)	10,000
Pad Size	4-1/2" x 9-3/8"
Paper Size (1/2 Sheet)	4-1/2" x 11"
Orbit Diameter	1/8"
Length	11-1/2"
Net Weight	7-1/4 Lbs.
Shipping Weight	8 Lbs.

Model 330 Speed-Bloc® Quarter-Sheet Finishing Sander

- Comfortable, easy-grip outer housing for hours of use without fatigue.
- Solid metal frame for precision seating and alignment of bearings, motor and fan, providing the maximum in long, trouble-free tool life.
- Rubber posts isolate your hand from vibration while enabling full sanding action and efficiency on the work. The result is the smoothest finishing sander available today.
- 100% ball bearings.
- 14,000 orbits-per-minute pad speed, with aggressive 5/64" orbit.
- Accepts pre-cut adhesive or self cut standard paper with metal stamp.
- **Standard Equipment:** Sander, abrasive sheet, clamp tool #846372 and operating manual.



Additional Specifications

Power	120 VAC, 25-60 HZ/120 VDC
Motor Amps	1.2
Pad Speed (OPM)	14,000
Pad Size	4-1/8" x 4-1/2"
Paper Size (1/4 Sheet)	4-1/2" x 5-1/2"
Orbit Diameter	5/64"
Length	4-1/2"
Net Weight	4 Lbs.
Shipping Weight	4-3/4 Lbs.

Model 332 Quicksand Random-Orbit Sander (5")

- 1.7 amps, AC only.
- For 5" adhesive-backed abrasives.
- 3/32" orbit.
- 12,000 OPM.
- Random, swirl-free sanding action.
- 100% ball bearings.
- Pad control feature prevents pad spin-up when tool is lifted off work.
- **Standard Equipment:** Sander, sanding disc and operating manual.



Additional Specifications

Power	120 VAC, 25-60 HZ
Motor Amps	1.7
Speed	12,000
Abrasive Type	Adhesive Backed
Tool Height	6-1/4"
Net Weight	3.2 Lbs.
Shipping Weight	3.75 Lbs.

PORTER-CABLE's standard one-year warranty covers most Porter-Cable Professional power tools and accessories.

Model 97310 Laminate Trim Kit

- 5.6 amps, AC/DC.
- 30,000 RPM.
- 1/4" collet.
- Spindle lock.
- Precision cast aluminum base.
- Micro-set™ depth-of-cut adjustment knob.
- 100% ball bearing construction.
- **Standard Equipment:** Trimmer motor #7301, standard trimmer base, offset trimmer base, tilt trimmer base, solid carbide bit #43216, edge guide #73100, wrenches #44745 and #698110, and instruction manuals all in a heavy-duty carrying case with compartments for the items listed above, plus one additional compartment for storing your laminate trimmer bits.



Additional Specifications

Power	120 VAC, 25-60 HZ/120 VDC
Motor Amps	5.6
Motor Diameter	2-3/4"
Speed (RPM)	30,000
Collet Capacity	1/4"
Switch	Sliding
Height	7-1/2"
Base Action	-

Model 100 7/8 Peak HP Router

- 6.5 amp AC/DC.
- 22,000 RPM.
- 1/4" collet.
- Precision machined aluminum motor housing and base.
- Accurate micrometer depth-of-cut adjustment.
- 100% sealed ball bearings.
- **Standard Equipment:** Router motor, base #1001, 1/4" collet #42154, collet wrenches #42157 and operating manual.



Additional Specifications

Power	120 VAC, 25-60 HZ/120 VDC
Peak HP	7/8
Rated Input Current (Amps)	6.5
Motor Diameter	3-1/2"
No-Load Speed (RPM)	22,000
Collets	Standard: 1/4"
Base	Round
Shipping Weight	8-1/4 Lbs.

Model 7518 Speedmatic® 3-1/4 Peak HP Five-Speed Router

- 15 amps, AC only.
- Electronic five-speed with soft start 10,000, 13,000, 16,000, 19,000, 21,000 RPM.
- Maintains constant speed under load.
- 1/2" collet.
- Auto-release collet system ends "frozen" bits.
- Unique design puts bottom bearing closer to work for minimum bit run-out and vibration.
- Precision machined aluminum motor housing and base.
- 100% sealed ball bearings.
- **Standard Equipment:** Router motor #75182, base #75361, 1/2" collet #42950, collet wrenches #42596 and operating manual.



Additional Specifications

Power	120 VAC, 25-60 HZ
Peak HP	3-1/4
Rated Input Current (Amps)	15
Motor Diameter	4.2"
Collets	Standard: 1/2"
	Available: 1/4" and 3/8"
Width	11"
Base Diameter	7"
Shipping Weight	18 Lbs.

Model 690LR 1-3/4 Peak HP Router

- 11 Amps, AC only, 27,500 RPM, 1/4" and 1/2" collets.
- Auto-release collet system ends "frozen" bits.
- Precision machined aluminum motor housing and base.
- Accurate micrometer depth-of-cut adjustment to 1/128".
- 100% sealed ball bearings.
- Dust-sealed switch.
- Lever release height adjustment.
- Under table stop prevents motor from inadvertently rotating out of base.
- **Standard Equipment:** Router motor #6902, base #1001, 1/4" collet #42999, 1/2" collet #42950, collet wrenches #42596 and operating manual.



Additional Specifications

Power	120 VAC, 25-60 HZ
Peak HP	1-3/4
Rated Input Current (Amps)	11
Motor Diameter	3-1/2"
No-Load Speed (RPM)	27,500
Collets	Standard: 1/4" and 1/2"
	Available: 3/8"
Base	Round
Shipping Weight	9-1/2 Lbs.

Model 9725 Two-Speed Porta-Band® Saw Kit

- 4.5 amps (low) and 6.5 amps (high), AC/DC.
- 44-7/8" blade.
- Cuts 3 3/8" x 4-1/8" rectangular.
- Two-speeds switch 195 SFPM (low) and 245 SFPM (high).
- 100% ball and needle bearings.
- Worm gear and chain drive.
- **Standard Equipment:** Saw, 18T bi-metal blade #45277, carrying case and operating manual.



Additional Specifications

Power	120 VAC, 25-60 HZ/120 VDC
Motor Amps	4.5 and 6.5
Speed (SFPM)	195 Lo, 245 Hi
Blade Size	44-7/8"
Overall Length	19-1/2"
Capacity	Round: 3-3/8" Rectangular: 3-3/8" x 4-1/8"
Net Weight	17 Lbs.
Shipping Weight	19 Lbs.

Model 9746 VS, Quik-Change™ Tiger Saw® Kit

- Extra-heavy-duty 10.5 amp motor provides maximum power for all cutting applications.
- Electronic variable speed, 0-2,600 SPM, maintains speed under load for smooth consistent cutting.
- Full 1-1/8" cutting stroke length cuts more stock in less time than shorter stroke saws.
- Quik-Change™ blade clamp for keyless blade changes in seconds.
- Quik-Change™ front shoe can be extended to utilize more of the blade's teeth in the cutting action.
- Ergonomic handle with soft grip.
- Blade can be installed upside down to allow for better reach in tight fitting applications.
- **Standard Equipment:** Saw, heavy-duty case for tool storage, blade and operating manual.



Additional Specifications

Motor Amps	10.5
Motor Watts	N/A
No-load Speed (SPM)	0 - 2,600
Stroke (Orbital/Recip.)	1-1/8"
Weight	9 Lbs.

Model 97724 Big Capacity Variable-Speed Porta-Band® Saw Kit

- 6 amps, AC only.
- 44-7/8" blade.
- Cuts 4-1/2" x 4-3/4" rectangular.
- Variable-speed dial 100-265 SFPM.
- 100% ball and needle bearings.
- Spur gear and chain drive.
- **Standard Equipment:** Saw, 18T bi-metal blade #45277, carrying case and operating manual.



Additional Specifications

Power	120 VAC, 25-60 HZ
Motor Amps	6
Speed	Variable 100-265
Blade Size	44-7/8"
Overall Length	21-1/2"
Capacity	Round: 4-3/4" Rectangular: 4-1/2" x 4-3/4"
Net Weight	14 Lbs.
Shipping Weight	16 Lbs.

Model 324MAG 7-1/4" Quik-Change™ Blade-Right MAG-SAW™ Kit

- Quik-Change™ keyless blade change offers tool-less blade changes in seconds.
- Magnesium construction provides more durability and lighter weight at 9.6 lbs.
- Aggressive cuts with a 15 amp motor at 5,800 RPM.
- Integrated dust exhaust port with 205-degree rotation and 1" O.D. for vacuum attachment.
- Soft grip handle for a comfortable fit.
- Versatility with its 0-50 degree miter capacity and a positive stop at 45 degrees.
- Magnesium base features quick reference 45 degree edge for marking material.
- On board cord clip keeps cord away from blade side of tool.
- 100% ball and needle bearings.
- Extended miter lip on lower guard for no-hang up cuts.
- **Standard Equipment:** Saw, 18T carbide tipped RAZOR™ blade, case #907834 and operating manual.



Additional Specifications

Power	120 VAC, 25-60 HZ/120 VDC
Motor Amps	15
Speed (RPM)	5,800
Blade Size	7-1/4"
Arbor Hole	5/8"
Capacity	45 Degrees: 1-5/8" 90 Degrees: 2-9/32"
Net Weight	9.6 Lbs.
Shipping Weight	16.6 Lbs.

Router Bits from Porter-Cable®

QUALITY FOUNDATION

Best-in-Class Manufacturing Processes

Machining – Brazing – Grinding

- Machining centers and CNC grinders provide extremely accurate, consistent and concentric bits with mirror finish cutting surface.

Shanks

- CNC centerless ground, verified by Marposh gauging with .0005" tolerance for exact fit and strength.

Powder-Coating Process

- Automotive-type semi-transparent powder coat finish provides a durable and attractive surface.

POZI-STOP™ SHANK

- Automatically locate bit at correct height in collet — no test cuts needed.
- Switching between bits during a project is fast and easy — bits will always be at exactly the same height.
- Creates a stronger, longer-lasting bit.
- Less vibration — smoother cuts.
- Featured primarily on Forming bits.

MONSTER CARBIDE

- 40% thicker carbide than on standard bits.
 - Results in a stronger, longer-lasting bit.
 - Better heat and force distribution.
 - Generates less friction, runs cooler.
 - Provides smoother cuts.
 - Allows faster feed rate.
 - Can be resharpened more times than standard carbide.
- Featured primarily on Forming and larger Grooving bits.

ROUTER BIT RPM CHART

Bit Diameter	Recommended rpm
1" or less	Full Speed
1" to 1-1/2"	18,000
1-1/2" to 2-1/2"	15,000
Over 2-1/2"	10,000

Note: This chart is a general guide. You may need to make adjustments based on the material you are routing and the profile of the bit you are using.

For your safety, bits with diameters larger than 1-1/2" should only be used on routers with variable speed control. It is also recommended that large bits only be used in table-mounted routers.

Router Bit Kits

Model PCRBS03

3 Pc. Laminate Trim Set

- Ideal for Finish Contractors, Woodworkers, Hobbyists and Craftspersons.
- Ideal Applications include kitchen remodeling, cabinet/project fabrication, all laminate trim projects and sign making.
- **Standard Equipment:** Includes a 23 Degree Bevel Trimmer w/Bearings, a 1/4" Flush Trimmer w/Bearing, a 1/4" Straight Bit and a wooden display case.



Model PCRBS06

6 Pc. Decorative Edging Set

- Geared towards true Router User, Avid Do-It-Yourselfer and All Woodworking Enthusiasts.
- Ideal applications include any profile work-projects/furniture, drop leaf tables, edge work and molding.
- The most popular Profiling Router Bits in one Kit!
- **Standard Equipment:** Includes a 3/8" Cove, a 3/8" Roundover, a 1/4" Roman Ogee, a 45-degree Chamfer, a 3/8" Rabbeting, a Replacement Bearing and a wooden display case.



Model PCRBS04

4 Pc. Groove & Trim Set

- Ideal for Finish Contractors, Woodworkers, High End Hobbyists and Craftspersons.
- Ideal applications include kitchen remodeling, cabinet/project fabrication, all laminate trim projects and panel/siding.
- **Standard Equipment:** Includes a 1/2" Pattern Bit w/Top Mounted Brg., a 1/2" Laminate Flush Trim 2-Flute, a 23 Degree 3-Flute Bevel Trim Bit, a 1/4" Combination Panel Pilot Bit and a wooden display case.



Model PCRBS10

10 Pc. Master Woodworking Set

- Geared to the Woodworker.
- Ideal applications include all key project bits, any profile work-projects/furniture, edge work, laminate and cut-out work and molding.
- The most popular Router Bits from all categories and all in one Kit!
- **Standard Equipment:** Includes a 1/4" 2-Flute Straight, a 3/8" 2-Flute Straight, a 1/2" 2-Flute Straight, a 3/8" V-Groove, a 1/2" Core Box, a 45-degree Chamfer Bit, a 1/4" Roman Ogee, a 3/8" Rabbeting Bit, a 3/8" Cove, a 3/8" Corner Rounding Bit and a wooden display case.



Model PCRBS05

5 Pc. Straight Bit Set





- Geared towards Contractors or Small Hobbyists/Furniture Makers.
- Ideal applications include tongue and groove forming, dado clearing, rabbeting, all material joinery; gives the Pro Contractor top cutter bits in one excellent value.
- **Standard Equipment:** Includes a 1/4" Double Flute Straight, a 3/8" Double Flute Straight, a 1/2" Double Flute Straight, a 3/4" Double Flute Straight, a 5/8" Double Flute Straight and a wooden display case.


















**Individual Router Bits
On Following Pages.**



















Straight Bits

STRAIGHT SINGLE FLUTE: Designed for general stock removal. Single flute geometry provides optimum chip removal at faster feed rates.


Name	Model #	Cut Width	Flute Length	Shank Diameter	Overall Length
 Straight Single Flute	43717PC	1/4"	3/4"	1/4"	2-3/64"
 Straight Single Flute	43115PC	21/64"	3/4"	1/4"	2-13/16"
 Straight Single Flute	43049PC	1/2"	1-1/2"	1/2"	3-1/8"
 Straight Single Flute, Solid Carbide	43206PC	1/8"	9/32"	1/4"	1-1/2"

STRAIGHT DOUBLE FLUTE - PLUNGE CUTTING: Designed for general stock removal where superior balance and vibration-free cutting provide a smoother finish and longer bit life.


Name	Model #	Cut Width	Flute Length	Shank Diameter	Overall Length
 Straight Double Flute - Plunge Cutting, Solid Carbide	43109PC	1/8"	1/2"	1/4"	1-1/2"
 Straight Double Flute - Plunge Cutting, Solid Carbide	43310PC	3/16"	13/32"	1/4"	1-1/2"
 Straight Double Flute - Plunge Cutting, Solid Carbide	43848PC	3/16"	1/2"	1/4"	1-1/2"
 Straight Double Flute - Plunge Cutting, Solid Carbide	42350PC	1/4"	1"	1/4"	2-1/2"
 Straight Double Flute - Plunge Cutting, Solid Carbide	42353PC	1/2"	1-1/8"	1/2"	3"
 Straight Double Flute - Plunge Cutting	43051PC	3/16"	1/2"	1/4"	2"
 Straight Double Flute - Plunge Cutting	43802PC	1/4"	3/4"	1/4"	2-1/8"
 Straight Double Flute - Plunge Cutting	43718PC	1/4"	1"	1/4"	2-1/2"
 Straight Double Flute - Plunge Cutting	43742PC	1/4"	1"	1/4"	2-1/2"
 Straight Double Flute - Plunge Cutting	43207PC	1/4"	1"	1/2"	2-31/32"
 Straight Double Flute - Plunge Cutting	43300PC	5/16"	1"	1/4"	2-3/8"
 Straight Double Flute - Plunge Cutting	43312PC	3/8"	1"	1/4"	2-1/2"
 Straight Double Flute - Plunge Cutting	43719PC	3/8"	1"	1/2"	2-9/16"
 Straight Double Flute - Plunge Cutting	43204PC	3/8"	1-1/4"	1/2"	2-7/8"
 Straight Double Flute - Plunge Cutting	43838PC	7/16"	1"	1/4"	2-1/2"

 Straight Double Flute - Plunge Cutting	43228PC	7/16"	1"	1/2"	2-11/16"
 Straight Double Flute - Plunge Cutting	43846PC	1/2"	3/4"	1/4"	2"
 Straight Double Flute - Plunge Cutting	43314PC-50	1/2"	1"	1/4"	2"
 Straight Double Flute - Plunge Cutting	43318PC	1/2"	1"	1/4"	2-1/2"
 Straight Double Flute - Plunge Cutting	43057PC	1/2"	1"	1/2"	2-11/16"
 Straight Double Flute - Plunge Cutting	43058PC	1/2"	1-1/4"	1/2"	2-61/64"
 Straight Double Flute - Plunge Cutting	43720PC	1/2"	1-1/2"	1/2"	2-7/8"
 Straight Double Flute - Plunge Cutting	43721PC	1/2"	2"	1/2"	4-13/64"
 Straight Double Flute - Plunge Cutting	43118PC	1/2"	2-1/2"	1/2"	4-1/2"
 Straight Double Flute - Plunge Cutting	43327PC	9/16"	1"	1/4"	2-1/4"
 Straight Double Flute - Plunge Cutting	43230PC	9/16"	1-1/4"	1/2"	2-7/8"
 Straight Double Flute - Plunge Cutting	43333PC	5/8"	1"	1/4"	2-1/4"
 Straight Double Flute - Plunge Cutting	43189PC	5/8"	1-1/4"	1/2"	2-3/4"
 Straight Double Flute - Plunge Cutting	43722PC	3/4"	1-1/4"	1/2"	3"
 Straight Double Flute - Plunge Cutting	43052PC	3/4"	1"	1/4"	2-1/4"
 Straight Double Flute - Plunge Cutting	43062PC	7/8"	1-1/4"	1/2"	2-7/8"
 Straight Double Flute - Plunge Cutting	44035PC	15/16"	1-1/4"	1/2"	2-7/8"
 Straight Double Flute - Plunge Cutting	43063PC	1"	1-1/4"	1/2"	2-3/4"

STAGGERTOOTH: Upcut/downcut shearing bit with plunge cutting point minimizes chipping and tearing on both sides of stock.







Name	Model #	Cut Width	Flute Length	Shank Diameter	Overall Length
 Staggertooth	43724PC	1/2"	2-1/8"	1/2"	4-1/8"

OVERSIZE DADO: Oversize bit used to rout tight-fitting dado joints in laminate-covered plywood.



Name	Model #	Cut Width	Plywood Thickness	Flute Length	Shank Diameter	Overall Length
 Oversize Dado	43201PC	9/32"	1/4"	1"	1/4"	2-1/2"

Straight Bits (Continued)


UNDERSIZE PLYWOOD, TWO FLUTE: For routing mortise to accept standard plywood sheets. Available for 1/2", 5/8" and 3/4" sheet thickness.

Name	Model #	Cut Width	Plywood Thickness	Flute Length	Shank Diameter	Overall Length
 Undersize Plywood, Two Flute	43192PC	31/64"	1/2"	1"	1/4"	2-1/4"
 Undersize Plywood, Two Flute	43194PC	31/64"	1/2"	1"	1/2"	2-11/16"
 Undersize Plywood, Two Flute	43164PC	19/32"	5/8"	3/4"	1/4"	2"
 Undersize Plywood, Two Flute	43188PC	19/32"	5/8"	1-1/4"	1/2"	2-7/8"
 Undersize Plywood, Two Flute	43193PC	23/32"	3/4"	1"	1/4"	2-1/4"
 Undersize Plywood, Two Flute	43195PC	23/32"	3/4"	1"	1/2"	2-3/4"


HINGE AND LOCK FACE MORTISING CUTTERS: Designed for mortising of doors to accept locks, lock face plates, hinges and for general stock removal. All cutters fit 1/4" - 28 threaded shanks.

Name	Model #	Shank Diameter	Cut Width	Flute Length
 Hinge and Lock Face Mortising Cutters	43736PC	1/4" shank, 1/4" - 28 thread		
 Hinge and Lock Face Mortising Cutters	43737PC	1/2" shank, 1/4" - 28 thread		
 Hinge and Lock Face Mortising Cutters	43698PC		5/8"	9/16"
 Hinge and Lock Face Mortising Cutters	43703PC		3/4"	9/16"
 Hinge and Lock Face Mortising Cutters	43700PC		13/16"	9/16"
 Hinge and Lock Face Mortising Cutters	43701PC		7/8"	9/16"
 Hinge and Lock Face Mortising Cutters	43702PC		15/16"	9/16"
 Hinge and Lock Face Mortising Cutters	43704PC		1"	9/16"
 Hinge and Lock Face Mortising Cutters	43699PC		1-1/8"	9/16"
 Hinge and Lock Face Mortising Cutters	43745PC		1-1/4"	9/16"





CARBIDE BURR: For fiberglass and other non-metallic composite materials.

Name	Model #	Cut Width	Flute Length	Shank Diameter	Overall Length
 Carbide Burr	43229PC	1/4"	1"	1/4"	2"






STRAIGHT SINGLE "V" FLUTE: For less demanding applications where the benefits of spiral action are not necessary. Single edge for faster feed rates.

 Straight Single "V" Flute	42345PC	1/4"	1"	1/4"	2-1/2"
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HINGE MORTISING, TWO FLUTE: For stock removal, dados, rabbets, hinge butt mortising.

Name	Model #	Cut Width	Flute Length	Shank Diameter	Overall Length
 Hinge Mortising, Two Flute	43437PC	1/2"	9/16"	1/4"	2-5/16"
 Hinge Mortising, Two Flute	43440PC	5/8"	9/16"	1/4"	2-5/16"
 Hinge Mortising, Two Flute	43443PC	3/4"	9/16"	1/4"	2-5/16"
 Hinge Mortising, Two Flute	43442PC	1-1/4"	9/16"	1/4"	2-3/8"




UP SPIRAL: Up spiral for fast, clean cutting with smooth finish. Combines effective chip removal with a cut that can't be matched by standard straight bits.

Name	Model #	Cut Width	Flute Length	Shank Diameter	Overall Length
 Up Spiral	43820PC	1/8"	1/2"	1/4"	2"
 Up Spiral	43822PC	3/16"	3/4"	1/4"	2"
 Up Spiral	43824PC	1/4"	1"	1/4"	2-1/2"
 Up Spiral	43833PC	3/8"	1-1/4"	1/2"	3"
 Up Spiral	43828PC	1/2"	1-5/8"	1/2"	3-1/2"

DOWN SPIRAL: Double-flute down-cut spiral provides excellent, smooth upper trimmed edge for sizing and plunging applications. Pushes chips down from cut.


Name	Model #	Cut Width	Flute Length	Shank Diameter	Overall Length
 Down Spiral	43819PC	1/8"	1/2"	1/4"	2"
 Down Spiral	43823PC	1/4"	1"	1/4"	2-1/2"
 Down Spiral	43825PC	3/8"	1-1/4"	1/2"	3"
 Down Spiral	42365PC	1/2"	1-1/8"	1/2"	3"
 Down Spiral	43835PC	1/2"	1-1/2"	1/2"	3-1/2"
 Down Spiral	42366PC	1/2"	1-5/8"	1/2"	3-1/2"

UP/DOWN COMPRESSION SPIRAL: Upcut/downcut geometry for single flute cutting speeds with optimum edge finish on both sides of laminated materials.


Name	Model #	Cut Width	Flute Length	Shank Diameter	Overall Length
 Up/Down Compression Spiral	43331PC	1/4"	7/8"	1/4"	2-1/2"
 Up/Down Compression Spiral	43832PC	1/4"	7/8"	1/4"	2-1/2"
 Up/Down Compression Spiral	43332PC	1/2"	1"	1/2"	3"

Straight Plastic Cutting Bits


STRAIGHT DOUBLE "V" FLUTE: For cutting harder plastics, melamine and laminates.

Name	Model #	Cut Width	Flute Length	Shank Diameter	Overall Length
 Straight Double "V" Flute	43816PC	1/4"	3/4"	1/4"	2-1/2"






STRAIGHT SINGLE "O" FLUTE: For cutting soft plastics where faster feed rates are desired.

Name	Model #	Cut Width	Flute Length	Shank Diameter	Overall Length
 Straight Single "O" Flute	43815PC	3/16"	5/8"	1/4"	2"

STRAIGHT SINGLE FLUTE: Designed for cutting of fibrous reinforced plastics and epoxies.



Name	Model #	Cut Width	Flute Length	Shank Diameter	Overall Length
 Straight Single Flute	43049PC	1/2"	1-1/2"	1/2"	3-1/8"

STRAIGHT DOUBLE FLUTE: For cutting fibrous reinforced plastics and epoxies.


Name	Model #	Cut Width	Flute Length	Shank Diameter	Overall Length
 Straight Double Flute	43718PC	1/4"	1"	1/4"	2-1/2"
 Straight Double Flute	43057PC	1/2"	1"	1/2"	2-11/16"
 Straight Double Flute	43058PC	1/2"	1-1/4"	1/2"	2-61/64"
 Straight Double Flute	43720PC	1/2"	1-1/2"	1/2"	2-7/8"
 Straight Double Flute	43721PC	1/2"	2"	1/2"	4-1/8"

Laminate Trimming Bits


FLUSH CUT (SELF PILOT): For trimming high-pressure plastic laminates flush with edge band or substrate.

Name	Model #	Bevel	Dia.	Flute Length	Shank Dia.	Overall Length
 Flush Cut (Self Pilot)	43509PC	Flush	1/4"	1/4"	1/4"	1-1/2"
 Flush Cut (Self Pilot)	43216PC	Flush	1/4"	3/8"	1/4"	2"


BEVEL (SELF PILOT): For bevel trimming high-pressure plastic laminates, as in top edges where bevel is required.

Name	Model #	Bevel	Dia.	Flute Length	Shank Dia.	Overall Length
 Bevel (Self Pilot)	43512PC	7 degree	1/4"	1/4"	1/4"	1-1/2"




BORING & FLUSH TRIM: For penetrating high-pressure plastic laminates and then flush trimming to a pre-cut opening in the substrate.

Name	Model #	Cut Width	Flute Length	Shank Diameter	Overall Length
 Boring & Flush Trim	43231PC	1/4"	1/4"	1/4"	2-1/2"


COMBINATION FLUSH/BEVEL TRIM, TWO FLUTE, ONE EFFECTIVE: For trimming high-pressure plastic laminates flush with edge of substrate. Can also trim a 22° bevel edge.

Name	Model #	Bevel	Dia.	Flute Length	Shank Dia.	Overall Length
 Combination Flush/Bevel Trim, Two Flute, One Effective	43277PC	Flush & 22°	1/2"	1/4"	1/4"	2-5/64"










2-WING BEVEL LAMINATE TRIM: For trimming high-pressure plastic laminate countertop edges where a bevel is required.

Name	Model #	Bevel	Dia.	Flute Length	Shank Dia.	Overall Length
 2-Wing Bevel Laminate Trim	44043PC	15 degree	5/8"	1/4"	1/4"	1-63/64"
 2-Wing Bevel Laminate Trim	43253PC	25 degree	15/16"	15/32"	1/4"	2-15/64"
 2-Wing Bevel Laminate Trim	43334PC	22 degree	1-43/64"	63/64"	1/2"	3-1/32"



OVERHANG CUTOFF: For rough sizing of plastic laminates.

Name	Model #	Overhang	Bearing Dia.	Shank Dia.	Flute Length	Overall Length
 Overhang Cutoff	43516PC	3/16"	3/4"	1/4"	1/2"	2-45/64"

LAMINATE FLUSH TRIM, TWO FLUTE: For trimming high-pressure plastic laminate or Corian® flush with substrate. *Corian is a registered trademark of DuPont.*







Name	Model #	Bevel	Dia.	Flute Length	Shank Dia.	Overall Length
 Laminate Flush Trim, Two Flute	43286PC	Flush	1/4"	1"	1/4"	2-15/32"
 Laminate Flush Trim, Two Flute	43276PC	Flush	3/8"	1/2"	1/4"	2-7/32"
 Laminate Flush Trim, Two Flute	43289PC	Flush	3/8"	1"	1/4"	2-7/8"
 Laminate Flush Trim, Two Flute	43752PC	Flush	1/2"	1/2"	1/2"	3-3/64"
 Laminate Flush Trim, Two Flute	43252PC	Flush	1/2"	1/2"	1/4"	2-29/64"
 Laminate Flush Trim, Two Flute	43731PC	Flush	1/2"	1"	1/4"	3-61/64"
 Laminate Flush Trim, Two Flute	43730PC	Flush	1/2"	1"	1/2"	3-11/64"
 Laminate Flush Trim, Two Flute	43748PC	Flush	1/2"	1-1/4"	1/4"	3-3/32"
 Laminate Flush Trim, Two Flute	43182PC	Flush	1/2"	1-17/32"	1/2"	4-31/64"

BEVEL LAMINATE TRIM, THREE FLUTE: For trimming high-pressure plastic laminate countertop edges where a bevel is required.


Name	Model #	Bevel	Dia.	Flute Length	Shank Dia.	Overall Length
 Bevel Laminate Trim, Three Flute	43335PC	23 degree	45/64"	1/4"	1/4"	1-15/16"
 Bevel Laminate Trim, Three Flute	43270PC	22 degree	7/8"	3/8"	1/4"	2-25/64"

Laminate Trimming Bits (Continued)







LAMINATE FLUSH TRIM, THREE FLUTE: Extra-smooth trimming bit.

Name	Model #	Bevel	Dia.	Flute Length	Shank Dia.	Overall Length
 Laminate Flush Trim, Three Flute	43290PC	Flush	1/2"	1/2"	1/4"	2-29/64"
 Laminate Flush Trim, Three Flute	44039PC	Flush	1/2"	1/2"	1/2"	2-5/8"
 Laminate Flush Trim, Three Flute	43295PC	Flush	1/2"	1"	1/4"	2-61/64"
 Laminate Flush Trim, Three Flute	43187PC	Flush	1/2"	1"	1/2"	3-11/64"
 Laminate Flush Trim, Three Flute	43183PC	Flush	1/2"	1-1/4"	1/2"	4-5/64"
 Laminate Flush Trim, Three Flute	43320PC	Flush	5/8"	13/32"	1/4"	2-3/8"


FLUSH BEVEL COMBINATION, DOUBLE FLUTE: For trimming high-pressure plastic laminates flush with edge band and substrate. Can also trim a 22° bevel edge.

Name	Model #	Cut Width	Flute Length	Bevel	Shank Dia.	Overall Length
 Flush Bevel Combination, Double Flute	44858PC	7/16"	1/4" Fl. 1/4" Bvl.	22 degree	1/4"	1-3/4"



PATTERN CUTTING: Designed for through-templet cuts where guiding with ball bearing is desired.

Name	Model #	Cut Width	Brg. Dia.	Flute Length	Shank Dia.	Overall Length
 Pattern Cutting	43292PC	3/4"	3/4"	1-1/4"	1/2"	2-31/32"
 Pattern Cutting	43451PC	5/16"	1/2"	3/4"	1/4"	2-21/32"
 Pattern Cutting	43325PC	1/2"	1/2"	1"	1/4"	2-63/64"
 Pattern Cutting	43326PC	5/8"	5/8"	1"	1/4"	3"
 Pattern Cutting	43328PC	9/16"	5/8"	9/16"	1/4"	2-35/64"
 Pattern Cutting	43329PC	3/4"	3/4"	1"	1/4"	3-7/64"





BEARING GUIDED DADO: For mortising of doors to accept hinge butts - used with No. 59370 for 3", 3-1/2" and 4" hinges.

Name	Model #	Cut Width	Brg. Dia.	Flute Length	Shank Dia.	Overall Length
 Bearing Guided Dado	43671PC	1/2"	5/8"	3/8"	1/4"	2-25/64"

COMBINATION PANEL PILOT, TWO FLUTE: Straight, double flute with boring point and pilot. For smooth cuts and even feed rates without chatter.










Name	Model #	Cut Width	Flute Length	Shank Dia.	Overall Length
 Combination Panel Pilot, Two Flute	43214PC	3/8"	1"	1/4"	3"
 Combination Panel Pilot, Two Flute	43215PC	1/2"	2"	1/2"	4-5/8"

COMBINATION PANEL PILOT, SINGLE FLUTE: Straight flute with boring point and pilot. Used to cut out openings in diverse combination of materials, especially in the mobile home, modular home and RV industries.



Name	Model #	Cut Width	Flute Length	Shank Dia.	Overall Length
 Combination Panel Pilot, Single Flute	43708PC	1/4"	3/4"	1/4"	2-3/4"
 Combination Panel Pilot, Single Flute	43709PC	3/8"	1"	3/8"	2-63/64"
 Combination Panel Pilot, Single Flute	43064PC	1/2"	1-1/4"	1/2"	3-11/16"
 Combination Panel Pilot, Single Flute	43066PC	1/2"	2-1/32"	1/2"	4-3/4"

Groove Forming Bits


CORE BOX: For reeding, fluting and general ornamentation. Especially effective in fluting flat surfaces.

Name	Model #	Cut Width	Flute Length	Shank Dia.	Overall Length
 Core Box	43144PC	3/8"	17/64"	1/4"	1-33/64"
 Core Box	43145PC	1/2"	3/8"	1/4"	1-5/8"
 Core Box	42904PC	1/2"	1-9/32"	1/2"	2-7/8"
 Core Box	43146PC	5/8"	13/32"	1/4"	1-7/8"
 Core Box	43147PC	3/4"	7/16"	1/4"	1-15/16"
 Core Box	42908PC	3/4"	1-9/32"	1/2"	2-7/8"
 Core Box	42900PC	1"	11/16"	1/4"	1-15/16"
 Core Box	42912PC	1"	1-1/4"	1/2"	2-3/4"
 Core Box	43711PC	1/4"	1/4"	1/4"	1-1/2"

V-GROOVE & SCORING: Ideal for freehand routing, simulating paneling and signwork.







Name	Model #	Cut Width	Flute Length	Shank Dia.	Overall Length
 V-Groove & Scoring	43210PC	1/8"	1/4"	1/4"	1-1/2"
 V-Groove & Scoring	43212PC	1/4"	1/4"	1/4"	1-1/2"

DISH CARVING BIT: For removing large amounts of wood as in making trays, coasters and raised-letter signs.


Name	Model #	Cut Width	Flute Length	Radius	Shank Dia.	Overall Length
 Dish Carving Bit	43473PC	1"	1"	1/4"	1/2"	2-3/4"

Groove Forming Bits (Continued)


V-GROOVE: Excellent for front door grooving, lettering and sign work. Also simulates plank construction on panels.

Name	Model #	Cut Width	Flute Length	Angle	Shank Dia.	Overall Length
 V-Groove	42948PC	1/4"	15/64"	90-degree	1/4"	1-5/8"
 V-Groove	43213PC	3/8"	5/16"	90 degree	1/4"	1-3/4"
 V-Groove	43725PC	1/2"	23/64"	90 degree	1/4"	2"
 V-Groove	42984PC	1/2"	5/8"	60 degree	1/4"	2-1/8"
 V-Groove	43077PC	3/4"	17/32"	90 degree	1/2"	2-1/8"
 V-Groove	43078PC	1"	43/64"	90 degree	1/2"	2-1/4"



PLUNGE ROUNDOVER: Used to round over edges in blind areas where a ball-bearing pilot is not needed.

Name	Model #	Radius	Cut Width	Flute Length	Shank Dia.	Overall Length
 Plunge Roundover	42911PC	1/2"	1-1/2"	1-9/64"	1/2"	2-29/64"


POINT CUTTING ROUNDOVER: For routing decorative grooves for projects such as decorative trim. Can also be used for edge forming when used with an edge guide.

Name	Model #	Radius	Cut Width	Flute Length	Shank Dia.	Overall Length
 Point Cutting Roundover	42992PC	1/4"	1/2"	3/8"	1/4"	2"


PLUNGE TRADITIONAL: Makes a wide, shallow decorative cut. Can also be used for edge forming.

Name	Model #	Radius	Cut Width	Flute Length	Shank Dia.	Overall Length
 Plunge Traditional	43161PC	1/16"	1/2"	3/8"	1/4"	2"
 Plunge Traditional	43162PC	3/32"	3/4"	1/2"	1/4"	1-3/4"

PLUNGE RAISED PANEL: Makes wide, shallow cuts. Creates a raised panel effect in one pass.









Name	Model #	Cut Width	Flute Length	Shank Dia.	Overall Length
 Plunge Raised Panel	43154PC	1-1/8"	15/32"	1/2"	1-25/32"

CLASSICAL: Makes decorative grooves for projects such as furniture and moldings; also used as a plunge bit for detailing the faces of doors and panels. Can be used for edge forming when used with an edge guide.



Name	Model #	Radius	Cut Width	Flute Length	Shank Dia.	Overall Length
 Classical	43167PC	5/32"	3/4"	1/2"	1/4"	2-1/8"

Joining Bits


DOVETAIL: For smooth dovetail joints.

Name	Model #	Cut Width	Degree of Cut	Flute Length	Shank Dia.	Overall Length
 Dovetail	43380PC	3/8"	9 degree	3/8"	1/4"	2"
 Dovetail	43705PC	1/2"	14 degree	33/64"	1/4"	2-17/32"
 Dovetail	43750PC	1/2"	14 degree	33/64"	1/2"	2-17/32"
 Dovetail	43448PC	1/2"	14 degree	33/64"	1/4"	2-17/32"
 Dovetail	43444PC	1/2"	10 degree	5/8"	1/4"	2-3/16"
 Dovetail	43454PC	1/2"	10 degree	5/8"	1/2"	2-3/8"
 Dovetail	43775PC	3/4"	14 degree	29/32"	1/4"	2-1/2"
 Dovetail	43774PC	3/4"	14 degree	7/8"	1/2"	3"



TONGUE & GROOVE ASSEMBLY: Used to cut both tongues and grooves in 5/8" stock; remove the top cutter to make the matching groove cut.

Name	Model #	Cut Width	Flute Length	Shank Dia.	Overall Length
 Tongue & Groove Assembly	43495PC	1-7/8"	3/4"	1/4"	2-49/64"
 Tongue & Groove Assembly	43499PC	1-7/8"	3/4"	1/2"	2-57/64"


DRAWER LOCK: Used to join the fronts and sides of drawers. For use in 1/2"-thick stock.

Name	Model #	Cut Width	Flute Length	Shank Dia.	Overall Length
 Drawer Lock	43510PC	2"	15/32"	1/2"	1-25/32"

45-DEGREE LOCK MITER: Create interlocking corner joints without having to change bit depth setting.



















Name	Model #	Dia.	Carbide Height	Angle	Shank Dia.	Overall Length
 45-Degree Lock Miter	43514PC	2"	13/16"	45 degree	1/2"	2-1/8"
 45-Degree Lock Miter	43503PC	3-1/8"	1-3/8"	45 degree	1/2"	3-1/8"

REVERSIBLE GLUE JOINT: For interlocking horizontal glue joints. *Note: Not for use in hand-held routers.*



Name	Model #	Dia.	Carbide Height	Shank Dia.	Overall Length
 Reversible Glue Joint	43504PC	1-1/2"	1-1/4"	1/2"	2-3/4"













Edge Forming Bits

ROUND-OVER: For smooth, uniformly rounded edges. Lower depth setting results in rounded corner with decorative fillet.






Name	Model #	Radius	Flute Length	Shank Dia.	Overall Length
 Roundover	43418PC	1/16"	1/4"	1/4"	1-57/64"
 Roundover	43404PC	5/32"	29/64"	1/4"	2-1/8"
 Roundover	43421PC	1/8"	23/64"	1/4"	2-1/64"
 Roundover	43422PC	1/8"	23/64"	1/2"	2-17/64"
 Roundover	42901PC	3/16"	13/32"	1/2"	2-5/16"
 Roundover	43085PC	3/16"	13/32"	1/4"	2-1/16"
 Roundover	43402PC	1/4"	1/2"	1/4"	2-13/64"
 Roundover	43425PC	1/4"	1/2"	1/2"	2-13/64"
 Roundover	43086PC	5/16"	37/64"	1/4"	2-9/32"
 Roundover	42905PC	5/16"	37/64"	1/2"	2-9/32"
 Roundover	43405PC	3/8"	21/32"	1/4"	2-23/64"
 Roundover	43427PC	3/8"	21/32"	1/2"	2-23/64"
 Roundover	43408PC	1/2"	3/4"	1/4"	2-7/16"
 Roundover	43091PC	1/2"	3/4"	1/2"	2-7/16"
 Roundover	43108PC	5/8"	7/8"	1/2"	2-37/64"
 Roundover	43092PC	3/4"	1"	1/2"	2-45/64"
 Roundover	43431PC	7/8"	1-1/8"	1/2"	3"
 Roundover	43428PC	1"	1-1/4"	1/2"	3-1/16"

BEADING: For decorative period edging.



Name	Model #	Radius	Flute Length	Shank Dia.	Overall Length
 Beading	43573PC	1/16"	1/4"	1/4"	1-57/64"
 Beading	43577PC	1/8"	23/64"	1/4"	1-31/32"

 Beading	43589PC	1/8"	23/64"	1/2"	2-7/32"
 Beading	43581PC	3/16"	13/32"	1/4"	2-1/64"
 Beading	43593PC	3/16"	13/32"	1/2"	2-21/64"
 Beading	43597PC	1/4"	1/2"	1/2"	2-9/64"
 Beading	43410PC	1/4"	1/2"	1/4"	2-9/64"
 Beading	43585PC	5/16"	37/64"	1/4"	2-7/32"
 Beading	43574PC	5/16"	37/64"	1/2"	2-7/32"
 Beading	43578PC	3/8"	21/32"	1/2"	2-9/32"
 Beading	43413PC	3/8"	21/32"	1/4"	2-9/32"
 Beading	43582PC	1/2"	3/4"	1/2"	2-13/32"
 Beading	43416PC	1/2"	3/4"	1/4"	2-13/32"
 Beading	43586PC	5/8"	7/8"	1/2"	2-35/64"

EDGE BEADING: Traditional bead with fillet. Ideal for matching old moldings or furniture and architectural woodwork.







Name	Model #	Radius	Flute Length	Shank Dia.	Bearing Dia.	Overall Length
 Edge Beading	43364PC	1/8"	9/16"	1/4"	1/2"	2-7/32"
 Edge Beading	43787PC	1/8"	9/16"	1/2"	1/2"	2-15/32"
 Edge Beading	43367PC	3/16"	47/64"	1/4"	1/2"	2-29/64"
 Edge Beading	43783PC	1/4"	55/64"	1/2"	1/2"	2-37/64"
 Edge Beading	43370PC	1/4"	55/64"	1/4"	1/2"	2-37/64"

COVE & BEAD: Classic combination of two styles commonly used in furniture and cabinetry.



Name	Model #	Overall Dia.	Flute Length	Shank Dia.	Overall Length
 Cove & Bead	43178PC	1-1/2"	13/16"	1/4"	2-17/32"
 Cove & Bead	43179PC	1-1/2"	13/16"	1/2"	2-17/32"

Edge Forming Bits (Continued)





COVE: For cutting decorative edging, inverted radii, where smoother finish is desired.

Name	Model #	Radius	Flute Length	Shank Dia.	Overall Length
 Cove	43102PC	1/4"	1/2"	1/4"	2-5/32"
 Cove	43580PC	1/4"	1/2"	1/2"	2-13/32"
 Cove	43103PC	3/8"	5/8"	1/4"	2-29/64"
 Cove	43584PC	3/8"	5/8"	1/2"	2-29/64"
 Cove	43104PC	1/2"	3/4"	1/4"	2-7/16"
 Cove	43588PC	1/2"	3/4"	1/2"	2-7/16"


TRIPLE BEAD: Creates triple bead with fillets in one pass.

Name	Model #	Diameter	Each Radius	Flute Length	Shank Dia.	Overall Length
 Triple Bead	43538PC	7/8"	1/8"	1"	1/4"	2-31/32"
 Triple Bead	43539PC	7/8"	1/8"	1"	1/2"	2-31/32"




BULL NOSE: For cutting bull nose edging. Additional cutter height allows for addition of top and bottom fillets.

Name	Model #	Material Thickness	Cutting Length	Radius	Cutting Length	Shank Dia.	Overall Length
 Bull Nose	43533PC	1/4"	9/32"	9/64"	9/32"	1/4"	2"
 Bull Nose	43534PC	1/2"	17/32"	17/64"	17/32"	1/2"	2-11/32"
 Bull Nose	43535PC	3/4"	3/4"	3/8"	3/4"	1/2"	2-9/16"
 Bull Nose	43536PC	1-1/8"	1-5/32"	37/64"	1-5/32"	1/2"	2-31/32"





SHALLOW BULL NOSE: Creates attractive "shallow" bull nose profile. Additional cutter height allows for addition of top and bottom fillets.

Name	Model #	Radius	Cutting Length	Cutting Length	Shank Diameter
 Shallow Bull Nose	43537PC	25/32"	15/16"	15/16"	1/2"



OEGEE WITH FILLET: Graceful decorative design may be routed with or without fillet.

Name	Model #	Overall Dia.	Flute Length	Radius	Shank Dia.	Overall Length
 Ogee with Fillet	43175PC	1-3/8"	9/16"	3/16"	1/4"	2-9/32"
 Ogee With Fillet	43177PC	1-5/8"	3/4"	1/4"	1/2"	2-15/32"
 Ogee With Fillet	43759PC	1-5/8"	3/4"	1/4"	1/4"	2-15/32"



ROMAN OEGEE: For decorative edging and furniture. Lower depth setting results in addition of fillet.

Name	Model #	Overall Dia.	Flute Length	Radius	Shank Dia.	Overall Length
 Roman Ogee	43126PC	1-3/16"	9/16"	5/32"	1/4"	2-9/32"
 Roman Ogee	43600PC	1-3/16"	9/16"	5/32"	1/2"	2-9/32"
 Roman Ogee	43127PC	1-1/2"	3/4"	1/4"	1/4"	2-15/32"
 Roman Ogee	43133PC	1-1/2"	3/4"	1/4"	1/2"	2-15/32"


DOUBLE ROMAN OEGEE: For forming decorative edges on projects such as molding, furniture and shelving.

Name	Model #	Overall Dia.	Flute Length	Radius	Shank Dia.	Overall Length
 Double Roman Ogee	43763PC	1-9/16"	3/4"	1/4"	1/4"	2-15/32"
 Double Roman Ogee	43767PC	1-9/16"	3/4"	1/4"	1/2"	2-15/32"


CHAMFER: For 45-degree bevel cutting. Lower depth setting results in chamfer with fillet.

Name	Model #	Bevel	Flute Length	Fillet	Shank Dia.	Overall Length
 Chamfer	43072PC	45 degree	49/64"	1/4"	1/4"	2-31/64"
 Chamfer	43190PC	45 degree	49/64"	1/4"	1/2"	2-31/64"






MULTI-PROFILE MOLDING MAKER: Produce a multitude of different profiles by varying height and fence settings, and using multiple passes.

Name	Model #	Flute Length	Large Radius	Small Radius	Small Radius	Shank Dia.	Overall Length
 Multi-Profile Molding Maker	43555PC	1-7/8"	3/8"	5/16"	5/16"	1/2"	3-57/64"

WAVY EDGE: Decorative design which can be used to simulate Victorian moldings.

Name	Model #	Overall Diameter	Flute Length	Shank Diameter	Overall Length
 Wavy Edge	43180PC	1-1/4"	5/8"	1/4"	2-9/32"

CLASSICAL: Beautiful bead and cove combination provide a quality accent to any project.

Name	Model #	Overall Diameter	Flute Length	Shank Diameter	Overall Length
 Classical	43171PC	1-1/4"	9/16"	1/4"	2-9/32"
 Classical	43751PC	1-1/4"	9/16"	1/2"	2-61/64"
 Classical	43173PC	1-1/2"	39/64"	1/4"	2-21/64"
 Classical	43174PC	1-1/2"	11/16"	1/2"	2-25/64"
 Classical	43559PC	1-1/4"	1-3/64"	1/2"	2-23/64"

Edge Forming Bits (Continued)

CROWN MOLDING: Used to make moldings, such as crown, base and chair rail moldings. Also used to make picture frames.




Name	Model #	Overall Dia.	Flute Length	Shank Dia.	Overall Length
 Crown Molding	43552	1-1/4"	2-1/4"	1/2"	3-3/42"


TABLE EDGE - THUMBNAIL: Creates soft sloping edge as used on table tops and plaques. For use in table mounted routers only.

Name	Model #	Overall Dia.	Bearing Dia.	Flute Length	Radius	Shank Dia.	Overall Length
 Table Edge - Thumbnail	43524PC	2-1/2"	1/2"	3/4"	3/8"	1/2"	2-29/64"


COVE & BEAD FACE MOLDING: Classic combination of two styles commonly used in furniture and cabinetry.

Name	Model #	Flute Length	Fillet Height	Large Radius	Small Radius	Shank Dia.	Overall Length
 Cove & Bead Face Molding	43543PC	1-3/8"	7/64"	3/4"	9/64"	1/2"	3-33/64"


REVERSE CURVE OGEE & BEAD: Classic combination of two styles commonly used in furniture and cabinetry.

Name	Model #	Flute Length	Fillet Height	Large Radius	Small Radius	Shank Dia.	Overall Length
 Reverse Curve Ogee & Bead	43540PC	1-3/8"	11/64"	5/16"	11/64"	1/2"	3-17/64"








OGEE & BEAD WITH FILLET: Classic combination of two styles commonly used in furniture and cabinetry.

Name	Model #	Flute Length	Fillet Height	Large Radius	Small Radius	Shank Dia.	Overall Length
 Ogee & Bead With Fillet	43544PC	1-47/64"	1/4"	5/16"	1/8"	1/2"	3-27/64"

TRADITIONAL CHAIR RAIL: Classic combination of two styles commonly used in furniture and cabinetry.


Name	Model #	Flute Length	Fillet Height	Large Radius	Small Radius	Shank Dia.	Overall Length
 Traditional Chair Rail	43541PC	1-1/2"	5/32"	3/4"	5/32"	1/2"	3-11/16"

RABBETING: 3/8" and 1/2" piloted bits for rabbeting or step cutting edges.


Name	Model #	Cut Width	Flute Length	Shank Diameter	Overall Length
 Rabbeting	43764PC	3/8"	1/8"	1/4"	2"
 Rabbeting	43768PC	3/8"	1/4"	1/4"	2-3/32"
 Rabbeting	43772PC	3/8"	3/8"	1/4"	2-17/64"
 Rabbeting	43780PC	3/8"	1/2"	1/4"	2-23/64"
 Rabbeting	43082PC	3/8"	1/2"	1/4"	2-1/8"
 Rabbeting	43120PC	1/2"	1/2"	1/4"	2-3/8"
 Rabbeting	43121PC	1/2"	1/2"	1/2"	2-3/8"

Solid Surface Forming Bits


COLOR CORE® ROUNDOVER: For making a 5/32" roundover on edges of Color Core® and similar abrasive materials. *Color Core® is a registered trademark of Formica Corporation.*


Name	Model #	Radius	Flute Length	Shank Diameter	Overall Length
 Color Core® Roundover	43404PC	5/32"	29/64"	1/4"	2-1/8"

TRU-MATCH SOLID SURFACE: Produces self-aligning mating edges on solid surface materials.


Name	Model #	Cut Width	Flute Length	Shank Diameter	Overall Length
 Tru-Match Solid Surface	43692PC	5/8"	1-3/4"	1/2"	3-1/8"


UNDER ROUND: For cutting bottom-half of bull nose on 1" or 1-1/2" material without turning the material over.

Name	Model #	Material Thickness	Flute Length	Radius	Shank Diameter	Overall Length
 Under Round	43929PC	1"	3/4"	1/2"	1/2"	3-5/32"


 Under Round	43930PC	1-1/2"	1"	3/4"	1/2"	3-13/32"
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ROUNDOVER: Use with under round bits for cutting top-half of bull nose on 1" or 1-1/2" material.

Name	Model #	Material Thickness	Flute Length	Radius	Shank Diameter	Overall Length
 Roundover	43931PC	1"	3/4"	1/2"	1/2"	2-13/32"


 Roundover	43932PC	1-1/2"	1"	3/4"	1/2"	2-21/32"
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BOWL & SINK TRIM: For sink cutouts. First bit creates rough cut-out with 1/16" margin. Second bit creates flush finished cut.


Name	Model #	Description	Flute Length	Shank Diameter	Overall Length
 Bowl & Sink Trim	43920PC	Bowl & Sink Trim	1"	1/2"	3-1/4"


 Bowl & Sink Trim	43921PC	Bowl & Sink Trim	1"	1/2"	3-15/64"
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TOPMOUNT BOWL CUTOUT: For sink cut-outs for topmount installation of sink or bowl. Use with Corian® #s 830A, 852RA, 852LA, and 854RA, among others. Use with 42050 Template Guide. *Corian is a registered trademark of DuPont.*


Name	Model #	Bevel	Overall Dia.	Flute Length	Shank Dia.	Overall Length
 Topmount Bowl Cutout	43936PC	15 degree	57/64"	15/16"	1/2"	2-9/16"

OGEE BOWL: For fabricating and edging solid surfacing, composite and hardwood materials.

Name	Model #	Angle	Rad.	Shnk. Dia.	Bear. Dia.	Bear. Angle	Shnk. Lgth.	Flute Lgth.	Overall Lgth.
 Ogee Bowl	43910PC	15°	1/2"	1/2"	1/2"	7/8"	10°	1"	31/32" 2-51/64"



 Ogee Bowl	43911PC	15°	1/2"	1/2"	1/2"	7/8"	10°	1"	1-1/4" 3-3/64"
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NO-DRIP: To cut a no-drip edge where countertop and face material meet.


Name	Model #	Flute Length	Shank Diameter	Overall Length
 No-Drip	43925PC	1/2"	1/2"	2-1/4"

Solid Surface Forming Bits (Continued)


ROUNDROVER BOWL BITS: For fabricating and decorative edge work of solid surfacing, composite and hardwood materials.

Name	Model #	Angle	Bear. Angle	Bear. Dia.	Shnk. Dia.	Shnk. Lgth.	Flute Lgth.	Edge Radius	Overall Lgth.
 Roundover Bowl Bits	43913PC	15°	10°	7/8"	1/2"	1"	1"	1/2"	2-49/64"
 Roundover Bowl Bits	43914PC	15°	10°	7/8"	1/2"	1"	1-1/4"	1/2"	3-1/32"


ROUNDROVER: Used with no-drip edge bit and for general purpose edgework.

Name	Model #	Application	Overall Dia.	Radius	Flute Length	Shank Dia.	Overall Length
 Roundover	43924PC	Edgework	1-1/8"	5/16"	9/16"	1/2"	2-7/32"

UNDERMOUNT BEVEL BOWL: For fabricating and edging solid surfacing, composite and hardwood materials.


Name	Model #	Angle	Flute Length	Shank Dia.	Shank Length	Bear. Dia.	Bear. Angle	Overall Length
 Undermount Bevel Bowl	43915PC	15°	1"	1/2"	1-3/4"	7/8"	10°	3-9/32"

NO-DRIP: For fabricating and edging solid surfacing, composite and hardwood materials.


Name	Model #	Radius	Radius	Shank Dia.	Bear. Dia.	Shank Lgth.	Flute Lgth.	Overall Lgth.
 No-Drip	43903PC	1/4"	1/4"	1/2"	7/8"	1"	1-1/8"	3-21/64"

Cabinet Bits



DRAWER PULL: Creates attractive drawer and door pulls in place of handles or knobs.
Note: Not for use in hand-held routers.

Name	Model #	Overall Diameter	Flute Length	Shank Diameter	Overall Length
 Drawer Pull	43567PC	1-7/8"	1-5/32"	1/2"	2-21/32"


INSET DOOR EDGE: For creating rounded front - rabbeted back doors as used in furniture and kitchen cabinets. *Note: Not for use in hand-held routers.*

Name	Model #	Overall Diameter	Flute Length	Shank Diameter	Overall Length
 Inset Door Edge	43565PC	1/2"	1-3/16"	1/2"	2-1/2"



HORIZONTAL PANEL RAISER, TRADITIONAL: Wide, shallow cutting bit for easy raised panel effect. *Note: Not for use in hand-held routers.*

Name	Model #	Overall Dia.	Width of Cut	Flute Length	Angle	Shank Length	Overall Length
 Horizontal Panel Raiser, Traditional	43570PC	2-3/4"	1-1/8"	5/8"	26°	1/2"	2-11/32"
 Horizontal Panel Raiser, Traditional	43527PC	3-1/2"	1-1/2"	5/8"	18.5°	1/2"	2-5/16"


VERTICAL PANEL RAISER, TRADITIONAL: Wide, shallow cutting bit for easy raised panel effect.

Name	Model #	Overall Diameter	Flute Length	Bevel Angle	Shank Diameter	Overall Length
 Vertical Panel Raiser, Traditional	43545PC	1-1/8"	1-9/16"	15°	1/2"	3"



HORIZONTAL PANEL RAISER, COVE: Wide, shallow cove style for easy raised panel effect. *Note: Not for use in hand-held routers.*

Name	Model #	Overall Dia.	Width of Cut	Flute Length	Shank Length	Overall Length
 Horizontal Panel Raiser, Cove	43788PC	2-1/2"	1"	3/4"	1/2"	2-29/64"
 Horizontal Panel Raiser, Cove	43528PC	3-1/2"	1-1/2"	9/16"	1/2"	2-1/4"


VERTICAL PANEL RAISER, CHARDONAY OGEE: Used to mill raised panel doors and drawer faces. Produces the same quality of cut as a horizontal bit while reducing the tip and surface speed rates for increased safety.

Name	Model #	Overall Dia.	Flute Lgth.	Rad.	Rad.	Rad.	Shank Dia.	Overall Lgth.
 Vertical Panel Raiser, Chardonay Ogee	43490PC	1"	1-1/2"	3/32"	3/32"	3/32"	1/2"	3"


HORIZONTAL PANEL RAISER, OGEE: Wide, shallow ogee style for easy classical raised panel effect. *Note: Not for use in hand-held routers. For stationary tool applications only.*

Name	Model #	Overall Dia.	Width of Cut	Radius Length	Flute Length	Shank Dia.	Overall Length
 Horizontal Panel Raiser, Ogee	43529PC	3-1/2"	1-1/2"	7/8"	5/8"	1/2"	2-5/16"
 Horizontal Panel Raiser, Ogee	43571PC	2-3/4"	1-1/8"	7/16"	39/64"	1/2"	2-5/16"


VERTICAL PANEL RAISER, OGEE: Wide, shallow ogee style for easy classical raised panel effect.

Name	Model #	Overall Dia.	Flute Length	Large Radius	Small Radius	Shank Dia.	Overall Length
 Vertical Panel Raiser, Ogee	43547PC	1-1/8"	1-9/16"	1"	1"	1/2"	3"


CLASSICAL STILE: Use to create professional stile and rail doors.

Name	Model #	Overall Dia.	Cut. Lgth.	Shank Dia.	Shank Lgth.	Overall Lgth.	Flute Lgth.	Slot Lgth.	Bear. Dia.	Rad.
 Classical Stile	43550PC	1-5/8"	5/8"-31/32"	1/2"	1-1/2"	3-3/32"	3/8"	1/4"	22mm	5/32"


CLASSICAL RAIL: Use to create professional stile and rail doors.

Name	Model #	Overall Dia.	Cut. Lgth.	Shank Dia.	Shank Lgth.	Overall Lgth.	Flute Lgth.	Slot Lgth.	Bear. Dia.	Rad.
 Classical Rail	43551PC	1-5/8"	5/8"-31/32"	1/2"	1-1/2"	3 3/32"	3/8"	1/4"	22mm	5/32"


OGEE STILE: Use to create professional stile and rail doors.

Name	Model #	Overall Dia.	Cut. Lgth.	Shank Dia.	Shank Lgth.	Overall Lgth.	Flute Lgth.	Slot Lgth.	Bear. Dia.	Rad.
 Ogee Stile	43560PC	1-5/8"	5/8"-31/32"	1/2"	1-1/2"	3-3/32"	29/64"	1/4"	22mm	5/32"

OGEE RAIL: Use to create professional stile and rail doors.


Name	Model #	Overall Dia.	Cut. Lgth.	Shank Dia.	Shank Lgth.	Overall Lgth.	Flute Lgth.	Slot Lgth.	Bear. Dia.	Rad.
 Ogee Rail	43561PC	1-5/8"	5/8"-31/32"	1/2"	1-1/2"	3-3/32"	29/64"	1/4"	22mm	5/32"

OGEE STACKED STILE AND RAIL: Makes both stiles and rails for cabinet doors. Simply change the bit height to switch between cuts. Depth of cut is 3/8"; suitable for 5/8" to 7/8" stock.


Name	Model #	Cut Width	Flute Length	Shank Diameter	Overall Length
 Ogee Stacked Stile and Rail	43791PC	1-5/8"	1-3/8"	1/2"	3-25/64"

Cabinet Bits (Continued)

Ogee Matched Stile and Rail Set: Two-piece male and female set produces strong, clean, perfectly fitting stile and rail joints in all types of wood. Depth of cut is 3/8"; suitable for 5/8" to 7/8" stock.


Name	Model #	Cut Width	Shank Diameter	Overall Length
 Ogee Matched Stile and Rail Set	43747PC	1-5/8"	1/2"	3-3/32"

EUROPEAN DOOR EDGE: Used to make finger grips on the closing and end trim of cabinet doors. Reversible design can be used face up or face down.



Name	Model #	Cut Width	Shank Length	Shank Diameter	Overall Length
 European Door Edge	43493PC	1-7/8"	1-1/8"	1/2"	2-7/16"

Specialty Bits



KEYHOLE: For boring hole and routing to make a T slot where wall mount is required for pictures, etc. Hole diameter is 3/8" with a neck cutting width 3/16".

Name	Model #	Cut Width	Neck Cut Width	Flute Length	Shank Diameter	Overall Length
 Keyhole	43319PC	3/8"	3/16"	3/8"	1/4"	1-5/8"

T SLOT WALL GROOVER: Makes horizontal T-shaped slots for wall display units that use hanging brackets.



Name	Model #	Large Diameter	Small Diameter	Flute Length	Shank Diameter	Overall Length
 T Slot Wall Groover	42903PC	1/2"	5/16"	3/8"	1/4"	2"
 T Slot Wall Groover	42907PC	1-1/16"	3/8"	47/64"	1/2"	2-23/64"

DADO AND PLANER: Used to clean dadoses and rout signs. Puts a ready-for-sanding finish on rough stock. Can be used to strip large, flat areas of thick, old paint or varnish.

Name	Model #	Cut Width	Flute Length	Shank Diameter	Overall Length
 Dado and Planer	43304PC	3/4"	3/8"	1/4"	2-1/4"
 Dado and Planer	43308PC	3/4"	3/8"	1/2"	2-1/4"



Biscuit Cutters

BISCUIT CUTTERS: Combination biscuit cutter and 1/4" kerf slot cutter eliminates the need to slide the cutter through the workpiece after the plunge cut is made. Used for biscuit joining, as well as making rabbets, dadoses, lap joints, spline joints, slots and T-molding installations.










Name	Model #	Overall Diameter	Kerf Thickness	Shank Diameter
 Biscuit Cutter System	43316PC	1-7/8"	5/32"	1/4"
 Biscuit Cutter System	43317PC	1-7/8"	5/32"	1/2"

Slot Cutters and Production Bits



STRAIGHT BITS: For use with Model 410 & 411 Production Trimmers.

Name	Model #	Cut Width	Flute Length	Shank Diameter	Overall Length
 Straight Bit	43109PC	1/8"	1/2"	1/4"	1-1/2"
 Straight Bit	43310PC	3/16"	13/32"	1/4"	1-1/2"

3-WING SLOT CUTTERS: Used to make slots for "T" molding and weather stripping.

Name	Model #	Diameter	Shank Diameter	Depth of Cut	Kerf Thickness
 Arbor	42196PC	5/16"	1/4"		
 Arbor	43395PC	5/16"	1/2"		
 Cutter	43247PC	1-7/8"		1/2"	.062"
 3-Wing Slot Cutter	43343PC			1/2"	.070"
 3-Wing Slot Cutter	43249PC			1/2"	.078"
 3-Wing Slot Cutter	43250PC			1/2"	.093"
 Cutter	43255PC	1-7/8"		1/2"	.125"
 Cutter	43532PC	1-7/8"		1/2"	.156"
 3-Wing Slot Cutter	43256PC			1/2"	.187"
 Cutter	43258PC	1-7/8"		1/2"	.250"

STACKABLE SLOT CUTTER ASSEMBLIES: Used to make rabbets, dadoses, lap joints, tongue and groove joints and T-molding installations. Assembly comes with four 3-wing slot cutters (one each with a 1/8", 5/32", 3/16" and 1/4" kerf), a 1/2" arbor bearing for 1/2" depth of cut, shims and spacers. Use any or all in combination, or use as separate precision cutters. When using a single cutter, use as many shims as necessary to insure the cutter is tightly fastened for a safe cut.

Name	Model #	Cut Width	Flute Length	Shank Diameter	Overall Length
 Stackable Slot Cutter Assembly	43388PC	1-7/8"	1/8" - 23/32"	1/4"	2-29/32"
 Stackable Slot Cutter Assembly	43392PC	1-7/8"	1/8" - 23/32"	1/2"	3-5/32"

MULTI-DEPTH RABBETING KIT

Model 43749PC
Kit contains one 1/2" shank Rabbeting bit; seven bearings with outside diameters of 1-1/2", 1-1/4", 1", 7/8", 3/4", 5/8", and 1/2"; one 10-32 x 3/8" Allen head cap screw and one Allen wrench.

Cut Width:	1-1/2"
Flute Length:	1/2"
Shank Diameter:	1/2"
Overall Length:	2-3/8"





CORDLESS TOOL SYSTEM

CORDLESS TOOL SYSTEM WITH LITHIUM-ION BATTERY TECHNOLOGY

The 28 volt Lithium-Ion battery packs power the entire Milwaukee V28™ System of power tools. The V28™ Lithium-Ion battery pack offers up to twice the run-time of an 18V NiCd and NiMH pack and is actually lighter than 18V NiCd and NiMH packs! Lithium-Ion technology allows consistent fade-free power – meaning the first cut is as powerful as the last. V28™ Lithium-Ion battery packs will never develop a memory and can be charged at any time regardless of the pack's current charge level! Press the 'fuel gauge' button and LED indicators display remaining charge left in the pack.



48-11-2830

V28 LITHIUM-ION

FEATURES:

- Fuel Gauge
- Non-slip grip surface
- Born-on-date and performance optimizing circuit
- 2-year warranty
- Eco-friendly

BAND SAW

0729-21

0-225/0-350 RPM

FEATURES:

- 28 Volt Milwaukee high power motor cuts as fast as corded version.
- Over 200 cuts of 1" conduit per battery charge.
- High/Low speed selector switch with lock.
- Two-finger trigger speed control.
- Comfortable non-slip Soft-Grip reduces vibration and fatigue.
- LED light aids cutting visibility.
- Deep cut full 3-3/4" x 4-3/4" cutting capacity.



SAWZALL® RECIPROCATING SAW

0719-22

FEATURES:

- 1-1/8" stroke, 0/2,000 - 0/3,000 SPM for extremely fast cutting.
- Accepts standard 1/2" shank Sawzall® blades.
- Tool-free adjustable shoe quickly adjusts blade depth.
- Exclusive gear protecting clutch for long life.
- Rugged Metal Quik-Lok™ blade clamp for fast tool-free blade changes.
- 28 Volt Milwaukee high power motor.
- High/Low speed selector switch with lock.
- Comfortable two-finger variable speed trigger.
- Comfortable Non-Slip Soft Grip reduces vibration and fatigue.



6-1/2 IN. CIRCULAR SAW

0730-22

FEATURES:

- 28 Volt Milwaukee high power motor delivers 4,200 RPM for fastest cutting performance.
- 50° bevel capacity easily adjusts for a wide range of cuts.
- Electric Brake stops blade in less than 2 seconds for fast repetitive cuts.
- Magnesium upper and lower guards for impact resistance.
- Lightweight aircraft aluminum shoe reduces fatigue and is rugged enough for the jobsite.
- Comfortable non-slip Soft-Grip reduces vibration and fatigue.



IMPACT WRENCH

0779-22

FEATURES:

- 28 Volt Milwaukee high power motor delivers 325 ft.-lbs. of torque, 0-1,450 RPM and 0-2,450 BPM.
- Hanger bracket w/ solid steel ring.
- Flat head detent pin for secure socket retention (round head pin also included).
- Magnesium gearcase for added durability and lighter weight.
- Comfortable Non-Slip Soft-Grip reduces vibration and fatigue.
- Reversible battery pack allows user to change tool's balance for overhead work or to fit in tight areas.



1/2 IN. HAMMER-DRILL

0724-24

FEATURES:

- 28 Volt Milwaukee high power motor delivers 600 in.-lbs. of torque.
- Heavy-duty 2-speed gear box with all metal gears delivers 0-600/0-1,800 RPM; 0-9,000/0-27,000 BPM.
- Ratcheting, single-sleeve chuck with carbide jaws for superior gripping strength.
- Metal hammer selector for added durability
- Clip-Lok™ System secures tool to belt with one hand.
- Comfortable non-slip Soft-Grip reduces vibration and fatigue.
- Reversible battery pack allows user to change drill balance for overhead work or in confined areas.



ROTARY HAMMER

IT'S COMING. The most powerful cordless rotary hammer in its weight class will be AVAILABLE SOON.

ACCESSORIES

ONE-HOUR CHARGER

48-59-2801



WORK LIGHT

49-24-0185





CORDLESS/ELECTRIC DRILLS

18V 1/2 IN. LOK-TOR™ DRIVER/DRILL KIT

0622-24

INCLUDES

- Two 2.4 Amp-Hr. 18V batteries
- Universal charger
- Side handle
- Carrying case

FEATURES:

- All-metal ratcheting chuck with carbide jaws for the highest grip torque on bits.
- Milwaukee-built motor provides up to 495 in.-lbs. of torque.
- Up to 50% more run-time than competitive products.
- Milwaukee's exclusive reversible battery allows users to adjust balance and get into tight spaces.



SPECIFICATIONS

Voltage	18 DC
Chuck Size	1/2 in.
No Load Speed	0-500/0-1,700 RPM
Torque	495 in.-lbs.
Chuck Type	Keyless, Metal
Reversible Battery	Yes
No. of Batteries Included	2
Amp Hours	2.4
Spindle Lock	Yes
Clutch Settings	20
Capacity in Steel	1/2 in.
Capacity in Wood	2-1/8 in.
Length	10-1/2 in.
Tool Weight	6.3 lbs.

1/2 IN. MAGNUM® DRILL, 0-850 RPM

0234-6

INCLUDES

- Side handle
- Chuck key with holder

FEATURES:

- 5.5 amp motor, 0 to 850 rpm, trigger speed control with reversing.
- Heavy-duty industrial chuck.
- 8 ft. 3-wire Quik-Lok® cord with easy detachment for storage and service.
- Exclusive brush cartridge system changes brushes in less than one minute.



SPECIFICATIONS

Voltage	120 AC
Chuck Size	1/2 in.
Amps	5.5
No Load Speed	0-850 RPM
Chuck Type	Keyed
Spindle	1/2 in.-20
Gear Train	Double
Cord Type	8 ft. Quik-Lok
Construction Type	Grounded
Trigger Lock	On
Spindle Lock	No
Soft Grip Handle	No
Length	10-1/2 in.
Tool Weight	4.8 lbs.

1/2 IN. MAGNUM® DRILL, 0-850 RPM WITH ALL METAL KEYLESS CHUCK

0235-21

INCLUDES

- Side handle

FEATURES:

- 5.5 amp motor, 0 to 850 rpm, trigger speed control with reversing.
- Heavy-duty industrial single sleeve all metal keyless chuck and spindle lock.
- 8 ft. 3-wire Quik-Lok® cord with easy detachment for storage and service.
- Exclusive brush cartridge system changes brushes in less than one minute.



SPECIFICATIONS

Voltage	120 AC
Chuck Size	1/2 in.
Amps	5.5
No Load Speed	0-850 RPM
Chuck Type	Keyless, Metal
Spindle	1/2 in.-20
Gear Train	Double
Cord Type	8 ft. Quik-Lok
Construction Type	Grounded
Trigger Lock	On
Spindle Lock	Yes
Soft Grip Handle	No
Length	10-1/2 in.
Tool Weight	4.9 lbs.

3/8 IN. MAGNUM® DRILL, 0-2800 RPM WITH KEYLESS CHUCK

0233-20

INCLUDES

- Side handle

FEATURES:

- 5.5 amp motor, 0 to 2,800 rpm, trigger speed control with reversing.
- Heavy-duty industrial keyless chuck.
- 8 ft. 2-wire rubber cord.
- Exclusive brush cartridge system changes brushes in less than one minute.



SPECIFICATIONS

Voltage	120 AC
Chuck Size	3/8 in.
Amps	5.5
No Load Speed	0-2,800 RPM
Chuck Type	Keyless, Metal
Spindle	3/8 in.-24
Gear Train	Single
Cord Type	8 ft. Fixed
Construction Type	Double Insulated
Trigger Lock	On
Spindle Lock	No
Soft Grip Handle	No
Length	10 in.
Tool Weight	4.0 lbs.





D-HANDLE, RIGHT ANGLE AND CLOSE QUARTER DRILLS

1/2 IN. D-HANDLE DRILLS

1001-1

Variable speed – 0-600 rpm
Triple gear reduction
8' fixed cord

1007-1

Variable speed – 0-600 rpm
Triple gear reduction
8' Quik-Lok® cord

1101-1

Single speed – 500 rpm
Triple gear reduction
8' fixed cord

1107-6

Variable speed – 0-500 rpm
Triple gear reduction
8' Quik-Lok cord

1250-1

Variable speed – 0-1,000 rpm
Double gear reduction
8' Quik-Lok cord



ALL INCLUDE

Side handle
Chuck key with holder

COMMON FEATURES:

- 1/2 in. capacity in steel.
- Powerful 7 amp Milwaukee built motor.
- Reversing speed.

COMMON SPECIFICATIONS

Voltage 120 AC
Chuck Size 1/2 in.
Chuck Type Keyed
Spindle 1/2 in.-20
Construction Type Grounded
Length 14-3/4 in.
Tool Weight 6.8 lbs.

ACCESSORIES



Quik-Lok Cord



Right Angle Drive



Quick Change Chuck

Converts 3 jaw chuck into a 7/16 in. quick change chuck (1101-1 and 1250-1)



Angle Drill Kit 33 Degree

- Stretches drilling reach up to 30 in.
- Allows drilling up to 2-9/16 in. diameter holes.
- Use 33 degree angle drive with 30 in. extension only.

1/2 IN. D-HANDLE RIGHT ANGLE DRILL KITS

3002-1

Variable speed – 0-400/0-900 rpm
Handles up to 2-9/16" selffeed bit
8' fixed cord

3102-6

Two speed – 335 and 750 rpm
Handles up to 2-9/16" selffeed bit
8' fixed cord

3107-6

Variable speed – 0-335/0-750 rpm
Handles up to a 4-5/8" selffeed bit
8' Quik-Lok cord



ALL INCLUDE

Carrying case
RAD assembly
Side handle
9/16" open end wrench
3/16" socket wrench
Chuck remover bar

COMMON SPECIFICATIONS

Voltage 120 AC
Chuck Size 1/2 in.
Chuck Type Keyed
Gear Train Quadruple
Construction Type Grounded
Length 16-3/4 in.
Tool Weight 10.3 lbs.

ACCESSORIES



Ship Auger Bit (3107-6 only)

- 1" diameter, 6" overall length.
- 1/2" shank, 4" twist.

Selffeed Bits – Electricians and Plumbers rely on Selffeed Bits for large hole drilling in wood.



- 1-1/2", 2", 2-1/8", 2-1/2" and 2-9/16" bit diameters available.
- 7/16" hex shank.



- 4-5/8" diameter.
- 3 milled flat shank.

CLOSE QUARTER DRILLS

0375-6

0-1,300 rpm, reversing
3/8" chuck
6-1/2" long, 3 lbs.

0379-1

0-750 rpm, reversing
1/2" chuck
6-3/4" long, 3.5 lbs.

COMMON FEATURES:

- 3.5 amp motor.
- Trigger speed control.
- Heavy-duty industrial chuck.
- 55° angled chuck for easy access to tight places.
- Ideal for working in tight spaces where a full size drill doesn't fit.



BOTH INCLUDE

Chuck key with holder

COMMON SPECIFICATIONS

Voltage 120 AC
Chuck Type Keyed
Spindle 1/2 in.-20
Gear Train Double
Cord Type 7 ft. Fixed
Construction Type Double Insulated
Spindle Lock No
Soft Grip Handle No



MAGNETIC DRILLS / HEAVY-DUTY DRILLS

ELECTROMAGNETIC DRILL PRESS BASES

4202

FIXED POSITION
9 in. drill travel
15"Hx4¼"Wx11"L
41 lbs.



4203

ADJUSTABLE POSITION
11 in. drill travel
17¼"Hx4¼"Wx11"L
49 lbs.



COMMON FEATURES:

- 120 Volt AC only, 12.5 amp max. rating.
- Variable speed base.
- For use on any flat ferrous material, 1/2 inch and thicker.

COMMON SPECIFICATIONS

Voltage 120 AC
Electronic Feedback Yes
Cord Type 9 ft. Fixed
Construction Type Grounded

ELECTROMAGNETIC DRILL PRESS MOTORS

Select Motor 4253-1 or 4292-1 for Base 4202
Select Motor 4262-1 or 4297-1 for Base 4203



4253-1
1/2" capacity
6.2 amp motor
600 rpm
1/2" keyed chuck
Taps up to
5/8" -18
threaded hole.



4262-1
3/4" capacity
11.5 amp motor
350 rpm
Taps up to
1" -14
threaded hole.



4292-1 / 4297-1
1-1/4" capacity
11.5 amp motor
375/750 / 250/500 rpm
Taps up to 1" -14
threaded hole.

All four motors develop up to 1600 pounds of drill point pressure with a 1-inch steel plate.

1/2 IN. COMPACT DRILLS

1610-1

650 RPM
Double Gear Train
11.2 lbs.

1630-1

900 RPM
Double Gear Train
11.2 lbs.

1660-6

450 RPM
Triple Gear Train
11.4 lbs.

ALL INCLUDE

Pipe handle

COMMON FEATURES:

- 1/2 in. capacity in steel.
- Powerful 7 amp motor.
- Heat treated gears are Helical-Cut for quiet performance.

COMMON SPECIFICATIONS

Voltage 120 AC
Chuck Size 1/2 in.
Amps 7.0
Chuck Type Keyed
Spindle 5/8 in. -16
Cord Type 8 ft. Fixed
Construction Type Grounded
Spindle Lock No
Soft Grip Handle No
Length 12-1/4 in.



3/4 IN. LARGE DRILL

1854-1

350 RPM
Reversing

INCLUDES

Pipe handle



FEATURES:

- 3/4 in. capacity in steel.
- Powerful 10 amp motor.
- #3 Jacobs taper spindle.

SPECIFICATIONS

Voltage 120 AC/DC
Chuck Size 3/4 in.
Amps 10.0
Chuck Type Keyed
Spindle #3 J.T.
Gear Train Triple
Cord Type 8 ft. Fixed
Construction Type Grounded
Spindle Lock No
Soft Grip Handle No
Length 18-1/2 in.
Weight 19.0 lbs.





ROTARY HAMMERS

7/8 IN. CAPACITY SDS DRIVE D-HANDLE ROTARY HAMMER

5368-21

INCLUDES
Carrying case
Depth gauge
Side handle

FEATURES:

- 7/8 in. solid bit capacity, 2 in. core bit capacity.
- Variable speed: 0-1,100 rpm, 0-5,000 bpm, reversing.
- Powerful 7.2 amp motor provides power for a hard-hitting 1.8 ft.-lbs. of energy per blow.
- Two modes of operation: rotation with hammering and rotation only – this versatile tool can be used for drilling in steel, wood or concrete. Use rotation-only for drilling in steel and wood with optional chuck and adapter. Use rotation with hammering when drilling in concrete.
- Speed control switch allows operator controlled starts for less bit walk resulting in more accurate hole positioning.
- Lightweight, compact 15 in. length and well balanced design.



SPECIFICATIONS

Voltage 120 AC
Amps 7.2
No Load Speed 0-1,100 RPM
No Load BPM 0-5,000
Blow Energy 1.8 ft.-lbs.
Cord Type 9 ft. Fixed
Drilling Mode Rotation Only
Handle Style D-Handle
Vibration Reduction No
Clutch Yes
Solid Bit Capacity 7/8 in.
Thin Wall Core Bit Capacity 2 in.
Length 15 in.
Weight 6.5 lbs.

1 IN. CAPACITY SDS DRIVE L-SHAPE ROTARY HAMMER

5362-6

INCLUDES
Carrying case
Depth gauge
Side handle

FEATURES:

- 1 in. solid bit capacity in concrete, 3-1/2 in. thin wall core bit capacity, SDS-Plus Drive.
- Trigger speed control: 0-900 rpm, 0-4,500 bpm, reversing.
- Powerful 6.8 amp.
- Two modes of operation: hammer with rotation or rotation only.



SPECIFICATIONS

Voltage 120 AC
Amps 6.8
No Load Speed 0-900 RPM
No Load BPM 0-4,500
Blow Energy 2.0 ft.-lbs.
Cord Type 8 ft. Fixed
Drilling Mode Rotation Only
Handle Style D-Handle
Vibration Reduction No
Clutch Yes
Solid Bit Capacity 1 in.
Thin Wall Core Bit Capacity 3-1/2 in.
Length 14 in.
Weight 7.5 lbs.

1-1/2 IN. SPLINE DRIVE ROTARY HAMMER

5321-21

INCLUDES
Carrying case
Depth gauge
Side handle

FEATURES:

- Patented Vibration Isolation System (both grips).
- Single motion bit insertion.
- 1-1/2 in. bit capacity, 6 in. thin wall core bit capacity.
- Dial speed control: 190-385 rpm, 1,700-3,400 bpm.
- Powerful 11.0 amp motor with Electronic Feedback Control Circuit.



SPECIFICATIONS

Voltage 120 AC Only
Amps 11.0
No Load Speed 190/385 RPM
No Load BPM 1,700/3,400
Blow Energy 7.9 ft.-lbs.
Cord Type 10 ft. Quik-Lok
Drilling Mode Rotary Hammer & Hammer Only
Handle Style D-Handle
Vibration Reduction Yes
Electronic Feedback Yes
Clutch Yes
Solid Bit Capacity 1-1/2 in.
Thick Wall Core Bit Capacity 4 in.
Length 17-1/2 in.
Weight 14.2 lbs.



HAMMER DRILLS / DEMOLITION HAMMER

1/2 IN. PISTOL GRIP DUAL TORQUE HAMMER-DRILLS

5378-20

0-1,350/0-2,500 RPM

INCLUDES

Depth gauge
Side handle
Chuck key

COMMON FEATURES:

- 1/2 in. capacity, 7.5 amp motor.
- Trigger speed control in two ranges:
0-1,350 rpm, 0-22,000 bpm, 0-2,500 rpm, 0-40,000 bpm, reversing.
- Hammer with rotation or rotation only.
- Self-stop brush system.



At 7.5 amps this heavy duty pistol grip Hammer-Drill can handle the toughest drilling of 1/2 inch holes in concrete. With dual range speed control, the operator can choose more power to speed for the toughest applications or more speed and less torque for lighter applications. Equipped with a removable side handle, the side handle also assists in setting the depth rod for pre-set hole drilling. Use for drilling in wood, with Flat Boring Bits, Hole Saws, Auger Bits, and Selffeed Bits. It can also be used to drill in steel with Twist Bits and in concrete with Percussion Bits.

5378-21 (Kit)

0-1,350/0-2,500 RPM
WITH CASE

INCLUDES

Depth gauge
Side handle
Chuck key

This popular 1/2 inch Hammer-Drill is now available in a kit with an impact resistant carrying case. This Hammer-Drill features a two-mode selection switch for hammer-drilling in concrete or rotation only for drilling in wood. It also offers a synchronized gear shift for high speed or high torque. The compact ergonomic design has a soft grip handle and two finger trigger switch for greater operator comfort. This tool is ideal for setting concrete screw fasteners and drilling small holes for anchors. It can also be used in the drilling only mode for holes in wood, steel and plastic.



COMMON SPECIFICATIONS

Voltage	120 AC
Amps	7.5
No Load Speed	0-1,350/0-2,500 RPM
No Load BPM	0-20,000/0-40,000
Chuck Type	Keyed
Blow Energy	1.8 ft.-lbs.
Cord Type	10 ft. Fixed
Trigger Lock	On
Capacity in Steel	1/2 in.
Capacity in Concrete	3/4 in./3/8 in.
Selffeed Bit Capacity	1-3/4 in.
Length	13 in.
Weight	6.0 lbs.

Keep everything in one spot for the job at hand. Store your Milwaukee Hammer-Drills in a custom molded, lightweight, impact resistant, rust proof plastic carrying case. Ideal for storing both the tool and its related accessories.

FEATURES:

- Custom molded, lightweight, impact resistant, rust proof plastic.
- Ideal for tool and accessory storage.

BREAKER HAMMER

For those King Kong size jobs, haul in the 5338 Breaker Hammer. You'll be glad you did. This 71-1/2 pound Big Daddy can handle the toughest demolition jobs. At 15 amp and 1400 bpm, this Breaker Hammer delivers 44-foot pounds of blow energy and uses 1-1/8 inch shank iron. When you are pounding this hard you work up a sweat, so does the tool so the bit lock is foot operated so you don't handle hot accessories. Too heavy to carry? A hand truck style dolly is available to haul from shop to jobsite. This tool accepts both 1-1/8 inch air tool steel as well as 1-1/8 inch hex notched steel.

5338

1,400 BPM

FEATURES:

- T-handles featured for operator control.
- 44 ft./lb. of blow energy, 1,400 bpm.
- 15 amp, 120 Volt AC/DC.
- Uses 1-1/8 in. hex air tool steel or 1-1/8 in. hex notched steel.



SPECIFICATIONS

Voltage	120 AC-DC
Amps	15.0
Blow Energy	44 ft.-lbs.
No Load BPM	1,400
Bit Shank Type	1-1/8 in. Collard Hex
Cord Type	10 ft. Fixed
Switch Type	Paddle
Electronic Feedback	No
Length	28-1/2 in.
Weight	71.5 lbs.



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SCREWDRIVERS

DRYWALL SCREWDRIVER

6742-20
0-4000 RPM



COMMON FEATURES:

- Powerful 6.5 amp motor, variable speed control.
- Ramp-off depth locator for easy depth adjustments.
- All metal gear case and diaphragm.
- 10 ft. 2-wire rubber cord.
- Ergonomic tactile grip and two finger trigger for user comfort and balance.
- Removable belt clip with bit storage.

DECKING, DRYWALL AND FRAMING SCREWDRIVER

6740-20
0-2500 RPM



SPECIFICATIONS

Voltage	120 AC
Amps	6.5
Drive Size	1/4 in. Hex
Max. HP	0.9
Cord Type	10 ft. Fixed
Construction Type	Double Insulated
Switch Type	Trigger
Trigger Lock	On
Soft Grip Handle	Yes
Clutch	Snap-Action
Spindle Offset	0.92 in.
Length (6742-20)	12-3/4 in.
Weight (6742-20)	3.5 lbs.
Length (6740-20)	13-1/8 in.
Weight (6740-20)	3.7 lbs.

BOTH INCLUDE

- Belt clip
- Phillips bit No. 2 reduced diameter
- Magnetic bit holder 1/4 in. x 3 in.
- Drywall locator assembly

Phillips Bit No. 2 Reduced Diameter



FEATURES:

- Screw shooter bit.
- 1-inch length.
- Reduced phillips bit.
- Screw size #2.

Magnetic Bit Holder 1/4 in. x 3 in.



FEATURES:

- Magnetic bit holder.
- 1/4 inch.
- 3-inch length.
- Screw shooter accessory.

Drywall Locator Assembly



FEATURES:

- Patented ramp-off locator.
- Insert molded, extra hard, stainless steel tip.
- Acetal resin formulated for maximum toughness but lightweight.
- Positive depth selection indexes 1/64 in. per two clicks.

SELF DRILL FASTENER SCREWDRIVER

6790-20
0-2,500 RPM



SPECIFICATIONS

Voltage	120 AC
Amps	6.5
Drive Size	1/4 in. Hex
Max. HP	0.9
Cord Type	10 ft. Fixed
Construction Type	Double Insulated
Switch Type	Trigger
Trigger Lock	On
Soft Grip Handle	Yes
Clutch	Snap-Action
Spindle Offset	0.92 in.
Length	12-1/8 in.
Weight	3.7 lbs.

FEATURES:

- Powerful 6.5 amp motor, variable speed control.
- Ramp-off depth locator for easy depth adjustments.
- All metal gear case and diaphragm.
- 10 ft. 2-wire rubber cord.
- Ergonomic tactile grip and two finger trigger for user comfort and balance.
- Removable belt clip with bit storage.

INCLUDES

- Belt clip
- TEK locator assembly
- 5/16 in. magnetic hex socket

TEK Locator Assembly



FEATURES:

- Patented ramp-off locator.
- Acetal resin formulated for maximum toughness but lightweight.
- Positive depth selection indexes 1/64 in. per two clicks.

5/16 in. Magnetic Hex Socket



FEATURES:

- 5/16 in. hex size.
- Combines driver and socket in one piece.



BAND SAWS / JIG SAWS

PORTABLE BAND SAWS

6225
200/250 FPM

6226
250/200 FPM
WITH CASE



FEATURES:

- Cuts up to 3-1/2 in. x 4-1/2 in. rectangular stock and 3-1/2 in. round stock.
- 6.0/5.0 amp, AC only.
- Two speeds: 200 and 250 sfpm.
- Uses standard 44-7/8 in. x 1/2 in. x .020 in. band saw blades.

SPECIFICATIONS

Voltage 120 AC
Amps 6.0/5.0
Capacity in Rect. Stock . . . 3-1/2 in x 4-1/2 in.
Capacity in Round Stock 3-1/2 in.
Cord Type 8 ft. Fixed
Construction Type Grounded
Switch Type Trigger
Length 20 in.
Weight 16 lbs.

DEEP CUT PORTABLE BAND SAW

6232-6
0-350 FPM
WITH CASE



FEATURES:

- Cuts up to 4-3/4 in. x 4-3/4 in. rectangular stock and 4-3/4 in. round stock.
- 6.0 amp, AC only.
- Trigger speed control: 0-350 sfpm.
- Uses standard 44-7/8 in. x 1/2 in. x .020 in. band saw blades.

SPECIFICATIONS

Voltage 120 AC
Amps 6.0
Capacity in Rect. Stock . . . 4-3/4 in. x 4-3/4 in.
Capacity in Round Stock 4-3/4 in.
Cord Type 8 ft. Fixed
Construction Type Grounded
Switch Type Trigger
Length 19-3/4 in.
Weight 17 lbs.

6226 AND 6232-6 INCLUDE
Carrying case for band saws

ALL INCLUDE
14-tooth blade

ORBITAL JIG SAW

6268-21
0-3,000 SPM
WITH CASE



FEATURES:

- LED light for improved sightline.
- Powerful 6.5 amp motor.
- Orbital action with 4 adjustment levels and 1 in. stroke length for faster cutting.
- Variable speed trigger - 0-3,000 SPM.
- Variable speed dial for repetitive cuts.
- Quik-Lok™ blade change system.
- Keyless Shoe Adjustment - 45° in both directions.
- Precision roller blade guide for accurate cuts.
- Counter balanced for reduced vibration.
- Tachometer feedback for constant cutting speed.
- Cushion grip for superior gripping and control.

SPECIFICATIONS

Voltage 120 AC
Amps 6.5
Stroke Length 1 in.
Blade Type T-Shank
Cord Type 12-2/3 ft. Fixed
Construction Type Double Insulated
Switch Type Trigger
Trigger Lock On
Dial Speed Control Yes
Keyless Blade Clamp Yes
Orbital Action Yes
Length 9-1/2 in.
Weight 6.4 lbs.

BODY GRIP ORBITAL JIG SAW

6276-21
500-3,000 SPM
WITH CASE



FEATURES:

- Powerful 6.2 amp motor.
- Orbital action with 4 adjustment levels for faster cutting.
- 7-setting dial speed control 500-3,000 SPM.
- Quik-Lok™ blade change system.
- Keyless 45° bevel adjustment.
- 10-position dust blower and built-in dust collection port for easy attachment to vacuum.
- Die cast aluminum shoe and all metal gear case.
- Low position roller guide for blade stability and precision cuts.
- Counter balanced for reduced vibration.

SPECIFICATIONS

Voltage 120 AC
Amps 6.2
Stroke Length 1 in.
Blade Type T-Shank
Cord Type 9-1/2 ft. Fixed
Construction Type Double Insulated
Switch Type Trigger
Trigger Lock On
Dial Speed Control Yes
Keyless Blade Clamp Yes
Orbital Action Yes
Length 11-3/4 in.
Weight 5.0 lbs.

BOTH INCLUDE

- Anti-splintering device
- Plastic shoe cover
- Two blades
- Dust shield
- Carrying case



FEATURES:

- Custom molded, lightweight, impact resistant, rust proof plastic.
- Ideal for tool and accessory storage.



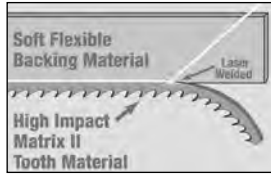
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JIG SAW BLADES

T-SHANK JIG SAW BLADES (HEAVY-DUTY)



- **BI-METAL:** Super hard wear resistant high speed steel (tooth area) laser welded to a flexible spring steel backing material.
- **Benefit:** Retains tooth hardness at high temperatures for metal cutting applications. Bi-metal construction allows the blade to flex and absorb impact without breaking while cutting nail embedded wood.
- **HIGH SPEED STEEL:** Tough durable tool steel blade with high tooth hardness.
- **Benefit:** Good general purpose metal cutting blade where blade flex or bending is minimal.
- **HIGH CARBON STEEL:** Tough durable carbon alloy blade with good tooth hardness and more flexibility than high speed steel.
- **Benefit:** Excellent economical wood and plastic cutting blade with good flexibility.

T-SHANK BLADES FIT JIG SAWS 6268-21, 6266-6, 6266-21, 6276-6, 6267-20, 6267-21 AND OTHER POPULAR BRANDS.

	CATALOG NUMBER	QTY./PKG.	BLADE MATERIAL	TEETH/INCH	TOOTH TYPE	LENGTH (IN.)	WIDTH (IN.)	RECOMMENDED USE
GENERAL PURPOSE								
	48-42-5300	5	Bi-Metal	6	Milled & Set	4	9/32	Fast cutting, nail embedded wood
	48-42-5310	5	Bi-Metal	10	Milled & Set	4	9/32	Fast cutting, nail embedded wood
	48-42-5390	5	Bi-Metal	12	Milled, Wavy Set	3	3/16	Scroll cutting in wood & metal
	48-42-5200	5	High Carbon Steel	6	Milled & Set	4	9/32	Very fast rough cutting, wood
	48-42-5220	5	High Carbon Steel	8	Milled & Set	4	9/32	Fast straight cutting, wood
WOOD CUTTING								
	48-42-5302	5	Bi-Metal	6	Taper Ground	4	9/32	Very fast clean cutting
	48-42-5311	5	Bi-Metal	10	Taper Ground	4	9/32	Fast clean cutting
	48-42-5385	5	Bi-Metal	20	Taper Ground	3	3/16	Scroll cutting in wood & laminates
	48-42-5421	5	High Carbon Steel	6	Ground & Set	4	9/32	Very fast rough cutting
	48-42-5500	5	High Carbon Steel	6	Taper Ground	4	9/32	Very fast clean cutting
	48-42-5512	5	High Carbon Steel	6	Ground & Set	4	1/4	Very fast, rough curve cutting
	48-42-5240	5	High Carbon Steel	10	Taper Ground	4	9/32	Clean cutting
	48-42-5540	5	High Carbon Steel	10	Taper Ground	4	9/32	Reverse tooth, no top splinters
	48-42-5640	5	High Carbon Steel	12	Milled, Wavy Set	3	5/32	Clean scroll cutting
METAL CUTTING								
	48-42-5850	5	Bi-Metal	8	Milled & Set	4	9/32	Aluminum, non-ferrous metals
	48-42-5190	5	Bi-Metal	14	Milled, Wavy Set	3	9/32	Thick metal over 1/4 inch thick
	48-42-5192	5	Bi-Metal	14	Milled, Raker Set	5-1/4	9/32	Thick metal, tubing, etc.
	48-42-5121	5	Bi-Metal	18	Milled, Wavy Set	3	9/32	Metal over 1/8 inch thick
	48-42-5161	5	Bi-Metal	24	Milled, Wavy Set	3	9/32	Metal under 1/8 inch thick
	48-42-5166	5	Bi-Metal	24	Milled, Wavy Set	5-1/4	9/32	Thin metal under 1/8 inch thick
	48-42-5101	5	High Speed Steel	14	Milled, Wavy Set	3	9/32	Metal over 1/4 inch thick
SPECIAL APPLICATION								
	48-42-5700	5	High Carbon Steel	Knife	—	4	9/32	Rubber & foam materials



5 PACK "T" SHANK BLADE ASSORTMENT

- 49-22-1178** includes blades
- | | |
|------------|-----------------|
| 48-42-5121 | Metal Cutting |
| 48-42-5161 | Metal Cutting |
| 48-42-5190 | Metal Cutting |
| 48-42-5300 | General Purpose |
| 48-42-5310 | General Purpose |



5 PACK "U" SHANK BLADE ASSORTMENT

- 49-22-1168** Optional equipment. Consists of one each blade Nos. 48-42-2120, 48-42-2160, 48-42-2190, 48-42-2300 and 48-42-2310 with 1/4" universal tang.





JIG SAW BLADES

U-SHANK JIG SAW BLADES (HEAVY-DUTY)

U-SHANK BLADES FIT PREVIOUS JIG SAW MODEL 6256-6 AND OTHER POPULAR BRANDS.

	CATALOG NUMBER	QTY/ PKG	BLADE MATERIAL	TEETH/ INCH	TOOTH TYPE	LENGTH (IN.)	WIDTH (IN.)	RECOMMENDED USE
GENERAL PURPOSE								
	48-42-2300	5	Bi-Metal	6	Milled & Set	4	9/32	Fast cutting, nail embedded wood
	48-42-2310	5	Bi-Metal	10	Milled & Set	4	9/32	Fast cutting, nail embedded wood
	48-42-2390	5	Bi-Metal	12	Milled, Wavy Set	2-3/4	3/16	Scroll cutting in wood & metal
	48-42-0200	5	High Carbon Steel	6	Milled & Set	4	9/32	Very fast rough cutting, wood
	48-42-0220	5	High Carbon Steel	8	Milled & Set	4	9/32	Fast straight cutting, wood
WOOD CUTTING								
	48-42-2302	5	Bi-Metal	6	Taper Ground	4	9/32	Very fast clean cutting
	48-42-2311	5	Bi-Metal	10	Taper Ground	4	9/32	Fast clean cutting
	48-42-2385	5	Bi-Metal	20	Taper Ground	2-3/4	3/16	Scroll cutting in wood & laminates
	48-42-0421	5	High Carbon Steel	6	Ground & Set	4	9/32	Very fast rough cutting
	48-42-0500	5	High Carbon Steel	6	Taper Ground	4	9/32	Very fast clean cutting
	48-42-0240	5	High Carbon Steel	8	Taper Ground	3-1/8	7/32	Clean cutting
	48-42-0540	5	High Carbon Steel	10	Taper Ground	4	9/32	Straight clean cutting
	48-42-0640	5	High Carbon Steel	10	Taper Ground	4	9/32	Reverse tooth, no top splinters
	48-42-0650	5	High Carbon Steel	12	Milled, Wavy Set	2-3/4	5/32	Clean scroll cutting
METAL CUTTING								
	48-42-0850	5	Bi-Metal	8	Milled & Set	4	9/32	Aluminum, non-ferrous metals
	48-42-2190	5	Bi-Metal	14	Milled, Wavy Set	3-5/8	9/32	Thick metal over 1/4 inch thick
	48-42-2192	5	Bi-Metal	14	Milled, Raker Set	5	9/32	Thick metal, tubing, etc.
	48-42-2120	5	Bi-Metal	18	Milled, Wavy Set	2-3/4	9/32	Metal over 1/8 inch thick
	48-42-2160	5	Bi-Metal	24	Milled, Wavy Set	2-3/4	9/32	Metal under 1/8 inch thick
	48-42-2166	5	Bi-Metal	24	Milled, Wavy Set	5	9/32	Thin metal under 1/8 inch thick
	48-42-0101	5	High Speed Steel	14	Milled, Raker Set	2-3/4	9/32	Metal over 1/4 inch thick
	48-42-0120	5	High Speed Steel	18	Milled, Wavy Set	2-3/4	9/32	Metal over 1/8 inch thick
	48-42-0140	5	High Speed Steel	24	Milled, Wavy Set	2-3/4	9/32	Metal under 1/8 inch thick
SPECIAL APPLICATION								
	48-42-0700	5	High Carbon Steel	Knife	—	3-5/8	9/32	Rubber & foam materials
	48-42-0801	5	Carbide-Tipped	Grit	—	2-3/4	5/16	Ceramics, tile

◆ = Available in 1000 pack quantities.

JIG SAW BLADE SELECTION GUIDE																				
TYPE OF CUTTING	HARD & SOFT WOOD		CHIPBOARD		LAMINATES		PLYWOOD		NAIL EMBEDDED		SHEET METAL		METAL MILD STEEL		NON-FERROUS METALS		PLASTICS & FIBERGLASS		RUBBER & FOAM BOARD	
	"U"	"T"	"U"	"T"	"U"	"T"	"U"	"T"	"U"	"T"	"U"	"T"	"U"	"T"	"U"	"T"	"U"	"T"	"U"	"T"
STRAIGHT	0220	5220	0500	5302	0500	5500	0240	5240	2300	5300	2120	5121	0101	5101	0801	5311	0700	5700		
	0421	5240	2302	5500					2310	5310	2160	5161	2120	5121	0850	5311				
	0500	5300									2160	5161	2160	5161	2311	5850				
	0540	5421									2190	5190								
	2300	5500																		
CURVE/SCROLL	0512	5385	0650	5512	2385	5385	2385	5385			2390	5390	2390	5390	2390	5390	0512	5512	0700	5700
	0650	5512	0512	5640													0650	5640		
	2385	5640																		
THICK MATERIAL	0421	5300	0500	5302	0500	5500	0500	5500	2300	5300	2120	5121	0101	5101	0850	5302	0850	5302		
	0500	5302	2302	5500							2160	5161	2166	5166	0850	5850				
	2300	5421									2166	5166	2190	5190						
	2302	5500																		
THIN MATERIAL	0240	5240	0240	5240	0640	5540	2310	5310	2310	5310	2160	5161	2120	5121	2120	5121	0640	5311		
	2310	5310	2311	5311			2385	5385									0801	5540		
	2311	5311															2311	5801		
	2385	5385																		
FINE FINISH	0540	5240	0500	5240	0640	5540	0540	5240	2310	5310							0540	5240		
	2311	5311	0540	5302			2385	5385	2311	5311							2311	5311		
	2385	2302	5500																	
COARSE FINISH	0200	5200	0421	5421	0421	5421	0220	5220	2300	5300			2192	5192	2192	5192	0200	5200		
	0421	5300							2302	5302							0220	5220		
	2300	5421															0801			

"U" = Universal shank blades. "T" = T-shank blades.



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RECIPROCATING SAWS

SAWZALL® - THE HATCHET® RECIPROCATING SAW

6524-21
0-3,000 SPM
WITH CASE



FEATURES:

- 6 position pivoting handle.
- Compact and only 6.7 lbs.
- Quik-Lok™ blade clamp.
- 0-3,000 SPM, 3/4 in. stroke length.
- Orbital cutting action.
- 7.5 amp Milwaukee built motor.
- Gear protecting clutch.
- Keyless adjustable shoe.
- Cushion grip and rubber boot for superior gripping.
- Heavy-duty 'S' Jacket 8 ft. two-wire Quik-Lok® removable cord.
- Double insulated.
- Uses standard 1/2 in. tang reciprocating saw blades.
- Blades may be clamped upside down.
- Impact resistant carrying case.

SPECIFICATIONS

Voltage	120 AC
Amps	7.5
Stroke Length	3/4 in.
Cord Type	10 ft. Quik-Lok
Construction Type	Double Insulated
Switch Type	Trigger
Dial Speed Control	No
Keyless Blade Clamp	Yes
Keyless Adjustable Shoe	Yes
Adjustable Handle	Yes
Orbital Action	Yes
Counter-Balance	Yes
Impact Protection	No
Length	13-1/2 in. / 19-1/2 in.
Weight	6.7 lbs.

MILWAUKEE 10 AMP SAWZALL® RECIPROCATING SAW

6509-20
0-2,800 SPM



FEATURES:

- 10 amp Milwaukee built motor.
- 1-2,800 SPM variable speed trigger.
- Quik-Lok™ blade clamp for fast, easy blade changes.
- Double bearing wobble plate mechanism for less vibration.
- Center picot adjustable shoe.
- Rubber boot for superior gripping.
- Includes 2 Super Sawzall® blades
- Heavy-duty 'S' Jacket 8 ft. two-wire rubber cord.
- Double insulated.
- Uses standard 1/2 in. shank Sawzall® Blades – blades may be clamped upside down for special cutting needs.

SPECIFICATIONS

Voltage	120 AC
Amps	10.0
Stroke Length	3/4 in.
Cord Type	8 ft. Fixed
Switch Type	Trigger
Dial Speed Control	No
Keyless Blade Clamp	No
Keyless Adjustable Shoe	Yes
Adjustable Handle	No
Orbital Action	No
Counter-Balance	No
Impact Protection	No
Length	17-1/3 in.
Weight	7 lbs.

360° ROTATING HANDLE ORBITAL SUPER SAWZALL® RECIPROCATING SAW

6523-21
0-3,000 SPM
WITH CASE



FEATURES:

- 360° rotating handle.
- 13 amp Milwaukee built motor.
- Orbital cutting action.
- Variable speed trigger, 0-3,000 SPM.
- 1-1/4 in. stroke.
- Counter balanced/gear protection system.
- Speed dial.
- Quik-Lok™ blade clamp.
- Quik-Lok® cord.
- Includes 2 Super Sawzall® blades



Heavy-duty, blow molded polyethylene construction.

SPECIFICATIONS

Voltage	120 AC/DC
Amps	13.0
Stroke Length	1-1/4 in.
Cord Type	10 ft. Quik-Lok
Construction Type	Double Insulated
Switch Type	Trigger
Dial Speed Control	Yes
Keyless Blade Clamp	Yes
Keyless Adjustable Shoe	Yes
Adjustable Handle	Yes
Orbital Action	Yes
Counter-Balance	Yes
Impact Protection	Yes
Length	19 in.
Weight	10 lbs.

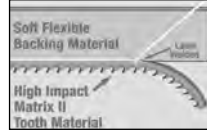




RECIPROCAL SAW BLADES

HEAVY-DUTY HIGH PERFORMANCE SAWZALL® RESCUE AND DEMOLITION BLADES

- 1/2" Universal Blade Tang fits in all Sawzalls®.
- Bi-metal construction increases blade life. Blades do not shatter.
- Matrix II Teeth with 8% cobalt.
- Uniform gullet depth.
- Blade reversible in clamp.



- **BI-METAL** – Super hard wear resistant high speed steel (tooth area) laser welded to a flexible spring steel backing material.
- **BENEFIT** – Matrix II High Speed Steel retains tooth hardness at high temperatures for metal cutting applications. Bi-metal construction allows the blade to flex and absorb impact without breaking while cutting nail embedded wood.

TEETH RECOMMENDATIONS

T.P.I.	Stock Thickness	T.P.I.	Stock Thickness
4/6	For cutting stock 1/2" and above	10	For cutting stock 1/4" thru 3/8"
5/8	For cutting stock 3/8" and above	10/14	For cutting stock 1/4" thru 3/8"
6	For cutting stock 3/8" and above	14	For cutting stock 3/16" thru 1/4"
7	For cutting stock 3/8" and above	18	For cutting stock 1/8" thru 3/16"
8/12	For cutting stock 1/4" thru 3/8"	24	For cutting stock below 1/8"

Cat. No. 5/Pack	Cat. No. 25/Box	Cat. No. 100/Box	Teeth Per Inch	Length x Width x Thickness	RECOMMENDED FOR CUTTING:
					WOOD, NAIL EMBEDDED WOOD, RESCUE AND DEMOLITION
48-00-5021	48-00-8021	48-01-7021	5/8	6 x 1.0 x .062	Cutting wood, nail embedded wood, demolition work. Excellent for plunge cutting into wood and nail embedded without buckling blades.
48-00-5026	48-00-8026	48-01-7026	5/8	9 x 1.0 x .062	
48-00-5027	48-00-8027	—	5/8	12 x 1.0 x .062	
					REMODELING, RESCUE AND DEMOLITION
48-00-5712	48-00-8712	—	10	6 x 1.0 x .042	Metal 3/16" - 1/4", channels, metal pipe, cast iron, demolition, rescue and remodeling.
48-00-5713	48-00-8713	—	10	9 x 1.0 x .042	
48-00-5782	48-00-8782	48-01-7782	14	6 x 1.0 x .042	Metal 3/16" - 1/4", channels, metal pipe, cast iron, demolition, rescue and remodeling.
48-00-5787	48-00-8787	—	14	9 x 1.0 x .042	
48-00-5784	48-00-8784	48-01-7784	18	6 x 1.0 x .042	Metal 1/8" - 3/16", conduit, tubing, channels, pipe, rubber, fiber, demolition, rescue and remodeling.
48-00-5788	48-00-8788	—	18	9 x 1.0 x .042	
48-00-5789	48-00-8789	—	18	12 x 1.0 x .042	
					REMODELING, RESCUE AND DEMOLITION
48-00-5795	48-00-8795	—	14	9 x 1.0 x .062	Metal 3/16" - 1/4", channels, metal pipe, cast iron, demolition, rescue and remodeling.
48-00-5798	48-00-8798	—	18	9 x 1.0 x .062	Metal 1/8" - 3/16", conduit, tubing, channels, pipe, rubber, fiber, demolition, rescue and remodeling.
					REMODELING, RESCUE AND DEMOLITION
48-00-5700	48-00-8700	—	8	6 x 1.0 x .062	All woods, nail embedded wood, composition material, plastic, light gauge non-ferrous metals and aluminum.
48-00-5705	48-00-8705	—	8	9 x 1.0 x .062	
48-00-5710	48-00-8710	—	8	12 x 1.0 x .062	
					REMODELING, RESCUE AND DEMOLITION
48-00-5701	48-00-8701	—	8	6 x 1.0 x .062	All woods, nail embedded wood, composition material, plastic, light gauge non-ferrous metals and aluminum. Also ideal for plunge cutting.
48-00-5706	48-00-8706	—	8	9 x 1.0 x .062	
48-00-5711	48-00-8711	—	8	12 x 1.0 x .062	

EXCLUSIVE "THE AX" FEATURES:

- .062" thick for stiffer performance.
- Sloped shape ideal for plunge cutting.
- Strengthened tooth tip.
- Wide gullet shape allows chips to clear the cut.

EXCLUSIVE "THE TORCH" FEATURES:

- .042" and .062" thick for stiffer performance and longer life.
- More aggressive blade removes more material per stroke for faster cutting.

EXCLUSIVE "WRECKER" FEATURES:

- .062" thick.
- 8 TPI for general purpose demolition and rescue.
- Sloped and blunt shaped – slope for plunge cutting and straight for metal cutting.



Hardware & Supply Co., Inc.
Supply, Inc. of Virginia
Form Rentals

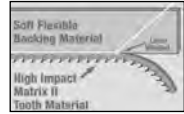
NJ (856) 662-6935 • PA (215) 925-8800
Metro (703) 569-6660 • VA (703) 455-6700
Clinton, MD (301) 877-8640





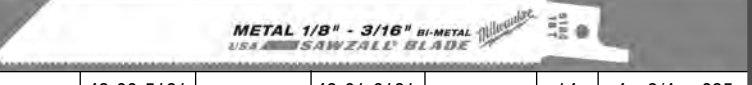


RECIPROCAL SAW BLADES

HEAVY-DUTY HIGH PERFORMANCE BI-METAL SAWZALL® BLADES

- **BI-METAL** – Super hard wear resistant high speed steel (tooth area) laser welded to a flexible spring steel backing material.
- **BENEFIT** – Matrix II High Speed Steel retains tooth hardness at high temperatures for metal cutting applications. Bi-metal construction allows the blade to flex and absorb impact without breaking while cutting nail embedded wood.



Cat. No. 2/Pack	Cat. No. 5/Pack	Cat. No. 25/Box	Cat. No. 50/Box	Cat. No. 100/Box	Teeth Per Inch	Length x Width x Thickness	RECOMMENDED FOR CUTTING:	
							WOOD CUTTING BLADES	
48-00-5012	48-00-5012	48-00-5012	48-01-6012	48-00-5012	6	6 x 3/4 x .050	Very fast cutting, nail embedded wood, general roughing-in.	
							WOOD CUTTING BLADES	
48-02-5031	48-00-5031	48-00-8031	48-01-6031	48-01-7031	5/8	6 x 3/4 x .050	Very fast cutting, nail embedded wood, general roughing-in.	
48-02-5035	48-00-5035	—	48-01-6035	—	6	6 x 3/4 x .050		
48-02-5036	48-00-5036	48-00-8036	48-01-6036	48-01-7036	6	9 x 3/4 x .050		
48-02-5037	48-00-5037	—	48-01-6037	48-01-7037	6	12 x 3/4 x .050		
48-02-5041	48-00-5041	—	48-01-6041	—	4/6	6 x 1/2 x .050		Very fast scroll cutting, circles, contours, nail embedded wood.
							ALL PURPOSE BLADES	
—	48-00-5090	—	48-01-6090	—	10	4 x 3/4 x .035	All woods, nail embedded wood, composition material, plastic, ferrous and non-ferrous metals, cast iron.	
48-02-5092	48-00-5092	—	48-01-6092	—	10	6 x 3/4 x .035		
48-02-5091	48-00-5091	—	48-01-6091	—	8/12	6 x 3/4 x .050		
48-02-5093	48-00-5093	48-00-8093	48-01-6093	48-01-7093	8/12	8 x 3/4 x .050		
48-02-5094	48-00-5094	—	48-01-6094	—	8/12	12 x 3/4 x .050		
—	48-00-5175	—	—	—	10	8 x 5/8 x .035		
48-02-3093	48-00-5193	—	48-01-6193	—	10/14	8 x 5/8 x .035		
—	48-00-5194	—	48-01-6194	—	10/14	12 x 5/8 x .035		
								SCROLL CUTTING BLADES
—	48-00-5161	—	—	—	10	3-5/8 x 5/16 x .035		Scroll cutting wood, contours, nail embedded wood, plastics.
48-02-5162	48-00-5162	—	—	—	14	3-5/8 x 5/16 x .035	Scroll cutting metal 1/8" thru 3/16".	
—	48-00-5163	—	—	—	18	3-5/8 x 5/16 x .035	Scroll cutting metal under 1/8".	
							METAL CUTTING BLADES	
—	48-00-5181	—	48-01-6181	—	14	4 x 3/4 x .035	Metal 3/16" thru 1/4", conduit, tubing, channels, pipe, rubber, fiber.	
48-02-5182	48-00-5182	48-00-8182	48-01-6182	48-01-7182	14	6 x 3/4 x .035		
—	48-00-5282	—	48-01-6282	48-01-7282	14	6 x 5/8 x .035 *		
48-02-5187	48-00-5187	—	48-01-6187	48-01-7187	14	9 x 3/4 x .035		
—	48-00-5183	—	48-01-6183	—	18	4 x 3/4 x .035	Metal 1/8" thru 3/16", conduit, tubing, channels, pipe.	
48-02-5184	48-00-5184	48-00-8184	48-01-6184	48-01-7184	18	6 x 3/4 x .035		
—	48-00-5284	—	48-01-6284	48-01-7284	18	6 x 5/8 x .035 *		
48-02-5188	48-00-5188	—	48-01-6188	—	18	9 x 3/4 x .035		
48-02-5189	48-00-5189	—	48-01-6189	—	18	12 x 3/4 x .035		
—	48-00-5185	—	48-01-6185	—	24	4 x 3/4 x .035	Metal thinner than 1/8", tubing, pipe, trim.	
48-02-5186	48-00-5186	48-00-8186	48-01-6186	—	24	6 x 3/4 x .035		
—	48-00-5286	—	48-01-6286	48-01-7286	24	6 x 5/8 x .035 *		

* Has 5/8" width for higher flexibility.





RECIPROCAL SAW BLADES

HEAVY-DUTY HIGH PERFORMANCE BI-METAL SAWZALL® BLADES



- **BI-METAL** – Super hard wear resistant high speed steel (tooth area) laser welded to a flexible spring steel backing material.
- **BENEFIT** – Matrix II High Speed Steel retains tooth hardness at high temperatures for metal cutting applications. Bi-metal construction allows the blade to flex and absorb impact without breaking while cutting nail embedded wood.

TEETH RECOMMENDATIONS

T.P.I.	Stock Thickness	T.P.I.	Stock Thickness
4/6	For cutting stock 1/2" and above	10	For cutting stock 1/4" thru 3/8"
5/8	For cutting stock 3/8" and above	10/14	For cutting stock 1/4" thru 3/8"
6	For cutting stock 3/8" and above	14	For cutting stock 3/16" thru 1/4"
7	For cutting stock 3/8" and above	18	For cutting stock 1/8" thru 3/16"
8/12	For cutting stock 1/4" thru 3/8"	24	For cutting stock below 1/8"

Cat. No. 2/Pack	Cat. No. 5/Box	Cat. No. 50/Box	Teeth Per Inch	Length x Width x Thickness	RECOMMENDED FOR CUTTING:	
					WOOD AND PLASTIC CUTTING BLADES	
—	48-00-5015	—	6	6 x 3/4 x .050	Very fast cutting wood, plastics and pruning.	
—	48-00-5016	—	6	9 x 3/4 x .050		
—	48-00-5017	—	6	12 x 3/4 x .050		
					PLASTER CUTTING BLADE	
48-02-5052	48-00-5052	48-01-6052	6	5 x 3/4 .050	For cutting plaster, plaster with metal lath, plasterboard, cuts on forward and backward stroke.	
					PRUNING BLADES HIGH ALLOY STEEL	
—	48-00-1301	—	5	9 x 3/4 x .060	Pruning trees, smooth sawing green woods. Deep tooth design, fleam filed. Clean cuts wood fibers.	
—	48-00-1303	—	5	12 x 3/4 x .060		
48-02-1303	—	—	5	(1) 9 x 3/4 x .060 (1) 12 x 3/4 x .060		
Cat. No. 3/Pack			Teeth Per Inch	Length x Width x Thickness	RECOMMENDED FOR CUTTING:	
					GENERAL PURPOSE BLADE	
48-00-1350			6	9 x 1 x .050	Made with specially formulated corrosion resistant stainless steel to prolong blade life. Recommended for cutting wood, cutting into walls that contain wood, constructing your own hunting tree stand, cutting firewood to size and clearing brush and forestry.	
Cat. No. 1/Pack	Cat. No. 3/Pack			Grit Type	Length x Width x Thickness	RECOMMENDED FOR CUTTING:
						TUNGSTEN CARBIDE BLADES
48-02-1400	48-00-1400			COARSE GRIT	4 x 3/4 x .032	For cutting hardwood flooring, cast iron, fiberglass, ceramic tiles, stone, brick, plaster and marble.
48-02-1410	48-00-1410			MEDIUM GRIT	3-1/2 x 1/2 x .032	
48-02-1420	48-00-1420			COARSE GRIT	6 x 3/4 x .032	
48-02-1430	48-00-1430			COARSE GRIT	9 x 3/4 x .039	



SUPER SAWZALL® 11-BLADE ASSORTMENT

49-22-1127 Includes one each of blades 5031, 5036, 5041, 5091, 5092, 5093, 5094, 5162, 5182, 5184 and 5186. Reusable vinyl sleeve.

SUPER SAWZALL® 7-BLADE ASSORTMENT

49-22-1126 Includes one each of 5162, 5182, 5184, 5091, 5092, 5031 and 5041. Packaged in reusable vinyl sleeve.

THE AX™/THE TORCH® 5-BLADE COMBINATION PACK

49-22-5712 Includes 2-Ax blades 48-00-5021 and 3-Torch Blades: 48-00-5712, 48-00-5782 and 48-00-5784



CIRCULAR SAWS

6405-6

8-1/4"
5,800 RPM

INCLUDES

Circular saw blade
9/16" wrench



FEATURES:

- 15 amp motor, AC/DC.
- 2-3/4" maximum depth of cut at 90 degrees.
- Spindle lock for fast blade change.

SPECIFICATIONS

Voltage	120 AC/DC
Amps	15.0
Spindle	5/8 in.
Cord Type	9 ft. Fixed
Construction Type	Grounded
Metal/Wood Cutting	Wood
Electric Brake	No
Spindle Lock	Yes
Soft Grip Handle	No
Adjustable Handle	No
Blade Position	Right
Depth of Cut at 90°	2-3/4 in.
Depth of Cut at 45°	2-1/8 in.
Length	13 in.
Weight	13 lbs.

6460

10-1/4"
5,200 RPM

INCLUDES

Carrying case
Circular saw blade
9/16" wrench
Rip fence
Side handle



FEATURES:

- 15 amp motor, AC/DC.
- 3-13/16" maximum depth of cut at 90 degrees.
- High capacity: cuts 4x4's.

20-gauge steel

SPECIFICATIONS

Voltage	120 AC/DC
Amps	15.0
Spindle	5/8 in.
Cord Type	9 ft. Fixed
Construction Type	Grounded
Metal/Wood Cutting	Wood
Electric Brake	No
Spindle Lock	Yes
Soft Grip Handle	No
Adjustable Handle	No
Blade Position	Right
Depth of Cut at 90°	3-13/16 in.
Depth of Cut at 45°	2-3/4 in.
Length	14-1/4 in.
Weight	19.5 lbs.

WORM DRIVE SAWS

6377-6

7-1/4"
4,400 RPM

INCLUDES

Circular saw blade
9/16" wrench



FEATURES:

- 15 amp motor, AC/DC.
- Diamond arbor.
- Worm gears for superior torque.

SPECIFICATIONS

Voltage	120 AC/DC
Amps	15.0
Spindle	Diamond
Cord Type	9 ft. Fixed
Construction Type	Grounded
Metal/Wood Cutting	Wood
Electric Brake	No
Spindle Lock	Yes
Soft Grip Handle	No
Adjustable Handle	No
Blade Position	Left
Depth of Cut at 90°	0 - 2-3/8 in.
Depth of Cut at 45°	0 - 1-7/8 in.
Length	17 in.
Weight	16.8 lbs.

6378

8-1/4"
4,400 RPM

INCLUDES

Circular saw blade
9/16" wrench



FEATURES:

- 15 amp motor, AC/DC.
- Diamond arbor.
- Worm gears for superior torque.

SPECIFICATIONS

Voltage	120 AC/DC
Amps	15.0
Spindle	Diamond
Cord Type	9 ft. Fixed
Construction Type	Grounded
Metal/Wood Cutting	Wood
Electric Brake	No
Spindle Lock	Yes
Soft Grip Handle	No
Adjustable Handle	No
Blade Position	Left
Depth of Cut at 90°	0 - 2-7/8 in.
Depth of Cut at 45°	0 - 2-1/4 in.
Length	17 in.
Weight	17.3 lbs.



MITER, CHAIN AND CUT-OFF SAWS

10 IN. MAGNUM® SLIDE COMPOUND MITER SAW

6497-6
4,800 RPM

INCLUDES
10 in. carbide tipped blade
Extension kit
Vise
Dust bag
Blade wrench

SLIDER



FEATURES:

- Powerful 15 amp motor.
- Large cutting capacity:
 - Crosscut up to 3-1/2" x 12".
 - Cut 3-7/16" x 8-3/4" at 45 degree miter.
 - Cut 2-1/8" x 8-3/4" at 45 degree x 45 degree compound.
- Wide miter angles from 51 degrees left to 59 degrees right. Positive stops at 0, 15, 22.5, 30 and 45 degrees left and right.
- Bevels angles from 48 degrees left and 3 degrees right. Positive bevel stops at 0 degrees and 45 degrees.

SPECIFICATIONS

Voltage 120 AC
 Amps 15.0
 Blade Size 10 in.
 Spindle 5/8 in.
 Vertical Capacity
 (Baseboard against fence) 4-1/4 in.
 Vertical Capacity
 (Crown molding nested vertically) 5-1/2 in.
 Horizontal Capacity
 (Baseboard lying flat) 12-3/8 in.
 0° Miter/0° Bevel (Max length) 4 x 12
 0° Miter/0° Bevel (Max width)
 45° Miter/0° Bevel (Max width) 4 x 8
 Max 0° Miter/45° Bevel (Max width) 2 x 10
 Max 45° Miter/45° Bevel (Max width) 2 x 8
 Length 24-1/2 in.
 Weight 55.5 lbs.

ELECTRIC CHAIN SAW

6215
1,800 FPM

INCLUDES
16 in. sprocket tip bar
3/8 in. pitch chain
33mm wrench
Screwdriver
Scabbard



FEATURES:

- Powerful 2.25 maximum horsepower motor, 13 amp.
- 16 inch bar, 1,800 feet per minute chain speed.
- Automatic oiling.
- Adjustable clutch protects motor and mechanism from harmful binding.

SPECIFICATIONS

Voltage 120 AC
 Amps 13.0
 Bar Size 16 in.
 Max. HP 2.2
 Cord Type 1 ft. Fixed
 Construction Type Double Insulated
 Switch Type Trigger
 Oil Tank Capacity 6-1/2 oz.
 Length 8-3/4 in.
 Weight 11.3 lbs.

14 IN. ABRASIVE CUT-OFF MACHINE

6176-20
3,900 RPM

For use with abrasive cut-off wheels (14" x 3/32" x 1")

INCLUDES
Vise
Abrasive wheel



FEATURES:

- 15 amp, 2,400 watts/3.2 maximum horsepower power output.
- 5-inch pipe cutting capacity.
- Heavy-duty cast iron base.
- Spindle lock for convenient changing of abrasive wheels.
- Rugged steel and high strength nylon construction keeps durability high and weight low.
- All ball bearing construction for longer life. / Easy access brushes.
- One piece carrying handle.
- Wheel rotation directs particles away from operator.
- Arm locks down for easy portability.

SPECIFICATIONS

Voltage 120 AC/DC
 Amps 15.0
 Wheel Size 14 in.
 Max. HP 3.2
 Spindle 1 in.
 Spindle Lock Yes
 Bevel Capacity 45°
 Capacity in O.D. Pipe 5 in.
 Capacity in Bar Stock 3-5/8 in.
 Capacity in Square Stock 5 in.
 Maximum Opening 9 in.
 Length 16 in.
 Weight 47.5 lbs.





SHEARS, NIBBLER AND ROUTERS

18-GAUGE SHEARS

6852-20
0-2,500 SPM

INCLUDES
Hex wrench

FEATURES:

- 6.8 amp Milwaukee motor, trigger speed control: 0-2,500 rpm spindle speed.
- 360° swivel head.
- Ergonomic tactile grip for optimal user comfort.
- 10 ft. flexible durable runner cord.



SPECIFICATIONS

Voltage 120 AC
 Amps 6.8
 Capacity in Steel 18-Ga.
 Capacity in Stainless 20-Ga.
 Cord Type 10 ft. Fixed
 Construction Type Double Insulated
 Switch Type Trigger
 Trigger Lock On
 Minimum Cutting Radius 7 in.
 Length 12-1/4 in.
 Weight 4.1 lbs.

16-GAUGE NIBBLER

6890
1,900 SPM

INCLUDES
Punch
Die
Allen wrench
Plate wrench

FEATURES:

- 3.8 amp, 1,900 spm.
- Cuts up to 7 ft. per minute.
- 0.87 in. starting hole required.
- AC/DC paddle switch.



SPECIFICATIONS

Voltage 120 AC/DC
 Amps 4.0
 Capacity in Steel 16-Ga.
 Capacity in Stainless 18-Ga.
 Cord Type 8 ft. Fixed
 Construction Type Double Insulated
 Switch Type Paddle
 Minimum Cutting Radius 1-3/4 in.
 Starting Hole 7/8 in.
 Length 11-1/4 in.
 Weight 4.8 lbs.

1-3/4 MAX HP BODYGRIP® ROUTER

5615-20
24,000 RPM

INCLUDES
Two 1-1/8 in. collet wrenches
1/2 in. collet
1/4 in. collet

FEATURES:

- Exclusive BodyGrip® design.
- 1-3/4 max. HP, 11 Amp, Milwaukee motor.
- Exclusive linear depth adjustment system.
- 1/4 in. and 1/2 in. premium self-releasing collets.



SPECIFICATIONS

Voltage 120 AC/DC
 Collet Diameter 1/4 in. - 1/2 in.
 Amps 11.0
 Cord Type 8 ft. Fixed
 Construction Type Double Insulated
 Switch Type Rocker
 Dial Speed Control No
 Handle Style BodyGrip
 Electronic Feedback No
 Depth Adj. Range 1-21/32 in.
 Sub Base Dia. 6 in.
 Height 8-1/2 in.
 Weight 8.8 lbs.

2-1/4 MAX HP EVS BODYGRIP® ROUTER

5616-20
10,000-24,000 RPM

INCLUDES
Two 1-1/8 in. collet wrenches
1/2 in. collet
1/4 in. collet
T-Handle wrench

FEATURES:

- Exclusive BodyGrip® design.
- 2-1/4 max. HP Milwaukee motor.
- Premium electronic motor feedback maintains speed and power under load.
- 36-speed, electronic variable speed with soft start.
- Micro-fine linear depth adjustment to within 1/64 in.
- Exclusive above-the-table depth adjustment system.
- Exclusive motor contamination shield minimizes damage, maximizes airflow.



SPECIFICATIONS

Voltage 120 AC
 Collet Diameter 1/4 in. - 1/2 in.
 Amps 13.0
 Cord Type 8 ft. Fixed
 Construction Type Double Insulated
 Switch Type Rocker
 Dial Speed Control Yes
 Handle Style BodyGrip
 Electronic Feedback Yes
 Depth Adj. Range 1-21/32 in.
 Sub Base Dia. 6 in.
 Height 8-1/2 in.
 Weight 8.8 lbs.





STRAIGHT AND DIE GRINDERS

STRAIGHT GRINDERS

5211

3" Diameter
11 AMPS
14,500 RPM

INCLUDES

9/16 in. and 1 in. wrenches
Grinding wheel and guard



5223

5" Diameter
12 AMPS
7,000 RPM

INCLUDES

9/16 in. and 1 in. wrenches
Grinding wheel and guard

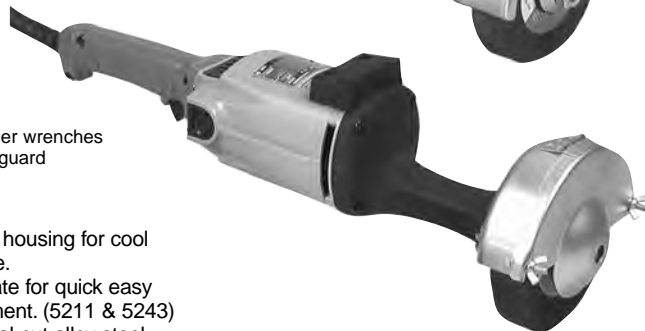


5243

6" Diameter
15 AMPS
5,500 RPM

INCLUDES

1-1/16 in. and spanner wrenches
Grinding wheel and guard



FEATURES:

- Coated spindle housing for cool gripping surface.
- Hinged face plate for quick easy wheel replacement. (5211 & 5243)
- Hardened helical-cut alloy steel gears and shaft. (5223)

ACCESSORIES



Twist Knot Wheel
3 Inch Standard



Grinding Wheel
3x1/2, 36/60 Grit



Buffing Wheel
5 Inch

COMMON SPECIFICATIONS

Voltage 120 AC
Cord Type 9 ft. Fixed
Switch Type Trigger
Trigger Lock On

5211 SPECIFICATIONS

Wheel Size 1/2 in. x 3 in.
Spindle 3/8 in.-24
Hole Dia. 3/8 in.
Length 21 in.
Weight 7.8 lbs.

5223 SPECIFICATIONS

Wheel Size 1 in. x 5 in.
Spindle 5/8 in.-11
Hole Dia. 5/8 in.
Length 20 in.
Weight 10.3 lbs.

5243 SPECIFICATIONS

Wheel Size 1 in. x 6 in.
Spindle 5/8 in.-11
Hole Dia. 5/8 in.
Length 22 in.
Weight 16.5 lbs.

DIE GRINDERS

5194

4.5 AMPS
21,000 RPM



5196

11 AMPS
14,500 RPM



INCLUDES

1/4 in. collet
11/16 in. open end wrench
1/2 in. open end wrench
1 in. open end wrench (5196)

FEATURES:

- 1/4 in. collet standard equipment, 1/8 in. collet available.
- All ball and roller bearings.

5194 SPECIFICATIONS

Voltage 120 AC/DC
Cord Type 8 ft. Fixed
Switch Type Paddle
Max. Cap. Reinforced Grinding Wheels . . 2 in.
Max. Cap. Mounted Wheels & Points. 1-5/8 in.
Length 13-1/2 in.
Weight 4.5 lbs.

5196 SPECIFICATIONS

Voltage 120 AC/DC
Cord Type 9 ft. Fixed
Switch Type Trigger
Trigger Lock On
Max. Cap. Reinforced Grinding Wheels . . 2 in.
Max. Cap. Mounted Wheels & Points. . . . 2 in.
Length 21-1/2 in.
Weight 7.8 lbs.



7 IN. / 9 IN. SANDERS

6066-6

3.5 Max. HP
15 AMPS
6,000 RPM

FEATURES:

- Spiral bevel gearing for performance and durability.
- Sander may be converted to grinder by using the proper wheel guard.



SPECIFICATIONS

Voltage 120 AC/DC
Spindle 5/8 in.-11
Cord Type 9 ft. Fixed
Construction Type Grounded
Switch Type Trigger
Trigger Lock On
Spindle Lock Yes
Adjustable Handle No
Electronic Feedback No
Length 17-1/2 in.
Weight 12 lbs.

6072

2.25 Max. HP
13 AMPS
5,000 RPM

FEATURES:

- Spiral bevel gearing for performance and durability.
- Sander may be converted to grinder by using the proper wheel guard.



SPECIFICATIONS

Voltage 120 AC/DC
Spindle 5/8 in.-11
Cord Type 9 ft. Fixed
Construction Type Double Insulated
Switch Type Trigger
Trigger Lock On
Spindle Lock Yes
Adjustable Handle No
Electronic Feedback No
Length 17 in.
Weight 9.3 lbs.

6078

2.25 Max. HP
13 AMPS
0-6,000 RPM

FEATURES:

- Dial speed control 0-6,000 RPM.
- 10 ft., 2-wire Quik-Lok® cord set.



SPECIFICATIONS

Voltage 120 AC Only
Spindle 5/8 in.-11
Cord Type 10 ft. Quik-Lok
Construction Type Double Insulated
Switch Type Trigger
Trigger Lock On
Spindle Lock Yes
Adjustable Handle No
Electronic Feedback No
Length 17 in.
Weight 9.3 lbs.

ALL INCLUDE

Side handle
Flange and nylon washer

ACCESSORIES

Carrying Case for 13 & 15 AMP Sanders and Grinders



FEATURES:

- 20-gauge steel with baked enamel paint to resist rust.
- Ideal for tool and accessory storage.
- Steel clasps for positive closure.



Sanding Disc

Spiral Backing Pad



SANDER/GRINDERS AND POLISHERS

4-1/2 IN. SANDER/GRINDERS

6140-6
5.5 AMPS
5/8 x 11 Spindle
10,000 RPM

6145
5.5 AMPS
1/2 x 13 Spindle
10,000 RPM

BOTH INCLUDE
Guard
Grinding wheel
Side handle
Flange
Flange nut
Spanner wrench



SPECIFICATIONS

Voltage 120 AC/DC
Capacity 4-1/2 in.
Max. HP 0.7
Cord Type 8 ft. Fixed
Construction Type Double Insulated
Switch Type Paddle
Spindle Lock Yes
Electronic Feedback No
Length 10-1/2 in.
Weight 4.5 lbs.

FEATURES:

- Spiral bevel gearing for performance and durability.
- All ball and roller bearing construction.
- Tool-free adjustable wheel guard.

7 IN. / 9 IN. POLISHERS

Ideal for clear coat finishes

5460-6
Electronic Speed Control
11 AMPS
0-1,750 RPM

FEATURES:
■ Spindle lock for convenient accessory change.
■ Quik-Lok® detachable cord.

5455
11 AMPS
1,750 RPM

FEATURES:
■ Spindle lock for convenient accessory change.
■ Aluminum gear case with protective urethane bumpers.



5460-6 SPECIFICATIONS

Voltage 120 AC
Spindle 5/8 in.-11
Cord Type 10 ft. Quik-Lok
Construction Type Double Insulated
Switch Type Trigger
Trigger Lock On
Dial Speed Control Yes
Spindle Lock Yes
Length 16-1/2 in.
Weight 8.8 lbs.

5455 SPECIFICATIONS

Voltage 120 AC/DC
Spindle 5/8 in.-11
Cord Type 9 ft. Fixed
Construction Type Double Insulated
Switch Type Trigger
Trigger Lock On
Dial Speed Control No
Spindle Lock Yes
Length 16-1/2 in.
Weight 8.8 lbs.

BOTH INCLUDE

Side handle
7 in. rubber backing pad
Disc nut
Nylon washer

ACCESSORIES



Lambswool Bonnet



Lambswool Finishing Pad



Foam Polishing Pad



4-Ply Twisted
100% Wool Pad



Rubber Backing Pad



Hardware & Supply Co., Inc.
Supply, Inc. of Virginia
Form Rentals

NJ (856) 662-6935 • PA (215) 925-8800
Metro (703) 569-6660 • VA (703) 455-6700
Clinton, MD (301) 877-8640



HEAT GUN / CAULK GUN

HEAT GUNS

8975-6

Dual Temperature
570°F and 1000°F
11.6 AMPS

8985 (Kit)

Variable Temperature
140°F - 1040°F
11.6 AMPS

FEATURES:

- Unique impact resistant heating element.
- Efficient soft air velocity increases surface temperature much faster than conventional hot air heat guns.
- Three position rocker switch – off, high and low (8975-6).
- Rotate rear housing to select temperature (8985).



SPECIFICATIONS

Voltage 120 AC
Amps 11.6
Air Temperatures 570°F/1,000°F
Air Volume 14.8 cu. ft./min.
Length 10-1/8 in.
Weight 1.6 lbs.



8985 INCLUDES

Carrying case
Accessory assortment

ACCESSORIES

Deflector
Nozzle



Air
Reducer
Nozzle



CAULK GUN

With 10 oz. Carriage Kit

6560-21

12 VOLT
Cordless

FEATURES:

- Dramatically reduces user fatigue when compared to manual application.
- Expels over 135 (10 oz.) tubes of latex per battery charge.
- 620 pounds of pushing force easily handles high viscosity materials such as windshield urethanes.
- Variable speed switch for better flow control.



6560-21 SPECIFICATIONS

Voltage 12 DC
Carriage 10 oz.
Force 620 lbs.
Reversible Battery Yes
No. of Batteries Included 1
Amp Hours 1.3
Trigger Lock Off
Length 18-1/2 in.
Weight 5.2 lbs.

INCLUDES

10 oz. carriage
Plunger rod
Battery
Charger

COMMON APPLICATIONS

- Auto glass repair and installations
- Weather-stripping
- Fire-stopping
- Sealing plumbing fixtures
- Concrete repair
- Water proofing
- Sound proofing

ACCESSORIES



Quart Size Caulk Cartridge



Plunger Rod for 20 oz.
Caulk Carriage
Sausage Style



One-Hour NiCd DC Charger
(Charges all Milwaukee Power Plus Batteries)



IMPACT WRENCH, DRAIN CLEANERS AND VACUUM CLEANERS

1/2 IN. IMPACT WRENCH WITH ROCKER SWITCH AND DETENT PIN SOCKET RETENTION

9070-20

1,800 RPM
2,600 BPM

FEATURES:

- 300 ft. lbs. of torque – more torque saves time.
- AC/DC rocker switch for quick selection of forward and reverse.
- Power 7.0 amp motor, 1800 RPM and 2600 IPM (no load)
- Light weight (6 lbs.) with balanced feel and cushioned grip.
- Pin detent system to securely retain sockets and adapters.



SPECIFICATIONS

Voltage 120 AC/DC
 Drive Size 1/2 in. Square
 Torque 300 ft.-lbs.
 No Load Speed 1,800 RPM
 Amps 7.0
 No Load BPM 2,600
 Cord Type 8 ft. Fixed
 Switch Type Rocker
 Soft Grip Handle Yes
 Socket Retention Flat End Detent Pin
 Length 11-5/8 in.
 Weight 6.0 lbs.

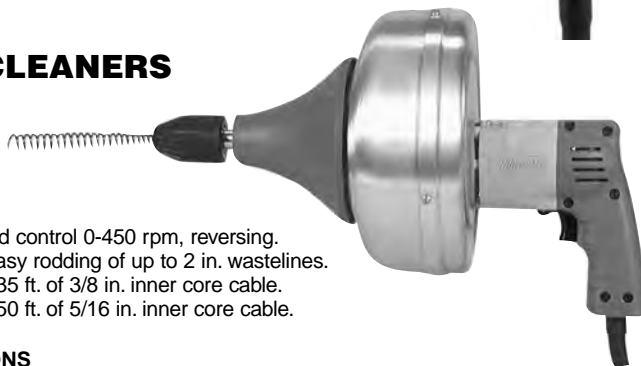
DRAIN CLEANERS

0566-1

0-450 RPM

FEATURES:

- Trigger speed control 0-450 rpm, reversing.
- Quick and easy rodding of up to 2 in. wastelines.
- Holds up to 35 ft. of 3/8 in. inner core cable.
- Holds up to 50 ft. of 5/16 in. inner core cable.



SPECIFICATIONS

Voltage 120 AC
 Max. Pipe Size I.D. 2 in.
 No Load Speed 0-450 RPM
 Chuck Type Keyless
 Amps 1.6
 Length 17 in.
 Weight 7.3 lbs.

0566-1 (Kit)

Steel cable
 Replacement bulb
 Cable guide
 Carrying case



1-STAGE WET/DRY VACUUM CLEANER

8955

FEATURES:

- 10 gal., 1-1/8 bu. recovery capacity, 8.0 amp motor.
- Positive water shut-off.
- Can be used as a blower.
- One-stage bypass motor for wet/dry operation.

INCLUDES

- 1-1/2 in. O.D. hose connection
- 3 Hold-down clamps
- 7 ft. x 1-1/2 in. I.D. vinyl hose
- Hose adapter
- Filter cartridge
- 3-Wheel dolly

SPECIFICATIONS

Voltage 120 AC
 Amps 8.0
 Material Wet/Dry
 Capacity 10 Gal. / 1-1/8 Bu.
 Tank Steel
 Tank Dimensions 14 in. dia.
 Motor Type 1-Stage Bypass
 Max. Air Flow 143 cu. ft./min.
 Sealed Suction in Water 45 in.
 Height 38-1/2 in.
 Width 19-1/2 in.
 Weight 32.0 lbs.



ACCESSORIES



Wet/Dry Cleaning Kit



Wet/Dry Pickup Cartridge Filter



Hardware & Supply Co., Inc.
Supply, Inc. of Virginia
Form Rentals

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 Metro (703) 569-6660 • VA (703) 455-6700
 Clinton, MD (301) 877-8640



1-9/16" SDS-max® Combination Hammer Model 11240

- 2 modes of operation – rotary hammer or hammer only.



Features:

- **SDS-max® bit system** – tool-free bit changes with automatic bit locking, dust protection and maximum impact energy transfer rate.
- **“Combination” dual mode selector** – 2 modes of operation, rotary hammer and hammer only mode.
- **Vario-Lock™ positioning** – rotates and locks chisel into 12 different positions to optimize working angle.
- **Innovative service modules** – designed so a qualified service technician can quickly replace the brushes and cord.
- **360° Auxiliary handle** – provides a wide range of movement along with operator comfort.
- **Integral clutch** – helps minimize torque reaction.
- **Grounded design, UL listed, complies to OSHA.**

Includes:

Auxiliary Handle – 2 602 025 062

Carrying Case – 3 605 438 536

Specifications:

Amperage	10
Impact Energy (ft.-lbs.)	5.2
No Load RPM	400
No Load BPM	3,000
Optimal Concrete Capacity Range	1/2 - 1-3/8"
Max. Hole Diameter in Concrete	1-9/16"
Max. Hole Diameter in Concrete-Core Bit	4"
Max. Hole Diameter in Concrete-Thru Hole Bit	2-1/2"
Length	17.25"
Weight	13.2 lbs.
Rating	120V

1-9/16" SDS-max® Combination Hammer Model 11241EVS

- 2 modes of operation – rotary hammer or hammer only.
- Combines drilling performance from a rotary hammer and chipping performance from a light demolition hammer.



Features:

- **SDS-max® bit system** – tool-free bit changes with automatic bit locking, dust protection and maximum impact energy transfer rate.
- **“Combination” dual mode selector** – 2 modes of operation, rotary hammer and hammer only mode.
- **Auto-Max® dial** – variable speed dial designed to automatically insure the maximum speed and power every time the tool is plugged in.
- **Constant Response™ circuitry** – provides soft-start, maintains constant speed under load, provides overload protection.
- **Turbo™ power** – delivers 20% more power in hammer only mode.
- **Service Minder™ light** – indicates when preventative maintenance is required.
- **Power light** – ensures operator that power feed is live.
- **Innovative service modules** – designed so a qualified service technician can quickly replace the brushes and cord.
- **Vario-Lock™ positioning** – service modules for brushes and cord.
- **Patented cord turret** – provides added flexibility and reduces cord wear.
- **Vibration dampening handle** – reduces vibration up to 40%, providing uncompromising user comfort for extended periods of work.
- **360° Auxiliary handle** – provides a wide range of movement along with operator comfort.
- **Integral clutch** – helps minimize torque reaction.
- **Grounded design, UL listed, complies to OSHA.**

Includes:

Auxiliary Handle – 2 602 025 062

Carrying Case – 3 605 438 536

Specifications:

Amperage	11
Impact Energy (ft.-lbs.)	6.2 Regular; 7.4 Turbo
No Load RPM	170-340
No Load BPM	1,700-3,300
Optimal Concrete Capacity Range	1/2" - 1-3/8"
Max. Hole Diameter in Concrete	1-9/16"
Max. Hole Diameter in Concrete-Core Bit	4"
Max. Hole Diameter in Concrete-Thru Hole Bit	2-1/2"
Length	17.25"
Weight	14 lbs.
Rating	120V



1-3/4" SDS-max® Rotary Hammer Model 11263EVS

- 2 modes of operation – rotary hammer or hammer-only.
- Impact Energy! 9.6 ft.-lbs. in drilling mode, 11.1 ft.-lbs. in chiseling turbo mode.



Features:

- **SDS-max® bit system** – tool-free bit changes with automatic bit locking, dust protection and maximum impact energy transfer rate.
- **“Combination” dual mode selector** – 2 modes of operation, rotary hammer and hammer only mode.
- **Variable speed dial** – for accurate bit starting and controlled chipping applications.
- **Constant Response™ circuitry** – provides soft-start, maintains constant speed under load, provides overload protection.
- **Turbo™ power feature** – delivers 20% more power in hammer only mode.
- **Service Minder™ light** – indicates when preventative maintenance is required.
- **Vario-Lock™ positioning** – rotates and locks chisel into 12 different positions to optimize working angle.
- **360° Auxiliary handle** – provides a wide range of movement along with operator comfort.
- **Softgrip rear handle** – absorbs shock and vibration for operator comfort and less fatigue.

Includes:

Auxiliary Handle – 2 602 025 103
Carrying Case – 3 605 438 396

Specifications:

Amperage	13.5
Impact Energy (ft.-lbs.)	9.6 Regular; 11.1 Turbo
No Load RPM	145-280
No Load BPM	1,350-2,800
Optimal Concrete Capacity Range	5/8" - 1-9/16"
Max. Hole Diameter in Concrete	1-3/4"
Max. Hole Diameter in Concrete-Core Bit	6"
Max. Hole Diameter in Concrete-Thru Hole Bit	3-1/8"
Length	21.0"
Weight	17.9 lbs.
Rating	120V

2" SDS-max® Combination Hammer Model 11245EVS

- “Combination” dual mode selector.



Features:

- **SDS-max® bit system** – tool-free bit changes with automatic bit locking, dust protection and maximum impact energy transfer rate.
- **“Combination” dual mode selector** – 2 modes of operation, rotary hammer and hammer only mode.
- **Variable-speed dial** – for accurate bit starting and controlled chipping applications.
- **Constant Response™ circuitry** – provides soft-start, maintains constant speed under load, provides overload protection.
- **Service Minder™ light** – indicates when preventative maintenance is required.
- **Vario-Lock™ positioning** – rotates and locks chisel into 12 different positions to optimize working angle.
- **Padded rear handle** – absorbs shock for operator comfort.
- **Integral clutch** – helps minimize torque reaction.
- **360° Auxiliary handle** – provides a wide range of movement along with operator comfort.
- **Double insulated, UL listed, complies to OSHA.**

Includes:

Auxiliary Handle – 2 602 025 086
Carrying Case – 2 605 438 322

Specifications:

Amperage	14.0
Impact Energy	13.3 ft.-lbs.
No Load RPM	120-250
No Load BPM	1,100-2,500
Optimal Concrete Capacity Range	3/4" - 1-3/4"
Max. Hole Diameter in Concrete	2"
Max. Hole Diameter in Concrete-Core Bit	6"
Max. Hole Diameter in Concrete-Thru Hole Bit	3-1/8"
Max. Hole Diameter in Steel-Twist Drill Bit	2"
Max. Hole Dia. - Core Bit	6"
Length	23.5"
Weight	24.5 lbs.
Rating	120V



7/8" SDS-plus® Bulldog Rotary Hammer Model 11224VSR

- Bulldog hammer series.
- Aggressive performance in concrete combined with versatile features.
- D-handle design.



Features:

- **SDS-plus® bit system** – tool-free bit changes with automatic bit locking, dust protection and maximum impact energy transfer rate.
- **Multi-function selector** – 3 modes of operation, rotation only, rotary hammer and hammer only mode.
- **Variable-speed reversing trigger** – for accurate bit starting, as well as removing fasteners or bound bits.
- **Vario-Lock™ positioning** – rotates and locks chisel into 36 different positions to optimize working angle.
- **D-handle design** – for extra control, ideal for overhead and downward drilling applications.
- **360° Auxiliary handle with built-in depth gauge** – wide range of movement along with consistent drilling depth.
- **Integral clutch** – helps minimize torque reaction.
- **Double insulated, UL listed, complies to OSHA.**

Includes:

Auxiliary Handle – 1 612 025 032
 Depth Gauge – 1 613 001 010
 Carrying Case – 2610994810

Specifications:

Amperage	6.9
Impact Energy (ft.-lbs.)	1.6
No Load RPM	0 - 1100
No Load BPM	0 - 6,150
Optimal Concrete Capacity Range	3/16" - 5/8"
Max. Hole Diameter in Concrete	7/8"
Max. Hole Diameter in Concrete-Thin Wall Core Bit	2-1/2"
Max. Hole Diameter in Steel	1/2"
Max. Hole Diameter in Wood	1"
Length	17-1/2"
Weight	6.5 lbs.
Cord Length	12'
Rating	120V
Certifications	UL

1" SDS-plus® Bulldog Xtreme Rotary Hammer Model 11253VSR

- Outlasts the competition.
- The fastest longest lasting breed of rotary hammer.
- Maximum speed, maximum life, maximum productivity.



Features:

- **7.2 Amp; 0-1,300 RPM; 0-5,800 BPM.**
- **Multi-function selector** – 3 modes of operation, rotation only, rotary hammer and hammer only mode.
- **Vario-Lock™ positioning** – rotates and locks chisel into 36 different positions to optimize working angle.
- **Patented rotating brush plate** – provides equal power in forward and reverse.
- **Patented cord turret** – 35° pivot for added flexibility and longer cord life.
- **SDS-plus® bit system** – Tool-free bit changes with automatic bit locking, dust protection and maximum impact energy transfer rate.
- **Variable-speed reversing trigger** – for accurate bit starting as well as removing fasteners or bound bits.
- **Pistol-grip design.**
- **Integral clutch** – helps minimize torque reaction.

Includes:

Auxiliary Handle – 2 602 025 141
 Depth Gauge – 1 613 001 010
 Carrying Case – 1 615 438 3672

Specifications:

Amperage	7.2
Impact Energy (ft.-lbs.)	2.2
No Load RPM	0 - 1,300
No Load BPM	0 - 5,800
Optimal Concrete Capacity Range	3/16" - 5/8"
Max. Hole Diameter in Concrete	1"
Max. Hole Diameter in Concrete-Thin Wall Core Bit	2-5/8"
Max. Hole Diameter in Steel	1/2"
Max. Hole Diameter in Wood	3/4" - 1"
Length	14-3/4"
Weight	6.4 lbs.
Bit Capacity	1" Solid Bit, 2-5/8" Thin Wall Core Bit
Rating	120V
Certifications	UL

SDS-plus® Hammer Steel/Chisels

	Type	Size	Item #
	Point	10"	HS1415
	Chisel	3/4" x 10"	HS1420
	Wide Chisel	1 1/2" x 10"	HS1425



36V 1" SDS-Plus® Rotary Hammer Model 11536VSR

- Bulldog™ power unleashed!
- Drills faster than key competitors, both corded and cordless!
- 50% faster drilling – 7.1 in./minute!



Features:

- **1" solid bit capacity.**
- **2.5" core bit capacity.**
- **3-Mode selector** – rotation only, rotary hammer and hammer only mode.
- **Impact force - 2.2 ft.-lbs.**
- **Litheon™ 36V batteries** – Allows more battery charges, longer run time and more power.
- **SDS-Plus® bit system.**
- **Variable speed reversing trigger.**
- **Vario-Lock™ positioning** – rotates and locks chisel into 36 different positions.
- **Tool-free bit changes** – with automatic bit locking, dust protection and maximum impact energy transfer rate.
- **Litheon™ fast charger** – charges 36V batteries to 80% of capacity in 30 minutes.
- **Integral clutch** – Helps minimize torque reaction.

Includes:

- 360° Auxiliary Handle
- (1) – Carrying Case
- (1) – 1-Hour Charger
- (1) – Depth Gauge
- (2) – Litheon™ Batteries

Specifications:

Impact Energy (ft.-lbs.)	2.2
No Load RPM	0 - 960
No Load BPM	0 - 4,260
Length	15"
Weight	9.6 lbs.
Max. Capacity in Concrete	1"
Max. Capacity in Wood	1-1/4"
Max. Capacity in Metal	1/2"
Rating	36 Volt

1-1/8" SDS-plus® Grounded Rotary Hammer Model 1122EVS

- Carrying case included.
- Variable speed dial.
- 3 modes of operation.



Features:

- **SDS-plus® bit system** – tool-free bit changes with automatic bit locking, dust protection and maximum impact energy transfer rate.
- **Multi-function selector** – 3 modes of operation, rotation only, rotary hammer and hammer only mode.
- **Variable speed dial** – for accurate bit starting and controlled chipping applications.
- **Constant Response™ circuitry** – provides soft-start, maintains constant speed under load, provides overload protection.
- **Service Minder™ light** – indicates when preventative maintenance is required.
- **Vario-Lock™ positioning** – rotates and locks chisel into 36 different positions to optimize working angle.
- **Padded rear handle** – absorbs shock for comfort.
- **Integral clutch** – helps minimize torque reaction.
- **360° Auxiliary handle** – provides a wide range of movement along with operator comfort.
- **Double insulated, UL listed, complies to OSHA.**

Includes:

- Auxiliary Handle – 2 602 025 077
- Depth Gauge – 1 613 001 008
- Carrying Case – 2 605 438 376

Specifications:

Amperage	7.8
Impact Energy (ft.-lbs.)	2.6
No Load RPM	300 - 700
No Load BPM	1,650 - 3,900
Optimal Concrete Capacity Range	1/4"-7/8"
Max. Hole Diameter in Concrete	1-1/8"
Max. Hole Diameter in Concrete-Thin Wall Core Bit	3"
Max. Hole Diameter in Steel	1/2"
Max. Hole Diameter in Wood	1-1/4"
Length	15-1/4"
Weight	10.1 lbs.
Rating	120V



1-9/16" Spline Combination Hammer Model 11248EVS

- 2 modes of operation – rotary hammer or hammer only.
- Includes upgrades like Service Minder™ and Constant-Response™ circuitry.



Features:

- **Spline/round hex bit system** – tool-free bit changes, with automatic bit locking.
- **Auto-Max® dial** – variable-speed dial designed to automatically insure the maximum speed and power every time the tool is plugged in.
- **Constant Response and service; circuitry** – provides soft-start, maintains constant speed under load, provides overload protection.
- **“Combination” dual mode selector** – 2 modes of operation, rotary hammer and hammer only mode.
- **Turbo™ power** – delivers 20% more power in hammer only mode.
- **Service Minder™ light** – indicates when preventative maintenance is required.
- **Power light** – ensures operator that power feed is on.
- **Vibration dampening handle** – reduces vibration up to 40%, providing uncompromising user comfort for extended periods of work.
- **Vario-Lock™ positioning** – rotates and locks chisel into 12 different positions to optimize working angle. Designed so a qualified service technician can quickly replace the brushes and cord. Provides added flexibility and reduces cord wear.
- **Grounded design, UL listed, complies to OSHA.**

Includes:

Plastic Case – 3 605 438 536

Auxiliary Handle – 2 602 025 062

Specifications:

Amperage	11
Impact Energy (ft.-lbs.)	6.2 Normal ; 7.4 Turbo
No Load RPM	170 - 340
No Load BPM	1,700 - 3,300
Optimal Concrete Capacity Range	1/2" - 1-3/8"
Max. Hole Diameter in Concrete	1-9/16"
Max. Hole Dia.-ThruHole Bit	2- 1/2"
Max. Hole Dia. - Core Bit	4"
Length	18"
Weight	14.4 lbs.
Cord Length	12'
Rating	120V

1/2" Hammer Drill with Carrying Case Model 1194AVSRK

- Carrying case included.



Features:

- **8.0 Amps, 0-1000/2600 RPM, 0-16,000/0-41,600 BPM.**
- **2-Speed gear box** – matches speed and torque to the job.
- **Dual function control** – quickly converts from rotation only to hammer with rotation.
- **Variable-speed reversing switch** – complete control for drilling, driving and removing bits or screws.
- **All ball and roller bearing construction** – smooth power transmission and extended tool life.
- **Ergonomic handle** – multiple gripping positions for increased comfort and control.
- **360° Side handle with depth gauge** – wide range of movement along with consistent drilling depth.
- **Lock-on button.**

Includes:

360° Auxiliary Handle – 1 612 025 024

Depth Gauge – 1 613 001 010

Chuck Key – CRK005

Specifications:

Amperage	8.0
No Load RPM	0 - 1,000 / 0 - 2,600
No Load BPM	0 - 16,000 / 0 - 41,600
Length	16"
Weight	5.3 lbs.
Max. Capacity in Wood	1-1/2"
Max. Capacity in Steel	1/2" / 1/4" in 2nd
Spindle Size	1/2"-20
Rating	120V AC
Max. Capacity in Concrete	3/4" / 3/8" in 2nd
Max. Capacity in Aluminum	5/8" / 3/8" in 2nd
Cord Length	8'



SDS-max® Demolition Hammer Model 11316EVS

- The hardest hitting hammer in its class!
- Large assortment of Bosch SDS-max® steel accessories available.



Features:

- **SDS-max® bit system** – tool-free bit changes with automatic bit locking, dust protection and maximum impact energy transfer rate.
- **Variable-speed dial** – for controlled chipping applications.
- **Constant Response™ circuitry** – provides soft-start, maintains constant speed under load, provides overload protection.
- **Service Minder™ light** – indicates when preventative maintenance is required.
- **Vario-Lock™ positioning** – rotates and locks chisel into 12 different positions to optimize working angle.
- **Padded rear handle** – absorbs shock for operator comfort.
- **360° Auxiliary handle** – provides a wide range of movement along with operator comfort.
- **Double insulated, UL listed, complies to OSHA.**

Includes:

Auxiliary Handle – 2 602 025 076
Carrying Case – 2 605 438 297

Specifications:

Amperage	14.0
Impact Energy (ft.-lbs.)	4.4 - 18.4
No Load RPM	0
No Load BPM	900 - 1,890
Length	22.5"
Weight	22.5 lbs.
Max. Motor HP	0
Cord Length	12'
Rating	120V

SDS-max® Demolition Hammer Model 11318EVS

- Best in class! Versatility and mobility with performance you would expect from a much larger hammer.



Features:

- **SDS-max® bit system** – tool-free bit changes with automatic bit locking, dust protection and maximum impact energy transfer rate.
- **Auto-Max® dial** – variable-speed dial designed to automatically insure the maximum speed and power every time the tool is plugged in.
- **Constant Response™ circuitry** – provides soft-start, maintains constant speed under load, provides overload protection.
- **Service Minder™ light** – indicates when preventative maintenance is required.
- **Power light** – ensures operator that power feed is live.
- **Vario-Lock™ positioning** – rotates and locks chisel into 12 different positions to optimize working angle.
- **Innovative service modules** – designed so a qualified service technician can quickly replace the brushes and cord.
- **Patented cord turret** – provides added flexibility and reduces cord wear.
- **Vibration dampening handle** – reduces vibration up to 40%, providing uncompromising user comfort for extended periods of work.
- **Grounded design, UL listed, complies to OSHA.**
- **360° Auxiliary handle** – provides a wide range of movement along with operator comfort.

Includes:

Auxiliary Handle – 2 602 025 036
Carrying Case – 2 605 438 534

Specifications:





















Amperage	11
Impact Energy (ft.-lbs.)	8.8
No Load BPM	1,300 - 3,300
Length	17.75"
Weight	12.5 lbs.
Rating	120V



The latest generation of SDS-max® chisels and points feature the newest innovation in demolition steel-reflection technology. Bosch's R-Tec reflection point is featured on HS1903 and HS1904. When energy is dispersed with each beat of the hammer, the new R-Tec point reflects the hammer's energy back into the work material, increasing the rate of removal by 15%. The result is faster demolition which increases overall jobsite productivity and profitability.

SDS-max® Hammer Steel

Fits Bosch SDS-max® hammers, competitive SDS-max® drive hammers and Hilti hammers using TE-Y and TE-FY shanks.

	Type	Application	Size	Item #	Bulk Item #
	R-Tec Flat Chisel	General chipping work	1" x 16"	HS1903	HS1903B10
	R-Tec Bull Point	Starts holes in concrete slabs.	16"	HS1904	HS1904B10
	Asphalt Cutter	Cuts asphalt or hard ground. (NOT for concrete)	5" x 15"	HS1906	NA
	Bushing Head Shank	Use with Bushing Head	12"	NA	NA
	Bushing Head	(Same as Bushing Tool)	16-tooth head, 1-3/4" sq. x 9-1/4"	NA	NA
	Bushing Tool One Piece	Removes excess concrete, produces an exterior finish, roughs the surface for a surface-applied substance.	16-tooth head, 1-3/4" sq. x 9-1/4"	HS1909	NA
	Scaling Chisel	Wide chisels with (2) 60° cutting angles clean concrete, scale and rust, cut troughs and some asphalt.	3" x 12" 1-1/2" x 12" 2" x 12"	HS1910 HS1916 HS1917	NA NA NA
	Flat Chisel	General chipping work.	1" x 12" 1" x 18"	HS1911 HS1912	HS1911B25 HS1912B25
	Bull Point	Starts holes in concrete slabs.	12" 18"	HS1913 HS1914	HS1913B25 HS1914B25
	Scraping Chisel	(1) 45° cutting angle scrapes tile, glazing, etc.	2" x 12"	HS1915	NA
	Floor Scraper		6" x 25"	HS1918	NA
	Seam Tool	Removes mortar between bricks; cuts narrow channels.	1-1/8" x 15"	HS1920	NA
	Slotting Tool	Breaks out the "web" between closely spaced holes to make a large opening.	1-1/8" x 15"	HS1921	NA
	Clay Spade	Digs clay, hard packed gravel, dirt. (NOT for concrete)	4-1/2" x 17"	HS1922	NA
	Ground Rod Driver	Drives ground rods.	5/8" & 3/4" rods	HS1924	NA
	Pointed Spade	Quickly breaks clay, hard packed gravel, dirt. (NOT for concrete)	4-1/2" x 16"	HS1926	NA
	Winged Channel Chisel		1" x 15"	HS1928	NA
	Gouge	Removes material from wide slots between bricks, slabs.	1" x 12"	HS1929	NA
	Tamper Plate Shank*	Use with Tamper Plate.	12"	HS1927	NA
	Tamper Plate	Compacts dirt, tamps asphalt.	5" x 5"	HS1828	NA

*Not interchangeable with Bushing Shank



BOSCH

PERCUSSION HAMMER ACCESSORIES

Round Hex / Spline Hammer Steel

3/4" Hex Hammer Steel

Item #	Bulk Item #	Size	Item #	Bulk Item #	Type
NA	NA	1" x 16"	NA	NA	R-Tec Flat Chisel
NA	NA	16"	NA	NA	R-Tec Bull Point
NA	NA	5" x 15"	HS1506	NA	Asphalt Cutter
HS1818	NA	12"	HS1508	NA	Bushing Head Shank
HS1521	NA	16-tooth head, 1-3/4" sq. x 9-1/4"	HS1521	NA	Bushing Head
HS1809	HS1809B15	16-tooth head, 1-3/4" sq. x 9-1/4"	HS1520	HS1520B15	Bushing Tool One Piece
HS1810	HS1810B25	3" x 12"	HS1503	HS1503B25	Scaling Chisel
HS1816	NA	1-1/2" x 12"	NA	NA	
HS1817	NA	2" x 12"	NA	NA	
HS1811	HS1811B25	1" x 12"	HS1517	HS1517B25	Flat Chisel
HS1812	HS1812B25	1" x 18"	HS1518	HS1518B25	
HS1813	HS1813B25	12"	HS1515	HS1515B25	Bull Point
HS1814	HS1814B25	18"	HS1516	HS1516B25	
HS1815	NA	2" x 12"	HS1502	NA	Scraping Chisel
NA	NA	6" x 25"	NA	NA	Floor Scraper
HS1820	NA	1-1/8" x 15"	NA	NA	Seam Tool
HS1821	NA	1-1/8" x 15"	NA	NA	Slotting Tool
HS1822	NA	4-1/2" x 17"	HS1504	NA	Clay Spade
HS1824	NA	5/8" & 3/4" rods	HS1524	NA	Ground Rod Driver
HS1826	NA	4-1/2" x 16"	HS1526	NA	Pointed Spade
NA	NA	1" x 15"	NA	NA	Winged Channel Chisel
NA	NA	1" x 12"	NA	NA	Gouge
HS1827	NA	12"	HS1527	NA	Tamper Plate Shank*
HS1828	NA	5" x 5"	HS1528	NA	Tamper Plate



*Not interchangeable with Bushing Shank



Hardware & Supply Co., Inc.
Supply, Inc. of Virginia
Form Rentals

NJ (856) 662-6935 • PA (215) 925-8800
Metro (703) 569-6660 • VA (703) 455-6700
Clinton, MD (301) 877-8640



Brute™ Breaker Hammer Model 11304

- A favorite among the rental industry for its term sustained durability and minimal down time.
- The plug-in-anywhere hammer!



Features:

- **The plug-in-anywhere hammer** – does not need a compressor.
- **Total portability** – operates on 115/120V AC/DC, 15 amp outlet or 2500 watt portable generator.
- **Service-Minder™ brush system** – shuts the Brute™ off when brush replacement, lubrication or preventative maintenance is needed.
- **Grease packed gear box and hammer mechanism** – eliminate uncertainty of jobsite lubrication.
- **Shock mounted handles** – absorb vibration to reduce operator fatigue.
- **2-way tool retainer** – accepts standard 1-1/8" hex, air tool steel with retaining collar of Bosch internal locking combo steel.

Specifications:

Amperage	15.0
Impact Energy (ft.-lbs.)	43
No Load BPM	1400
Length	29-3/4"
Weight	64 lbs.
Cord Length	12'
Rating	120V
Handle Span	23-1/2"
Body Depth	5-3/4"

12" Abrasive Cutoff Machine Kit – 5,000 RPM Model 1364K

14" Abrasive Cutoff Machine Kit – 4,300 RPM Model 1365K



Features:

- **15.0 Amps.**
- **Natural debris removal** – wheel rotation carries sparks, dust and debris away from the operator.
- **AC/DC capability** – extends the versatility of the tool by working from DC outlets such as welders and generators.
- **Reinforced armature windings** – protect motor against abrasive dust and metal debris.
- **Service-Minder™ brushes** – eliminate guesswork, stop the tool when preventative maintenance is needed.
- **Reversible handle** – wrap around side handle mounts left or right for added convenience and versatility.
- **Large footplate** – improves stability and allows greater depth of cut, smooth on both sides for guiding.
- **Double Insulated, UL listed, complies to OSHA.**
- **Reversible fire position** – tool comes set up in fire forward position, but is easily changed to fire reverse position without additional accessories.

1364K Specifications:

Amperage	15.0
No Load RPM	5,000
Length	24.5"
Weight	24-1/2 lbs.
Wheel Diameter	12"
Rating	120V
Depth of Cut	3-7/8"
Spindle Thread	5/8"-11

1365K Specifications:

Amperage	15.0
No Load RPM	4,300
Length	24.5"
Weight	27 lbs.
Rating	120V
Wheel Diameter	14"
Depth of Cut	4-7/8"
Spindle Thread	5/8"-11

1364K Includes:

- Wrap Around Side Handle – 1 607 000 247
- Wheel Guard – 2 605 510 133
- Adjustable Footplate – 2 608 190 025
- Inside Flange – 1 605 703 067
- Outside Flange – 1 605 703 068
- 7/8" Arbor Locking Nut – 2 610 917 054
- 1" Arbor Locking Nut – 1 603 340 011
- 3/8" Allen Wrench – 1 607 950 038
- 6mm Allen Wrench – 1 907 950 007
- Carrying Case

1365K Includes:

- Wrap Around Side Handle – 1 607 000 247
- Wheel Guard – 1 603 340 012
- Adjustable Footplate – 2 608 190 025
- Inside Flange – 1 605 703 078
- Outside Flange – 1 605 703 077
- 7/8" Arbor Locking Nut – 1 603 340 012
- 1" Arbor Locking Nut – 1 603 340 011
- 3/8" Allen Wrench – 1 607 950 038
- 6mm Allen Wrench – 1 907 950 007
- Carrying Case



10.8V Pocket Driver™ Model PS20-2

- Looks small. Works big.
- Very handy and easy to carry in a tool belt!
- Drives 100 3" screws in one charge.



Features:

- **80 in.-lbs. of torque** – drives 100 3-inch screws per battery charge.
- **Ultra-compact power and design** – almost half the size of a 12V compact drill/driver.
- **LED light** – for tight spaces and applications.
- **Forward/Reverse button** – equally useful at driving or removing screws.
- **Quick change chuck** – prevents bit loss in drill or drive mode; pull to insert or release 1/4" hex shank bits.
- **10+1 Clutch** – enables precision driving and eliminates over torque in soft base materials. Max mode allows pilot and other small bore holes.
- **Variable-speed trigger** – for increased sensitivity and control.

Includes:

- (1) – Carrying Case
- (2) – 1.5" Power Drive Bits
- (1) – 30 Minute Charger
- (2) – Litheon™ 10.8V Batteries

Specifications:

No Load RPM	0 - 400
Torque (in.-lbs.)	80
Weight	1.8 lbs.
Rating	10.8V
Length	6-1/2"

10.8V I-Driver™ Model PS10-2

- Tight spaces. No problem.
- Drives 100 3-inch screws in one charge.
- The first pro tool to articulate to 90°!



Features:

- **80 in.-lbs. of torque** – drives 100 3-inch screws per battery charge.
- **Ultra-compact head length** – 3.5" total head length – 3 times shorter than most popular competitor.
- **90-Degree articulating head** – rotates and locks into five positions for increased versatility.
- **7+1 Electronic clutch** – precision driving, eliminates over torque in soft base materials. Drill mode allows pilot and other small bore holes.
- **Forward/Reverse button** – equally useful at driving or removing screws.
- **Quick change chuck** – prevents bit loss in drill or drive mode; pull to insert or release 1/4" hex shank bits.
- **Storage hanger** – convenient tool storage between uses.
- **Variable-speed trigger** – revolutionary design provides increased sensitivity and control.

Includes:

- (1) – Carrying Case
- (2) – 1.5" Power Drive Bits
- (1) – 30 Minute Charger
- (2) – Litheon™ 10.8V Batteries

Specifications:

No Load RPM	0 - 600
Torque (in.-lbs.)	80
Weight	2.2 lbs.
Rating	10.8V
Length	90° = 3-1/2" / 180° = 11-1/2"

HD77 – 7¼" Worm Drive Skilsaw™



- Precision-machined worm drive gears with 7¼" blade for maximum power and durability.
- Oil indicator level and relief bellows for long life.
- Die-cast aluminum motor and gear housings for durability.
- Push button blade lock for easy blade changes.
- 22 amp switch and heavy gauge cord for dependability.
- Anti-snap lower guard reduces snags when making narrow cut-offs.

HD77M – 7¼" Magnesium Worm Drive Skilsaw™



MAG 77

- Light magnesium housing (2 lbs. lighter) with 7¼" blade provide durability, lighter weight.
- Oil indicator level and relief bellows for long life.
- Push button blade lock for easy blade changes.
- 22 amp switch and heavy gauge cord for dependability.
- Anti-snap lower guard reduces snags when making narrow cut-offs.

HD5825 – 6½" Worm Drive Skilsaw™



- Precision-machined worm drive gears with 6½" blade for maximum power and durability.
- Oil indicator level and relief bellows for long life.
- Solid aluminum die cast motor and gear housings for durability.
- Push button blade lock for easy blade changes.
- 22 amp switch and heavy gauge cord for dependability.

HD5860 – 8¼" Worm Drive Skilsaw™



**60°
PRO
BEVEL**

- Exclusive 60° bevel feature with 8¼" blade cuts 2x stock in one pass at 60°.
- Precision-machined worm drive gears for maximum power and durability.
- Oil indicator level and relief bellows for long life.
- Die-cast aluminum motor and gear housings for durability.
- Push button blade lock for easy blade changes.
- Includes 40-tooth combination blade and wrench.

Specifications:	HD77	HD77M	HD5825	HD5860
Depth of Cut at 45°	1-15/16"	1-15/16"	1-3/4"	2-1/4"
Depth of Cut at 60°	–	–	–	1-1/2"
Depth of Cut at 90°	2-3/8"	2-3/8"	2"	2-7/8"
Voltage	120	120	120	120
Rating	120V	120V	120V	120V
Amperage	13.0	13.0	12.0	13.0
Weight	16.0 lbs.	14.0 lbs.	14.9 lbs.	18.8 lbs.
No Load RPM	4,400	4,400	4,600	4,300
Blade Diameter	7¼"	7¼"	6½"	8¼"
Cord Length	8 ft.	8 ft.	8 ft.	8 ft.
Arbor Size	Diamond	Diamond	Diamond	Diamond
Certifications	UL, CSA	UL, CSA	UL, CSA	UL, CSA

The **EVOLUTION 180** is the worlds first Metal Cutting Saw. With it's 7" blade, high power 1200w motor and a generous 2" depth of cut it has established itself across industries as the standard metal cutting saw. Thousands of satisfied users will attest to its durability and versatility, while its compact dimensions and lightweight make it ideal for use on or off site. The Evolution metal cutting saw quickly and easily cuts through steel and aluminum without producing sparks, heat or burrs, to leave a neat, clean finish every time — No need for coolant! Powerful and portable, this versatile evolution metal cutting saw can also be used to cut most types of wood and plastic without the need to change the blade.



- 2" Maximum cutting capacity.
- Designed to cut steel, aluminum, and stainless steel without heat, burrs or coolant. Also cuts wood.
- Powerful 1200 watt 11 amp motor copes with the heaviest of work. Earth grounded and double insulated.
- Long life blade cuts over 80m (260') of 6mm (1/4") steel plate.
- Spindle lock for easy blade changes.
- Includes, Carry Case, trigger switch, operators manual, goggles and hearing protection.
- High quality construction with 12 months warranty.



The **EVOLUTION 180 XTREME** Steel Cutting Circular Saw with Laser Guide and Bevel Cutting Facility with the capacity to take a 180mm TCT blade, designed to cut steel and stainless steel without heat, burrs or coolant. Also cuts wood. The Evolution 180 Xtreme is fitted with a powerful 1500w motor enabling it to cope with the heaviest industrial work, the machine is earth grounded and double insulated. The maximum cutting capacity is 60mm and thickness 8mm, the long life blade cuts over 80m of 6mm steel plate. The 180 Xtreme comes in its own carrying case and is completed with trigger switch, operators manual, goggles and hearing protection. The Evolution 180 Xtreme is a high quality machine.

- Cuts angles in steel tubing.
- Rips through steel plate.
- Steel Grating? NO PROBLEM.
- Bevel cuts from 0 to 45 degrees.
- Designed to cut steel, aluminum, and stainless steel without heat, burrs or coolant. Also cuts wood.
- Powerful 1500 watt motor copes with the heaviest of work. Earth grounded and doubly insulated.
- 2-5/8" Maximum cutting capacity.
- Spindle lock for easy blade changes.
- Includes, Carry Case, trigger switch, operators manual, goggles and hearing protection.
- High quality construction with 12 months warranty.

The **EVOLUTION 230X** metal cutting saw with laser guide has a sturdy, heavy-duty feel as they cut through metal smoothly and with minimum effort. This saw was built to cut metal with a unique motor design that maintains torque and operates at the optimum RPM as the blade moves through steel, thin steel, aluminum and stainless steel.



- Cuts angles in steel tubing.
- Rips through steel plate.
- Steel Grating? NO PROBLEM.
- Laser guide.
- RPM: 2,700.
- Retracting blade guard.
- 3-prong plug.
- Safety glasses.
- Arbor size: 25.4mm.
- Cord length: 8'.
- Cutting guide.
- Chip retention chamber.
- Ear plugs.
- Amps: 15.
- Blade size: 9".
- Bevel cut: 0°-45°.
- Rubberized grip.
- Storage case.
- Watts: 1,750.
- Maximum cutting depth: 3-3/8".
- Stamped wrench included for blade changes.
- Very low vibration.

3/8" Variable-Speed Reversible Drill 6510LVR

Heavy-duty high torque motor for production work

- High power-to-weight ratio (3.3 lbs.).
- Variable-speed (0-1,200 RPM) for drilling in a wide variety of materials.
- All ball bearing construction for long tool life.
- Well balanced for better control and ease of operation.
- Conveniently located lock-on-button for continuous use.
- Separate reversing switch.
- Industrial 3/8" chuck for accurate drilling.
- Convenient belt clip.



INCLUDES:

Drill chuck (763090-1)
Chuck key (763424-8)

Specifications

CapacitySteel 3/8" (10mm)
.....Wood 3/4" (18mm)
No Load RPM0-1,200
AMPS3.5
Length9-1/2" (242mm)
Net Weight3.3 lbs. (1.48kg)
Shipping Weight4.2 lbs. (1.9kg)

9.6V 3/8" Cordless Angle Drill Kit (Variable-Speed, Reversible)

DA391DWD

Ideal for Close Quarter Drilling and Driving



Measures only 4-1/2" from tip of chuck to widest portion of tool body

- Variable-speed (0 - 800 RPM) for pinpoint hole positioning.
- Keyless chuck for fast and easy bit installation.
- Compact, well balanced and lightweight (2.9 lbs.) for easy maneuverability.
- Overload protector helps prevent motor burnout.
- Electric brake stops chuck quickly.

INCLUDES:

Battery (632007-4)
Charger DC9700
Keyless chuck (763083-8)
Plastic tool case (182425-A)

Specifications

CapacitySteel 3/8"
.....Wood 15/32"
.....Wood screw #9 x 3/4"
No Load RPM0 - 800
Torque43.4 in.-lbs.
Watt Hours12.5
Battery (Ah)1.3
Length13-1/4"
Net Weight (w/battery)2.9 lbs.
Shipping Weight9.0 lbs.

1/2" Spade Handle Drill

6013BR

550 RPM with Double Gear Reduction for Added Torque

Rocker type switch for easy one-handed forward or reverse operation

- D-handle rotates 360° for multi-position operation.
- Ball bearing construction for long tool life and smooth operation.
- Heavy-duty industrial 1/2" drill chuck for positive bit retention and accurate drilling.
- Handy chuck key is retained in handle to prevent loss.



INCLUDES:

Top handle (152492-0)
Drill chuck (763047-2A)
Chuck key (763411-7A)

Specifications

CapacitySteel 1/2"
.....Wood 1-3/8"
No Load RPM550
AMPS6.3
Length13-3/8"
Net Weight6.2 lbs.
Shipping Weight7.7 lbs.

9.6V 3-3/8" Cordless Circular Saw Kit

5090DW

Cuts 33 ft. of 15/32" Plywood on a Single Charge

Compact and lightweight (4.0 lbs.) for easy handling

- Tilting base for bevel cutting up to 45°.
- Adjustable cutting depth to 55/64" at 90° and 45/64" 45°.
- Blade lock for easy blade replacements.
- Comfortable non-slip grip for better control.
- Tile and glass cutting with optional diamond wheels and water supply kit.



INCLUDES:

9.6V Battery 9000 (632007-4)
Charger DC9700 (113103-2)
Combination blade (721003-8)
Hex wrench (783202-0)

Specifications

Blade Diameter3-3/8"
Arbor19/32"
Max. Cutting Depth45° 5/64" - 45/64"
.....90° 0 - 55/64"
No Load RPM1,000
Watt Hours12.5
Battery (Ah)1.3
Length12-3/8"
Net Weight (w/battery)4.0 lbs.
Shipping Weight (lbs.)7.0 lbs.

10-1/4" Circular Saw (With Electric Brake)

5201NA

Cuts 3-3/4" at 90° and 2-1/2" at 45°

Extra powerful 12 AMP motor for heavy-duty applications

- Well balanced and lightweight (18.3 lbs.) for better control and ease of operation.
- Precision gearing with ball and needle bearing construction for smooth and efficient power transmission.
- Electric brake for maximum productivity; saves time between cuts.
- Rugged steel base for stability.

INCLUDES:

Combination blade (721411-3)
Rip fence (164019-4)
Wrench for flange (781011-1)
Wrench for bolt (781203-2)

Specifications

Blade Diameter10-1/4"
Arbor5/8"
Max. Cutting Capacityat 90° 3-3/4"
.....at 45° 2-1/2"
No Load RPM.....3,700
Watts out1,550
AMPS12.0
Length17-1/2"
Net Weight18.3 lbs.
Shipping Weight.....27.7 lbs.



7-1/4" Circular Saw

5007NBK

Well Balanced Design for Easy Operation

Heavy gauge aluminum wrap around base ensures stable support

- Shaft lock for easy blade replacement.
- Heavy-duty 15 AMP motor for continuous operation.
- Ball bearing construction.
- AC/DC switch for use with alternative power sources.
- Includes special "thin rim" carbide blade.
- Includes plastic tool case for convenient storage.

INCLUDES:

Carbide tipped blade (A-90009)
Wrench #13 (781203-2)
Rip Fence (164095-8)
Plastic tool case (824409-0)

Specifications

Blade Diameter7-1/4"
Arbor5/8"
Max. Cutting Capacityat 90° 2-3/8"
.....at 45° 1-3/4"
No Load RPM.....5,800
Watts out2,100
AMPS15
Length11-5/8"
Net Weight11.0 lbs.
Shipping Weight.....18.3 lbs.



4-3/8" Circular Saw

4200NH

11,000 RPM for Fast Cutting in a Variety of Materials

High power to weight ratio

- Ball and needle bearing construction for smooth operation.
- Well balanced and light for easy handling.
- Lock-off button helps prevent accidental starts.
- Blade is on the left side.
- Dry cutting of stone and masonry with optional diamond blade.

INCLUDES:

Carbide tipped blade (A-90093)
Rip fence (164095-8)
Socket wrench (782209-3)
Spanner wrench (781011-1)

Specifications

Blade Diameter4-3/8"
Arbor3/4"
Max. Cutting Capacityat 90° 1-1/4"
.....at 45° 3/4"
No Load RPM.....11,000
Watts out1,150
AMPS9.1
Length9"
Net Weight6.8 lbs.
Shipping Weight.....7.6 lbs.



16-5/16" Circular Saw (With Electric Brake)

5402NA

Large Capacity for Beam and Timber Cutting

Large capacity blade cuts 6-1/4" at 90° and 4-3/16" at 45°

- Weighs only 28.7 lbs. for ease of operation.
- Electric brake for maximum productivity.
- Powerful motor delivers 1,800 max watts out.
- Low noise level at only 87dB for quiet operation.
- Blade stabilizer for stable blade rotation and superior cutting performance.
- Large depth control lever for convenience and secure adjustments.
- Large support handle for increased operator comfort and control.
- Carbide tipped blade.

INCLUDES:

32-Tooth Carbide Tipped Blade (A-90956)
Hex wrench #6 (783204-6)
Rip fence (164019-4)

Specifications

Blade Diameter16-5/16"
Arbor1"
Max. Cutting Capacityat 90° 6-1/4"
.....at 45° 4-3/16"
No Load RPM.....2,200
Watts out1,800
AMPS15.0
Length24-1/4"
Net Weight28.7 lbs.
Shipping Weight.....37.4 lbs.



14" Portable Cut-Off Saw

2414NB

Cuts 4-1/2" Round Stock at 45° and 90°

D-shape handle for easy gripping

- Lock-off button to prevent accidental starting.
- Spark diversion guard for operators' safety.
- Guide plate adjusts 45° right and left – 3 locations for various sizes of materials.
- Quick release vise for secure stock retention and fast repeated cut-offs.
- Socket wrench stores on base for convenience.
- Adjustable depth stop for precise, repeatable cutting depth.
- Shaft lock for easy wheel changes.



INCLUDES:

- 1 Ea. Abrasive wheel (724603-3)
- Socket wrench (782210-8)
- 2 Ea. Switch button (411478-6)

Specifications

Blade Diameter	14"
Arbor	1"
Max. cutting Capacity ...90° 4-1/2"	
.....45° 4-1/2"	
No Load RPM	3,800
AMPS	15.0
Length	19-3/4"
Net Weight	36.6 lbs.
Shipping Weight	41.8 lbs.

Shear

JS1600

Cuts 16-Ga. Mild Steel and 18-Ga. Stainless

Powerful motor for continuous use in 16-gauge mild steel and 18-gauge stainless steel

- Built-in thickness gauge for convenience.
- Lever switch for comfort and easy use.
- Easy replaceable blades with a total of 8 cutting edges each.
- Lightweight for easy one handed operation.
- All ball and needle bearings for long life.
- Double insulated.



INCLUDES:

- Shear blade set (191384-8A)
- Wrench (783201-2)

Specifications

Capacity	Steel 16 ga.
.....Stainless 18 ga.	
AMPS	2.8
Strokes/min. (SPM)	4,000
Min. Cutting Radius	1-3/16"
Length	9-1/8"
Net Weight	3.7 lbs.
Shipping Weight	5.2 lbs.

Laminate Trimmer

3700B

Micro Adjustable Guide for Trimming Laminates Accurately

28,000 RPM for fast, smooth trimming

- Removable guide for conventional routing.
- Compact design for easy one-handed operation.
- Lightweight (3.6 lbs.) for maneuverability and reduced operator fatigue.
- Includes wrenches, 1/4" collet and template guide.
- Double insulated.



INCLUDES:

- Wrench #10 (781003-0)
- Wrench #17 (781008-0)
- 1/4" Collet cone (763608-8)
- Template guide (343577-5)

Specifications

Nibbler

JN1601

Handles 16-Ga. Mild Steel and 18-Ga. Stainless

Clean and precise work in keystone plate, deck plate and other corrugated sheet materials

- Die rotates 360°.
- Large 1/4" stroke.
- Ergonomic, slim body design for easy gripping.
- Extremely light (weighs only 3.5 lbs.) for easy handling.
- Lock-on sliding switch for continuous use.
- Built-in thickness gauge for convenience.
- Easy punch and die replacement for less down time.
- Double insulated.



INCLUDES:

- Wrench (781013-7)
- Hex wrench (783208-8)

Specifications

Capacity	Steel 16 ga.
.....Stainless 18 ga.	
.....Aluminum 10 ga.	
AMPS	5.0
Strokes/min. (SPM)	2,200
Min. Cutting Radius	Outside edge 2"
.....Inside edge 1-3/4"	
Length	10-1/4"
Net Weight	3.5 lbs.
Shipping Weight	4.9 lbs.

3" x 24" Belt Sander

9924DB

Low Profile Balanced Design

Extended base to allow flush sanding

- Replaceable ceramic wear plate for easy maintenance.
- Extra long cord for operator convenience.
- Easy lever control to change belts.
- Ball bearing construction for long tool life.
- Powerful 7.8 motor for fast stock removal.
- Low profile for balance and less gouging.
- Highly efficient dust collector.
- Double insulated.



INCLUDES:

- 1 ea. Abrasive belt (#80; 742312-8C)
- Dust bag (122296-4)

Specifications

Belt Size	3" x 24"
Belt Speed (ft/min)	1,300
AMPS	7.8
Length	14"
Net Weight	10.5 lbs.
Shipping Weight	13.2 lbs.

Concrete Planer

PC1100

For Smooth Finishes on Concrete Surfaces or Leveling of Seams

Dry cutting diamond wheel for planing without a water feeding system

- Front roller adjusts planing depth.
- Dust bag for clean operation.
- Lock-on button for continuous operation.
- Double insulated.

INCLUDES:

Diamond wheel (724906-5)
Dust bag (122193-4)
Lock nut wrench (782401-1)
Screwdriver (783001-0)
Lock nut (224526-0)
Steel tool case (823070-0)



Specifications

Wheel Diameter.....4-3/8"
No Load RPM.....10,000
AMPS.....8.5
Length.....16-1/2"
Net Weight.....9.5 lbs.
Shipping Weight.....17.7 lbs.

5" Angle Grinder

9005B

AC/DC, Jobsite Proven for Over 20 Years

Powerful 9 AMP motor yet light-weight for high production work with less fatigue

- Ball bearing construction for long tool life.
- Removable side handle can be installed on either side of tool for operator comfort.
- Spindle lock for easy accessory changes.
- AC/DC for use with alternative power sources.
- Lock-on button for continuous use operation.
- Standard 5/8" - 11 UNC spindle.
- Double insulated.

INCLUDES:

1 Ea. Grinding wheel (741407-8)
Wheel guard (164556-8)
Side handle (273480-5)
Inner flange (224178-7)
Lock nut (224509-0)
Lock nut wrench (782412-6)
Spindle washer (261039-0)



Specifications

Grinding Wheel.....5"
Wire Cup Brush.....3-1/2"
Sanding Disc.....5"
No Load RPM.....10,000
AMPS.....9.0
Spindle Thread (11 UNC).....5/8"
Length.....14"
Net Weight.....6.6 lbs.
Shipping Weight.....9.3 lbs.

4-1/2" Angle Grinder

9564

Super Joint System (SJS) helps prevent gear damage

9.5 AMP motor design for high output power in a more compact tool

- All metal gear housing for added protection.
- Larger and improved carbon brush material for longer tool life.
- "Tool-less" wheel guard adjustment for easy clamping.
- Labyrinth construction seals and protects the motor and bearings from dust and debris by creating a complex set of channels.

INCLUDES:

4-1/2" Grinding Wheel (741424-8-1)
Wheel Guard (163418-7)
Lock Nut (193418-7)
Lock Nut Wrench (782412-6)
Side Handle (152490-4)
Inner Flange (224378-9)



Specifications

Grinding Wheel.....4-1/2"
Cut-off Wheel.....4-1/2"
Wire Cup Brush.....3"
Sanding Disc.....4-1/2"
No Load RPM.....10,500
AMPS.....9.5
Spindle Thread (11 UNC).....5/8"
Length.....11-3/4"
Net Weight.....4.0 lbs.
Shipping Weight.....7.7 lbs.

7" Angle Grinder

GA7001L

Rugged Metal Housing for Long Tool Life

All ball and needle bearings for long life

- Extra heavy-duty (15 AMP) motor for high production and continuous use.
- 6,000 RPM for optimum material removal.
- Removable side handle can be mounted on either side.
- AC/DC switch for use with alternative power source.
- Rugged housing for durability.
- Spindle lock for easy wheel changes.
- Standard 5/8" - 11 UNC spindle for various accessories.

INCLUDES:

Grinding wheel (741413-3)
Wheel guard (164477-4)
Flange (224111-9)
Lock nut (224512-1)
Side handle (273480-5)
Lock nut wrench (782412-6)
Spindle washer (261039-0)



Specifications

Grinding Wheel.....7"
Wire Cup Brush.....6"
Sanding Disc.....7"
No Load RPM.....6,000
AMPS.....15.0
Spindle Thread (11 UNC).....5/8"
Length.....16-1/4"
Net Weight.....12.6 lbs.
Shipping Weight.....18.5 lbs.

1/2" Drive Impact Wrench TW0350

High Max Torque of 260 ft.-lbs.

Impact resistant aluminum gear case with rubber boot protects the all metal gears and offers increased durability

- 0 - 2,000 impacts per minute for maximum efficiency.
- High max torque (260 ft.lbs.) for demanding applications.
- Efficient impact system with less vibration and longer tool life.
- Compact length for easy handling and total operator control.
- Externally accessible brushes for easy inspection and replacement.
- Ergonomically designed rubberized grip improves control while minimizing operator fatigue.



INCLUDES:

Belt Clip (324284-9)
Plastic Carrying Case (824630-1)

Specifications

Square Drive.....1/2"
No Load RPM.....0 - 2,000
Impacts/min. (IPM)0 - 2,000
Torque (ft.-lbs.).....260
AMPS.....3.5
Net Weight.....6.4 lbs.
Shipping Weight11.0 lbs.

3/4" Square Drive Impact Wrench (Reversible)

6906

Maximum Torque of 433 ft.-lbs.

Powerful 9 AMP motor for heavy-duty applications

- Precision gearing plus ball and needle bearing construction for smooth and efficient power transmission.
- Rocker type reversing switch for easy one-handed forward or reverse operation.
- Side handle adjusts 360° for operator convenience at any angle.
- Externally accessible brushes for easy inspection and replacement.
- Double insulated.
- Includes steel tool case.



INCLUDES:

Side handle (122464-9)
Steel tool case (823023-9)

Specifications

Square drive3/4"
Bolt drive5/8" - 7/8"
Impacts/min. (IPM)1,600
No Load RPM1,700
Torque (ft.-lbs.).....433
AMPS.....9.0
Length12-7/8"
Net Weight.....11.0 lbs.
Shipping Weight22.0 lbs.

1/2" Square Drive Impact Wrench (Reversible)

6905H

Maximum Torque of 217 ft.-lbs.

2,600 IPM and 2,200 RPM for fast tightening and loosening of bolts

- Extremely well balanced and lightweight design (5.0 lbs.) for easy handling and reduced operator fatigue.
- Powerful 6 AMP motor for superior performance under heavy-duty applications.
- Rugged housing with rubber bumper for long tool life.
- Isolated forward/reverse switch helps prevent accidental rotation changes.
- 8.2 ft. power cord for less restrictive movement.
- Includes steel tool case.
- Double insulated.



INCLUDES:

Steel tool case (182494-2)

Specifications

Square drive1/2"
Impacts/min. (IPM)2,600
No Load RPM2,200
Torque (ft.-lbs.).....217
AMPS.....6.0
Length10-13/16"
Net Weight.....5.0 lbs.
Shipping Weight10.9 lbs.

1-1/2" Rotary Hammer (Splined, AC/DC)

HR3851

Air Cushion Design for Hard Hitting and Fast Drilling

All ball and needle bearings for longer tool life

- Powerful 10 AMP motor for continuous heavy-duty work.
- Torque limiting clutch.
- Easy lever change from "rotary hammering" to "hammering only."
- Automatic brush cutoff to advise maintenance schedule and to protect motor.
- "Splined" type drive system for maximum power.
- Factory grease packed for reduced maintenance.



INCLUDES:

Hex wrench (#4; 783202-0, #5; 783203-8)
Plastic tool case (150589-9)

Specifications

Capacity
Concrete (with core bits).....4-5/8"
No Load RPM240
Blows/min. (BPM)2,900
Impact Energy (J)7.7
AMPS.....10.0
Length17-1/2"
Net Weight.....16.5 lbs.
Shipping Weight29.0 lbs.

900 Watt Angle Grinder W 7-115 Quick (00715)

- robust Metabo Marathon motor
- die cast aluminum gear housing
- Metabo S-automatic torque limiting clutch
- spindle stop
- Metabo "Quick" tool quick change
- additional VibraTech handle for vibration damping
- adjustment of protective hood without tools
- ergonomic shape for fatigue-proof rough grinding
- Metabo winding protection grid
- auto-stop carbon brushes
- versatile applications through the extensive range of accessories

Included as standard: protective cover, inner support flange, "Quick" flange nut, side handle



900 Watt Angle Grinder W 7-125 (06205)

- robust Metabo Marathon motor
- die cast aluminum gear housing
- Metabo S-automatic torque limiting clutch
- spindle stop
- additional VibraTech handle for vibration damping
- adjustment of protective hood without tools
- ergonomic shape for fatigue-proof rough grinding
- Metabo winding protection grid
- auto-stop carbon brushes
- versatile applications through the extensive range of accessories

Included as standard: protective cover, inner support flange, adjusting nut, side handle, flat-pin spanner



1400 Watt Electronic Angle Grinder WE 14-150 Quick (01451)

- robust Metabo Marathon motor
- die cast aluminum gear housing
- Metabo S-automatic torque limiting clutch
- spindle stop
- Metabo "Quick" tool quick change
- additional VibraTech handle for vibration damping
- adjustment of protective hood without tools
- high torque
- Tacho Constamatic (VC) full-wave electronics
- electronic soft start
- overload protection
- Metabo winding protection grid
- no-volt release switch
- auto-stop carbon brushes
- versatile applications through the extensive range of accessories

Included as standard: protective cover, inner support flange, "Quick" flange nut, side handle



2300 Watt Angle Grinder W 23-180 (06410)

- robust Metabo Marathon motor
- high efficiency and increased torque by optimum heat dissipation
- die cast aluminium gearbox housing
- spindle lock
- additional VibraTech handle for vibration damping
- rotating main handle without tools
- protective cover adjustment without tools
- Metabo safety switch; lock against unintentional start
- Metabo coil guard
- auto-stop carbon brushes
- versatile applications by the extensive range of accessories

Included as standard: protective cover, inner support flange, adjusting nut, side handle, flat-pin spanner



	W 7-115 Quick (00715)	W 7-125 (06205)	WE 14-150 Quick (01451)	W 23-180 (06410)
Grinding wheel diameter	4.5"	5"	6"	7.125"
Torque	21 in.-lbs.	21 in.-lbs.	31 in.-lbs.	124 in.-lbs.
No-load speed	10,000/min.	9,000/min.	9,000/min.	8,500/min.
Rated input power	900 W	900 W	1,400 W	2,300 W
Output power	460 W	460 W	800 W	1,580 W
Rated load speed	6,500/min.	6,500/min.	9,000/min.	5,800/min.
Spindle thread	5/8" - 11 UNC	5/8" - 11 UNC	5/8" 11 UNC	--
Weight (without mains cable)	4 lbs.	4 lbs.	4.2 lbs.	10.8 lbs.

USA5 MAGNETIC DRILL

Features:

- 2-speed gear box.
- 2-3/8" diameter through 3" material.
- Internal coolant system.
- 3/4" twist drill capacity and tapping options.
- Positive slug ejection.

Applications:

- Steel Fabricators
- Bridge Building
- Ship Building
- Steel Erectors
- Maintenance Departments
- Truck & Trailer
- Refineries
- Power Plants



Part #18066
(#18080 is 240v)

Specifications

Arbor bore	3/4"
Drill point breakaway	950 lbs. on 1" plate
Height	23-3/4"
Length	11"
Magnet base dimensions	4" x 7-1/2"
Magnet dead lift	2320 lbs. on 1" plate
Motor	1.8 HP 1400W (single phase) 120V / 11.7A ~ 240V / 5.8A 270 / 520 RPM (no load)
Slugger cutter diameter (maximum)	2-3/8"
Slugger depth of cut (maximum)	3"
Weight	51 lbs.
Width	7-1/2"

Slugger

BY JANCY ENGINEERING INC.

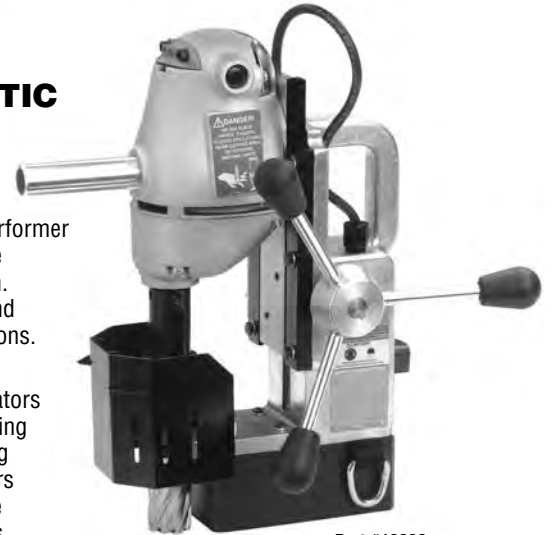
JM101 MAGNETIC DRILL

Features:

- A proven performer with positive slug ejection.
- Twist drill and tapping options.

Applications:

- Steel Fabricators
- Bridge Building
- Ship Building
- Steel Erectors
- Maintenance Departments
- Truck & Trailer
- Refineries
- Power Plants



Part #19020
(#19024 is 240v)

Specifications

Arbor bore	3/4"
Drill point breakaway	650 lbs. on 1" plate
Height	16-1/4"
Length	9-3/8"
Magnet base dimensions	3 x 6-1/4"
Magnet dead lift	1480 lbs. on 1" plate
Motor	0.9 HP 700W (single phase) 120V / 6.0A 450 RPM (no load)
Slugger cutter diameter (maximum)	1-3/8"
Slugger depth of cut (maximum)	2"
Weight	28 lbs.
Width	7-1/2"

METAL CUTTER SAW

Slugger



Part #MCSL07

Applications:

- 5/16" Mild Steel Plate
- 3/8" Aluminum Plate
- 1/4" Steel Plate
- Angle Steel
- Steel Studs
- Square Tube
- Round Tube and Pipe
- Rebar
- Conduit

Features:

- Bevel up to 45 degrees.
- Powerful 1200 watt motor.
- Weighs only 13.6 pounds.
- 7" blade diameter.
- 2" depth of cut, 20mm arbor bore, overload switch.
- Impact resistant carrying case, standard.
- Blade options for mild steel, stainless steel and aluminum.

Specifications

Bevel	45°
Blade Diameter	7"
Depth of cut	2"
Height	9.40"
Length	16.61"
Motor	1200 watt
Weight	13.6 lbs.
Width	10.59"

NOTCHERS



Part #NJYAL100
Recommended for
Production Work

Features:

- Notches any angle 0° to 60° in any pipe or tube from 3/4" to 3" diameter in seconds.
- Two axis precision crossfeed table with handwheels.
- Heavy-duty frame and base construction.
- Mandrel centerline adjustment.
- One vise holds all pipe and tube sizes.
- Top-mounted deburring surface.
- Vise graduated in degrees for easy set-up.
- 24 mandrels available to ensure correct gap-free fits.
- 10 belts and three mandrels of your choice included with unit.
- Tool-free belt and mandrel change over.
- Smooth operation with minimal vibration.

Specifications

Angle range	0° to 60°
Belt	4" x 78-3/4"
Belt speed	98.4 feet/sec.
Dimensions	59" x 47" x 19-1/2"
Grinding capacity	3/4" to 3" O.D.
Motor	4 HP, 220v/440v, 3 ph
Speed	3420 RPM
Weight	517 lbs.

Part #NJYAL12U



Vent notching die for galvanizing

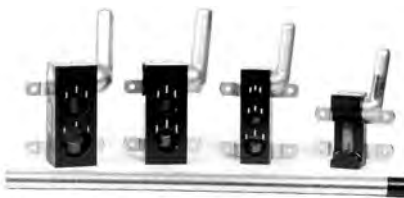
Features:

- Capacity is 3/4", 1", 1-1/4", 1-1/2" and 2" pipe.
- Units are available in 3-1/2 horsepower, 220 volts or 440 volts, 3 phase.
- For galvanizing, machine is equipped with a vent notching die to quickly create a uniform notch in round or square workpieces for outflow.

Specifications

Dimensions	30" x 13-1/2" x 11-1/2"
Motor	3-1/2 HP, 220v/440v, 3 ph
Weight	160 lbs.

NJYAL1, NJYAL2, NJYAL3, NJYALU
Manual Notchers (Part Numbers vary)



Notcher Applications:

- Steel tube and pipe
- Stainless Steel tube and pipe (consult Jancy)
- Hand rail construction
- Gate & Fence / Plumbing

Features:

- Efficient, productive notching at low cost.
- Workpiece is quickly and accurately notched to a proper fit, eliminating costly filing and grinding operations.
- Easy to mount to any stationary surface.
- Notch several diameters up to schedule 40 wall thickness.
- No change over or costly attachments.
- Simply insert a pipe into the die block, utilizing an eccentric shaft and lever system, and pull the handle downward...a perfect notch every time!
- The vent notching die quickly creates a uniform notch in round or square workpieces for outflow.

JB2400 TUBE & PIPE BENDER – hydraulic rotary draw bender



Features:

- Made in the USA.
- All steel construction.
- 110v/25A, 220v/15A - 3 hp Baldor motor.
- 2" sch. 40 pipe capacity, 1.5"–8" CLR (center line radius).
- Auto stop feature for repeatability.
- No complicated electronics to program.
- 180 degree bend capacity in one shot.
- 35-second cycle time for 180 degree bend.
- No tooling required to change forming and pressure dies.
- Bend pipe, round & square tubing, solid round & flat stock.
- On casters for portability.
- 18-month warranty.

Bending capacities of select materials:

Pipe (I.D.)	2" Schedule 40
Tube (O.D.)	2-1/2" .095"
Chromoly	2-1/4" .083"
Square tube	2" x 2" .125"
Flat stock	1/4" x 2" —
Solid rod (O.D.)	1" —
Aluminum (O.D.)	2" .125"
Stainless (O.D.)	2" .093"

Specifications

Capacity	2" Schedule 40 pipe
Height	52"
Length	36"
Maximum Bend	180 degrees
Maximum Bend Speed	35 sec. at 180 deg.
Maximum CLR	8"
Minimum CLR	1.5"
Motor	15A, 220V, 1ph, 60 cycle
Motor	25A, 110V, 1ph, 60 cycle
Weight	625 lbs.
Width	28"

BM20 PORTABLE BEVELING MACHINE –

For weld prep. or finish fabrication work



Applications:

- Plate
- Large diameter pipe
- Weld prep

Specifications

Angle range	15° to 60°
Bevel Width	42 lbs.
Beveler nominal amperage	14A / 120V
Cutting speed	1800 SFPM
Horsepower	1-1/2 hp
Maximum current load	18A / 120V
Power supply	120V
Start-up current	11A / 120V

Slugger CUTTERS *(Available in Standard and Metric sizes)*

- Drill holes 3 times faster than twist drills.
- Drill unique and curved surfaces.
- Allow overlap cuts on existing holes.
- Produce reamed quality burr-free holes.
- Coolant fed cutting edges.
- Produces solid slug.
- Reduce machine size and horsepower requirements.
- Manufactured with C.N.C. accuracy.
- Resharpenable cutting edges.
- Eliminate time consuming, costly pilot holes and step drilling.

3/4" Shank Cutters



- Applications:**
- Steel Fabricators
 - Bridge Building
 - Ship Building
 - Steel Erectors
 - Maintenance Departments
 - Truck & Trailer Mfg.
 - Refineries
 - Power Plants

1", 2", 3", 4" and 6" Depth Cut
Diameter Sizes from 7/16" to 3"

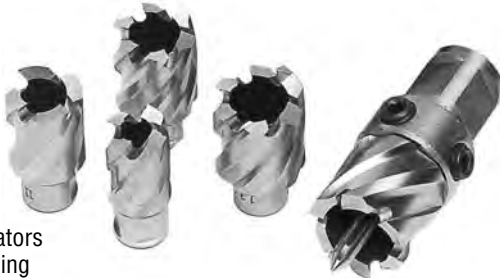
Thin Metal Cutters

- Applications:**
- Sheet Metal
 - Light Tubing
 - Rubber
 - Fiber Materials
 - Sheet Plastics

1/4" Depth Cut
Diameter Sizes from 5/16" to 3"



ShortSlugger® Cutters



- Applications:**
- Steel Fabricators
 - Bridge Building
 - Ship Building
 - Steel Erectors
 - Maintenance Depart.
 - Truck & Trailer
 - Refineries
 - Power Plants

5/8" Depth Cut
Diameter Sizes from 1/2" to 1-1/16"

Carbide Tipped Cutters

- Applications:**
- Stainless Steel
 - Harder Alloys

3/4" Shank and Threaded Drives
1", 2", 3" and 4" Depth Cut
Diameter Sizes from 11/16" to 4"



Carbide Sheet Metal Cutters



3/16" Depth Cut:
Diameter Sizes from 5/8" to 3"
1" Depth Cut:
Diameter Sizes from 11/16" to 1-1/2"

- Applications:**
- Stainless Steel
 - Harder Alloys

Cutting Paste

- Applications:**
- Horizontal Drilling
 - Inverted Drilling



Size: 11 oz. Tube

Tapmatic® Edge creme lubricates Slugger cutters when drilling in horizontal and inverted positions. The heat that is generated while drilling liquifies the cutting paste, providing coolant and extending cutter life.



MAGNETIC DRILLS / ACCESSORIES



Wharton offers the availability of any model for your specific needs!

The patented **HMD150** is designed for fast, efficient hole making in confined spaces. A powerful motor, heavy-duty, high-torque gearing along with the use of Hougen RotaLoc Plus™ Annular Cutters combine to allow for a broad range of applications. The rigid quill feed prevents tool vibration, eliminates gibs, slide/way adjustments and maintenance while providing a constant low profile. The unit is equipped with a removable feed handle, which exposes a hex-head for ratcheting the feed in extremely close quarters.



The two-speed **HMD505** with the patented quill feed design eliminates gib adjustments and arbor support brackets for maintenance free operation and fast, smooth feed into and throughout the cut especially in deep hole drilling. Optional pressurized coolant system aids drilling in horizontal positions and feed handles can be quickly switched to either side. Controls are positioned at the rear for accessibility and convenience. With the coolant bottle and carrying handle removed, the drill becomes only 15" high for even greater maneuverability.



The **HMD904** is lightweight and compact. An economical drill with medium duty capacities. It uses Hougen Rotabroach Annular Cutters. Rear positioned controls are easily accessible and ergonomically designed. Feed handles can be easily switched to either side. And now the **HMD904** features a new safety switch indicator. It tells the operator when the lift sensor is engaged, making the drill operational.



SPECIFICATIONS	HMD904	HMD505	HMD150
Electrical System	120V, 50/60 Hz, 8A, 960W	120V, 50/60 Hz, 14A, 1680W	120V, 50/60 Hz, 8A, 960W
Motor	7.2A, 450 RPM	13A, 250/450 RPM	7.2A, 450 RPM
Hole Diameter	7/16" - 1-1/2" (12mm - 38mm)	7/16" - 2-3/8" (12mm - 51mm)	1/2" - 1-3/8" (12mm - 35mm)
Capacity Depth	2" (50mm)	3" (760mm)	1" (25mm)
Cutter / Mount	Hougen "12,000-Series" 3/4" Shank	Hougen "12,000-Series" 3/4" Shank	RotaLoc Plus™ with Quick-Shank mounting
Dimensions	16-7/16" H x 7-3/16" W x 8-1/4" L	20" H x 4-3/4" W x 10-3/4" L	7-13/16" H x 6-1/2" W x 11-11/16" L
Magnet Base Strength	3-1/8" W x 6-9/16" L	4" W x 8" L	4" W x 7" L
1" Plate	Dead Lift 1680 lb. Drillpoint 900 lb. Breakaway 741 lb.	Dead Lift 2560 lb. Drillpoint 1080 lb. Breakaway 820 lb.	Dead Lift 2165 lb. Drillpoint 735 lb. Breakaway 500 lb.
3/8" Plate			
Net Weight	27.5 lb.	45 lb.	22.7 lb.
Shipping Weight	38.1 lb.	56.8 lb.	31.6 lb.

JACOBS® CHUCKS

Part No.	Description
10732	1/2" Chuck with Key
10738	5/8" Chuck with Key

The 1/2" chuck fits Models HMD904 and HMD914. The 5/8" chuck fits Models HMD914. 1/2" chuck requires 01829

Spindle Adapter for Model HMD904. Model HMD914 requires Spindle Adapter 40341 for both chuck sizes.



SPINDLE ADAPTERS

Part No.	Description
01829	HMD904 Chuck/Tap Adapter
02386	10915 3/4" Shank Adapter
10851	1/2" Shank Adapter
40040	HMD915 3/4" Weldon Adapter
40226	HMD914 Chuck/Tap Adapter
40341	HMD914 Chuck Adapter (long)

Spindle Adapters are required for several of the accessories to increase versatility and productivity of your Hougen Magnetic Drill.



TAPPING ATTACHMENT KITS

Part No.	Description
02463	For use with HMD904 Order Collets separately
Collets:	02495 for #6 thru 1/4" tap 02496 for 1/4" thru 1/2" tap
10937	For use with HMD914 Order Collets separately
Collets:	10807 for #10 thru 1/2" tap 10808 for 1/2" thru 3/4" tap

Lightweight, easy to install design incorporates a planetary gear reverse with a 1:1 ratio. Reversing speed is equal to spindle speed so in-feed and out-feed of the unit can be employed without reversing motor direction.



Hardware & Supply Co., Inc.
Supply, Inc. of Virginia
Form Rentals

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DRILL CUTTERS / LUBRICANTS

Rotabroach® Annular Cutters “12,000-Series”

For use on Hougen Portable Magnetic Drills and materials up to 350 BHN. Made of hardened, high speed tool steel and precision ground, cutters feature a 3/4" diameter shank (Models HMD915 and HMD916 require adapter #02386) and are available in 1, 2 and 3" depth of cut (D.O.C.). Plus, modified end tooth geometry for stacked plate drilling is available. “12,000-Series” Annular Cutters are resharpenable using the 10950 Sharpening Machine.



Cutter Dia. (in. & mm)	Decimal Equivalent	1" Depth of Cut	2" Depth of Cut	3" Depth of Cut	Part No.	Cutter Dia. (in. & mm)	Decimal Equivalent	1" Depth of Cut	2" Depth of Cut	3" Depth of Cut	Part No.	Cutter Dia. (in. & mm)	Decimal Equivalent	1" Depth of Cut	2" Depth of Cut	3" Depth of Cut	Part No.
3/4" Diameter Shank Cutters						3/4" Diameter Shank Cutters						3/4" Diameter Shank Cutters					
Use with Pilot ---->		10531	10532	---		Use with Pilot ---->		10527	10528	24131		Use with Pilot ---->		10527	10528	24131	
7/16	.4375	12114	12214	---		1-3/8	1.3750	12144	12244	3-12244		28mm	1.1024	12328	12428	12528*	
12mm	.4724	12312	12412	---		1-7/16	1.4375	12146	12246	3-12246		29mm	1.1417	12329	12429	12529*	
3/4" Diameter Shank Cutters						3/4" Diameter Shank Cutters						3/4" Diameter Shank Cutters					
Use with Pilot ---->		10533	10534	---		1-1/2	1.5000	12148	12248	3-12248		30mm	1.1811	12330	12430	12530*	
1/2	.5000	12116	12216	---		1-9/16	1.5625	12150	12250	3-12250		31mm	1.2205	12331	12431	12531*	
9/16	.5625	12118	12218	---		1-5/8	1.6250	12152	12252	3-12252		32mm	1.2598	12332	12432	12532*	
5/8	.6250	12120	12220	---		1-11/16	1.6875	12154	12254	3-12254		33mm	1.2992	12333	12433	12533*	
11/16	.6875	12122	12222	---		1-3/4	1.7500	12156	12256	3-12256		34mm	1.3386	12334	12434	12534*	
13mm	.5118	12313	12413	---		1-13/16	1.8125	12158	12258	3-12258		35mm	1.3779	12335	12435	12535*	
14mm	.5512	12314	12413	---		1-7/8	1.8750	12160	12260	3-12260		36mm	1.4173	12336	12436	12536*	
15mm	.5906	12315	12415	---		1-15/16	1.9375	12162	12262	3-12262		37mm	1.4567	12337	12437	12537*	
16mm	.6299	12316	12416	---		2	2.0000	12164	12264	3-12264		38mm	1.4961	12338	12438	12538*	
17mm	.6693	12317	12417	---		2-1/16	2.0625	---	12266	---		39mm	1.5354	12339	12439	12539*	
18mm	.7087	12318	12418	---		2-1/8	2.1250	---	12268	---		40mm	1.5748	12340	12440	12540*	
3/4" Diameter Shank Cutters						3/4" Diameter Shank Cutters						3/4" Diameter Shank Cutters					
Use with Pilot ---->		10527	10528	24131		2-3/16	2.1875	---	12270	---		41mm	1.6142	12341	12441	12541*	
3/4	.7500	12124	12224	3-12224		2-1/4	2.2500	---	12272	---		42mm	1.6535	12342	12442	12542*	
13/16	.8125	12126	12226	3-12226		2-5/16	2.3125	---	12274	---		43mm	1.6929	12343	12443	12543*	
7/8	.8750	12128	12228	3-12228		2-3/8	2.3750	---	12276	---		44mm	1.7323	12344	12444	12544*	
15/16	.9375	12130	12230	3-12230		19mm	.7480	12319	12419	12519*		45mm	1.7717	12345	12445	12545*	
1	1.000	12132	12232	3-12232		20mm	.7874	12320	12420	12520*		46mm	1.8110	12346	12446	12546*	
1-1/16	1.0625	12134	12234	3-12234		21mm	.8268	12321	12421	12521*		47mm	1.8504	12347	12447	12547*	
1-1/8	1.1250	12136	12236	3-12236		22mm	.8661	12322	12422	12522*		48mm	1.8898	12348	12448	12548*	
1-3/16	1.1875	12138	12238	3-12238		23mm	.9055	12323	12423	12523*		49mm	1.9291	12349	12449	12549*	
1-1/4	1.2500	12140	12240	3-12240		24mm	.9449	12324	12424	12524*		50mm	1.9685	12350	12450	12550*	
1-5/16	1.3125	12142	12242	3-12242		25mm	.9843	12325	12425	12525*		51mm	2.0079	12351	12451	12551*	
						26mm	1.0236	12326	12426	12526*		52mm	2.0472	12352	12452	12552*	
						27mm	1.0630	12327	12427	12527*							

*All 3" D.O.C. Metric delivered within 6 weeks.

SLICK-STIK™ LUBRICANT & ROTAMAGIC™ CUTTING FLUID

Part No.	Description
11742-4	(4) 1 Gallon Bottles - makes 11 gallons each, 44 gallons total
11743	(1) 5 Gallon Pail - makes 55 gallons total
11745-6	(6) 16 oz. Slick-Stik Lubricant
11746-12	(12) 1.68 oz. Slick-Stik Lubricant
11746-24	(24) 1.68 oz. Slick-Stik Lubricant in display box



Slick-Stik™

is softer than other stick lubricants for easy application, superior adhesion to the tool, assuring thorough coverage. Use with ferrous or non-ferrous materials.

RotaMagic™

Concentrated Cutting Fluid is water soluble and yields a 10:1 ratio when mixed with water.

15" AND 20" DRILL PRESSES



2530



2500



2550



- Cast iron head.
- Large quill allows greater accuracy.
- Head casting features a permanently lubricated ball bearing spindle assembly, using four heavy-duty ball bearings mounted in an enclosed quill for extended life.
- Massive T-slotted production work table (Model 2550 only).
- Table tilts 45°.
- Large ground steel column diameter for maximum head and table support.
- 3-3/8" stroke for deep hole applications.
- Accurate depth stop for precise hole depths.

STANDARD EQUIPMENT

- 5/8" Drill chuck and arbor.

STOCK NUMBER	2530	2500	2550
Type	15" Bench	15" Floor	20" Floor
Drills to Center of Circle (in.)	15	15	20
Cast Iron Drilling Capacity (max./in.)	5/8	5/8	3/4
Steel Drilling Capacity (max./in.)	1/2	1/2	5/8
Quill Diameter (in.)	1-7/8	1-7/8	2-1/4
Quill Travel (in.)	3-3/8	3-3/8	4-3/4
Spindle Taper	2 MT	2 MT	3 MT
Number & Range of Spindle Speeds (RPM)	12 (250, 340, 390, 510, 600, 650, 990, 1550, 1620, 1900, 2620, 3100)	12 (250, 340, 390, 510, 600, 650, 990, 1500, 1620, 1900, 2620, 3100)	12 (150, 260, 300, 440, 490, 540, 1150, 1550, 1550, 1840, 2220, 2950, 4200)
Overall Table Size (in.)	10 x 10	10 x 10	18-1/2 x 16-1/2
Table Working Surface (in.)	10 x 10	10 x 10	14 x 16
T-slot Number & Size (in)	N/A	N/A	3 & 1/2
Column Diameter (in.)	2-7/8	2-7/8	3-5/8
Base Size (in.)	11 x 18-1/2	11 x 19-1/2	22-3/4 x 17-3/4
Spindle to Base (in.)	24-1/2	48-3/4	43-1/2
Motor	3/4HP, 115V, 1Ph, 1725 RPM	3/4HP, 115V, 1Ph, 1725 RPM	1-1/2HP, 115V, 1Ph, 1725 RPM
Floor Space Required (in./L x W x H)	26 x 13-3/8 x 39	26 x 13-3/8 x 63-1/2	34 x 21 x 67
Net Weight (lbs.)	157	185	321

*Capacities for continuous production use will vary based on application



PNEUMATIC DIE GRINDERS



- Lightweight yet powerful and compact design.
- Heavy-duty ball bearing construction for vibration-free performance.
- Durable precision machined and hardened steel gears.
- Variable speed throttle control with self-closing lever.
- Front exhaust on JSM-501 and MG-1B models keeps work area clean.
- JSM-501 and JSM-542 feature safety lock throttle.
- JSM-516N includes 68-3/4" air hose with fitting.

PNEUMATIC DIE GRINDER KITS

JSM-512K kit includes:

1/4" Die Grinder, (10 Each) Mounted Points, 1/8" Collet, (2 Each) Spanner Wrenches and Blow Mold Case.

JSM-522K kit includes:

1/4" Angle Head Die Grinder, (10 Each) Mounted Points, 1/8" Collet, (2 Each) Spanner Wrenches and Blow Mold Case.



STOCK NUMBER	DESCRIPTION	SHIP WEIGHT (LBS.)	CARTON PACK
JSM-512K	Die Grinder Kit	5	1
JSM-522K	Die Grinder Kit	5	1

STOCK NUMBER	MODEL	COLLET SIZE (IN.)	SPINDLE THREAD (IN./TPI)	HORSE-POWER (HP)	FREE SPEED (RPM)	AIR PRESS. (PSI)	AIR CONSUMP. (CFM)	AIR INLET (NPT/IN.)	AIR HOSE (ID/IN.)	VIBRATION VALUE (M/S2)	OVERALL LENGTH (IN.)	SHIP WEIGHT (LBS.)	CARTON PACK
JSM-516N	JSM-516N	1/8	-	-	54,000	90	4	1/8	3/8	4.8	5-1/4	1	1
JSM-501	JSM-501	1/4	-	1/4	22,000	90	4	1/4	3/8	3	7	3	1
JSM-512	JSM-512	1/4	-	1/4	22,000	90	4	1/4	3/8	5.4	6-3/4	3	1
JSM-512E	JSM-512E	1/4	-	1/4	22,000	90	4	1/4	3/8	5.4	13-1/4	4	1
JSM-522	JSM-522	1/4	-	1/4	22,000	90	4	1/4	3/8	2.2	6-1/4	2	1
JSM-532	JSM-532	1/4	-	1/4	25,000	90	4	1/4	3/8	.9	6	2	1
JSM-532E	JSM-532E	1/4	-	1/4	25,000	90	4	1/4	3/8	.9	9-1/2	4	1
JSM-542	JSM-542	1/4	-	1/4	20,000	90	12	1/4	3/8	1.0	5	2	1
526201	MG-1B	1/4	3/8-24	1/2	20,000	90	12	1/4	3/8	10.2	6-1/16	2	1

RATCHET WRENCHES



JSG-0719



JSM-30



JSG-0735



JSM-30K

- Steel spring ball retainers for rapid socket changing.
- Variable-speed lever throttle for better speed control.
- Hardened steel gears for long tool life.
- Ball bearing construction throughout.

RATCHET WRENCH KITS

Kit includes:
3/8" Ratchet Wrench, 3" Extension Bar, Universal Joint, Screwdriver Adapter, 3 Screwdriver Bits and Blow Mold Case

STOCK NUMBER	DESCRIPTION	SHIP WEIGHT (LBS.)	CARTON PACK
JSM-30K	3/8 Ratchet Wrench Kit	6	1

STOCK NUMBER	SQUARE DRIVE (IN.)	BOLT CAP'Y (IN.)	ANVIL RETAINER TYPE	MAX. TORQUE (FT./LBS.)	FREE SPEED (RPM)	AIR PRESS. (PSI)	AIR CONSUMP. (CFM)	AIR INLET (NPT/IN.)	AIR HOSE (ID/IN.)	VIBRATION VALUE (M/S ²)	OVERALL LENGTH (IN.)	SHIP WEIGHT (LBS.)	CARTON PACK
JSG-0719	1/4	1/4	Ball	18	240	90	3	1/4	1/4	4.4	6-5/16	2	1
JSM-30	3/8	3/8	Ball	50	150	90	4	1/4	3/8	4.5	10	4	1
JSM-31	1/2	3/8	Ball	50	150	90	4	1/4	3/8	4.5	10	4	1
JSG-0735	1/2	1/2	Ball	90	150	90	5	1/4	3/8	3.7	14-3/8	5	1

IMPACT WRENCHES



- Built-in air regulator for positive speed and torque control.
- Front and/or rear bumper guards.
- Models JSM-401, JSM 403, JSG-0740, and JSG-0775 feature a single hammer clutch mechanism.
- Models JSG-0716N, JSG-0750, JSG-0717SH, feature a powerful pin clutch hammer mechanism.
- Models JSG-0717SH and JSG-0751SH feature a three-piece housing design.

IMPACT WRENCH KITS

JSG-0717SHK kit includes:
1/2" Impact Wrench, 3" Extension Bar, Hex Key Wrench and Blow Mold Case

Impact Sockets: 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1"

JSM-403K kit includes:
1/2" Impact Wrench, 5" Extension Bar, Hex Key Wrench and Blow Mold Case

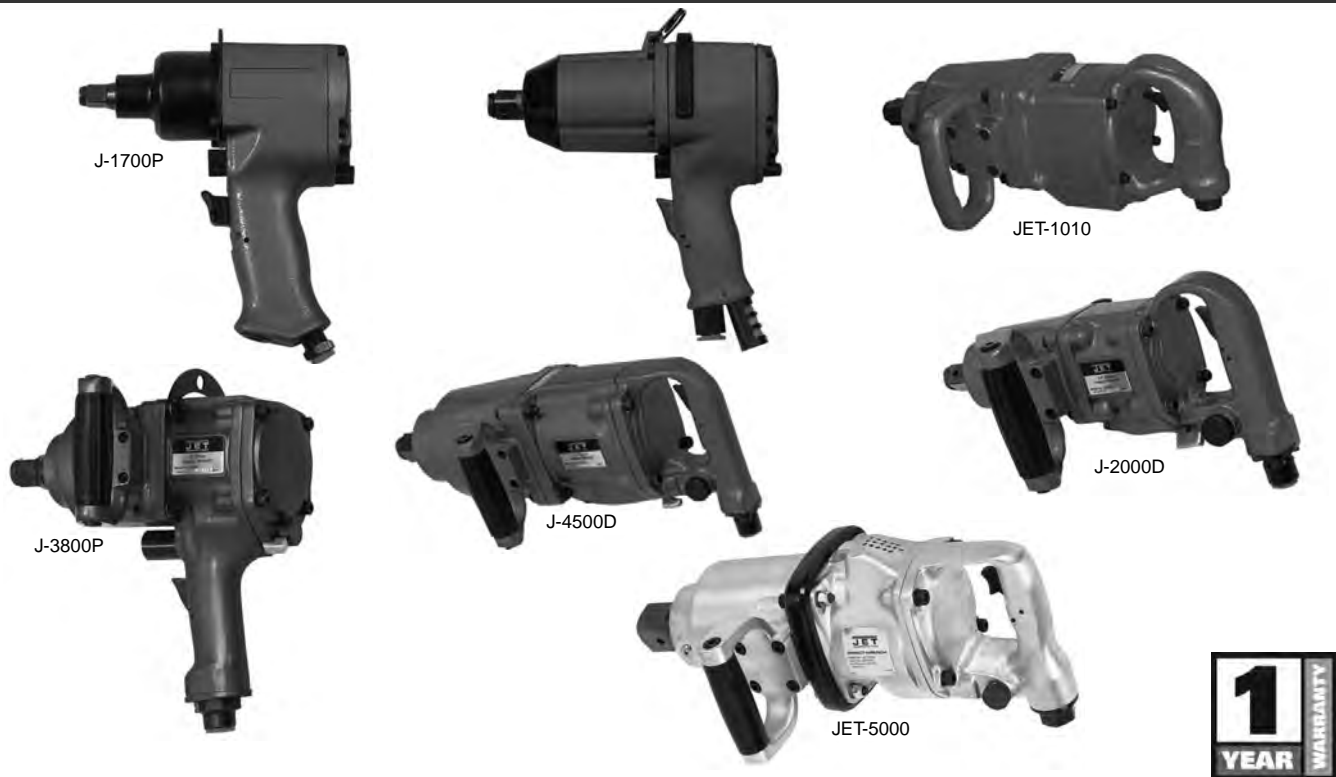


1
YEAR WARRANTY

STOCK NUMBER	DESCRIPTION	SHIP WEIGHT (LBS.)	CARTON PACK
JSM-403K	1/2" Impact Wrench Kit	5	1
JSG-0717SHK	1/2" Impact Wrench Kit	12	1

STOCK NUMBER	SQUARE DRIVE (IN.)	BOLT CAP'Y (IN.)	ANVIL RETAINER TYPE	MAX. TORQUE (FT./LBS.)	FREE SPEED (RPM)	AIR PRESS. (PSI)	AIR CONSUMP. (CFM)	AIR INLET (NPT/IN.)	AIR HOSE (ID/IN.)	VIBRATION VALUE (M/S2)	OVERALL LENGTH (IN.)	SHIP WEIGHT (LBS.)
JSM-401	3/8	3/8	Ring	75	10,000	90	3	1/4	3/8	13.4	5	2-1/2
JSG-0775	3/8	3/8	Ring	75	10,000	90	3	1/4	3/8	8.9	5-1/2	2
JSM-403	1/2	5/8	Ring	250	7,000	90	4	1/4	3/8	11.6	6-1/4	5-1/4
JSG-0716N	1/2	5/8	Ring	280	7,000	90	4	1/4	3/8	2.8	7-1/4	5-1/4
JSG-0717SH	1/2	5/8	Ring	380	7,000	90	5	1/4	3/8	2.5	7-5/8	6
JSG-0740	3/4	1	Ring/Hole	480	4,500	90	8	1/4	3/8	5.2	8	10-1/2
JSG-0750	3/4	1	Ring/Hole	500	4,500	90	10	1/4	3/8	11.0	8	10-1/2
JSG-0751SH	3/4	1	Ring/Hole	530	5,000	90	10	1/4	3/8	4.4	9-1/2	11

IMPACT WRENCHES



1/2" SQUARE DRIVE IMPACT WRENCHES

- Twin hammer clutch provides superior torque.
- Variable-speed teasing throttle.
- Single handed operation for forward and reverse direction changes.
- Front exhaust.

3/4" SQUARE DRIVE IMPACT WRENCHES

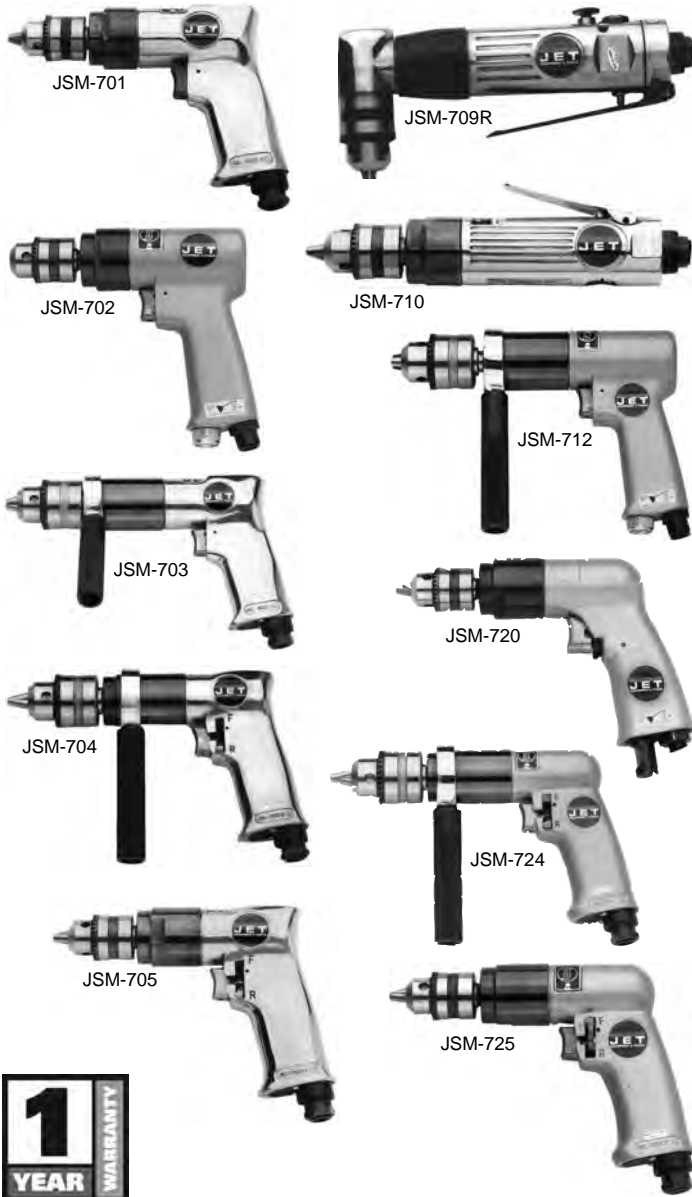
- Unique pinless hammer provides for stability.
- Distinctive clutch design generates maximum power.
- Variable-speed teasing throttle.
- Built-in regulator
- Pistol grip style body.
- Muffled handle exhaust.
- Pistol grip design with center balanced hanger ring.
- J-2000PL has 5" extended anvil.
- J-3800 has cushion grip dead handle.

1" SQUARE DRIVE IMPACT WRENCHES

- Unique pinless hammer provides for stability.
- Distinctive clutch design generates maximum power.
- Variable-speed teasing throttle.
- Built-in regulator
- Incredible power-to-weight ratio.
- Cushioned grip dead handle.
- Side-mounted bumper guards.

STOCK NO.	MODEL	SQUARE DRIVE (IN.)	BOLT CAP'Y (IN.)	ANVIL RETAINER TYPE	MAX TORQUE (FT./LBS.)	FREE SPEED (RPM)	AIR PRESS. (PSI)	AIR CONSUMP. (CFM)	AIR INLET (NPT/IN.)	AIR HOSE (ID/IN.)	VIBRATION VALUE (M/S2)	OVERALL LENGTH FOLDED (IN.)	SHIP WEIGHT (LBS.)	CARTON PACK
1/2" Square Drive Impact Wrenches														
505983	J-1700P	1/2	5/8	Ring	407	6500	90	23	1/4	3/8	3.2	7	7	1
3/4" Square Drive Impact Wrenches														
505972	J-2000P	3/4	13/16	Ring/Hole	550	5500	90	39	3/8	3/8	4	8-7/8	11	1
505973	J-2000PL	3/4	13/16	Ring/Hole	550	5500	90	39	3/8	3/8	4	13-7/8	12	1
505974	J-2000D	3/4	7/8	Ring/Hole	510	5500	90	39	3/8	3/8	4	12-3/16	13	1
1" Square Drive Impact Wrenches														
505941	JET-1010	1	1-1/4	Ring/Hole	1250	4100	90	35	1/2	1/2	8	16-3/16	33	1
505955	JET-5000	1-1/2	2	Hole	3400	3000	90	44	1/2	3/4	8.3	16	34	1
505942	JET-1010-E6	1	1-1/4	Ring/Hole	1250	4100	90	35	1/2	1/2	8	22-7/16	35	1
505976	J-3800P	1	1-1/2	Ring	1400	4700	90	57	1/2	1/2	8	11-1/16	23	2
505977	J-3800D	1	1-1/2	Ring	1400	4700	90	57	1/2	1/2	8	13	23	1
505980	J-4500D	1	1-3/4	Ring	1700	3700	90	66	1/2	1/2	8.6	18-1/8	34	1

AIR DRILLS

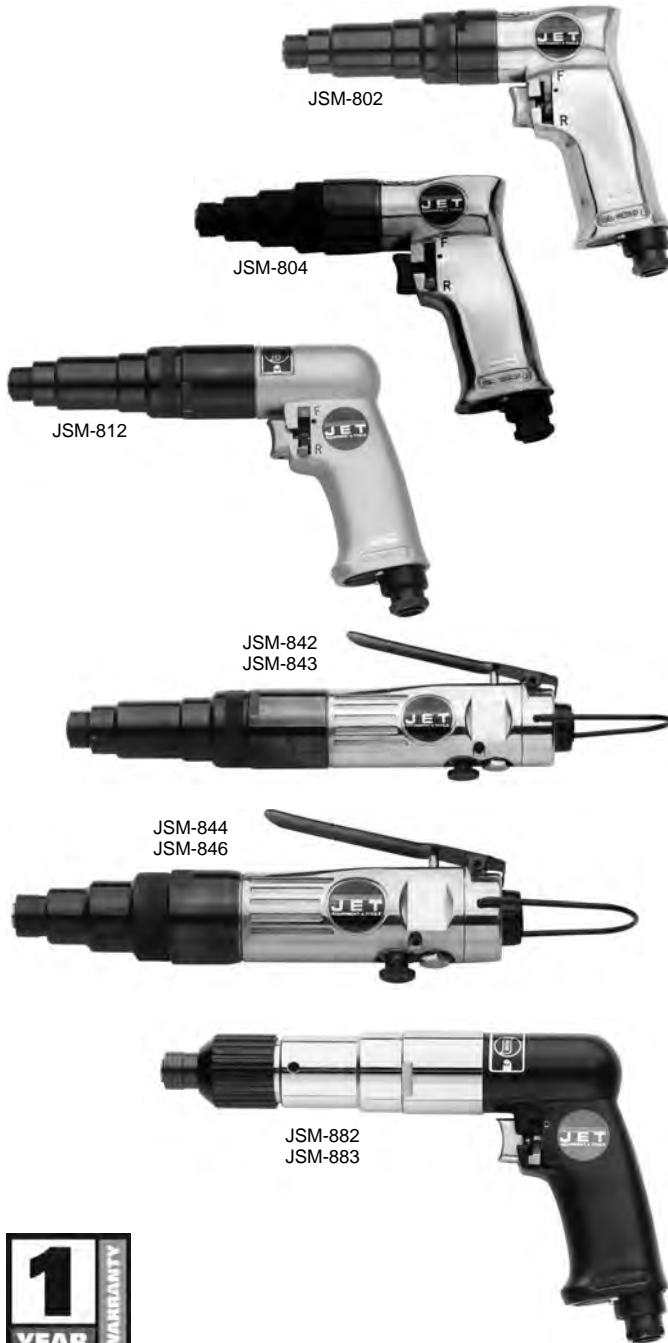


- Ball bearing and needle bearing construction for more efficient performance.
- Muffled handle exhaust for quiet operation.
- All pistol grip models have variable-speed triggers for positive control.
- All models equipped with Jacobs chucks.
- All 1/2" models have an auxiliary side handle for better control.
- Reversing valve on models JSM-725, JSM-724, JSM-709R, JSM-704 and JSM-705.
- Models JSM-720, JSM-725, JSM-724, and JSM-702 feature a new, specially designed housing for general and heavy industrial use.
- Models JSM-709 and JSM-709R feature 90° angle head design for confined areas.



STOCK NUMBER	REVERSIBLE	CHUCK SIZE (IN.)	SPINDLE THREAD (IN./TPI)	HORSE-POWER (HP)	FREE SPEED (RPM)	AIR PRESS. (PSI)	AIR CONSUMP. (CFM)	AIR INLET (NPT/IN.)	AIR HOSE (ID/IN.)	VIBRATION VALUE (M/S2)	OVERALL LENGTH (IN.)	SHIP WEIGHT (LBS.)	CARTON PACK
JSM-701	No	3/8	3/8-24	1/2	2200	90	4	1/4	3/8	1.5	6-1/2	3	1
JSM-702	No	3/8	3/8-24	1/2	2000	90	4	1/4	3/8	3.4	6-1/2	4	1
JSM-703	No	1/2	3/8-24	1/2	500	90	4	1/4	3/8	2.2	7	5	1
JSM-704	Yes	1/2	3/8-24	1/2	800	90	4	1/4	3/8	2.2	7	5	1
JSM-705	Yes	3/8	3/8-24	1/2	1800	90	4	1/4	3/8	5.4	6-1/2	4	1
JSM-706	No	3/8	3/8-24	1/2	2600	90	4	1/4	3/8	4.2	6-1/2	3	1
JSM-709	No	3/8	3/8-24	1/3	1900	90	4	1/4	3/8	2.6	7-1/4	4	1
JSM-709R	Yes	3/8	3/8-24	1/2	1900	90	4	1/4	3/8	2.6	8-1/4	5	1
JSM-710	No	3/8	3/8-24	1/2	2600	90	4	1/4	3/8	2.1	8-1/2	3	1
JSM-720	No	3/8	3/8-24	3/4	2600	90	5	1/4	3/8	1.5	7-1/8	3	1
JSM-724	Yes	1/2	3/8-24	1/2	800	90	4	1/4	3/8	2.2	7-1/2	5	1
JSM-725	Yes	3/8	3/8-24	1/2	1800	90	4	1/4	3/8	4.4	7	4	1
JSM-748	No	3/8	3/8-24	1/2	4500	90	4	1/4	3/8	1.5	6-1/2	3	1

AIR SCREWDRIVERS



- Ball and needle bearing construction for more efficient performance.
- Muffled handle exhaust for quiet operation.
- All pistol grip models have variable-speed triggers for positive control.
- All models have quick-action reversing valve and quick-change chuck to accept standard 1/4" hex bits.
- All adjustable clutch models have minimum torque.
- Model JSM-882 features an external adjustable clutch.



STOCK NUMBER	COLOR	TORQUE RANGE (IN./LBS.)	SHIP WEIGHT (LBS.)	CARTON PACK
J80237G	GREEN	45/90	1	1
J80237B	BLACK	45/115	1	1
J80237Y	YELLOW	45/145	1	1

1
YEAR WARRANTY

STOCK NUMBER	CHUCK TYPE	CHUCK SIZE (IN.)	HORSE-POWER (HP)	FREE SPEED (RPM)	TORQUE (IN./LBS.)	AIR PRESS. (PSI)	AIR CONSUMP. (CFM)	AIR INLET (NPT/IN.)	AIR HOSE (ID/IN.)	VIBRATION VALUE (M/S ²)	OVERALL LENGTH (IN.)	SHIP WEIGHT (LBS.)	CARTON PACK
JSM-802	A	1/4	1/2	1800	45 / 115	90	4	1/4	3/8	.6	7	4	1
JSM-804	P	1/4	1/2	1800	115	90	4	1/4	3/8	.6	7	4	1
JSM-806	P	1/4	1/2	800	145	90	4	1/4	3/8	.3	8-1/2	4	1
JSM-812	A	1/4	1/2	1800	45 / 115	90	4	1/4	3/8	.6	7	4	1
JSM-882	A	1/4	1/2	1800	45 / 115	90	4	1/4	3/8	.5	9	4	1
JSM-842	A	1/4	1/2	1800	45 / 115	90	4	1/4	3/8	.4	10	4	1
JSM-843	A	1/4	1/2	800	45 / 145	90	4	1/4	3/8	.4	11	4	1



SANDERS AND POLISHERS



- Heavy-duty, balanced, ball bearing construction.
- Built-in regulator for positive speed control on models JSG-0402, JSG-0404, and JSG-0420.
- Dynamic counterweight vibration isolators for low vibration sanding.
- Model JSG-0430 straight line sander features a dual piston design which provides for stall-free operation.
- Models JSG-9613, JSG-0416 and JSG-0430 feature quick-action paper clamps.
- Random orbital dual action models JSG-0404, JSG-0420, JSM-603-5, JSM603-6, JSM603V-5, and JSG-9613 provide superior swirl-free finish.
- Model JSG-0470 has a dead handle that mounts for left or right hand operation.
- JSM-603V-5 has a five-hole vacuum pad for dust-free sanding.



STOCK NUMBER	PAD SIZE (IN.)	SPINDLE THREAD (IN./TPI)	HORSE-POWER (HP)	FREE SPEED (RPM)	AIR PRESS. (PSI)	AIR CONSUMP. (CFM)	AIR INLET (NPT/IN.)	AIR HOSE (ID/IN.)	VIBRATION VALUE (M/S2)	OVERALL LENGTH (IN.)	SHIP WEIGHT (LBS.)	CARTON PACK
JSG-0402	3, 4-1/2, 5-1/2 Round	7/16 / 20	1/2	18,000	90	4	1/4	3/8	1.9	7-1/2	6	1
JSG-0404	6 Round	5/16 / 24	1/2	10,000	90	4	1/4	3/8	8.1	8-1/4	4	1
JSG-0416	3-2/3 x 6-1/2	-	1/2	8000	90	4	1/4	3/8	8	7-3/8	6	1
JSG-0420	6 Round	5/16 / 24	1/2	10,000	90	4	1/4	3/8	2.6	8-1/4	6	1
JSG-0430	2-1/2 x 15-3/4	-	-	3000	90	8	1/4	3/8	15	16	8	1
JSG-0470	7 Round	5/8 / 11	1	4500	90	12	1/4	3/8	6.5	16	6	1
JSG-9613	4 x 4-3/8	-	1	20,000	90	10	1/4	3/8	22	5	5	1
JSM-603-5	5 Round	5/16 / 24	1/2	10,000	90	18	1/4	3/8	7.3	6	4	1
JSM-603-6	6 Round	5/16 / 24	1/2	10,000	90	18	1/4	3/8	7.3	6	4	1
JSM-603V-5	5 Round	5/16 / 24	1/2	10,000	90	18	1/4	3/8	7.3	6	5	1

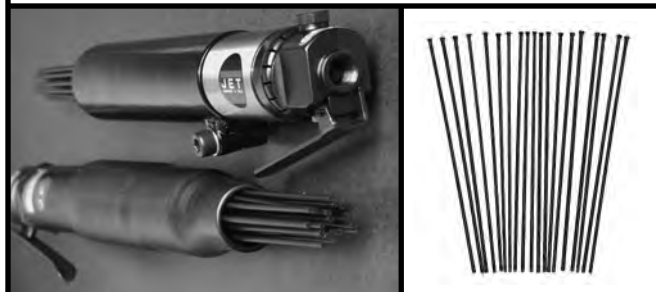
NEEDLE SCALERS / FLUX CHIPPERS



- Heat-treated barrels and pistons for extended tool life.
- Wide angle chisel standard with F-25 and F-25NS.
- Lever lock retainer on Model JSG-9121.
- Ball lock retainer on model F-25.
- Needle scalers can be used either as a scaler or flux chipper by removing scaler attachment.

OPTIONAL ACCESSORIES

- NS-25—Needle scaler attachment for F-25 or replacement scaler for F-25NS
- N307—19-piece package of 3mm x 180mm replacement needles



1
YEAR WARRANTY

STOCK NUMBER	BLOWS PER MINUTE	STROKE LENGTH (IN.)	NUMBER OF NEEDLES	SIZE OF NEEDLES (MM)	AIR PRESS. (PSI)	AIR CONSUMP. (CFM)	AIR INLET (NPT/IN.)	AIR HOSE (ID/IN.)	VIBRATION VALUE (M/S ²)	OVERALL LENGTH FOLDED (IN.)	SHIP WEIGHT (LBS.)	CARTON PACK
JSG-9121	4600	1-1/8	-	-	90	4	1/4	3/8	2.5	11	4	1
JSG-9121NS	4600	1-1/8	19	3	90	4	1/4	3/8	10.2	15	7	1
F-25	4000	7/8	-	-	90	4	1/4	3/8	2.5	8-3/8	5	1
F-25NS	4000	7/8	19	3	90	4	1/4	3/8	14.5	16-3/8	6	1
NS-25	-	-	19	3	-	-	-	-	-	12	2	1
N307	-	-	19	3	-	-	-	-	-	-	1	1

PISTOL GRIP NEEDLE SCALER



- Heavy-duty pistol grip design.
- Comes standard with (14) 4mm needles.

OPTIONAL ACCESSORIES

- N407 14-piece package, 4mm x 180mm replacement needles



1
YEAR WARRANTY

STOCK NUMBER	BLOWS PER MINUTE	STROKE LENGTH (IN.)	NUMBER OF NEEDLES	SIZE OF NEEDLES (MM)	AIR PRESS. (PSI)	AIR CONSUMP. (CFM)	AIR INLET (NPT/IN.)	AIR HOSE (ID/IN.)	VIBRATION VALUE (M/S ²)	OVERALL LENGTH FOLDED (IN.)	SHIP WEIGHT (LBS.)	CARTON PACK
JSG-3328NS	4500	5/8	27 or 14	3 or 4	90	8	1/4	3/8	14.6	14	8	1

HEAVY-DUTY INDUSTRIAL PNEUMATIC DRILL



RD-12

- Heavy-duty industrial quality 1/2" drill.
- "Teasing" throttle.
- Compact design.
- D-type handle with inside trigger.
- Zerk fittings for external lubrication.
- Dead handle.



STOCK NUMBER	MODEL	FREE SPEED (RPM)	AIR PRESSURE (PSI)	AIR CONSUMPTION (CFM)	AIR INLET (NPT/IN.)	AIR HOSE (ID/IN.)	VIBRATION VALUE (M/S ²)	OVERALL LENGTH (IN.)	SHIP WEIGHT (LBS.)
556410	RD-12	1,200	90	30	1/4	1/2	-	12-1/2	6-3/4

ROCK DRILLS



RD-30



RD-60

- Latch type tooling retainer.
- T-style handle, with rubber grips.
- Forged steel parts.
- Heavy-duty ratchet and pawl.
- Four-position throttle.
- RD-30 is equipped with model O-30 oiler.
- Both the RD-30 and the RD-60 have counterclockwise rotation.
- Recommended air pressure.



STOCK NUMBER	MODEL	HEX SHANK SIZE (IN.)	PISTON DIAMETER (IN.)	PISTON STROKE (IN.)	CHUCK ROTATION	FREE SPEED (RPM)	BLOWS PER MINUTE	FT./LBS. PER BLOW @90 PSI	AIR PRESSURE (PSI)
550020	RD-7	5/8	1-1/2	1-1/2	LEFT	300	2600	12	90
550019	RD-15-7/8	7/8 x 3-1/4	1-1/4	1-1/4	RIGHT	350	3200	22	90
550021	RD-30-7/8	7/8 x 3-1/4	1-3/4	1-3/4	LEFT	250	2450	34	90
550024	RD-60-7/8	7/8 x 3-1/4	2-9/16	2-9/16	LEFT	200	1800	75	90
550022	RD-60-1	1 x 4-1/4	2-9/16	2-9/16	LEFT	200	1800	75	90

STOCK NUMBER	MODEL	AIR CONSUMPTION (CFM)	AIR INLET (NPT/IN.)	AIR HOSE (ID/IN.)	VIBRATION VALUE (M/S ²)	OVERALL LENGTH (IN.)	SHIP WEIGHT (LBS.)	CARTON PACK
550020	RD-7	25	1/2	3/8	18.1	14-1/2	8	1
550019	RD-15-7/8	28	1/2	1/2	17.5	16-1/2	12	1
550021	RD-30-7/8	56	3/4	3/4	17.3	18-1/2	31	1
550024	RD-60-7/8	91	3/4	3/4	17.5	22-3/8	60	1
550022	RD-60-1	91	3/4	3/4	17.5	22-3/8	60	1

HEAVY-DUTY INDUSTRIAL HORIZONTAL GRINDERS



- Powerful motor for superior performance.
- Torque drive speed governor.
- Speed regulating valve maintains constant speed control when grinding and prevents over-speed when free running.
- Ball bearing construction.
- Safety self-closing lever throttle.
- Adjustable wheel guard.
- Wheel not included.



STOCK NUMBER	MODEL	WHEEL SIZE (IN.)	SPINDLE THREAD (TPI/IN.)	HORSE-POWER (HP)	FREE SPEED (RPM)	AIR PRESSURE (PSI)	AIR CONSUMP. (CFM)	AIR INLET (NPT/IN.)	AIR HOSE (ID/IN.)	VIBRATION VALUE (M/S2)	OVERALL LENGTH (IN.)	SHIP WEIGHT (LBS.)
526205	HG-2L	2	3/4-24	.9	11,000	90	18	3/8	3/8	6.4	14-1/4	4
526207	HG-4L	4	5/8-11	1.3	7,000	90	43	3/8	1/2	5.7	18-1/2	7

HEAVY-DUTY INDUSTRIAL ANGLE GRINDERS



- Powerful motor for superior performance.
- Torque drive speed governor.
- Speed regulating valve maintains constant speed control when grinding and prevents over-speed when free running.
- Ball bearing construction.
- Safety self-closing lever throttle.
- Adjustable wheel guard.
- Wheel not included.



STOCK NUMBER	MODEL	WHEEL SIZE (IN.)	SPINDLE THREAD (TPI/IN.)	HORSE-POWER (HP)	FREE SPEED (RPM)	AIR PRESSURE (PSI)	AIR CONSUMP. (CFM)	AIR INLET (NPT/IN.)	AIR HOSE (ID/IN.)	VIBRATION VALUE (M/S2)	OVERALL LENGTH (IN.)	SHIP WEIGHT (LBS.)
526346	AG-4T	4 x 5/8	3/4-24	.75	13,000	90	23	3/8	3/4	4	10-1/2	4-1/8
526347	AG-4.5T	4-1/2 x 7/8	5/8-11	.75	11,500	90	23	3/8	3/4	3	10-1/2	4-1/2
526348	AG-7T	7 x 7/8	5/8-11	1.5	7,500	90	46	3/8	1/2	2.6	12	7-1/2

CLAY/TRENCH DIGGERS



- Heavy-duty design.
- Replaceable front head bushing.
- Drop-forged cylinder.
- Full control inside lever throttle.



STOCK NUMBER	MODEL	FT./LBS. PER BLOW @ 90 PSI	AIR CONSUMPTION (CFM)	AIR INLET (NPT/IN.)	AIR HOSE (ID/IN.)	VIBRATION VALUE (M/S2)	OVERALL LENGTH (IN.)	SHIP WEIGHT (LBS.)
550011	CD-20-7/8	28	25	1/2	1/2	16.4	20-1/2	22
550012	CD-30-1	46	49	1/2	1/2	18.1	22	30
550010	TD-30-7/8	46	49	1/2	1/2	18.1	22	30
550014	TD-30-1	46	49	1/2	1/2	18.1	29	36
550016	TD-30-1	46	49	1/2	1/2	18.1	29	36

STOCK NUMBER	MODEL	HANDLE TYPE	HEX SHANK SIZE (IN.)	PISTON DIAMETER (IN.)	PISTON STROKE (IN.)	BLOWS PER MINUTE
550011	CD-20-7/8	D	7/8 x 3-1/4	1-11/16	2-1/2	1,800
550012	CD-30-1	D	1 x 4-1/4	1-3/4	3-3/8	1,550
550010	TD-30-7/8	T	7/8 x 3-1/4	1-3/4	3-3/8	1,550
550014	TD-30-1	T	7/8 x 3-1/4	1-3/4	3-3/8	1,550
550016	TD-30-1	T	1 x 4-1/4	1-3/4	3-3/8	1,550

BENCH MODEL SAND RAMMERS



- Light to medium duty applications.
- Equipped with rubber butts.

FLOOR MODEL SAND RAMMERS

- Heavy-duty applications.
- JET-2T equipped with rubber butt.
- JET-06 equipped with steel butt, 2-year limited warranty.

SAND RAMMERS REPLACEMENT PARTS

STOCK NO.	MODEL	BUTT TYPE
556631	JET-00T	Rubber
556632	JET-0T	Rubber
556633	JET-1T	Rubber
556634	JET-2T	Rubber
556606	JET-06	Steel



STOCK NUMBER	MODEL	BUTT DIAMETER (IN.)	BORE & STROKE (IN.)	BLOWS PER MINUTE	AIR CONSUMPTION (CFM)	AIR HOSE (ID/IN.)	OVERALL LENGTH (IN.)	SHIP WEIGHT (LBS.)	TYPE
556631	JET-00T	2	3/4 x 2	1,600	8	3/8	11	4	Bench
556632	JET-0T	2	7/8 x 2-1/2	1,000	10	3/8	16	6	Bench
556633	JET-1T	2-5/8	1 x 4	800	22	3/8	20	12	Bench
556634	JET-2T	3	1-1/4 x 5	700	27	1/2	44	20	Floor
556606	JET-06	5-3/4	1-1/2 x 5-1/2	750	38	1/2	49	37	Floor

RIVET BUSTERS



- Hard hitting, powerful hammers for cutting off bolt and rivet heads.
- May be used for heavy-duty chipping and nail driving applications.
- Comes equipped with Arrow™ retainer, bushings and retainer springs.
- RB-90 and RB-90D use standard 1" rivet buster tooling.
- RB-91 and RB91D use jumbo 1-1/8" rivet buster tooling.



STOCK NUMBER	MODEL	TOOLING SIZE (IN.)	RIVET CAPACITY (IN.)	STROKE LENGTH (IN.)	BORE SIZE (IN.)	BLOWS PER MINUTE	FT./LBS. PER BLOW @ 90 PSI	AIR PRESSURE (PSI)
550095K	RB-90	1	1-1/4	9	1-1/16	900	43	90
550094K	RB-91	1-1/8	1-1/4	9	1-1/16	900	43	90
550092K	RB-90D	1	1-1/4	9	1-1/16	900	43	90
550093K	RB-91D	1-1/8	1-1/4	9	1-1/16	900	43	90
550097	RB-110	1-1/8	1-1/4	11	1-1/16	680	64	90
550100	RB-110D	1-1/8	1-1/4	11	1-1/16	680	64	90

STOCK NUMBER	MODEL	AIR CONSUMPTION (CFM)	AIR INLET (NPT/IN.)	AIR HOSE (ID/IN.)	VIBRATION VALUE (M/S2.)	OVERALL LENGTH (IN.)	SHIP WEIGHT (LBS.)
550095K	RB-90	28	3/8	1/2	16.9	20-1/4	23
550094K	RB-91	28	3/8	1/2	16.9	20-1/4	23
550092K	RB-90D	28	3/8	1/2	16.9	20-1/2	24
550093K	RB-91D	28	3/8	1/2	16.9	20-1/2	24
550097	RB-110	35	3/8	1/2	15.6	26	33
550100	RB-110D	35	3/8	1/2	15.6	27	34

CHIPPING HAMMERS



FBCH-3R

JCO-3R-RV



FOUR BOLT CHIPPING HAMMERS

- Available with four different stroke lengths, 2" - 4".
- Rubber coated trigger.
- D-handle for extra strength and better grip.
- Four-bolt handle design reduces handle breakage.
- Exhaust deflector diverts exhaust while providing a comfortable grip.
- Heavy-duty hammer provides hard-hitting powerful blows.
- Available with round or hex bushing.
- Will accommodate standard oval collar chisel and retainers.
- Comes with standard type retainer.
- Recommended air pressure 90 PSI.

CASTLE TOOTH HANDLE CHIPPING HAMMERS

- Available with four different stroke lengths, 1" - 4".
- Ring valve type.
- Drop-forged castle tooth style handle.
- Heavy-duty hammer provides hard-hitting powerful blows.
- Outside trigger and open handle design.
- Available with round or hex bushing.
- Will accommodate standard oval collar chisel and retainers.
- Comes with standard type retainer.

OPTIONAL ACCESSORIES

For JET JCO and FBCH chipping hammers include:

- Quick change retainer (557909)
- Ball type retainer (557910)
- Standard retainer (557911)
- 7/8" – 24 hose swivel (557913)
- Retainer strings, 25 pieces (557912)



557909



557910



557911

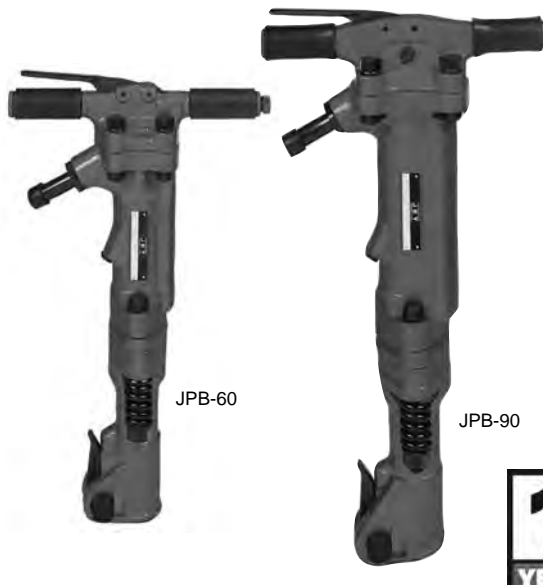
FOUR-BOLT CHIPPING HAMMERS

STOCK NO.	MODEL	SHANK BUSHING STYLE	SHANK BUSHING SIZE (IN.)	STROKE LENGTH (IN.)	BORE SIZE (IN.)	BLOWS PER MIN.	FT./LBS. PER BLOW @ 90 PSI	AIR PRESS. (PSI)	AIR CONSUM. (CFM)	AIR INLET (NPT/IN.)	AIR HOSE (ID/IN.)	VIBRATION VALUE (M/S2)	OVERALL LENGTH (IN.)	SHIP WEIGHT (LBS.)
557702	FBCH-2R	Round	.680	2-1/2	1-1/8	2,000	24	90	28	7/8 - 24	1/2	8.1	15-5/8	19
557706	FBCH-2H	Hex	.580	2-1/2	1-1/8	2,000	24	90	28	7/8 - 24	1/2	8.1	15-5/8	19
557703	FBCH-3R	Round	.680	3	1-1/8	1,900	31	90	28	7/8 - 24	1/2	14.4	16-5/8	20
557707	FBCH-3H	Hex	.580	3	1-1/8	1,900	31	90	28	7/8 - 24	1/2	14.4	16-5/8	20
557704	FBCH-4R	Round	.680	4-1/2	1-1/8	1,500	43	90	28	7/8 - 24	1/2	16.4	18-1/2	22

CASTLE TOOTH HANDLE CHIPPING HAMMERS

STOCK NO.	MODEL	SHANK BUSHING STYLE	SHANK BUSHING SIZE (IN.)	STROKE LENGTH (IN.)	BORE SIZE (IN.)	BLOWS PER MIN.	FT./LBS. PER BLOW @ 90 PSI	AIR PRESS. (PSI)	AIR CONSUM. (CFM)	AIR INLET (NPT/IN.)	AIR HOSE (ID/IN.)	VIBRATION VALUE (M/S2)	OVERALL LENGTH (IN.)	SHIP WEIGHT (LBS.)
557901	JCO-1R-RV	Round	.680	1	1-1/8	2,500	9	90	27	3/8	1/2	9.1	11	11
557905	JCO-1H-RV	Hex	.580	1	1-1/8	2,500	9	90	27	3/8	1/2	9.1	11	11
557902	JCO-2R-RV	Round	.680	2	1-1/8	2,300	18	90	29	3/8	1/2	14.4	12-3/4	13
557906	JCO-2H-RV	Hex	.580	2	1-1/8	2,300	18	90	29	3/8	1/2	14.4	12-3/4	13
557903	JCO-3R-RV	Round	.680	3	1-1/8	2,200	25	90	31	3/8	1/2	14.4	14-3/8	14
557907	JCO-3H-RV	Hex	.580	3	1-1/8	2,200	25	90	31	3/8	1/2	14.4	14-3/8	14
557904	JCO-4R-RV	Round	.680	4	1-1/8	1,800	42	90	33	3/8	1/2	9.1	14	15
557908	JCO-4H-RV	Hex	.580	4	1-1/8	1,800	42	90	33	3/8	1/2	9.1	16	15

PAVING BREAKERS



- Large diameter, smooth stroke piston.
- Full control throttle.
- Replaceable front head bushing.
- Four-bolt head-to-cylinder construction.
- Efficient valve chest for low-maintenance.
- Drop-forged cylinder.
- Chisel retainer latch.
- Rubber handle grips.
- All shank sizes accommodate standard steel.



STOCK NO.	MODEL	HEX SHANK SIZE (IN.)	PISTON DIA. (IN.)	PISTON STROKE (IN.)	BLOWS PER MIN.	FT./LBS. PER BLOW @ 90 PSI	AIR PRESS. (PSI)	AIR CONSUM. (CFM)	AIR INLET (NPT/IN.)	AIR HOSE (ID/IN.)	VIBRATION VALUE (M/S ²)	OVERALL LENGTH (IN.)	SHIP WEIGHT (LBS.)
550035	PB-30-1	1 x 4-1/4	1-3/4	3-3/8	1,550	46	90	49	1/2	1/2	18.1	22-1/2	33
550075	JPB-60-1-1/8	1-1/8 x 6	2-1/4	5	1,400	89	90	58	3/4	3/4	15.6	25-3/8	66
550076	JPB-60-1-1/4	1-1/4 x 6	2-1/4	5	1,400	89	90	58	3/4	3/4	15.6	25-3/8	66
550077	JPB-90-1-1/8	1-1/8 x 6	2-5/8	6-1/2	1,250	181	90	77	3/4	3/4	17.3	28-1/2	93
550078	JPB-90-1-1/4	1-1/4 x 6	2-5/8	6-1/2	1,250	181	90	77	3/4	3/4	17.3	28-1/2	93

FILTER/REGULATOR/LUBRICATOR



- Air filter and oiler feature shatterproof plastic bowls with protective metal cups.
- The air filter removes solid particles and condensates moisture accompanying compressed air.
- Micro-fog lubricator supplies lubricating oil to the pneumatic tool in proper proportion to the air consumption.
- Air pressure can be maintained by the stepless regulator accurately over a wide range of flows as necessary for each application.

STOCK NO.	MODEL	TYPE*	CONNECTION PORT (NPT/IN.)	MAX. TEMP. (F)	MAX. PRESS. (PSI)	OVERALL LENGTH (IN.)	OVERALL WIDTH (IN.)	OVERALL HEIGHT (IN.)	SHIP WEIGHT (LBS.)	CARTON PACK
JSB-2021	JSB-2021	FR	1/4	150	150	2-5/8	4	10-1/4	3	1
JSB-2031	JSB-2031	FR	3/8	150	150	2-5/8	4	10-1/4	3	1
JSB-2041	JSB-2041	FR	1/2	150	150	2-5/8	4	10-1/4	3	1
JSB-1121	JSB-1121	AF	1/4	150	150	2-5/8	2-1/2	10-1/4	2	1
JSB-1131	JSB-1131	AF	3/8	150	150	2-5/8	2-1/2	10-1/4	2	1
JSB-1141	JSB-1141	AF	1/2	150	150	2-5/8	2-1/2	10-1/4	2	1
JSB-3021	JSB-3021	FRL	1/4	150	150	7-1/2	4	10-1/4	3	1
JSB-3031	JSB-3031	FRL	3/8	150	150	7-1/2	4	10-1/4	5	1
JSB-3041	JSB-3041	FRL	1/2	150	150	7-1/2	4	10-1/4	5	1
JSB-1221	JSB-1221	AR	1/4	150	150	2-1/2	3-7/8	6-5/8	2	1
JSB-1231	JSB-1231	AR	3/8	150	150	2-1/2	3-7/8	6-5/8	2	1
JSB-1241	JSB-1241	AR	1/2	150	150	2-1/2	3-7/8	6-5/8	2	1

*FR - Filter Regulator, AF - Air Filter, FRL - Filter Regulator Lubricator, AR - Air Regulator



HANDHELD POWER TOOLS

Pneumatic Driven

Sullair's line of contractor tools includes paving breakers, rock drills, chipping hammers and other pneumatic tools for construction and mining. All are ruggedly built for long-lasting operation under difficult conditions.

Sullair air tools feature fewer wear parts for less maintenance and consume less air for higher efficiency. Reduced kickback of the tools lessens operator fatigue.

Sullair also offers a complete line of accessory steel for breakers, chipping hammers and rivet busters.

The best way to power Sullair tools is with a Sullair compressor, available in models from 125 to 1900 cfm, coupled to the tools with Sullair hose, distinctively colored and labeled for easy identification.

Model	Weight	Bore	Stroke	Warranty
PAVING BREAKERS—STANDARD "T" HANDLE				
MPB-90A	92 lbs.	2-7/16"	5-9/32"	2 Years
MPB-60A	69-1/2 lbs.	2-5/32"	5-5/32"	2 Years
MPB-35C	39 lbs.	1-3/4"	5-5/16"	2 Years
MPB-30A	35-1/2 lbs.	1-25/32"	3-25/32"	2 Years
PAVING BREAKERS—ANTI-VIBRATION				
MPB-90AFG	99-1/2 lbs.	2-7/16"	5-9/32"	2 Years
MPB-60AFG	77 lbs.	2-5/32"	5-5/32"	2 Years
PAVING BREAKERS—ANTI-FREEZE				
MPB-90AS	94 lbs.	2-7/16"	5-9/32"	2 Years
MPB-60AS	71-1/2 lbs.	2-5/32"	5-5/32"	2 Years
PAVING BREAKERS—ANTI-VIBRATION—SILENT ANTI-FREEZE				
MPB-90AFSG	101 lbs.	2-7/16"	5-9/32"	2 Years
MPB-60AFSG	78-1/2 lbs.	2-5/32"	5-3/32"	2 Years
CLAY DIGGERS AND DEMOLITION TOOLS				
MCD-30	33-3/4 lbs.	1-25/32"	3-25/32"	2 Years
MDT-30	33 lbs.	1-2/5"	7-2/5"	2 Years
MDT-22	24 lbs.	1-1/2"	4-1/2"	2 Years
BACKFILL TAMPERS				
MBT-6	40-1/2 lbs.	1-1/2"	5-1/2"	1 Year
ROCK DRILLS — DRY BLOW TYPE				
MRD-55	56 lbs.	2-5/8"	2-11/16"	90 Days
MRD-50	48-1/2 lbs.	3"	2-5/8"	1 Year
MRD-40	45-1/2 lbs.	2-11/16"	2-3/8"	1 Year
MRD-30	34 lbs.	2-9/32"	1-3/4"	1 Year
MRD-9	9 lbs.	1-11/32"	1-3/8"	1 Year
CHIPPING HAMMERS — 4-BOLT HANDLE				
MCH-2	16-5/8 lbs.	1-1/8"	3"	2 Years*
MCH-3	17-3/4 lbs.	1-1/8"	3-3/4"	2 Years*
MCH-4	18-5/8 lbs.	1-1/8"	4-1/4"	2 Years*
MLC-10	12 lbs.	1-7/64"	1-13/16"	2 Years*
NEEDLE SCALER — CONVERTS TO WELD FLUX SCALER				
SANS	6-1/2 lbs.	1"	1-1/8"	90 Days
WELD FLUX SCALER — CONVERTS TO NEEDLE SCALER				
SWFS	4 lbs.	1"	1-1/8"	90 Days

*2 years excluding Retainer and Retainer Spring.

Model	Weight	Bore	Stroke	Warranty
RIVET BUSTER				
MRB-8	30 lbs.	1-3/16"	8"	90 Days
MRB-11	33 lbs.	1-3/16"	11"	90 Days
MCV CONCRETE VIBRATORS				
MCV-300	5.3 lbs.	1-3/16"	16"	6 Months
MCV-400	9 lbs.	1-5/8"	17"	6 Months
MCV-580	18 lbs.	2-1/4"	35"	6 Months
MCV-780	33 lbs.	3-1/16"	51"	6 Months
PAVING BREAKER ACCESSORY TOOLS				
Moil Points	Digging Chisels	Narrow Wedges		
Narrow Chisels	Spread Points	Brick Wedges		
3-inch Chisels	Bushing Tools	Frost Wedges		
Asphalt Cutters	Rock Breakers	Asphalt Wedges		
Clay Spades				
CHIPPING HAMMER ACCESSORY TOOLS — RETAINER TYPE				
Moil Points	Busing Tools (1 piece)			
Flat Chisels	2" Wide Blade Chisels			
1-1/2" Wide Blade Chisels				
RIVET BUSTER ACCESSORY TOOLS — FOR CONCRETE				
Chisels	Moil Points			
UTILITY DRILL (MRD-9) ACCESSORY TOOLS				
Carbide Tipped (Hollow) Drill Bits (Round and Hex Shank)				
Chipping Points and Chisels				
ROCK DRILL STEEL				
7/8" or 1" Hex Drill Steels (H-Thread)				
H-Thread Carbide Rock Bits				
LINE OILERS				
Pressure feed and constant feed line oilers				
AIR HOSE				
I.D.	Length	Coupled	W.P.	
3/4"	50'	2-Lug Quick Connects	300 PSIG	
3/4"	100'	2-Lug Quick Connects	300 PSIG	
1/2"	8'	3/8" NPT, 7/8"-24 Swivel or 1/2" NPT Swivel	300 PSIG	
1/2"	450'	Reel Uncoupled	300 PSIG	
3/4"	400'	Reel Uncoupled	300 PSIG	
BACKFILL TAMPER BUTTS				
Pole Butt — Half Moon	6" Malleable Iron	3" Aluminum Butt		
4" Aluminum Butt				

7801 - 3/8" Super Duty Air Drill

So powerful that it's the choice for industrial work as well as automotive, this is the high quality, long-lasting 3/8" drill for demanding jobs. Its industrial grade chuck holds up to longer and heavy drilling, hole sawing, valve guide reaming and wire brushing.



- 1/2 hp air motor for high performance.
- Free speed up to 2,100 rpm.
- Variable-speed throttle.
- Planetary gear reduction balances the load on bearings and gears to increase the tool's life.

7802R - 3/8" HD Reversible Air Drill

This economical, high quality drill is useful for general purpose drilling, honing, reaming and hole sawing. Its reversible 1/2 hp motor allows to drive and remove screws, including backing out tight screws without a struggle.



- Free speed: 2,000 rpm.
- Reversible motor with a quick reverse lever.
- Variable-speed throttle for starting holes easily.
- Handles smoothly, a lightweight, compact drill.

7803 - 1/2" Heavy-Duty Air Drill

Here's the economical choice for power, a high quality drill designed for drilling, hole sawing, cylinder honing and any other job that calls for a 1/2" size. Its quality features for long life include the industrial grade 1/2" chuck, ball and needle bearing construction and double reduction planetary gearing.



- No-load speed of 500 rpm.
- Auxiliary side handle.

7816 - 1/2" Pneumatic Drill

90 PSI air pressure. 3/8" inside diameter air hose. 1/4" (NPT) air inlet. Equipped with 3/8-24 male thread spindle. Muffled handle exhaust for quiet operation. Variable-speed trigger for positive control.



- Free speed: 1,200 rpm.
- Auxiliary side handle for better control.

8005 - Electric Impact

For application where the use of compressed air is not practical.



- Full ball bearing construction throughout for maximum performance.
- High quality, heat treated steel gears for longer life.
- Full power in reverse for removing bolts, nuts, studs and lag screws.
- Lightweight cast aluminum housing and handle reduce operator fatigue.
- Heavy-duty 3-conductor cord – grounding required.
- Delivers high torque for maximum efficiency.

285A - 1" HD Air Impact Wrench

Combines exceptional power, durability and operator convenience.



- 1,450 ft.-lbs. maximum torque with 5,000 rpm free speed.
- Superior balance, "angled-down" exhaust.
- High efficiency 6-vane air motor.
- Three-position power regulator.

258 - 3/4" HD Air Impact Wrench

Delivers 1000 ft.-lbs. of maximum torque for work on trucks, heavy equipment and agricultural machinery.



- In-handle exhaust directs air flow away from the operator and the work.
- 360 degree swivel inlet helps eliminate twisted hoses.
- Fully adjustable power in forward and reverse.

231 - 1/2" Super Duty Air Impact Wrench

Most popular tool in its class.



- Exclusive impact mechanism.
- Pressure-feed lubrication.
- Adjustable power regulator.
- Easy to service two-piece construction.
- Contoured handle for comfort and control.

244A - 1/2" Super Duty Air Impact Wrench

Bring out the "big-gun" for tire-changing and other heavy automotive and truck work..





- 500 ft.-lbs. torque at a free speed of 7,000 rpm.
- Powerful, with smooth, balanced blows.
- Pressure Feed Lubrication System automatically greases the impact mechanism.





DEMOLITION TOOLS


Pavement Breaker Tools

(All Pavement Breaker Tools are measured under the collar.)

	Description	Wt.	Box Qty.	Moil Point	Narrow Chisel
Moil Points  Narrow Chisels  <div style="border: 1px solid black; padding: 2px;">Longer lengths available.</div> <div style="border: 1px solid black; padding: 2px;">7/8" x 4-1/4" shank is also available for all standard Pavement Breaker items.</div>	7/8" x 3-1/4" x 14"	3-1/4	12	1011	923
	7/8" x 3-1/4" x 18"	4	12	1012	924
	7/8" x 3-1/4" x 24"	5-1/4		1012-2	924-2
	7/8" x 3-1/4" x 36"	7-1/2		1012-3	924-3
	1" x 4-1/4" x 14"	4-1/2	12	1013	925
	1" x 4-1/4" x 18"	5-1/2	12	1014	926
	1" x 4-1/4" x 24"	7		1014-2	926-2
	1" x 4-1/4" x 36"	10		1014-3	926-3
	1" x 4-1/4" x 48"	13		1014-4	926-4
	1" x 4-1/4" x 60"	16		1014-5	926-5
	1" x 4-1/4" x 72"	19		1014-6	926-6
	1-1/8" x 6" x 14"	6-1/2	8	1019	1030
	1-1/8" x 6" x 18"	7-3/4	8	1020	1031
	1-1/8" x 6" x 24"	9-1/2		1020-2	1031-2
	1-1/8" x 6" x 36"	13-1/4		1020-3	1031-3
	1-1/8" x 6" x 48"	17		1020-4	1031-4
	1-1/8" x 6" x 60"	21		1020-5	1031-5
	1-1/8" x 6" x 72"	24-1/2		1020-6	1031-6
	1-1/4" x 6" x 14"	8	8	1023	1034
	1-1/4" x 6" x 18"	9-1/2	8	1024	1035
1-1/4" x 6" x 24"	11-3/4		1024-2	1035-2	
1-1/4" x 6" x 36"	16-1/2		1024-3	1035-3	
1-1/4" x 6" x 48"	21		1024-4	1035-4	
1-1/4" x 6" x 60"	25-1/2		1024-5	1035-5	
1-1/4" x 6" x 72"	30-1/4		1024-6	1035-6	

	Description	Wt.	Box Qty.	Part No.
3" Wide Chisels  <div style="border: 1px solid black; padding: 2px;">Longer lengths available.</div>	7/8" x 3-1/4" x 14"	3-1/2	12	934
	7/8" x 3-1/4" x 18"	4-1/4	12	935
	7/8" x 3-1/4" x 24"	5-1/2		935-2
	7/8" x 3-1/4" x 36"	7-3/4		935-3
	1" x 4-1/4" x 14"	5	12	936
	1" x 4-1/4" x 18"	6	12	937
	1" x 4-1/4" x 24"	7-1/4		937-2
	1" x 4-1/4" x 36"	10-1/4		937-3
	1" x 4-1/4" x 48"	13-1/4		937-4
	1" x 4-1/4" x 60"	16		937-5
	1" x 4-1/4" x 72"	19		937-6
	1-1/8" x 6" x 14"	6-3/4	8	1040
	1-1/8" x 6" x 18"	8	8	1041
	1-1/8" x 6" x 24"	10		1041-2
	1-1/8" x 6" x 36"	13-1/2		1041-3
	1-1/8" x 6" x 48"	17-1/2		1041-4
	1-1/8" x 6" x 60"	21		1041-5
	1-1/8" x 6" x 72"	25		1041-6
	1-1/4" x 6" x 14"	8-1/2	8	1042
	1-1/4" x 6" x 18"	10	8	1043
1-1/4" x 6" x 24"	12-1/4		1043-2	
1-1/4" x 6" x 36"	17		1043-3	
1-1/4" x 6" x 48"	21-1/2		1043-4	
1-1/4" x 6" x 60"	26		1043-5	
1-1/4" x 6" x 72"	30-1/2		1043-6	

	Description	Wt.	Box Qty.	Part No.
Asphalt Cutters 	7/8" x 3-1/4" x 11" x 5" Wide Blade	6	6	942
	1" x 4-1/4" x 11" x 5" Wide Blade	6-1/4	6	943
	1-1/8" x 6" x 11" x 5" Wide Blade	8	6	1045
	1-1/4" x 6" x 11" x 5" Wide Blade	9	6	1046

	Description	Wt.	Box Qty.	5-1/2" Blade	4-1/2" Blade
Clay Spades 	7/8" x 3-1/4" x 16"	6-1/2	5	982	982S
	1" x 4-1/4" x 16"	7-1/4	5	972	972S
	1-1/8" x 6" x 16"	9-1/2	5	1075	1075S
	1-1/4" x 6" x 16"	12	5	1077	1077S








DEMOLITION TOOLS


Pavement Breaker Tools


(All Pavement Breaker Tools are measured under the collar.)


	Description	Wt.	Box Qty.	Part No.
Superkut Chisels 	1" x 4-1/4" x 16" x 1-1/2" Wide Blade	7-3/4	8	9136
	1-1/8" x 6" x 16" x 1-1/2" Wide Blade	8-1/2	8	9156
	1-1/4" x 6" x 16" x 1-1/2" Wide Blade	8-3/4	8	9166


	Description	Wt.	Box Qty.	Part No.
Asphalt-Concrete Wedges 	1" x 4-1/4" x 12" x 3" Wide Blade	6-1/4	6	836
	1-1/8" x 6" x 12" x 3" Wide Blade	8-1/4	6	837
	1-1/4" x 6" x 12" x 3" Wide Blade	9	6	838


	Description	Wt.	Box Qty.	Part No.
Brick Wedges 	1" x 4-1/4" x 10" x 2-1/4" Wide Blade	6-1/2	6	950
	1-1/8" x 6" x 10" x 2-1/4" Wide Blade	7	6	951
	1-1/4" x 6" x 10" x 2-1/4" Wide Blade	7-1/2	6	952


	Description	Wt.	Box Qty.	Part No.
Bushing Tools: 16 Teeth 	7/8" x 3-1/4" x 9-1/2" x 1-3/4" Square	5	8	846
	1" x 4-1/4" x 8" x 1-3/4" Square	4-3/4	8	847
	1-1/8" x 6" x 8" x 1-3/4" Square	5-3/4	8	848
	1-1/4" x 6" x 8" x 1-3/4" Square	7	8	849

	Description	Wt.	Box Qty.	Part No.
Rock Breakers Suitable for Hole Size 1-1/2" to 2" 	1-1/8" x 6" x 15" (1-1/4" x 2-1/4" Taper)	12-1/2	6	841
	1-1/4" x 6" x 15" (1-1/4" x 2-1/4" Taper)	13	6	844

	Description	Wt.	Box Qty.	Part No.
Form Pin – Railroad Spike Drivers Socket Size: 3/8" Deep 	7/8" x 3-1/4" x 8" x 1-3/4" I.D.	5	8	824
	1" x 4-1/4" x 8" x 1-3/4" I.D.	5-1/4	8	825
	1-1/8" x 6" x 8" x 1-3/4" I.D.	7	8	826
	1-1/4" x 6" x 8" x 1-3/4" I.D.	7-1/4	8	827

	Description	Wt.	Box Qty.	Part No.
Frost Wedges 	1" x 4-1/4" x 17" x 1-1/2" Wide Blade	6-1/2	5	810
	1-1/8" x 6" x 17" x 1-1/2" Wide Blade	8-1/2	5	812
	1-1/4" x 6" x 17" x 1-1/2" Wide Blade	9-1/4	5	813

	Description	Wt.	Box Qty.	Part No.
Digging Chisels 	7/8" x 3-1/4" x 16" x 3" Wide Blade	6	6	945
	1" x 4-1/4" x 16" x 3" Wide Blade	6-1/2	6	946
	1-1/8" x 6" x 16" x 3" Wide Blade	8-1/2	6	1048
	1-1/4" x 6" x 16" x 3" Wide Blade	10	6	1049


	Description	Wt.	Box Qty.	Part No.
Pipe Drivers 	Pipe Size: 1"			
	1-1/8" x 6" x 9-3/4"	6-1/4	6	1812
	1-1/4" x 6" x 9-3/4"	7	6	1813
	Pipe Size: 1-1/4"			
	1-1/8" x 6" x 9-3/4"	6-3/4	6	1814
	1-1/4" x 6" x 9-3/4"	7-1/4	6	1815
	Pipe Size: 1-1/2"			
	1-1/8" x 6" x 9-3/4"	7	6	1816
	1-1/4" x 6" x 9-3/4"	7-1/2	6	1817
	Pipe Size: 2"			
	1-1/8" x 6" x 9-3/4"	8-1/2	6	1818
	1-1/4" x 6" x 9-3/4"	9	6	1819






DEMOLITION TOOLS


Pavement Breaker Tools


(All Pavement Breaker Tools are measured under the collar.)


		Description	Wt.	Box Qty.	Part No.
3" Wide Chisels Super Service 		7/8" x 3-1/4" x 14"	4-1/2	12	934R
		7/8" x 3-1/4" x 18"	5-1/2	12	935R
		1" x 4-1/4" x 14"	6	12	936R
		1" x 4-1/4" x 18"	7	12	937R
		1" x 4-1/4" x 24"	8		937R2
		1-1/8" x 6" x 14"	7-1/4	8	1040R
		1-1/8" x 6" x 18"	8-1/2	8	1041R
		1-1/8" x 6" x 24"	11		1041R2
		1-1/4" x 6" x 14"	8-3/4	8	1042R
		1-1/4" x 6" x 18"	10-1/2	8	1043R
	1-1/4" x 6" x 24"	13-1/2		1043R2	

		Description	Wt.	Box Qty.	Moil Point	Narrow Chisel
Moil Points Super Service  Narrow Chisels Super Service 		7/8" x 3-1/4" x 14"	4-1/2	12	1011R	923R
		7/8" x 3-1/4" x 18"	5-1/2	12	1012R	924R
		7/8" x 3-1/4" x 24"	7-1/2		1012R2	924R2
		1" x 4-1/4" x 14"	5-1/4	12	1013R	925R
		1" x 4-1/4" x 18"	6-1/4	12	1014R	926R
		1" x 4-1/4" x 24"	8-1/2		1014R2	926R2
		1-1/8" x 6" x 14"	6-1/2	8	1019R	1030R
		1-1/8" x 6" x 18"	8	8	1020R	1031R
		1-1/8" x 6" x 24"	11		1020R2	1031R2
		1-1/4" x 6" x 14"	8-1/4	8	1023R	1034R
	1-1/4" x 6" x 18"	10	8	1024R	1035R	
	1-1/4" x 6" x 24"	12-1/2		1024R2	1035R2	

		Description	Wt.	Box Qty.	Rod Size	Part No.
Ground Rod Drivers 3" Socket Depth 		1" x 4-1/4" x 11/16" Socket Diameter	6-1/4	8	5/8"	1800
		1" x 4-1/4" x 13/16" Socket Diameter	6	8	3/4"	1801
		1" x 4-1/4" x 1" Socket Diameter	6	8	7/8"	1802
		1" x 4-1/4" x 1-1/8" Socket Diameter	5-3/4	8	1"	1803
		1-1/8" x 6" x 13/16" Socket Diameter	8	8	3/4"	1804
		1-1/8" x 6" x 1" Socket Diameter	7-3/4	8	7/8"	1805
		1-1/8" x 6" x 1-1/8" Socket Diameter	7-3/4	8	1"	1806
		1-1/4" x 6" x 1" Socket Diameter	8-1/2	8	7/8"	1807
		1-1/4" x 6" x 1-1/8" Socket Diameter	8-1/4	8	1"	1808

		Description	Wt.	Part No.
Splitting Wedges and Shims Drill Hole Size: 2" x 12" Deep 	Wedge Only			
		1-1/8" x 6" x 17-1/2"	8-1/2	817W
		1-1/4" x 6" x 17-1/2"	9-1/4	818W
	Shim Only (set of 2)			
	2" x 12"	6-1/4	1311S	

		Description	Wt.	Box Qty.	Part No.
Combo Cutters 		1-1/8" x 6" x 11-1/2" x 3-3/4" Wide Blade	8	6	834
		1-1/4" x 6" x 11-1/2" x 3-3/4" Wide Blade	9	6	835

		Description	Wt.	Box Qty.	Part No.
Detachable Shanks (Universal Taper to match items on next page.) 		7/8" x 3-1/4" x 9-3/4"	5	8	864
		1" x 4-1/4" x 9-3/4"	5-1/2	8	865
		1-1/8" x 6" x 9-3/4"	7-1/4	8	867
		1-1/4" x 6" x 9-3/4"	8	8	868









DEMOLITION TOOLS

Pavement Breaker Tools

(All Pavement Breaker Tools are measured under the collar.)







		Description	Wt.	Box Qty.	Part No.
Tamping Pads					
		7" Round	16	3	965
		6" Square	12	5	968
		8" Square	16	2	969

		Description	Wt.	Box Qty.	Part No.
Sheathing Driver Shoes					
		2" Sheathing Driver	17	4	1051
		3" Sheathing Driver	19	4	1052


		Description	Wt.	Box Qty.	Part No.
Tent Stake Drivers					
		2" Tent Stake Driver (2-1/4" I.D.)	9-1/4	6	1053
		2-1/2" Tent Stake Driver (2-3/4" I.D.) (2" Socket Depth)	9-1/4	6	1054

Chipping Hammer Tools

(Chipping Hammer Tools are measured overall.)

				Round Shank Oval Collar		Hex Shank Oval Collar		Round Shank Round Collar		Hex Shank Round Collar	
											
	Length	Box Qty.	Wt.	Bull Point	Flat Chisel	Bull Point	Flat Chisel	Bull Point	Flat Chisel	Bull Point	Flat Chisel
	9"	25	1-1/4	FO120	FO180	GO120	GO180	F120	F180	G120	G180
	12"	25	1-3/4	FO121	FO181	GO121	GO181	F121	F181	G121	G181
	18"	25	2-1/2	FO122	FO182	GO122	GO182	F122	F182	G122	G182
	24"		3-1/2	FO123	FO183	GO123	GO183	F123	F183	G123	G183
	36"		5-1/4	FO124	FO184	GO124	GO184	F124	F184	G124	G184
	48"		7	FO125	FO185	GO125	GO185	F125	F185	G125	G185
	60"		8-3/4	FO126	FO186	GO126	GO186	F126	F186	G126	G186
	72"		10-1/2	FO127	FO187	GO127	GO187	F127	F187	G127	G187
	84"		12-1/4	FO128	FO188	GO128	GO188	F128	F188	G128	G188
	96"		14	FO129	FO189	GO129	GO189	F129	F189	G129	G189
	108"		15-3/4	FO130	FO190	GO130	GO190	F130	F190	G130	G190
	120"		17-1/2	FO131	FO191	GO131	GO191	F131	F191	G131	G191
	132"		19-1/2	FO132	FO192	GO132	GO192	F132	F192	G132	G192
	144"		21	FO133	FO193	GO133	GO193	F133	F193	G133	G193

Longer lengths available.

				1-1/2" Wide Scaling Chisels			
	Length	Box Qty.	Wt.				
	9"	25	1-1/4	FO2805	GO2805	F2805	G2805
	12"	25	1-3/4	FO2815	GO2815	F2815	G2815
	18"	25	2-1/2	FO2825	GO2825	F2825	G2825
	24"		3-1/2	FO2835	GO2835	F2835	G2835
	36"		5-1/4	FO2845	GO2845	F2845	G2845
	48"		7	FO2855	GO2855	F2855	G2855
	60"		8-3/4	FO2865	GO2865	F2865	G2865
	72"		10-1/2	FO2875	GO2875	F2875	G2875
	84"		12-1/4	FO2885	GO2885	F2885	G2885
	96"		14	FO2895	GO2895	F2895	G2895
	108"		15-3/4	FO2905	GO2905	F2905	G2905
	120"		17-1/2	FO2915	GO2915	F2915	G2915
	132"		19-1/2	FO2925	GO2925	F2925	G2925
	144"		21	FO2935	GO2935	F2935	G2935

Longer lengths available.



DEMOLITION TOOLS

Chipping Hammer Tools

(Chipping Hammer Tools are measured overall.)

				Round Shank Oval Collar	Hex Shank Oval Collar	Round Shank Round Collar	Hex Shank Round Collar
<p>Longer lengths available.</p>	Length	Box Qty.	Wt.	2" Wide Scaling Chisels			
	9"	25	1-1/4	FO2802	GO2802	F2802	G2802
	12"	25	1-3/4	FO2812	GO2812	F2812	G2812
	18"	25	2-1/2	FO2822	GO2822	F2822	G2822
	24"		3-1/2	FO2832	GO2832	F2832	G2832
	36"		5-1/4	FO2842	GO2842	F2842	G2842
	48"		7	FO2852	GO2852	F2852	G2852
	60"		8-3/4	FO2862	GO2862	F2862	G2862
	72"		10-1/2	FO2872	GO2872	F2872	G2872
	84"		12-1/4	FO2882	GO2882	F2882	G2882
	96"		14	FO2892	GO2892	F2892	G2892
	108"		15-3/4	FO2902	GO2902	F2902	G2902
	120"		17-1/2	FO2912	GO2912	F2912	G2912
	132"		19-1/2	FO2922	GO2922	F2922	G2922
144"		21	FO2932	GO2932	F2932	G2932	
<p>Longer lengths available.</p>	Length	Box Qty.	Wt.	3" Wide Scaling Chisels			
	9"	25	1-1/2	FO3803	GO3803	F3803	G3803
	12"	25	2	FO3813	GO3813	F3813	G3813
	18"	20	3	FO3823	GO3823	F3823	G3823
	Length	Box Qty.	Wt.	5" Wide Scaling Chisels			
	10"	15	3	FO3805	GO3805	F3805	G3805
	Length (Overall)	Box Qty.	Wt.	4-1/2" Wide Clay Spades			
	15"	12	6	FO980	GO980	F980	G980
	Length (Overall)	Box Qty.	Wt.	One Piece Bushing Tools			
	9-3/4" (16 Steel Teeth)	15	3	FO240	GO240	F240	G240
	9-3/4" (9 Carbide Teeth)	15	3	FO240C	GO240C	F240C	G240C
	Length (Overall)	Box Qty.	Wt.	Floor Scrapers			
	23-1/2"	4	7	FO701	GO701	F701	G701
	Description		Wt.	Nail/Pin Drivers			
	9/16" I.D. (1/2") x 1/2" Deep		2	FO501	GO501	F501	G501
	11/16" I.D. (5/8") x 1/2" Deep		2	FO502	GO502	F502	G502
	13/16" I.D. (3/4") x 1/2" Deep		2	FO503	GO503	F503	G503

Scaler Tools

(Longer lengths available.)

				Weld Flux Style	Cleco Style
	Length (Overall)	Box Qty.	Wt.	Flat Chisels 3/4" Blade	
	7"	100	1/2	<u>Weld Flux Part No.</u>	<u>Cleco Part No.</u>
	12"	100	3/4	WF180	CR180
	18"	50	1	WF181 WF182	CR181 CR182





DEMOLITION TOOLS

Scaler Tools (Longer lengths available.)

		Weld Flux Style		Cleco Style	
Length (Overall)	Box Qty.	Wt.	Scaling Chisels 1-3/8" Blade		
			<u>Weld Flux Part No.</u>	<u>Cleco Part No.</u>	
6-1/2"	100	1/2	WF2805	CR2805	
11-1/2"	100	3/4	WF2815	CR2815	
18"	50	1	WF2825	CR2825	
Length (Overall)	Box Qty.	Wt.	Angle Scaling Chisels 1-3/8" Blade		
			<u>Weld Flux Part No.</u>	<u>Cleco Part No.</u>	
6-1/2"	100	1/2	WF2805A	CR2805A	
11-1/2"	100	3/4	WF2815A	CR2815A	
18"	50	1	WF2825A	CR2825A	

Rivet Buster Tools (Longer lengths available for Bull Points and Flat Chisels.)

	Length	Box Qty.	Wt.	Part No.
Bull Points				
Standard Shank (80x)	10"	25	2	4000
	12"	25	2-1/2	4001
	18"	20	3-3/4	4002
Jumbo Shank (11x)	10"	25	2-1/4	5000
	12"	25	2-1/2	5001
	18"	20	4	5002

	Length	Box Qty.	Wt.	Part No.
Flat Chisels				
Standard Shank (80x)	10"	25	2	4100
	12"	25	2-1/2	4101
	18"	20	3-3/4	4102
Jumbo Shank (11x)	10"	25	2-1/4	5100
	12"	25	2-1/2	5101
	18"	20	4	5102


	Length	Box Qty.	Wt.	Part No.
Ripper Chisels				
Standard Shank (80x)	10"	25	2	4300
	10"	25	2-1/4	5300
Jumbo Shank (11x)				


	Length	Box Qty.	Wt.	Part No.
Scaler Chisels				
Jumbo Shank (11x)				
	15"	15	3-1/4	5602
2-1/2" x 15" (Requires 7000S Split Sleeve)				

	Length	Box Qty.	Wt.	Part No.
Side Cut Chisels				
(For use in steel)				
Standard Shank (80x)	10"	25	2	4200
	12"	25	2-1/2	4201
Jumbo Shank (11x)	10"	25	2-1/4	5200
	12"	25	2-1/2	5201







Rivet Buster Tools

	Rivet Size	Wt.	Standard Clearance	4" Clearance	6" Clearance	8" Clearance
Backout Punches  Standard Shank (80x)	3/8"	2-1/2	4400			
	1/2"	2-1/2	4401			
	5/8"	2-1/2	4402	4500	4501	4502
	3/4"	2-1/2	4403	4503	4504	4505
	7/8"	2-1/2	4404	4506	4507	4508

	Rivet Size	Wt.	Standard Clearance	4" Clearance	6" Clearance	8" Clearance
Backout Punches  Jumbo Shank (11x)	3/8"	2-3/4	5400			
	1/2"	2-3/4	5401			
	5/8"	2-3/4	5402	5500	5501	5502
	3/4"	2-3/4	5403	5503	5504	5505
	7/8"	2-3/4	5404	5506	5507	5508
	1"	2-3/4	5405	5509	5510	5511







Rivet Buster Accessories

	Part No.		Part No.
Upper Sleeves For Standard Rivet Busters (80x) 	8500	Bumpers For Standard Rivet Busters (80x): Rubber For Standard Rivet Busters (80x): Poly 	9000 9000N
For Jumbo Rivet Busters (11x)	6000	For Jumbo Rivet Busters (11x): Rubber For Jumbo Rivet Busters (11x): Poly	8000 8000N

	Part No.		Part No.
Lower Sleeves For Standard Rivet Busters (80x) 	9500	Lock Springs For Rivet Busters (Steel) 	8100
For Jumbo Rivet Busters (11x) For Jumbo (11x) Split Sleeve (For use with 5602)	7000 7000S	For Chipping Hammers (Steel) For Chipping Hammers (Poly)	8100C 8100CN

Electric Hammer Tools

(Electric Hammer Tools are measured overall.)

	SDS Plus	SDS Max	3/4" Demo	Spline	Internal Lock	TE905
						
Description	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.
Bull Points						
10" Bull Point	410	-	-	-	-	-
12" Bull Point	-	710	610	510	-	-
18" Bull Point	-	711	611	511	-	-
20" Moil Point	-	-	-	-	-	211
20-1/2" Moil Point	-	-	-	-	310	-


























DEMOLITION TOOLS

Electric Hammer Tools

(Electric Hammer Tools are measured overall.)

		SDS Plus	SDS Max	3/4" Demo	Spline	Internal Lock	TE905
							
Description	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.
Flat Chisels	3/4" x 10" Flat Chisel	412	-	-	-	-	-
	1" x 12" Flat Chisel	-	712	612	512	-	-
	1" x 18" Flat Chisel	-	713	613	513	-	-
	1" x 20" Flat Chisel	-	-	-	-	-	213
	1-1/4" x 20-1/2" Chisel	-	-	-	-	312	-
Description	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.
Scaling Chisels	1-1/2" x 10" Scaler	408	-	-	-	-	-
	1-1/2" x 12" Scaling Chisel	-	708	608	508	-	-
	2" x 12" Scaling Chisel	-	707	607	507	-	-
	3" x 12" Scaling Chisel	-	714	614	514	-	-
	3" x 20" Scaling Chisel	-	-	-	-	-	214
	3" x 20-1/2" Wide Chisel	-	-	-	-	314	-
Description	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.
Scraping Chisels	2" x 12" Scraper	-	709	609	509	-	-
							
Description	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.
Bushing Tools	One Piece Bushing Tool	-	715	615	515	-	-
	Note: Carbide Bushing Tools are also available.						
Description	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.
Asphalt Cutters	4-1/2" Asphalt Cutter	-	716	616	516	-	-
	5" Asphalt Cutter	-	-	-	-	316	-
		SDS Max	3/4" Demo	Spline	Internal Lock	TE905	
							
Description	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.	
Clay Spades	4-1/2" Clay Spade	704	604	504	-	204	
	5-1/2" Clay Spade	-	-	-	304	-	
Description	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.	
Ground Rod Drivers	.906" Ground Rod Driver	720	620	520	-	-	
	1" Ground Rod Driver	-	-	-	303	-	
Description	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.	
Floor Scrapers	6" Blade Floor Scraper (Replacement Parts Available)	700	600	500	-	-	
	6" Replacement Floor Scraper Blade Only	702	702	702	-	-	



DEMOLITION TOOLS

Electric Hammer Tools

(Electric Hammer Tools are measured overall.)

		SDS Max	3/4" Demo	Spline	Internal Lock	TE905
Description		Part No.	Part No.	Part No.	Part No.	Part No.
Tamper Shanks						
	12" Tamper Shank	718	618	518	-	
	15-1/2" Tamper Shank	-	-	-	318	

(For use with items below)

Description		Part No.	Part No.	Part No.	Part No.	Part No.
Tamper Plates						
	5" x 5" Tamper Plate	717	717	717	-	
	6" x 6" Tamper Plate	-	-	-	317	

Description		Part No.	Part No.	Part No.	Part No.	Part No.
Tent Stake Drivers						
	2-1/2" Tent Stake Driver (2-3/4" I.D.)	-	-	-	323	

Carbon Drill Steels

(Longer Lengths Available)

		7/8" x 3-1/4"	7/8" x 4-1/4"	Length	Wt.	1" x 4-1/4"	Length	Wt.
H-Thread Rods								
	520-1	521-1	1'	2-3/4	522-1	1'	4	
	520-1.5	521-1.5	1-1/2'	3-3/4	522-1.5	1-1/2'	5-1/4	
	520-2	521-2	2'	5	522-2	2'	7	
	520-2.5	521-2.5	2-1/2'	6	522-2.5	2-1/2'	8-1/2	
	520-3	521-3	3'	7	522-3	3'	10	
	520-4	521-4	4'	9	522-4	4'	12-1/2	
	520-5	521-5	5'	11	522-5	5'	15	
	520-6	521-6	6'	13	522-6	6'	17	
	520-7	521-7	7'	15	522-7	7'	20	
	520-8	521-8	8'	17	522-8	8'	22	
	520-9	521-9	9'	19	522-9	9'	25	
	520-10	521-10	10'	22	522-10	10'	28	
520-12	521-12	12'	26	522-12	12'	33		

		7/8" x 3-1/4"	7/8" x 4-1/4"	Length	Wt.	1" x 4-1/4"	Length	Wt.
Tapered Drill Rods (11 Degree Taper)								
	701-1	703-1	1'	2-3/4	705-1	1'	4	
	701-1.5	703-1.5	1-1/2'	3-3/4	705-1.5	1-1/2'	5-1/4	
	701-2	703-2	2'	5	705-2	2'	7	
	701-2.5	703-2.5	2-1/2'	6	705-2.5	2-1/2'	8-1/2	
	701-3	703-3	3'	7	705-3	3'	10	
	701-4	703-4	4'	9	705-4	4'	12-1/2	
	701-5	703-5	5'	11	705-5	5'	15	
	701-6	703-6	6'	13	705-6	6'	17	
701-8	703-8	8'	17	705-8	8'	22		

NOTE: H-Thread Extension Rods (threaded on both ends) are also available.



Hardware & Supply Co., Inc.
Supply, Inc. of Virginia
Form Rentals

NJ (856) 662-6935 • PA (215) 925-8800
Metro (703) 569-6660 • VA (703) 455-6700
Clinton, MD (301) 877-8640



DEMOLITION TOOLS

Carbide Tipped Drills




Bit Size	Length (U/C)	Drill Depth	Wt.	Shank Size: 7/8" x 3-1/4"	Shank Size: 7/8" x 4-1/4"	Wt.	Shank Size: 1" x 4-1/4"	
5/8"	9"	6"	1-1/2	546				
5/8"	12"	9"	1-3/4	546-12	546-12SP			
5/8"	18"	15"	2	546-18	546-18SP			
5/8"	24"	21"	2-1/2	546-24	546-24SP			
3/4"	9"	6"	1-3/4	550	547			
3/4"	12"	9"	2	550-12	547-12	2-1/2	550-12SPL	
3/4"	18"	15"	2-1/2	550-18	547-18	3	550-18SPL	
3/4"	24"	21"	3	550-24	547-24	3-1/2	550-24SPL	
3/4"	30"	27"	3-1/2	550-30	547-30	4	550-30SPL	
3/4"	36"	33"	4-1/4	550-36	547-36			
3/4"	48"	45"	5-1/2	550-48	547-48			
7/8"	9"	6"	2	551	548			
7/8"	12"	9"	2-1/2	551-12	548-12	2-1/2	551-12SPL	
7/8"	18"	15"	3	551-18	548-18	3-1/4	551-18SPL	
7/8"	24"	21"	3-3/4	551-24	548-24	4	551-24SPL	
7/8"	30"	27"	4-1/2	551-30	548-30	4-1/2	551-30SPL	
7/8"	36"	33"	5-1/2	551-36	548-36			
7/8"	48"	45"	7-1/4	551-48	548-48			
1"	9"	6"	2-1/4	552	549			
1"	12"	9"	2-3/4	552-12	549-12	3	552-12SPL	
1"	18"	15"	3-1/2	552-18	549-18	4	552-18SPL	
1"	24"	21"	4-1/4	552-24	549-24	5	552-24SPL	
1"	30"	27"	5-1/4	552-30	549-30	5-3/4	552-30SPL	
1"	36"	33"	6-1/4	552-36	549-36	7	552-36SPL	
1"	48"	45"	8-1/2	552-48	549-48			
Speedrills	1-1/8"	12"	9"	3	553-12	553-12SP	3-3/4	553-12SPL
	1-1/8"	18"	15"	4	553-18	553-18SP	4-1/2	553-18SPL
	1-1/8"	24"	21"	5	553-24	553-24SP	5-1/2	553-24SPL
	1-1/8"	30"	27"	6	553-30	553-30SP	6-3/4	553-30SPL
	1-1/8"	36"	33"	7-1/4	553-36	553-36SP	8	553-36SPL
	1-1/8"	48"	45"	9-1/2	553-48	553-48SP		
	1-1/4"	12"	9"	3	554-12	554-12SP	4-1/4	554-12SPL
	1-1/4"	18"	15"	4	554-18	554-18SP	5-1/2	554-18SPL
	1-1/4"	24"	21"	5	554-24	554-24SP	6-3/4	554-24SPL
	1-1/4"	30"	27"	6	554-30	554-30SP	8	554-30SPL
	1-1/4"	36"	33"	7-1/4	554-36	554-36SP	9-1/2	554-36SPL
	1-1/4"	48"	45"	9-1/2	554-48	554-48SP		
	1-3/8"	12"	9"	3-1/4	555-12	555-12SP	4-1/4	555-12SPL
	1-3/8"	18"	15"	4	555-18	555-18SP	5-1/2	555-18SPL
	1-3/8"	24"	21"	5-1/4	555-24	555-24SP	6-1/2	555-24SPL
	1-3/8"	30"	27"	6-1/4	555-30	555-30SP	8	555-30SPL
	1-3/8"	36"	33"	7-1/2	555-36	555-36SP	9-1/2	555-36SPL
	1-3/8"	48"	45"	10	555-48	555-48SP		
	1-1/2"	12"	9"	3-1/4	556-12	556-12SP	4	556-12SPL
	1-1/2"	18"	15"	4-1/4	556-18	556-18SP	5-1/2	556-18SPL
	1-1/2"	24"	21"	5-1/4	556-24	556-24SP	6-3/4	556-24SPL
	1-1/2"	30"	27"	6-1/4	556-30	556-30SP	8	556-30SPL
	1-1/2"	36"	33"	7-1/2	556-36	556-36SP	9-1/2	556-36SPL
	1-1/2"	48"	45"	10	556-48	556-48SP		
	1-5/8"	12"	9"	3-1/4	557-12	557-12SP		
	1-5/8"	18"	15"	4-1/4	557-18	557-18SP		
	1-5/8"	24"	21"	5-1/4	557-24	557-24SP		
	1-5/8"	30"	27"	6-1/4	557-30	557-30SP		
	1-5/8"	36"	33"	7-1/2	557-36	557-36SP		
	1-5/8"	48"	45"	10	557-48	557-48SP		


Speedrills







Rock Bits – Shoulder Drive


	Bit Diameter	Part No.		Bit Diameter	Part No.
 <p>H Thread Bits - Steel</p>	1-3/8"	138HS	E Thread Bits - Steel 	15/16"	156ES
	1-1/2"	112HS		1"	100ES
	1-5/8"	158HS		1-1/8"	118ES
	1-3/4"	134HS		1-1/4"	114ES
	1-7/8"	178HS			
	2"	200HS	D Thread Bits - Steel 	2-1/4"	214DS
	2-1/4"	214HS		2-1/2"	212DS
	2-1/2"	212HS		2-3/4"	234DS
	2-5/8"	258HS		3"	300DS
				3-1/4"	314DS
			3-1/2"	312DS	
			4"	400DS	


	Bit Diameter	Part No.
 <p>H Thread Shallow Bits - Carbide</p> <p>1/4" Carbide Depth (Non Resharpenable)</p>	1-3/8"	HSC138
	1-1/2"	HSC112
	1-5/8"	HSC158
	1-3/4"	HSC134
	1-7/8"	HSC178
	2"	HSC200

	Bit Diameter	Part No.
 <p>H Thread Button Bits - Carbide</p>	1-1/2"	HC112
	1-5/8"	HC158
	1-3/4"	HC134
	1-7/8"	HC178
	2"	HC200
	2-1/4"	HC214

	Bit Diameter	Part No.
 <p>H Thread Multi Use Bits - Carbide</p> <p>9/16" Carbide Depth (May Be Resharpened)</p>	1-3/8"	HC138
	1-1/2"	HC112
	1-5/8"	HC158
	1-3/4"	HC134
	1-7/8"	HC178
	2"	HC200
	2-1/4"	HC214
	2-1/2"	HC212
	2-3/4"	HC234
	3"	HC300

	Bit Diameter	Part No.
 <p>D Thread Multi Use Bits - Carbide</p> <p>9/16" Carbide Depth (May Be Resharpened)</p>	2"	DC200
	2-1/4"	DC214
	2-1/2"	DC212
	2-3/4"	DC234
	3"	DC300

	Bit Diameter	For 7/8" Steel	For 1" Steel
 <p>Tapered Single Use Bits - Carbide</p> <p>(Please specify taper: 11 degree taper is standard.)</p>	1-1/8"	TP78SC118	
	1-1/4"	TP78SC114	
	1-3/8"	TP78SC138	TP1SC138
	1-1/2"	TP78SC112	TP1SC112
	1-5/8"	TP78SC158	TP1SC158
	1-3/4"	TP78SC134	TP1SC134
	1-7/8"	TP78SC178	TP1SC178
	2"	TP78SC200	TP1SC200

	Bit Diameter	For 7/8" Steel	For 1" Steel
 <p>Tapered Multi Use Bits - Carbide</p> <p>(Please specify taper: 11 degree taper is standard.)</p>	1-1/4"	TP78C114	
	1-3/8"	TP78C138	TP1C138
	1-1/2"	TP78C112	TP1C112
	1-5/8"	TP78C158	TP1C158
	1-3/4"	TP78C134	TP1C134
	1-7/8"	TP78C178	TP1C178
	2"	TP78C200	TP1C200



Double Cut Shears

KD-200 Power Shears



These double-cut shears feed quickly and quietly, without warping or bending your finished piece (distortion is in the waste strip). It easily follows a scribed line – edges are not hardened or burred, so you get maximum use of a sheet. The swiping action of blades seals the edge of coated metals. These shears cut sheet metal up to 18-gauge in straight or contour lines at 180 inches per minute and plastic or Formica up to 3/32" thick.

These shears are also available with a contour cutting blade KD-200C to cut tighter curves and the HS blade KD-200HS for cutting foam filled doors.

Shear blades:

- 60-21 center blade
- 60-22L left, side knife
- 60-22R right, side knife
- or combined in Kit #102 (includes 60-27 spacer bushing).

KD-440 14-Gauge Power Shears



This lightweight, pistol-grip shear cuts 14-gauge mild steel and most grades of stainless to 16-gauge. Double-insulated, the 5 AMP KD-440 cuts at over 150 inches per minute, leaving a clean, flat sheet, ready to fabricate. Distortions are absorbed in an easily disposed of waste curl, leaving the sheet cool and free of burn, chips and burrs. The cutting blades are finest high-speed steel, which you can easily replace.

Shear blades:

- 40-21 center blade
- 60-22L left, side knife
- 60-22R right, side knife
- or combined in Kit #106

KD-242 16-Gauge Power Shears



These lightweight shears, designed for durability, cut 16-gauge mild steel and stainless to 18-gauge. Close clearance heavy-duty blades provide smooth cutting action, without burring or buckling the material. The patented aluminum shear head curls the waste strip into a handy coil for fast clean-up, allowing maximum sheet usage. With a straight On/Off switch, the KD-242 fills the gap between Kett light gauge and heavy gauge power shears. Also available in a variable speed model KD-442.

Shear blades:

- 40-21 center blade
- 60-22L left, side knife
- 60-22R right, side knife
- or combined in kit #106.

Scissor Shears

KD-441 Heavy-Duty Scissor Shears



With speeds up to 2500 strokes per minute, the 5-pound KD-441 quickly cuts through plastics, wire mesh and rubber with a clean scissors action. When cutting thin coated metals, the swiping cut seals edges and is less likely to rust or corrode. This 5 AMP scissor shear is ideal when cutting through steel siding's multi-thickness nailing strip and continuing across the sheet and through the lip.

Shear blades:

- 41-21 center blade
- 41-22 stationary side knife
- 70-05 spacer

Model	Head	Capacity	Power Source			Length	Weight
			Amp	Volt	RPM		
Double Cut Shears							
KD-200	60-20	18-Gauge Mild Steel - 16-Gauge Stainless	5	120	2500	14"	4 Lbs.
KD-440	40-20	14-Gauge Mild Steel - 16-Gauge Stainless	5	120	2500	14½"	5 Lbs.
KD-242	42-20	16-Gauge Mild Steel - 18-Gauge Stainless	5	120	2500	14"	4 Lbs.
Scissor Shears							
KD-441	41-20	24-Gauge Mild Steel - 18-Gauge Wire Mesh	5	120	2500	16"	5 Lbs.



ELECTRIC NIBBLERS / POWER HACKSAWS

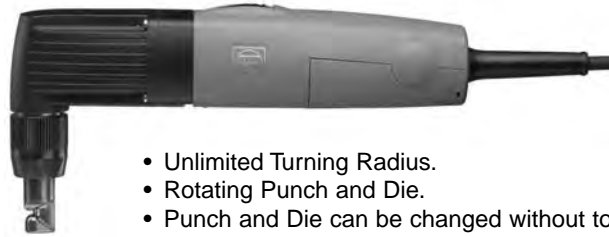
Electric Nibblers

Model BLK 1.3CS

Cutting Capacity for

Sheet Metal:18-gauge
Stainless:.....22-gauge
Aluminum:14-gauge
Plastics:.....3/32"

Strokes per min.:1800
Cutting Speed:7.5'/min.
Radius of smallest curve:3/4"
Net Weight:3.5 lbs.



- Unlimited Turning Radius.
- Rotating Punch and Die.
- Punch and Die can be changed without tools.

Model BLK 3.5

Cutting Capacity for

Sheet Metal:10-gauge
Stainless:.....13-gauge
Aluminum:10-gauge
Plastics:.....3/16"

Strokes per min.:650
Cutting Speed:3.9'/min.
Radius of smallest curve:9/32"
Net Weight:7.9 lbs.



- Unlimited Turning Radius.
- Handle can be mounted on right or left side.
- Designed for working to templates.
- Includes wrench and handle.

Model BLK 5.0

Cutting Capacity for

Sheet Metal:6-gauge
Stainless:.....11-gauge
Aluminum:6-gauge
Plastics:.....1/8"

Strokes per min.:650
Cutting Speed:3.9'/min.
Radius of smallest curve:1-7/32"
Net Weight:11.4 lbs.



- Cutting head can be rotated 90°.

Pneumatic Hacksaw

Model STS 325R

Working Pressure:86 PSI
Air Usage:51 CFM
Blade Stroke:.....2-3/8"
Strokes per min.:330
Net Weight:15.4 lbs.
Hose Fitting:.....3/4" NPS

Capacity

Pipe:.....24" Diameter
Profiles:.....21-3/4" H / 11-1/2" W



- Ideal for trimming pipe and profile steel.
- Suitable for steel, cast iron, concrete and plastic.
Includes 1" NPT threaded connector.

Electric Hacksaw

Model ASTXE 649

Input / Output Watts:.....750 / 480
Blade Stroke:.....2-3/8"
Strokes per min.:100 - 350
Net Weight:13.7 lbs.
Cord Length:8'
Voltage:115V, AC

Capacity

Pipe:.....24" Diameter
Profiles:.....21-3/4" H / 11-1/2" W



- Ideal for trimming pipe and profile steel.
- Suitable for steel, cast iron, concrete and plastic.
Includes 1" NPT threaded connector.
- Variable speed.

Also available with single speed — Model ASTX 649.





HACKSAW BLADES

Fein Hacksaw Blades



Part No.	Description	Length	Teeth Per Inch	Thickness	Max. Cut Diameter
Blades for Wood					
6-35-03-032-00-6	FEIN Z22-32 WS BLADE	15-3/4"	4	1/16"	9-3/4"
Blades for Aluminum and Plastic					
6-35-03-065-00-9	FEIN Z22-9 HSS BLADE	8-1/16"	8	1/16"	3-1/8"
6-35-03-068-00-4	FEIN Z22-29 HSS BLADE	15-3/4"	8	1/16"	9-3/4"
6-35-03-071-11-9	FEIN Z22-71 HSS BLADE	12"	4	1/16"	6"
6-35-03-074-02-0	FEIN Z22-74 HSS BLADE	23-5/8"	8	5/64"	17-5/8"
6-35-03-095-00-6	HEAVY-DUTY BLADE	12-3/4"	8	5/64"	12-3/4"
Blades for Steel and Non-ferrous Metal					
6-35-03-063-00-7	FEIN Z22-6 HSS BLADE	12"	16	1/16"	6-5/8"
6-35-03-064-00-5	FEIN Z22-7 HSS BLADE	15-3/4"	16	1/16"	10-1/4"
6-35-03-066-00-2	FEIN Z22-10 HSS BLADE	8"	16	1/16"	2"
6-35-03-067-00-6	FEIN Z22-11 HSS BLADE	8"	21	1/16"	2"
6-35-03-069-00-8	FEIN Z22-3 HSS BLADE	20-7/8"	12	1/16"	14-7/8"
6-35-03-069-11-8	FEIN Z22-30 HSS BLADE	21-7/8"	12	1/16"	15-7/8"
6-35-03-070-00-0	FEIN Z22-31 HSS BLADE	12"	12	1/16"	6"
6-35-03-037-11-1	FEIN Z22-37 HSS BLADE	37"	12	1/16"	33"
6-35-03-072-00-2	FEIN Z22-72 HSS BLADE	19-3/4"	14	5/64"	13-3/4"
6-35-03-073-00-6	FEIN Z22-73 HSS BLADE	23-5/8"	14	5/64"	17-5/8"
6-35-03-075-06-0	FEIN Z22-75 HSS BLADE	30-3/8"	12	5/64"	24-3/8"
6-35-03-093-00-4	HEAVY-DUTY BLADE	12"	16	5/64"	6"
6-35-03-094-00-2	HEAVY-DUTY BLADE	12-3/4"	12	5/64"	6-3/4"
Carbide Blades for Concrete					
6-35-03-072-77-7	FEIN Z22-72 CARBIDE BLADE	20"		3/16"	14"
6-35-03-073-77-7	FEIN Z22-73 CARBIDE BLADE	23-5/8"		3/16"	17-5/8"
Blades for Cast Iron					
6-35-03-096-01-8	FEIN SAW BLADE-TD-BORON	12-5/8"		3/32"	6-5/8"
6-35-03-097-01-2	FEIN SAW BLADE-TD-BORON	19-5/16"		7/64"	13-5/16"

Industrial Grinders – Slim design provides extra clearance for grinding odd-shaped pieces.

6" Non-Exhaust Type Industrial Grinder



- Powered by Baldor split-phase motor.
- Non-exhaust type wheel guards.
- Adjustable stamp-steel tool-rest, spark-breaks and eyeshields.
- Supplied with one coarse (36)-grit and one medium (60)-grit aluminum oxide grinding wheel.
- Wheels are 6" diameter, 3/4" wide, 1/2" arbor hole.
- Includes 8-foot, 3-conductor power cord.

Cat. No.	Hp	Voltage	Phase	Hz	RPM	Ship Wt.
612	1/3	115	1	60	3600	30 lb.

6" Exhaust Type Industrial Grinders



- Powered by Baldor split-phase motor.
- Exhaust type guards accommodate a 2" diameter vent pipe.
- Adjustable stamp-steel tool-rest, spark-breaks and eyeshields.
- Supplied with one coarse (36)-grit and one medium (60)-grit aluminum oxide grinding wheel.
- Wheels are 6" diameter, 1/2" arbor hole.
- Includes 8-foot, 3-conductor power cord.

Cat. No.	Hp	Voltage	Phase	Hz	RPM	Ship Wt.
632E	1/4	115	1	60	1800	47 lb.
612E	1/3	115	1	60	3600	44 lb.
623E	1/3	115	1	60	3600	47 lb.

7" Non-Exhaust Type Industrial Grinder



- Powered by Baldor PSC type motor.
- Non-exhaust type wheel guards.
- Adjustable stamp-steel tool-rest, spark-breaks and eyeshields.
- Supplied with one coarse (36)-grit and one medium (60)-grit aluminum oxide grinding wheel.
- Wheels are 7" diameter, 5/8" arbor hole.
- Includes 8-foot, 3-conductor power cord.

Cat. No.	Hp	Voltage	Phase	Hz	RPM	Ship Wt.
712	1/2	115/230	1	60	3600	45 lb.

7" Exhaust Type Industrial Grinders



- Powered by Baldor single or three-phase motor.
- Cast iron exhaust type guards accommodate a 3" diameter vent pipe.
- Adjustable stamp-steel tool-rest, spark-breaks and eyeshields.
- Supplied with one coarse (36)-grit and one medium (60)-grit aluminum oxide grinding wheel.
- Wheels are 7" diameter, 5/8" arbor hole.
- Includes 8-foot, 3-conductor power cord (115/230 volt models).

Cat. No.	Hp	Voltage	Phase	Hz	RPM	Ship Wt.
7306	1/2	115/230	1	60	1800	71 lb.
7307	1/2	115/230	1	60	3600	70 lb.
7308	1/2	208-230/460	3	50/60	1500/1800	71 lb.
7309	1/2	208-230/460	3	50/60	3000/3600	72 lb.

7" Exhaust Type Deluxe Industrial Grinders



- Powered by Baldor single- or three-phase motor.
- Cast iron exhaust type guards accommodate a 3" diameter vent pipe.
- Adjustable stamp-steel tool-rest, spark-breaks and eyeshields.
- Grinder supplied with one coarse (36)-grit and one medium (60)-grit aluminum oxide grinding wheel.
- Supplied with GA24 water pot, GA25 tool tray and two GA9 lighted eyeshields*.
- Wheels are 7" diameter, 5/8" arbor hole.
- Includes 8-foot, 3-conductor power cord (115/230 volt models).

Cat. No.	Hp	Voltage	Phase	Hz	RPM	Ship Wt.
7306D	1/2	115/230	1	60	1800	84 lb.
7307D	1/2	115/230	1	60	3600	86 lb.
7309D	1/2	208-230/460	3	50/60	3000/3600	87 lb.

8" Exhaust Type Industrial Grinders



- Cast iron exhaust type guards accommodate a 3" diameter vent pipe.
- Supplied with one coarse (36)-grit and one medium (60)-grit aluminum oxide grinding wheel.
- Wheels are 8" diameter, 3/4" arbor hole.
- Includes 8-foot, 3-conductor power cord (115/230 volt models).

Cat. No.	Hp	Voltage	Phase	Hz	RPM	Ship Wt.
8100W	3/4	115/230	1	60	1800	99 lb.
8107W	3/4	115/230	1	60	3600	99 lb.
8102W	3/4	208-230/460	3	50/60	1500/1800	98 lb.
8123W	3/4	208-230/460	3	50/60	3000/3600	99 lb.

8" Exhaust Type Deluxe Industrial Grinders



- Cast iron exhaust type guards accommodate a 3" diameter vent pipe.
- Grinder supplied with one coarse (36)-grit and one medium (60)-grit aluminum oxide grinding wheel.
- Supplied with GA24 water pot, GA25 tool tray and two GA9 lighted eyeshields*.
- Wheels are 8" diameter, 3/4" arbor hole.
- Includes 8-foot, 3-conductor power cord (115/230 volt models).

Cat. No.	Hp	Voltage	Phase	Hz	RPM	Ship Wt.
8100WD	3/4	115/230	1	60	1800	110 lb.
8107WD	3/4	115/230	1	60	3600	111 lb.
8102WD	3/4	208-230/460	3	50/60	1500/1800	111 lb.
8123WD	3/4	208-230/460	3	50/60	3000/3600	112 lb.

10" Exhaust Type Industrial Grinders



- Cast iron exhaust type guards accommodate a 4" diameter vent pipe.
- Supplied with one coarse (36)-grit and one medium (60)-grit aluminum oxide grinding wheel.
- Wheels are 10" diameter, 7/8" arbor hole.
- Includes 8-foot, 3-conductor power cord (115/230 volt models).

Cat. No.	Hp	Voltage	Phase	Hz	RPM	Ship Wt.
1022W	1	115/230	1	60	1800	133 lb.
1021W	1-1/2	208-230/460	3	50/60	1500/1800	134 lb.
105W	1-1/2	575	3	50/60	1500/1800	133 lb.

10" Exhaust Type Deluxe Industrial Grinders



- Cast iron exhaust type guards accommodate a 4" diameter vent pipe.
- Grinder supplied with one coarse (36)-grit and one medium (60)-grit aluminum oxide grinding wheel.
- Supplied with GA24 water pot, GA25 tool tray and two GA9 lighted eyeshields*.
- Wheels are 10" diameter, 7/8" arbor hole.
- Includes 8-foot, 3-conductor power cord (115/230 volt models).

Cat. No.	Hp	Voltage	Phase	Hz	RPM	Ship Wt.
1022WD	1	115/230	1	60	1800	145 lb.
1021WD	1-1/2	208-230/460	3	50/60	1500/1800	145 lb.

12" Exhaust Type Industrial Grinders



- Cast iron exhaust type guards accommodate a 5" diameter vent pipe.
- Grinder supports optional wheels 12" x 2" wide; arbor size is 1-1/4".
- Manual starter with overload protection conveniently mounted on grinder.
- Includes lighted GA9 eyeshields.
- All units connected at the factory for 230 volts, except 129W, which is rated 575 volts.
- Pedestal, water pot and tool trays optional.

Cat. No.	Hp	Voltage	Phase	Hz	RPM	Ship Wt.
1217W	2	115/230	1	60	1800	259 lb.
1215W	2	208-230/460	3	50/60	1500/1800	253 lb.
1216W	3	208-230/460	3	50/60	1500/1800	254 lb.
129W	3	575	3	50/60	1500/1800	256 lb.

*Eyeshields wired through the start/stop switch on single-phase units.

Industrial and Commercial Vacs



Shop-Vac Industrial Contractor Duty

2-Stage motor, stainless steel tank, Lock-On positive connection hose system, tough metal tools, long cord and 3-wheel dolly

610-50-10

Tank Size: 10 Gallons

Power: 2.0 Peak HP

Features:

- Cord Length: 18 Feet
- Operation Sound Level: Extra Quiet
- Hose Size: 1.5" Diameter
- Warranty: 1 Year
- Tough Metal Tools
- Tank Drain
- Stainless Steel Tank
- Lock-on Hose

Included Accessories:

- 1-1/2" Dia. x 12' Lock On hose
- (2) metal extension wands
- 14" aluminum nozzle w/brush and squeegee insert

Included Filters:

- Cartridge Filter
- Foam Sleeve

Built to Handle the Worst Jobsite Mess

Shop-Vac Industrial Economy

High performance motor, tough rust-resistant epoxy phenolic-coated steel tank, and dual size heavy-duty plastic tools

850-02-10

Tank Size: 10 Gallons

Power: 4.5 Peak HP

Features:

- Cord Length: 18 Feet
- Operation Sound Level: Super Quiet
- Hose Size: 1.25" / 2.5" Diameter
- Warranty: 1 Year

Included Accessories:

- 1-1/4" Dia. x 7' hose
- (2) 1-1/4" extension wands
- 12" floor nozzle with brush
- squeegee inserts
- crevice tool
- round brush
- gulper nozzle
- clip on feet; 2-1/2" Dia. x 6' hose
- (2) 2-1/2" extension wands
- 6" utility nozzle

Included Filters:

- Cartridge Filter
- Foam Sleeve



Industrial Power on a Lightweight Budget



Shop-Vac Industrial - The Right Stuff

High performance motor, tough rust-resistant epoxy phenolic-coated steel tank, and dual size heavy-duty plastic tools

962-06-10

Tank Size: 6 Gallons

Power: 3.0 Peak HP

Features:

- Cord Length: 12 Feet
- Operation Sound Level: Quiet
- Hose Size: 1.25" Diameter
- Warranty: 1 year
- Lock-on Hose
- Onboard Accessory Storage

Included Accessories:

- 1-1/4" Dia. x 6' Hose
- Gulper Nozzle
- Crevice Tool and Tool Holder
- (2) Extension wands
- Wet Dry nozzle

Included Filters:

- Cartridge Filter
- High-Quality Collection Filter Bag

The Muscle to Handle the Worst Jobsite Mess

BALL BEARING CHUCKS

Super Chuck® Ball Bearing Chucks are designed for close tolerance production drilling on precision equipment.

The Jacobs Super Chuck® Ball Bearing Chuck is specifically engineered to heavy-duty, close tolerance production drilling. It is adaptable to a wide range of production drilling equipment, jig borers, milling machines, lathes and radials. Utilizing a ball thrust bearing to reduce friction in the chuck closing mechanism, it permits the application of more gripping force on drill shanks to maximize drilling torque under the most demanding machining conditions.

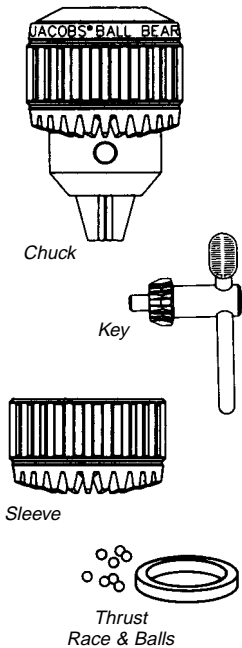


FEATURES:

- Ball bearing construction maximizes gripping force and drilling accuracy.
- Jaws center-ground for absolute straightness and alignment.
- One-piece sleeve eliminates crack between driving teeth often found in other designs.
- Through-hardened sleeve teeth plus hardened nose and keyholes provide outstanding wear resistance.
- Fluted sleeve standard.
- Each chuck 100% inspected for performance and precision.
- T.I.R. .003" maximum at half capacity.

TAPER MOUNTED

Model No.	Part No.	Capacity Range				Mount Jacobs	Key No.	Dimensions						Wgt. Each oz.
		Minimum		Maximum				Closed Length		Open Length		Sleeve Dia.		
		in.	mm	in.	mm			in.	mm	in.	mm	in.	mm	
8-1/2N	30209	0.040	0	0.250	6.4	2JT	K30	2.41	61.2	1.95	49.5	1.56	39.7	10
11N	30215	0.040	0	0.375	10.0	2JT	K32	2.88	73.2	2.26	57.4	1.93	49.1	19
14N	30221	0.040	0	0.500	13.0	3JT	K3	3.88	98.6	2.97	75.4	2.44	62.1	38
16N	30227	0.125	3	0.625	16.0	3JT	K4	4.31	109.5	3.26	82.8	2.63	66.9	47
18N	30233	0.125	3	0.750	19.0	4JT	K4	5.12	130.0	3.95	100.3	3.01	76.4	66
20N	30239	0.375	10	1.000	25.4	5JT	K5	5.5	139.7	4.23	107.4	3.65	92.6	100



REPLACEMENT PARTS (OLDER MODELS)

For the older models which do not incorporate the service kit marking on the chuck nose, service parts are still available as listed in the chart below.

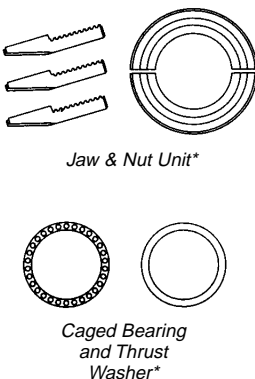
Chuck Model No.	Key		Jaws and Nut Unit No.	Sleeve		Thrust Race and Balls Part No.
	Model No.	Part No.		Model No.	Part No.	
8-1/2N	K30	3664	7430	S8-1/2N	5089	7436
11N	K32	3666	7431	S11N	5097	7437
14N	K3	3651	7432	S14N	5506	7438
16N	K4	3655	7433	S16N	5514	7439
18N	K4	3655	7434	S18N	5522	7440
20N	K5	3657	7435	S20N	5530	7441

SERVICE KITS (NEWER MODELS)

There have been improvements incorporated in the Jacobs Super Chuck Ball Bearing Chuck. These necessitate a change in the service components. For the new chucks which call out a service kit number on the chuck nose, this kit will include: jaws, nut, caged bearing and thrust washer.

Chuck		Service	Key		Sleeve	
Model No.	Part No.	Kit No.*	Model No.	Part No.	Model No.	Part No.
8-1/2N	30209	30343	K30	3664	S8-1/2N	5089
11N	30215	30344	K32	3666	S11N	5097
14N	30221	30345	K3	3651	S14N	5506
16N	30227	30346	K4	3655	S16N	5514
18N	30233	30347	K4	3655	S18N	5522
20N	30239	30348	K5	3657	S20N	5530

*All Newer Model Super Chuck® Ball Bearing Chuck service kits include jaws, nut, caged bearing and thrust washer.



PLAIN BEARING CHUCKS



The O.E.M. standard for accuracy and durability on all types of industrial power and machine tools.

The Jacobs Plain Bearing Chuck is the world's most widely used for medium or heavy-duty portable, bench or floor mounted power tools. This industrial quality chuck, with fully hardened and ground working components, offers exceptionally high accuracy, gripping power and durability. Both heavy and medium duty models are available in a wide range of capacities for use on threaded or taper mounted spindles.

FEATURES:

- Heavy and Medium Duty models for threaded or taper mounting.
- Jaws center-ground for absolute straightness and alignment.
- One-piece sleeve eliminates crack between driving teeth often found in other designs.
- Through-hardened sleeve teeth plus hardened nose and keyholes provide outstanding wear resistance.
- Fluted sleeve standard.
- Each chuck 100% inspected for performance and precision.
- T.I.R. .004" maximum at half capacity.



TAPER MOUNTED



Heavy-Duty Model

- Fluted sleeve standard except Model 34-33C, which is smooth and ground.

Model No.	Part No.	Capacity Range				Mount Jacobs	Key No.	Dimensions						Wgt. Each oz.
		Minimum		Maximum				Closed Length		Open Length		Sleeve Dia.		
		in.	mm	in.	mm			in.	mm	in.	mm	in.	mm	
3A	6223	0.125	3	0.625	16.0	3JT	K3	3.81	96.8	2.897	72.9	2.30	58.4	32
3KD (2)	6228	0.125	3	0.625	16.0	3JT	K3	4.06	103.1	3.12	79.2	2.29	58.2	33
3PD (3)	6230	0.125	3	0.625	16.0	3JT	K3	4.06	103.1	3.12	79.2	2.29	58.2	33
34-02	14442	.040	1	0.500	13.0	2JT	K3	3.52	89.4	2.74	69.6	2.04	51.8	23
34-06	6295	.040	1	0.500	13.0	6JT	K3	3.52	89.4	2.74	69.6	2.04	51.8	24
34-33	14445	.040	1	0.500	13.0	33JT	K3	3.52	89.4	2.74	69.6	2.04	51.8	23
34-33C (4)	14451	.040	1	0.500	13.0	33JT	K3C	3.71	94.2	2.93	74.4	2.00	50.8	26
36	6309	0.18	0	0.800	20.3	3JT	K4	4.06	103.1	3.14	79.8	2.54	64.5	45
36KD (2)	14865	0.18	5	0.800	20.3	3JT	K4	4.25	108.0	3.42	86.9	2.54	64.5	44
36PD (3)	14866	0.18	5	0.800	20.3	3JT	K4	4.25	108.0	3.42	86.9	2.54	64.5	45

- (2) Equipped with positive drive slot.
 (3) Equipped with pin type positive drive.
 (4) Equipped with locking collar - 1-1/16-20 thread, smooth sleeve.

THREAD MOUNTED



Heavy-Duty Model

- Fluted sleeve standard on all models.

Model No.	Part No.	Capacity Range				Mount Jacobs	Key No.	Dimensions						Wgt. Each oz.
		Minimum		Maximum				Closed Length		Open Length		Sleeve Dia.		
		in.	mm	in.	mm			in.	mm	in.	mm	in.	mm	
3B 5/8	6232	0.125	3	0.625	16.0	5/8-16	K3	3.81	97	2.84	72	2.29	58	32
7BA 3/8	6255	0 (1)	1	0.250	6.5	3/8-24	K7	2.23	57	1.74	44	1.33	34	7
32BA 1/2	8859	0 (1)	1	0.375	10.0	1/8-20	K32	3.05	77	2.31	59	1.79	45	14
35B 1/2	14723	0.156	4	0.625	16.0	1/2-20	K3	3.52	89	2.74	70	2.04	52	25
36B 3/4	6316	0.188	5	0.800	20.3	3/4-16	K4	4.12	105	3.20	81	2.54	65	46
36B 5/8	6314	0.188	5	0.800	20.3	5/8-16	K4	4.12	105	3.20	81	2.54	65	46

- (1) At minimum capacity will hold a No. 60 (0.040 in./1mm) drill.

Medium Duty Model

- Fluted sleeve standard except Models OB 5/16, 1B 3/8, and 41BA 3/8-S, which are smooth and ground.
- 41 Series Chucks replace 31 Series Chucks.

Model No.	Part No.	Capacity Range				Mount Jacobs	Key No.	Dimensions						Wgt. Each oz.
		Minimum		Maximum				Closed Length		Open Length		Sleeve Dia.		
		in.	mm	in.	mm			in.	mm	in.	mm	in.	mm	
OB 5/16	6204	.0135	0	0.156	4.0	5/16-24	K0	1.53	39.0	1.17	30.00	0.85	22.0	2
1B 3/8	6208	.040	1	0.250	6.5	3/8-24	K1	1.95	50.0	1.57	40.00	1.12	28.0	5
2BA 3/8	6219	.040	1	0.375	10.0	3/8-24	K2	2.81	71.0	2.17	55.00	1.67	42.0	13
41BA 3/8	30728	.040	1	0.375	10.0	3/8-24	K30	2.50	63.5	2.05	52.07	1.43	36.3	8
41BA 3/8-S	31138	.040	1	0.375	10.0	3/8-24	K30	2.50	63.5	2.05	52.07	1.43	36.3	8
41BA 1/2	31090	.040	1	0.375	10.0	1/2-20	K30	2.50	63.5	2.05	52.07	1.43	36.3	8
33BA 1/2	6287	0.08	2	0.500	13.0	1/2-20	K32	3.09	78.0	2.43	62.00	1.79	45.0	17
33BA 3/8	6283	0.08	2	0.500	13.0	3/8-24	K32	3.09	78.0	2.43	62.00	1.79	45.0	17
33BA 5/8	6289	0.08	2	0.500	13.0	5/8-16	K32	3.09	78.0	2.43	62.00	1.79	45.0	17

- (1) At minimum capacity will hold a No. 60 (0.040 in./1mm) drill.
 (2) Model OB 5/16 has a minimum capacity of a No. 80 (.0135 in./344mm) drill.
 (S) Smooth Sleeve.



*Oil • Grease • Antifreeze
Industrial Solvents/Lubricants • Cleaners
Inverted Marking Paints • Primers
Penetrating Oil • Air Tool Conditioner
Penetrating Compounds
Thread Sealants
Hand Cleaners
Gasket Sealant/Makers
Industrial Paints
Interior-Exterior/Fluorescent Paints
Enamel/Rust Preventative Paints*

Paint/Sundries/Chemicals

8

*Barrier Systems
Drop Clothes • Rags
Protection Films
Sealants • Adhesives
Putty Knives • Scrapers • Joint Knives
Fire Barrier Caulk • Firestop
Joint/Galvanizing Repair Compounds
Lacquer/Paint Thinner • Calcium Chloride
Linseed Oil • Turpentine • Acetone
Denatured Alchole • Muriatic Acid
Sure Klean 600 • Triple Expanding Foam*

Castrol® Hypuron™ S

CASTROL® HYPURON™ S sets a new standard for super high performance diesel engine oils. Its advanced low ash, soot-handling technology breaks the mold for conventional heavy-duty engine oils. **CAS- TROL® HYPURON™ S**, blended with a precisely selected partial synthetic base stock, provides superior performance and protection for your engines to enhance component and equipment life, lower main-tenance costs, and increase profitability.



Applications / Specifications:

- Exceeds API Service Categories – SAE 15W-40 (CI-4 Plus, CI-4, CH-4, CG-4, CF-4, SL)
- General Motors Corporation (Allison Transmission Div.) C-4
- J. I. Case
- Caterpillar ECF-1
- Cummins CES 20078, 20076
- John Deere
- JASO DH-1
- JCB
- Deutz
- Detroit Diesel (SAE 15W-40 is the primary recommendation for the Series 30, 40, 40E, 50, 55, 60 and other four stroke engines)
- Navistar International
- Komatsu
- Mack EO-N Premium Plus '03, EO-N Premium Plus, EO-M Plus
- Volvo VDS-3, VDS-2
- Hino
- Detroit Diesel Power Guard 93K214

Castrol UTF

CASTROL UTF, Universal Tractor Fluid, is a premium hydraulic/transmission fluid that exceeds the refill and service top-up needs of farm and industrial tractor transmission, differentials, and immersed disc brakes. **CAS- TROL UTF** is compounded with anti-wear, extreme pressure, anti-oxidant and friction control additives and foam and corrosion inhibitors. **CASTROL UTF** couples this unique additive pack- age with highly refined base oils and a shear stable viscosity index improver for a balanced package.



Applications:

- Allis Chalmers
- Case/IH
- Caterpillar
- John Deere
- Deutz-Allis
- Ford Tractor
- Kubota
- Massey Ferguson
- Oliver/White
- Sperry Vickers

Castrol Multivehicle ATF

Castrol Multivehicle ATF provides you with a single ATF product that is specially formulated to meet manufacturer's warranty requirements for General Motors DEXRON®-III, Ford MERCON® and MERCON®V and Allison C-4 specifications. In addition, it is recommended for use in most Chrysler, Honda, Toyota, Nissan, BMW and Mitsubishi transmissions.



Features and Benefits:

- Synthetic blend formulation.
- Enhanced friction durability for smooth transmission operation.
- Exceptional high temperature protection to effectively resist fluid oxidation.
- Superb low temperature fluidity for cold weather shifting.

Castrol Automotive Antifreeze

Castrol Automotive Antifreeze is a conventional (green), ethylene glycol based antifreeze for use in automotive and light duty diesel applications. It contains inhibitors that provide maximum protection from freezing to -84°F and boil-over to +276°F. Its patented formula protects all metals, including aluminum, against damaging rust and corrosion when used as recommended.

Castrol Contractor Special

CASTROL CONTRACTOR SPECIAL is a Lithium Complex extreme pressure lubricant containing 3% Molybdenum Disulfide. **CASTROL CONTRACTOR SPECIAL** is formulated to offer high temper-ature and heavy-duty performance coupled with good pumpability for appli- cations where a tough durable lubricating film is needed.



Applications: For heavily loaded equip-ment such as bulldozers, shovels, load-ers and off-highway trucks. Plain and anti-friction bearings, ball joints, king pins, hinge and bucket pins, heavy-duty chassis lubrication.

Features/Advantages:

- Lithium Complex provides lubrica- tion at elevated temperatures with- out breakdown or "run out."
- 3% Molybdenum Disulfide offers a tenacious lubricating film that reduces wear. Enhanced retention on lubricated parts.
- Superior film strength and anti- wear package allow exceptional performance under conditions of high loading, severe shock and oscillating motion.
- Pumpability – Readily dispensed from manual pumps as well as automatic systems.

Castrol® Pyroplex Red®

CASTROL® PYROPLEX RED® is a high tempera- ture EP, lithium complex grease that meets the highest performance standards of automotive (particularly Disc Brake Wheel Bearings) fleets, industrial, farm and off highway equipment opera- tions. Formulated from selected base stock and containing unique oxidation inhibitors, this grease possesses outstanding thermal stability. In select- ing the extreme pressure and anti-wear package, great care was exercised in choosing only addi- tives that had temperature characteristics similar to the grease itself. **CASTROL® PYROPLEX RED®** has excellent rust protection, mechanical stability and compatibility with other greases.



Features/Advantages:

- Lithium Complex – The Castrol rec- ommendation for high temperatures encountered during severe braking with disc brakes. The high thermal stability of the grease enables it to provide trouble free lubrication over extended periods. Versatility of application: i.e., bearings, of all kinds, coupling, gears, etc.
- Excellent shear stability (or ability to stay put in a bearing). – No breakdown or run out over long periods of use.
- Retains all of its properties in stor- age, in packing for prelubricated bearings, etc.
- Superior extreme pressure and anti-wear package – acclaimed service under conditions of high loading and severe shock loading.

Castrol HD Lithium

CASTROL HD LITHIUM is a smooth, brown lithium 12-hydroxy stearate EP grease formulated in NLGI 0, 1 and 2 consistencies. It is intended for use on ball and roller anti-friction bearings as well as conventional sleeve bearings. **CASTROL HD LITHIUM** has wide acceptance in construction, trucking, industrial, automotive, marine and farm applications. Typical examples include shaker screens, crushers, asphalt plants, bucket pins, articulating joints, couplings, king pins as well as truck and automobile chassis. **CASTROL HD LITHIUM** is rust inhibited and has good water resistance and long storage life. The base oils utilized in the **CASTROL HD LITHIUM GREASE**, coupled with an oxidation inhibitor and EP additives, enable the grease to withstand continuous heavy loads and shock loads.



INDUSTRIAL SOLVENTS/LUBRICANTS



3-36® Multi-Purpose Lubricant and Corrosion Inhibitor – No. 03005

A versatile petroleum based compound that forms a clear, thin film that lubricates and protects against wear and corrosion. Multi-purpose product lubricates, protects, displaces moisture, and cleans all in one.

Applications:

Tubing, castings, gears, weld rod, wire, fixtures, dies, jigs, shim stock, chucks, drill rod, heat treated parts, machined surfaces, finished welds, aluminum extrusions, air actuated tools, conveyors, frozen joints, locks, hoists, etc.

Packaging: 16 Ounce Aerosol



SP-350™ Corrosion Inhibitor – No. 03262

Superior lubrication and corrosion protection for metal parts and assemblies that are stored indoors. Protection lasts up to 2 years. Promotes easy start-up of stored equipment.

Applications:

Precision machine surfaces, and is a protective coating for assemblies in storage or in shipment. Start-up lubricant for stored machinery.

Packaging: 16 Ounce Aerosol



SP-400™ Corrosion Inhibitor (Extreme Duty) – No. 03282

Long-term indoor/outdoor corrosion inhibitor that provides protection of all equipment subject to heat, humidity, chemicals or severely corrosive atmospheres. Use on machined surfaces and assemblies subjected to long periods of storage.

Applications:

Motors, shafts, equipment exposed to elements, outdoor storage of raw materials and finished stock.

Packaging: 16 Ounce Aerosol



Extreme Duty Silicone – No. 03030

Silicone fluid with superior lubrication and temperature viscosity characteristics. Use on all metallic and non-metallic surfaces. Reduces friction and galling even on metal-to-metal contact areas.

Applications:

Plant conveyors, guides and rails, mold release agents, vending machines, electric motors, rollers and sliding mechanisms.

Packaging: 16 Ounce Aerosol



Cutting Oil Thread Cutting Lubricant – No. 14050

Cutting Oil is a superior thread cutting lubricant for use on all types of metals, including brass, copper and aluminum.

Applications:

Tapping, threading, drilling, sawing, shearing, turning, and reaming metal parts, pipes, conduit, screws, bolt holes, housings, aluminum sheets, strapping, gears and chains.

Packaging: 16 Ounce Aerosol



Zinc-It® Instant Cold Galvanize – No. 18412

Coating of 95% pure zinc actively fights rust and corrosion. Use as a touch-up for damaged galvanized coatings. Dries quickly.

Applications:

On threads, exposed edges, fasteners, conduit, strapping, welds, fencing, railings, grates, electrical poles, breaker panel housings, rain spouts, signs, doors, trailers, waste containers, catwalks and guard rails.

Packaging: 16 Ounce Aerosol



Welder's Anti Spatter – No. 03083

Prevents spatter from adhering to surrounding metal surfaces during welding. Water-based formula allows easy clean-up without the use of solvent cleaners.

Applications:

Resistance welding tips, Mig and Tig tips, weldments, electrode holders, contact tips, tools, metal molds and bench top splash guards.

Packaging: 16 Ounce Aerosol





INDUSTRIAL SOLVENTS/LUBRICANTS

**Heavy Duty Degreaser – No. 03096**

Effectively removes grease, oil, tar, etc. to increase operating efficiency of equipment. It evaporates quickly, leaves no residue and has no flash or fire point, making it an excellent alternative to 1,1,1-based cleaners. Use caution on plastics.

Applications:

Air tools, mechanical brakes, clutches, chains, wire ropes, motors, dies, molds, parts, bearings, generators and compressors.

Packaging: 1 Gallon Bottle

**Heavy Duty Degreaser – No. 03095**

Effectively removes grease, oil, tar, etc. to increase operating efficiency of equipment. It evaporates quickly, leaves no residue and has no flash or fire point, making it an excellent alternative to 1,1,1-based cleaners. Use caution on plastics.

Applications:

Air tools, mechanical brakes, clutches, chains, wire ropes, motors, dies, molds, parts, bearings, generators and compressors.

Packaging: 20 Ounce Aerosol

**Heavy Duty Degreaser II – No. 03120**

Non-chlorinated formula for cleaning where chlorinated solvents are not acceptable. High flash-point of >142°F. Effectively removes soils with no residue build-up. Use caution on plastics.

Applications:

Mechanical equipment, motors, switch gears, transformers and a wide variety of industrial and electrical equipment.

Packaging: 20 Ounce Aerosol

**Contact Cleaner – No. 03070**

Advanced Technology Formula contains no known ozone depleting substances or VOCs. The non-chlorinated, non-flammable, plastic safe formula is an optimal alternative to CFC, HCFC and flammable contact cleaners. NSF K2 Registered.

Applications:

Electrical connectors, printed circuit boards, relays, switches, scales, timers and other sensitive electrical and electronic equipment.

Packaging: 16 Ounce Aerosol

**Contact Cleaner 2000® Precision Cleaner – No. 03150**

Effective alternative to CFC-113-based cleaners when sensitive plastics are not a concern. Evaporates quickly, leaves no residue, has no flash or fire point and contains no Class I Ozone Depleting Chemicals.

Contains HCFC(141b) which has use restrictions and may only be sold to commercial users for applications consistent with regulation.

Applications:

Contacts, metal switches, motors, relays, generators, edge connectors, buss bars, circuit breakers, scales and sensors. Not recommended for use on LEXAN®, Noryl®, or polycarbonate-type plastics.

Packaging: 16 Ounce Aerosol

**Brakleen® Brake Parts Cleaner – No. 05089**

The original brake parts cleaner. Formulated to quickly and effectively remove grease, brake dust, brake fluids, oils, and other contaminants from brake parts, lining and pads.

Applications:

ABS, disc, drum, brake cylinders, brake drums, brake linings, brake shoes, calipers, clutch discs, disc brake pads, discs. Safe for use on all brake systems including: Springs and Wedge brakes.

Packaging: 20 Ounce Aerosol

**White Lithium Grease – No. 03080**

Superior lubrication and durability in any weather or temperature. Perfect for use as a break-in lubricant for bearings or as a general purpose lubricant and corrosion inhibitor for tools, machinery and equipment.

Applications:

Hinges, latches, overhead door tracks, open gears, chains, cables, slide conveyors, guide rails, cams, pistons, machinery, tools and equipment. A break-in lubrication for bearings.

Packaging: 16 Ounce Aerosol



Marvel Mystery Oil



ADDED TO GASOLINE:

- Cleans and lubricates fuel injectors and carburetors.
- Improves gasoline mileage.
- Reduces and prevents varnish and gum build-up.
- Extends spark plug life.
- Safe for catalytic converters and oxygen sensors.

ADDED TO ENGINE OIL:

- Prevents valve sticking and clatter.
- Fortifies properties of engine oil, prevents breakdown caused by extreme temperatures.
- Promotes easier cold weather starts.
- Reduces and prevents acid and sludge formation.

FOR ALL MARINE ENGINES:

- Inboard and outboard.

Additional Uses for Marvel Mystery Oil

1. **Automatic Transmission:** The formula for Marvel Mystery Oil is very similar to an old Marvel product called Automatic Transmission Sealer & Conditioner, MM250. For transmissions that are sticking, sluggish or leaking, add 1 pint of Marvel Mystery Oil to the transmission.
2. **Air Tool Oil:** The formula for Marvel Mystery Oil and Marvel Air Tool Oil are very similar. Marvel Air Tool Oil contains a heavy-duty corrosion additive which is not in the Marvel Mystery Oil. Otherwise, they are the same formula. If moisture in compressed air is not a problem, Marvel Mystery Oil can easily be used as an air tool oil. Apply a couple of drops of Marvel Mystery Oil to oil ports several times a day when used frequently and for prolonged periods of time.
3. **Gun Oil:** All guns should be cleaned and oiled after using. Gun owners use a variety of products to lubricate their weapons before storing. Mostly, gun oil is a thin non-detergent oil. Marvel Mystery Oil is preferred by many gun owners as their choice for a gun oil. Other oils used are Kroil, WS-40, 10W motor oil. The weapon is taken apart and cleaned and then wiped with a rag containing the Marvel Mystery Oil to leave a thin coat of oil on all the metal parts.

Stock #	Label Wt.
MM012R	16 oz.
MM013R	32 oz.
MM014R	1 Gal.
MM015	5 Gal.
MM018	55 Gal.



THE SOLUTION THAT WORKS AS HARD AS YOU DO

Known as “the can with a thousand uses,” WD-40® protects metal from rust and corrosion, penetrates stuck parts, displaces moisture, and lubricates just about anything. WD-40 is also great when it comes to cleaning grease, grime, and other marks from most surfaces.

THE FIVE BASIC FUNCTIONS

CLEANS: WD-40 gets under dirt, grime and grease to clean. It also dissolves adhesives, allowing easy removal of labels, tape, stickers and excess bonding material.

DISPLACES MOISTURE: Because WD-40 displaces moisture, it quickly dries out electrical systems to eliminate moisture-induced short circuits.

PENETRATES: WD-40 loosens rust-to-metal bonds and frees stuck, frozen or rusted metal parts.

LUBRICATES: WD-40’s lubricating ingredients are widely dispersed and hold firmly to all moving parts.

PROTECTS: WD-40 protects metal surfaces with corrosion-resistant ingredients to shield against moisture and other corrosive elements.



WD-40® No-Mess Pen™

WD-40 where you want it and nowhere else!

The WD-40 No-Mess Pen is the coolest new innovation from WD-40, delivering the same great product you know and love, with the convenience of precise application through a handy pen-shaped applicator.

WD-40 No-Mess Pen – It’s the neatest, easiest WD-40 ever – and it’s so small, you can take it with you when you’re on the go.



The new BIG BLAST can covers everything faster.

It’s another original from the original.

- Same legendary product inside; revolutionary delivery system outside.
- New wide-area spray nozzle, designed to deliver product quickly and efficiently over large area.

Big Blast Can

Spray rate: 4.65g/second @105 psig

Pattern: 5" @ 8" distance

Regular WD-40 Can

Spray rate: 1.3g/second @ 105 psig

Pattern: 2" @ 6" distance



Work Smarter.™

WD-40® Smart Straw™ sprays 2 ways!

Now you can use WD-40 to protect, clean and lubricate thousands upon thousands of items – without ever losing the straw again!

New Smart Straw features a permanently attached straw that sprays two ways. Simply flip it up for a precision stream and down for a regular spray action.

Discover how one of the world’s smartest products just got smarter.

VOC Compliant Marking Paint

Stripe® Athletic Field Marker (20 oz.) is specially formulated for line striping athletic fields. Engineered for use in an inverted position for quick and easy application with the #Z-607 Turf Machine. Performs equally well on any porous surface such as gravel, soil and safe on grass.

Stripe® Extra Traffic Marker (18 oz.) is specifically formulated for line striping over new or freshly coated asphalt. Engineered for use in an inverted position for easy and quick application with the Z-604 Traffic Machine.

Stripe® Golf Course Marker (16 oz.) is a fast drying water base marking paint applied in an inverted position that is safe on grass and lead free.

Stripe® Marking Paint (20 oz., solvent based) is a fast drying marking paint designed to be sprayed in an inverted position for easy use.

Stripe® Marking Paint (16 oz., water based) is a fast drying marking paint applied in an inverted position that is lead free and V.O.C. compliant.

Stripe® Inverted Tip Temporary Marking Paint (20 oz.) is a quick drying marker applied in an inverted position where a temporary mark is desired. It is lead free and safe on grass. Can be removed with water.

Stripe® Latex Traffic Marker (20 oz.) is a low odor, water-borne formulation for line striping. Engineered to be used in the Z-604 Traffic Machine for quick and easy application on concrete, blacktop and most other surfaces.

Stripe® Traffic Marker is the original water base formulation for line striping. Engineered to be used in the Z-604 Traffic Machine for quick and easy application on concrete, blacktop and most other surfaces



Marking Tools

Z-604 Traffic Marking Machine

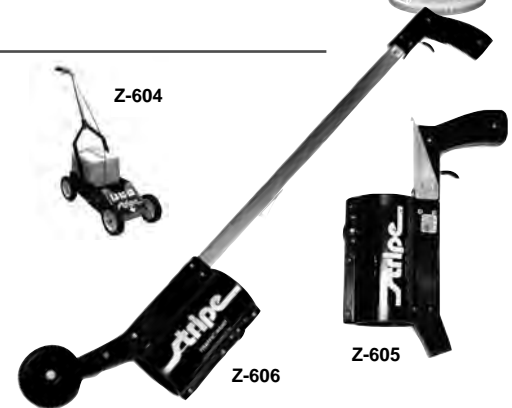
Designed exclusively for Stripe Traffic Paints. This easy to use machine applies crisp, even 2" - 4" lines to concrete or asphalt.

Z-605 Stripe Gun

Compact and lightweight, this tool is ideal for free hand marking with any Stripe Inverted Tip product.

Z606-Marking Wand

For use with a variety of Stripe Inverted Tip marking paints. This lightweight tool is ideal for a wide range of marking applications.



Primers

Hi Tech Primers

A fast drying surface sealer that provides maximum rust protection and better adhesion for a finishing top coat.

Suggested Uses:

- Excellent for preparing bare metal or wood surfaces for a finish coat both interior and exterior.
- Structural steel
- Machinery
- Farm Equipment
- Lawn furniture
- Steel window frames

Benefits:

- Reduced overspray
- Fast dry
- Sag free
- Excellent hide
- Sandable
- Rust inhibitive
- Outdoor/indoor durability
- Effective against rust and chemicals



MRO Bulk High Solids Industrial Coatings (All Colors)

MRO® High Solids Industrial Coating is a superior lead free coating formulated for multi-purpose applications where maximum performance is required. Can be applied by brush, roller or sprayer. For maximum protection, prime bare or rusted metal surfaces with MRO Red Iron Oxide (1-1407) or Light Gray (1-1431) primers.

Suggested Uses:

- Excellent for wood and metal.
- Recommended for:**
- Piping
- Tanks
- Bins
- Machinery
- Heavy capital structures
- Sprinkler systems

Benefits:

- Excellent adhesion
- Protects against rust and corrosion
- Single coat hiding
- Brush or spray application
- Maximum durability
- Lead free
- Chromate free



Don't spoil it-Kroil it! Penetrating Oil

Loosens Frozen Metal Parts!

An industry proven penetrating oil that has no equal. Kroil quickly loosens rusted nuts and bolts - frees frozen shafts, pulleys, etc. Kroil by Kano Laboratories penetrates to 1 millionth-inch spaces. Dissolves rust, lubricates, cleans and prevents rust. Displaces moisture. Kroil the oil that creeps. This is the best penetrating oil around, ask any Farmer or Mechanic. Best of all Kroil is approved for use in nuclear plants.



PENETRATING OIL

PB Penetrating Catalyst

PB B'LASTER, the #1 selling all-purpose penetrating catalyst recently calculated by NPD as dominating the market by 79.7%, flashes through corrosion and is used *universally* as a lubricant and rust inhibitor. PB allows for easy disassembly, extends the life of equipment and simplifies future maintenance. Professional technicians and mechanics rely on PB's capillary action for the toughest jobs, like brakes, exhaust and suspension systems. PB's surfactant works on parts even when they're wet, while it displaces moisture.

Product #: 16-PB
Nothing works faster than B' LASTER!



Air Tool Conditioner

Air Tool Conditioner, B'LASTER's #2 selling product because it is considered the *crème de la crème* of its type, can revive even "dead" air tools. ATC instantly breaks the surface tension of sludge, calcium and varnish. ATC is a very cost-effective way to maintain impact wrenches, drills, grinders, polishers, sanders, air motors and most types of pneumatic tools, because its unique chemistry cleans and lubricates internal parts while tools are still in use. ATC provides a lasting coat of lubrication. ATC is an effective anti-freeze for air tools, protecting them from freezing even at -25°F.

Product #: 16-ATC



PENETRATING COMPOUND

Never-Seez® Regular Grade is a superior, antiseize and extreme pressure lubricant formulated to protect metal parts against rust, corrosion and seizure. Fine metallic and graphite particles in a special grease protect parts even in high heat, high pressure and corrosive environments.

Never-Seez® Pure Nickel Special is a superior, high temperature anti-seize and extreme pressure lubricant containing flake particles of pure nickel, graphite and other additives in a special grease carrier found to enhance anti-seize performance. Recommended for use when applications prohibit the presence of copper, especially when resistance to corrosive acidic and caustic solutions is required.

Nickel Nuclear Grade Never-Seez is specially tested and certified pure for use in nuclear power plants. Each production lot of Nuclear Grade Never-Seez is tested for contaminants of sulfur, halogens and low-melt metals and each container is labeled with the lot number that certifies purity. Recommended for nuclear fittings, valves and steam manifolds. Provides maximum protection from high heat up to 2400°F and aggressive chemicals. Meets General Electric D50YP12, Westinghouse and Bectel's nuclear specifications. Tested to MIL-A-907.



NICKEL NUCLEAR GRADE
 NGBT-8 Brush Top 8 oz.
 NGBT-16 Brush Top 1 lb.
 NG-165 Flat Top 1 lb.
 NG-4 Flat Top 4 lb.
 NG-8 Flat Top 8 lb.

PURE NICKEL SPECIAL

NSBT-8N Brush Top 8 oz.
 NSN-165 Flat Top 1 lb.
 NSBT-16N Brush Top 1 lb.
 NSN-8 Flat Top 8 lb.
 NSN-42B Pail 42 lb.
 NSN-130B Drum 130 lb.
 NSN-425B Drum 425 lb.

REGULAR GRADE

NS-10 Tube 1 oz.
 NSB-4 Tube 1/4 lb.
 NS-40 Flat Top 1/4 lb.
 NSBT-4 Brush Top 1/4 lb.
 NSBT-8 Brush Top 8 oz.
 NSA-16 Aerosol 16 fl.oz.
 NS-160 Flat Top 1 lb.
 NSBT-16 Brush Top 1 lb.
 NSB-16 Bottle 1 lb.
 NSC-1 Cartridge 1 lb.
 NS-168 Flat Top 8 lb.
 NS-42B Pail 42 lb.
 NS-130B Drum 130 lb.
 NS-425B Drum 425 lb.

CALFONEX®

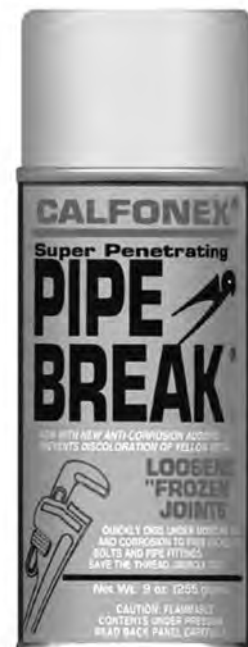
PENETRATING COMPOUND

Super penetrating **PIPE BREAK®** beats the competition with a proprietary chemical formula that cuts through water.

Unlike oil-based penetrants, quick-acting **PIPE BREAK®**

- Cuts through moisture, rust and corrosion.
- Loosens frozen parts - pipe fittings, nuts, bolts and joints.
- Protects against future corrosion.
- Replaces cleaners and lubricants.

PIPE BREAK® spray is ready to tackle your toughest jobs.





RectorSeal® No. 5® pipe thread sealant is a soft-set, slow drying compound which seals, lubricates and protects threaded pipe and fittings. It can be pressurized immediately for piping up through 2" and 100 psi and is ideal for application with a wide variety of fluids and gases, including potable water application. Recommended for use on threaded galvanized steel, iron, brass, copper, aluminum, stainless steel, polyethylene, fiberglass reinforced and PVC pipe. Conforms to TT-S-1732.



RectorSeal® T Plus 2® pipe thread sealant is a non-setting, multi-purpose compound which contains Teflon*, plus synthetic fibers to create a stronger seal. Recommended for use on threaded galvanized steel, iron, brass, copper, aluminum, stainless steel, polyethylene, fiberglass reinforced, PVC, CPVC and ABS pipe. T Plus 2 may be pressurized immediately following application. Conforms to TT-S-1732.

FGG/BM System Compatible* indicates that this product has been tested, and is monitored on an ongoing basis, to assure its chemical compatibility with FlowGuard Gold®, BlazeMaster® and Corzan® pipe and fittings.

FlowGuard Gold®, BlazeMaster® and Corzan® are registered trademarks of Noveon IP Holdings Corp. FGG/BM™ is a trademark of Noveon IP Holdings Corp.



RectorSeal® Tru-Blu™ pipe thread sealant with Teflon* is a fast-dry, flexible set thread sealant designed for high vibration environments such as refrigeration and industrial applications. Teflon* has been added to enhance thread lubrication during assembly and break out. Recommended for use on threaded galvanized steel, iron, brass, copper, aluminum, stainless steel, polyethylene, fiberglass reinforced, PVC, and CPVC pipe. Great for use as a positive lock and seal on threaded fasteners. Conforms to TT-S-1732.



RectorSeal® No. 5® Special pipe thread sealant is a variation of the basic RectorSeal® No. 5 formulation. For use where a low odor sealant with low temperature application is required. It is a non-staining, soft set compound specifically formulated for use on gas piping or when gas detection equipment is used. Recommended for use on threaded galvanized steel, iron, brass, copper, aluminum, stainless steel, polyethylene, fiberglass reinforced and PVC pipe. Conforms to TT-S-1732.



RectorSeal® No. 5® Sub-Zero pipe thread sealant is a low odor, non-staining, soft set thread sealant for use where low temperature application is a requirement. It is brushable to -35 degrees F. Recommended for use on threaded galvanized steel, iron, brass, copper, aluminum, stainless steel, polyethylene, fiberglass reinforced and PVC pipe. Conforms to TT-S-1732.



RectorSeal® No. 100 Virgin™ pipe thread sealant is a non-setting industrial grade compound containing virgin Teflon for use when a pure Teflon product is required. Recommended for use on threaded galvanized steel, iron, brass, copper, aluminum, stainless steel, polyethylene, fiberglass reinforced, PVC, CPVC and ABS pipe. Conforms to TT-S-1732.



RectorSeal® No. 7 pipe thread sealant is a medium-dry, soft-set sealant designed for use with lines carrying corrosive chemicals including acids, caustics, alcohol, ethylene glycol, gasoline, and ammonia. Recommended for use on threaded galvanized steel, iron, brass, copper, aluminum, and stainless steel pipe. Conforms to AMS-S-7916 and TT-S-1732.



RectorSeal® No. 21 pipe thread sealant is a black, soft-set, multi-purpose sealant created for applications where a black sealant is preferred. Recommended for use on threaded galvanized steel, iron, brass, copper, aluminum, stainless steel, fiberglass reinforced polyethylene and PVC pipe. Conforms to AMS-S-7916 and TT-S-1732.



Permatex® Fast Orange® Pumice and Smooth Lotion Hand Cleaners

Industrial grade, biodegradable, waterless, petroleum solvent-free hand cleaner. It contains no harsh chemicals, mineral oils or ammonia that can sting cuts and abrasions. Pure, fresh-smelling natural citrus power does the cleaning while aloe, lanolin, glycerin and jojoba condition and protect skin. Fast Orange® gently deep cleans the toughest dirt and grease.

Permatex® Fast Orange® Cream Formula Hand Cleaner

A cream version of our #1 selling Fast Orange® Pumice Lotion Hand Cleaner. Pure, fresh-smelling, natural citrus power cleans deep down to remove even the most stubborn grease and grime. Readily biodegradable, non-toxic and petroleum solvent-free, Fast Orange® Cream was formulated for those who prefer a thicker consistency hand cleaner. Fortified with premium skin conditioners, Fast Orange® is the choice for working hands. Also works great on laundry stains, pet odors and many other household cleaning needs.
Suggested Applications: Resins, oil, grease, tar, grime, soil, printers' ink, adhesives, paint, scuff marks along with gasket and tile cements.

Pumice Cream
Item # Container Size
35406 4.5 lb. container



Permatex® Fast Orange® Lotion Hand Cleaner

The #1 selling, biodegradable*, waterless, petroleum solvent-free hand cleaner that contains no harsh chemicals, mineral oils or ammonia that can sting cuts and abrasions. Pure, fresh-smelling natural citrus power does the cleaning. Fortified with aloe, lanolin, glycerin and other skin conditioners. Fine Pumice and Smooth formula gently deep cleans the toughest dirt. Works great on laundry stains, scuff marks, tile floors, pet odors and many other household cleaning needs.

Suggested Applications: Removes resins, oil, grease, tar, grime, soil, printers' ink, epoxies, paint, rubber cement, gasket and tile cements.



DL® Permatex® Blue Label™ Cream Hand Cleaner

Cream formula waterless hand cleaner. Takes off many difficult to remove substances yet is gentle to hands. Does not leave a greasy feeling after use. The 4.5 lb. can fits most dispensers including DL® Permatex® 95140. Cited by a leading consumer magazine as the best-performing waterless hand cleaner.

Suggested Applications: Oil, grease, tar, grime, soil, resins, printers' ink, epoxies, paint, rubber cement, gasket and tile cements.

Item # Container Size
01013 14 oz. plastic tub
01406 4.5 lb. plastic tub



Permatex® Fast Orange® Hand Cleaner Wipes

Fast Orange® Hand Cleaner Wipes remove the toughest grease, tar, grime, ink, paints, sealants, adhesives and other difficult soils. Each pre-moistened wipe has a textured surface on one side that is ideal for cleaning heavy-duty soils from hands, tools and work areas. The wipes also have a smooth side for general purpose cleaning.

Item # Container Size
25072 72-count bucket



Pumice Lotion

Item #	Container Size
25108	7.5 fl. oz. bottle
25116	15 fl. oz. squeeze bottle
25217	1/2 gallon bottle w/pump
25218	1 gallon bottle w/pump
25104	1 gallon flat-top bottle

Smooth Lotion

Item #	Container Size
23108	7.5 fl. oz. bottle
23116	15 fl. oz. squeeze bottle
23217	1/2 gallon bottle w/pump
23218	1 gallon bottle w/pump
23104	1 gallon flat-top bottle

* Biodegradable according to 40 CFR 796.3240.



WD-40 Company

LAVA® BAR

The Lava® Bar is the original heavy-duty hand cleaner. Since 1893, do-it-yourselfers, coal miners and oil rig workers have depended on the power of pumice in Lava to cut through even the toughest grease and grime. Lava's name was derived from one of its key ingredients – pumice.

A by-product of volcanic activity, pumice is used in combination with other cleaning agents to clean even the dirtiest of hands. The Lava Bar is available in a 5.75 oz. bar and 5.75 oz. value-pack for heavy users.





Form-A-Gasket® No. 1 Sealant

Fast-drying, hard-setting sealant designed for sealing rigid materials and flanges or patching holes and joints where permanent assembly is desired. Temperature range -65°F to 400°F (-54°C to 204°C); resists common shop fluids and fuels.

Suggested Applications: Freeze plugs, threaded connections.

Item #	Container Size
80003	11 oz. tube, boxed

No. 2 Sealant

Slow-drying, non-hardening sealant designed for sealing cut gaskets and stamped parts. Allows for easy disassembly if required. Temperature range -65°F to 400°F (-54°C to 204°C); resists common shop fluids and fuels. Use where sealing is more important than adhesion.

Suggested Applications: Valve cover gaskets, oil pan gaskets.

Item #	Container Size
80015	1.5 oz. tube, carded
80016	3 oz. tube, carded
80011	11 oz. tube, boxed

Aviation Form-A-Gasket® No. 3 Sealant

Slow-drying, non-hardening brush-top sealant approved for use in aviation as well as automotive applications. Temperature range -65°F to 400°F (-54°C to 204°C); resists gasoline, oil and grease.

Suggested Applications: Close-fitting machined surfaces, sealing hoses, solid gaskets.

Item #	Container Size
80017	16 oz. bottle
80019	4 oz. bottle

1372 High Temperature Form-A-Gasket® Sealant

Slow setting, non-hardening, high temperature sealant. Especially recommended for heavy-duty applications. Temperature range -65°F to 600°F (-54°C to 315°C) intermittent. Resists common shop fluids.

Suggested Applications: Coating and sealing exhaust gaskets, flanges and connections and other heavy-duty applications.

Item #	Container Size
80088	7 oz. tube

High Tack™ Spray-A-Gasket™ Sealant

Fast-drying all-purpose sealant dries to a highly tacky, non-brittle film. A reliable general adhesive. Remains effective under temperatures of -65°F to 500°F (-54°C to 260°C). Resists gasoline, oil, antifreeze, axle lube, kerosene, propane and butane. Level 3*

Suggested Applications: Valve covers, fuel pumps, carburetors, manifold gaskets; seals all felt, cork, metal, paper, rubber and asbestos gaskets.

Item #	Container Size
80065	12 oz. aerosol can

*NFPA Fire Code 30B.



Sensor-Safe Blue RTV Silicone Gasket Maker

The original Permatex Blue. Will not foul oxygen sensors. Replaces almost any cut gasket. Makes reliable “formed-in-place” gaskets that resist cracking, shrinking and migrating. Coats pre-cut gaskets to increase reliability. Temperature range -65°F to 500°F (-54°C to 260°C) intermittent; resists auto and shop fluids. First generation 1970-1980 gasket maker.

Suggested Applications: Valve covers, oil pans, timing covers, water pumps, thermostat housings, transmission pans.

Item #	Container Size
80023	12 oz. tube, boxed

Ultra Blue® Multipurpose RTV Silicone Gasket Maker

OEM specified. Permatex® Ultra silicones were developed to meet today’s technology changes. Sensor-safe, low odor, noncorrosive. Outstanding oil resistance and joint movement values. Eight times more flexible than cork/composite gaskets; three times more oil resistant than conventional silicones. Temperature range -65°F to 500°F (-54°C to 260°C) intermittent; resists auto and shop fluids and vibration.

Suggested Applications: Valve covers, oil pans, timing covers, transmission pans, differential covers.

Item #	Container Size
81724	3.35 oz. tube
81725	13 oz. cartridge

Clear RTV Silicone Adhesive Sealant

General-purpose, clear RTV indoor/outdoor sealant. Seals, bonds, repairs, mends and secures glass, metal, plastics, fabric, vinyl, weather stripping and vinyl tops. Protects and repairs electrical wiring. May be applied to horizontal or vertical surfaces. Waterproof and flexible. Temperature range -75°F to 400°F (-59°C to 204°C); resists oil, water, weather, vibration, grease.

Suggested Applications: Windshields, door frames, electrical connections, vinyl tops, seams and roofs.

Item #	Container Size
80855	11 oz. cartridge

High-Temp Red RTV Silicone Gasket

OEM specified. Formulated for hi-temp applications, or heavy-duty use (such as towing, etc.). Replaces almost any cut gasket by making reliable “formed-in-place” gaskets that resist cracking, shrinking and migrating caused by thermal cycling. Coats pre-cut gaskets to increase reliability. Temperature range -65°F to 650°F (-54°C to 343°C) intermittent; resists auto and shop fluids. First generation 1970-1980 gasket maker.

Suggested Applications: Valve covers, oil pans, timing covers, water pumps, thermostat housings, transmission pans.

Item #	Container Size
81409	11 oz. cartridge
81160	3 oz. tube, carded

Anti-Seize Lubricant

A highly refined blend of aluminum, copper and graphite lubricants. Use during assembly to prevent galling, corrosion and seizing and to assure easier disassembly. Temperature range: -60°F to 1600°F (-51°C to 871°C). Salt, corrosion and moisture resistant – ideal for marine use. Non-aerosol version meets Mil Spec #907E. Aerosol - Level 3*

Suggested Applications: For easy removal of spark plugs, cylinder head and exhaust head bolts.

Item #	Container Size
80208	16 oz. brush-top bottle

Gasket Remover

Quickly removes all types of gasketing adhesives and sealants, even baked-on gaskets. Removes gaskets from any type of assembly in 10 to 12 minutes. Prepares metal parts for new gasket maker and assembly. Reduces scraping and sanding. Prevents damage to flanges. Level 2*.

Suggested Applications: Removes silicone, weatherstrip adhesive, dried oil, grease and paint.

Item #	Container Size
80646	16 oz. aerosol can

*NFPA Fire Code 30B.





Medium Strength Threadlocker BLUE

All-purpose, medium strength threadlocker. Ideal for all nut and bolt applications 1/4" - 3/4" (6mm - 20mm). Eliminates need for stocking expensive lock nuts and lock washers. Locks and seals while preventing parts from loosening due to vibration. Protects threads from corrosion. Removable with hand tools for easy disassembly.

- Prevents vibration loosening.
- Medium Strength Blue.
- Use on nut and bolt assemblies 1/4".
- Removable with standard hand tools.
- Mil-Spec (S-46163A) Type II, Grade N.

Item #	Container Size
24210	10ml bottle
24250	50ml bottle

Permanent Strength Threadlocker RED

A permanent, high strength threadlocker that is applied to fasteners 3/8" - 1" (10mm - 25mm) in size before assembly. Designed for securing parts that must withstand heavy shock, vibration or extreme chemical or environmental conditions. Localized heating and hand tools are required to separate parts.

- Prevents vibration loosening.
- Permanent Strength Red.
- Use on nut and bolt assemblies 3/8".
- Heat required for removal.
- Mil-Spec (S-46163A) Type II, Grade O.

Item #	Container Size
26210	10ml bottle
26250	50ml bottle

Penetrating Grade Threadlocker GREEN

A low viscosity threadlocking liquid that wicks along the threads of preassembled fasteners to secure them in place. Since it is applied after assembly, preventive maintenance procedures are simplified. Ideal for fasteners ranging from #2 to 1/2" (2.2 to 12mm) in size. Localized heating and hand tools are needed for disassembly.

- Prevents vibration loosening.
- Penetrating (Wicking) Green.
- Use on pre-assembled fastener assemblies up to 1/2".
- Mil-Spec (S-46163A) Type III, Grade R.

Item #	Container Size
29050	50ml bottle

Pneumatic/Hydraulic Sealant

Designed for locking and sealing high pressure hydraulic and pneumatic systems. Contains no fillers or particles which could contaminate system fluids, foul valves or clog fine filters and screens. Reliably cures on "as received" fasteners and controlled locking strength affords easy disassembly.

- Prevent leaks in Pneumatic / Hydraulic systems.
- Won't foul valves or clog filters.

Item #	Container Size
54550	50ml bottle

Pipe Joint Compound

Universal sealant. Lubricates and seals threaded joints on water, oil and fuel lines. Temperature range -65°F to 400°F (-54°C to 204°C); resists common shop fluids.

Suggested Applications: Thread fittings, plumbing applications.

Item #	Container Size
80045	16 oz. bottle



Super Glue

This formulation was specially designed for a faster, long-lasting bond. It is easily applied and works on non-porous materials including metal, plastics, rubber, vinyl, paper, wood, textiles and cork gaskets. Permanent transparent bond fills gaps to .004".

Suggested Applications: Automotive trim, logos, knobs, gear shift logos, minor interior repairs.

Item #	Container Size
49550	1 oz. bottle

SPECIALTY MAINTENANCE

Rust Treatment

Provides one-step rust treatment that destroys old rust, prevents new rust. Just brush or spray on. Within minutes, rust is replaced by a durable black polymer coating that may be painted.

Suggested Applications: Destroys rust on trucks, trailers, storage tanks, pipes, valves, fences, bulkheads, overhangs, decks, hatch covers (topcoat with appropriate marine paint), agricultural equipment, plows, tractors, snow removal equipment.

Item #	Container Size
75448	1 gallon bottle

Prussian Blue

Aids precision-fitting of machined surfaces. Locates high spots on bearings, valves, gears and other close-to-tolerance components. Nondrying. Easy clean-up.

Suggested Applications: Bearings, valves, gears, other close tolerance or machined assemblies.

Item #	Container Size
80038	.75 fl. oz. tube



3400 SYSTEM 340 VOC ALKYD ENAMEL

Rust-Oleum® Industrial Low VOC Enamels are high-solids modified alkyds designed for interior and exterior surfaces. This low VOC version of the original rust-preventive coating is formulated to protect metal surfaces from the ravages of rust and corrosion.

For use on properly primed surfaces where a long-lasting high gloss finish is desired and where the use of low VOC coatings is required. This durable alkyd enamel is useful throughout the plant for routine maintenance painting.



- A low VOC version (<340 g/l) of the original rust preventive coating formulated to protect metal surfaces from the ravages of rust and corrosion.
- Best color and gloss retention in the industry.
- Superior coverage compared to competitive industrial enamels.
- Protects against mild chemical spills, fumes, oil and grease.
- Resists chipping, cracking and peeling.
- One coat hide.
- For indoor and outdoor protection.

TYPICAL APPLICATIONS:

Equipment • Pipes • Railings • Vehicle Refinishing
Structural Steel • Metal Cabinets and Lockers • Vents

FINISHES

Description	1-Gallon	5-Gallon	Description	1-Gallon	5-Gallon
Marlin Blue	3423402	—	Safety Green	3433402	—
National Blue	3427402	—	Safety Red	3464402	—
Chestnut Brown	3477402	—	Aluminum*	3415402	—
Dunes Tan	3471402	—	Silver Gray	3482402	—
Almond	3470402	—	Navy Gray	3486402	—
Forest Green	3438402	—	Safety Yellow	3444402	—
Yellow	3446402	—	Gloss Black	3479402	3479300
Safety Blue	3425402	—	Gloss White	3492402	3492300
Regal Red	3465402	—	Flat Black	3478402	—
Equip. Orange	3456402	—	Red Primer	3469402	3469300
Equip. Yellow	3445402	—	Gray Primer	3481402	3481300

* Compliant Nationwide (Metallic <500 g/l).

NEED SPEED?

The New Alkyd Accelerator accelerates cure time and increases film hardness.



TINT BASES ALSO AVAILABLE

Description	1-Gallon	5-Gallon
Masstone	3407408	3407388
Deep Base	3408411	3408391
Light Base	3409418	3409394
Red Base	3405408	3405388
Yellow Base	3406408	—

Call us for information on our full line of Paint Brushes and Rollers.





SPRAY COATINGS / FOAM CAULK

Interior-Exterior Paint

No Runs, No Drips, No Errors!™

This fast-drying paint creates a smooth professional finish every time. And it dries in 12 minutes or less, which means you can get the look you want in no time!



- Smooth, long lasting finish.
- Excellent weather resistance.
- Available in 52 colors.

Net Weight - 12 oz.

Rust Preventative Enamels

Stop rust before it happens. Spray Krylon® Rust Tough® Rust Preventative Enamels directly on your metal surfaces. It chemically converts any rust formation to a black waterproof primer. It stops future rust from forming and dries to the touch in less than 30 minutes. No primer needed!



- No primer required - direct to metal .
- Dries to the touch in less than 30 minutes.
- Superior fade resistance.
- Easy soap and water cleanup.
- Low odor.
- Long-lasting rust protection.
- One-coat coverage.
- Available in gloss, satin and metallic finishes.

Net Weight - 12 oz.

Acrylic Crystal Clear

- Protective, non-yellowing finish.
- Dries in just 12 minutes or less.
- For use inside and out – on wood, metal, plastic, wicker and more.

Net Weight - 11 oz.



Fluorescent Paints

Get bold with Krylon® Fluorescent Paints. Neon colors provide high visibility for greater safety in your home, office or shop.

- Bold, neon colors for high visibility.
- For safety and decor items.
- Increases brilliance up to 400%.
- Glows under ultraviolet (black) light.
- For best results, use a white basecoat.

Net Weight - 11 oz.



Rust Tough® Primers

Prevent rust - even in the harshest environments - by spraying your surfaces first with Krylon® Rust Tough® Primer. This unsurpassed protection dries quickly and is available in a variety of colors.



- Spray directly over rust.
- Topcoat with Rust Tough® Rust Preventative Enamels.
- Protects surfaces from rust - even in the harshest environments.
- Easy soap and water cleanup.
- Low odor.
- Long-lasting rust protection.
- One-coat coverage.



Stop Gap!® Expanding Insulating Foam

Ideal for filling and insulating holes and gaps.

- Forms an airtight and waterproof bond to wood, metal, masonry, glass and most plastics.
- Cured products hardens and can be trimmed, shaped, sanded, painted or stained.
- Dries tack free in 15-30 minutes.



Rust Tough® Hamm-R Finishes™

Krylon® Rust Tough® Hamm-R™ Finish sprays directly on metal. It creates the clean, industrial look of a hand-hammered metal object, while stopping the start and spread of rust.

- No primer needed.
- Exterior durability.
- Prevents rust from starting and spreading.

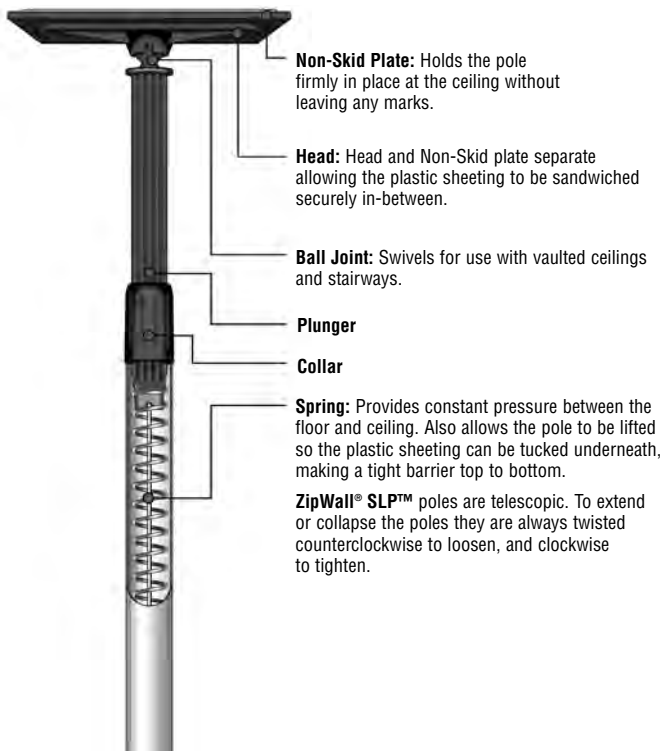
Net Weight - 12 oz.



Spring Loaded Poles to create tapeless dust barriers in minutes!

This is our signature product. ZipWall® is an award-winning barrier system. It has been honored by the press and hailed by builders, painters, carpenters, floor refinishers, demolition workers, restoration companies, and do-it-yourselfers as a simple and effective method of controlling dust by isolating the worksite from other areas.

The patented ZipWall® spring loaded barrier system consists of telescoping twist lock ZipWall® poles available in both twelve and twenty foot lengths. The system locks the screening material (ordinary plastic sheeting, light canvas tarp or drop cloth) firmly against the ceiling, creating a "virtually airtight" barrier. Once in place, just lift and tuck the screening material under the pole to create a tight barrier from top to bottom. The poles are sold in pairs.



Non-Skid Plate: Holds the pole firmly in place at the ceiling without leaving any marks.

Head: Head and Non-Skid plate separate allowing the plastic sheeting to be sandwiched securely in-between.

Ball Joint: Swivels for use with vaulted ceilings and stairways.

Plunger

Collar

Spring: Provides constant pressure between the floor and ceiling. Also allows the pole to be lifted so the plastic sheeting can be tucked underneath, making a tight barrier top to bottom.

ZipWall® SLP™ poles are telescopic. To extend or collapse the poles they are always twisted counterclockwise to loosen, and clockwise to tighten.



The ZipWall® barrier system is an easy way to contain an entire work area in minutes. This unique system uses spring loaded, telescopic poles that lock into place with a simple twist **A**.

To erect a barrier, start with the pole in the collapsed position. Sandwich the plastic sheeting between the plate and the head **B**. Then snap them together to lock the plastic into place. Next, raise the plastic to the ceiling by extending the pole **C**. Lock into place with a quarter twist of the upper section of the pole. The spring-loaded section at the top keeps constant pressure against the plate at the ceiling. Using the same method, attach the plastic to the next pole and place it up to 10 ft. away.

The plate is covered with a soft, non-skid, non-marking material. This not only prevents the pole from sliding, but also protects the ceiling. The plate and the head are attached to the pole on a ball-joint which is efficient for angular surfaces such as vaulted or cathedral ceilings, or stairwells.

Once all poles are in place, lift each one and tuck the plastic underneath making the barrier tight from top to bottom **D**.

You may need to place a GripDisk™ slide stopper under each pole to prevent slippage on slick surfaces such as hardwood, tile or vinyl flooring **E**.



ZipWall® SLP™ (Spring Loaded Pole)

Package contains 2 spring loaded poles, two grip disks and comes with the new tethered plate. Plastic sheeting is not included.

The SLP plunger and spring are built into the pole. This makes the poles lighter (1.5 lbs. each) and stronger. With the plunger now made of solid polycarbonate, it is unbreakable when used even under the toughest conditions.

SLP / item # SLP2 / two 12-foot spring loaded poles

20' Poles / item # KT-20 / with Jacks, five sections.



Manufacturers of Quality Wiping Materials

***A popular painters' rag!
Economical white low lint wiper excellent for many applications.***

R010-W32 25 lb. box

***Best value for general cleanup.
This will be assorted colors, blended cotton.***

R020-C13D 50 lb. box

***Most economical pickup cloth for oil, dirt and grease.
All synthetic material.***

R010-C29 50 lb. box

Size and weight are the two factors to consider when buying a drop cloth.
Industry standard classifies drop cloths by oz. / sq. yard.

DROP CLOTH LINE:

HEAVY GRADE

W912-H 8 oz. / sq. yard
9 x 12 White

***Wharton also
offers other quality
wiping cloths
upon request!***





TEMPORARY FLOOR PROTECTION FILM

- **Easy to apply:** Reverse wind* rolls adhere quickly and easily.
- **Easy to work:** Low tack water-based adhesive stays put as you move about.
- **Made to endure:** Strong, 3 mil polyurethane film is puncture and tear resistant.
- **Easy to size:** Cut with sharp blade to fit space.
- **Easy to remove:** Peel and toss in seconds.
- **Easy to count on:** Stays on the job for up to 45 days.
- **Satisfied customers:** Customers appreciate contractors who cover their tracks.
- **No hassle cleanup:** Floors and carpets remain unsoiled and without adhesive residue.

for Carpets

- **Made to protect:** Protects carpets during sloppy jobs.

Available in 5 standard sizes, including stairs:

- 24" x 200' Reverse Wind*
- 24" x 500' Reverse Wind*
- 36" x 200' Reverse Wind*
- 36" x 500' Reverse Wind*
- 32" x 200' Normal Wind (for stairs)

Usage Requirements:

- Product is designed to adhere properly to synthetic (non-wool) carpets.
- Do not apply carpet film to hardwood floors.
- Do not apply to wet or damp carpets.
- Wait 72 hours prior to applying to newly laid carpets.
- Remove after 45 days to avoid residue.

for Hard Surfaces

- **Made to protect:** Protects hard surface floors (ceramic, linoleum, and wood) during sloppy jobs.

Available in 2 standard sizes:

- 24" x 200' Reverse Wind*
- 36" x 200' Reverse Wind*

***REVERSE WIND** rolls contain the adhesive side of the film on the out side of the roll. Because the sticky side has first contact with the surface, application is quick and easy.

KleenKover Film Applicator

TEMPORARY FILM APPLICATOR WORKS WITH CARPET FILM AND HARD SURFACE FILM

The temporary film applicator unrolls film onto the surface in one easy step. It is adjustable for use with 24- and 36-inch rolls. (CFAT24-36: 22 lbs.)



KleenKover Step Off Pads

REMOVE DIRT AND GRIME FROM SHOES UPON CONTACT

Step Off Pads are 24" x 36" adhesive coated blue mats that contain an anti-microbial germicide to remove dirt, grease and grime from shoes, wheeled carts and equipment upon contact. Ideal for construction or renovation sites and other places that require clean shoes before entry (cleanrooms, hospitals, food processing plants, pharmaceutical plants). Each case contains four 30 sheet pads and weighs 11 pounds. (Model: SOP2436)

Technical Specifications

- Mil Thickness: 2
- Tensile Strength: 7
- Elongation: 225
- Adhesion: 14.0 - 18.0



* Manufacturer's values average according to PSTC test methods.





QB-300

MULTI-PURPOSE CONSTRUCTION ADHESIVE

Pro-Series® QB-300™ Multi-Purpose Construction Adhesive is a premium quality, waterproof adhesive formulated using synthetic rubber and tackifying resins. It is specially designed for the bonding and installation of all types of plastic foams and polystyrene insulation including STYROFOAM® brand plastic foam and FORMULAR® Extruded Polystyrene Insulation. When used as directed, QB-300™ will not attack polystyrene and other plastic foams. Because of its unique design, this adhesive forms a “bridge” between the panel and the bonding surface with a strong yet flexible bond. This product is also highly recommended for use with all types of vinyl covered gypsum board due to excellent initial tack and rapid bond development. It will not cause any staining, bleeding or blistering effect. QB-300™ provides excellent adhesion to a wide variety of building materials including wood, fiberboard, metals, masonry, brick, concrete, marble, cork, polystyrene bath panels, fiberglass, glazed surfaces and much more.

PACKAGING:

10.2 oz. cartridge - 12 per case (Item No. 30011)
5 gal. pail - 1 unit (Item No. 30095 *Special Order)



SF-400™

VOC Compliant CONSTRUCTION and SUB-FLOOR ADHESIVE

Pro-Series® SF-400™ VOC Construction and Sub-Floor Adhesive incorporates a new, technologically advanced solvent/rubber based formula that meets stringent California VOC requirements. This adhesive provides excellent adhesion and extrusion in all weather conditions. It offers fast grab and high ultimate bond to wet, frozen and treated lumber.

PACKAGING:

28 oz. cartridge, 12 pack SKU 40029-VOC



SA-167

SILICONIZED ACRYLIC LATEX CAULK

Pro-Series® SA-167™ is a premium quality latex caulk with outstanding properties like adhesion, out-door weathering, minimum shrinkage and long tooling time. Its acrylic base offers not only outstanding adhesion but also resistance to oxidation and ultra-violet rays. The siliconized formulation improves adhesion to ceramic and glass substrates. It provides a waterproof and weatherproof seal without the use of a primer and can be painted with latex or oil-based paints.

PACKAGING:

10.2 oz. cartridges - 12 per case (Item No. 16711-X)



PL 400

HEAVY-DUTY CONSTRUCTION ADHESIVE

PL400 provides the ultimate in bonding capabilities and is especially formulated for all heavy-duty construction, interior or exterior, such as sub-flooring, exterior sheathing, siding, decks, metal and FRP panels, wherever a powerful, permanent bond is required. Virtually unaffected by weather extremes. Also VOC compliant formula for California sales. Product meets stringent new California State CARB and Federal VOC Regulations.

PACKAGING:

10.2 oz. cartridges - 12 per pack,
28 oz. cartridges - 12 per pack



PC-158

PAINTER'S CHOICE LATEX CAULK

Painter's Choice™ is a quality latex caulk suitable for all interior applications where minimum joint movement is expected. It adheres well to most building materials and is easy to apply, easy to tool and easy to clean up with soap and water. Painter's Choice™ produces a seal that offers improved resistance to air and moisture penetration. It is readily paintable in one hour with either oil or latex based paints. This formulation resists mildew and mold, is non-staining, non-yellowing and no-sagging with almost no odor.

PACKAGING:

10.5 oz. cartridges - 12 per case (Item No. 15811)



VP-275

MULTI-PURPOSE SILICONE SEALANT

Pro-Series® VP-275™ is a one-part, low modulus, neutral curing silicone sealant. The high performance characteristics of VP-275™ provide for excellent primerless adhesion to most porous and nonporous building materials. The product cures at room temperature by reaction with moisture in the air to produce a permanently flexible seal that is weatherproof and waterproof. VP-275™ offers superior resistance to oxidation, UV light, temperature variations and is noncorrosive to most metals. The low modulus properties of the sealant allow it to withstand extension/compression movement capability up to +/-50 percent of the original joint width. VP-275™ is solvent free and nontoxic. It can be applied easily at temperature from 0°F to 110°F.

PACKAGING:

10.3 oz. cartridges - 12 per case (Item No. 27511-X)





BLACK & SILVER® HIGH CARBON STEEL

Guaranteed Forever. High carbon steel blade individually ground, polished, mirror finished and clear coated. Full tang blade construction. Nylon projection interlock handles resist most paint thinners.



02005 3/4" Flexible *Black & Silver®*

02000 1-1/4" Flexible *Black & Silver®*

02050 1-1/4" Stiff *Black & Silver®*

02100 1-1/2" Flexible *Black & Silver®*

02150 1-1/2" Stiff *Black & Silver®*

02250 2" Flexible *Black & Silver®*

02300 2" Stiff *Black & Silver®* shown above



02070 1-1/4" Stiff *Black & Silver®* Bent Blade



02205 3/4" Stiff *Black & Silver®* Chisel

02200 1-5/16" *Black & Silver®* Chisel



02950 2-IN-1 *Black & Silver®* Glazing Tool
Satin finish high carbon steel blade. Use for glazing operations. One end has slotted V-blade to apply smooth strip of putty, other end has a heavy-duty 1-1/4" chisel edge to remove old putty and drive push style glazing points.



02970
2-1/2" 5-IN-1 *Black & Silver®* Painter's Tool
Sharp scraper blade. Putty remover. Spreader. Half round cut-out removes paint from paint rollers. Sharp point opens cracks for patching.



02350 3" Flexible *Black & Silver®* Scraper

02500 3-1/2" Flexible *Black & Silver®* Scraper



02400 3" Stiff *Black & Silver®* Chisel Scraper

02600 4" Stiff *Black & Silver®* Extra Heavy-Duty Chisel Scraper



02550 4" Flexible *Black & Silver®* Joint Knife

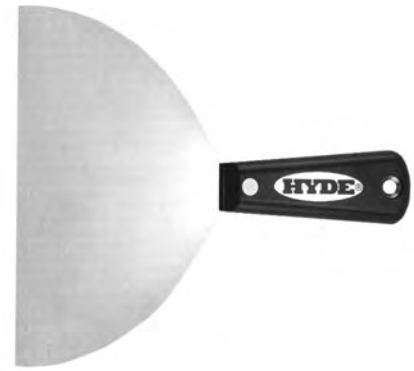
02750 5" Flexible *Black & Silver®* Joint Knife

02850 6" Flexible *Black & Silver®* Joint Knife

02880 10" Flexible *Black & Silver®* Joint Knife



02755 5" Stiff *Black & Silver®* Wallcovering Trim Tool



02990 8" Flexible *Black & Silver®* Joint Knife

CONTRACTOR HARDWOOD TOOLS

Traditional high carbon steel putty knives, scrapers and joint knives have full-tang blades with hardwood handles that are milled, contoured and sanded smooth for comfort. Blades are individually ground, polished, mirror finished and clear coated. Brass plated steel grommet hang holes.



07110 1-1/2" Flexible Putty Knife



07210 1-1/4" Extra Heavy Duty Chisel Putty Knife



07360 3" Flexible Scraper



07410 3" Stiff Chisel Scraper



07860 6" Flexible Joint Knife





BLACK & SILVER® HAMMER HEAD®

Guaranteed Forever. Die cast metal nail setting end built into handles to set drywall nails. Full tang blade construction. Blades run straight from the working edge through handle to the nail setting end. Patented nylon handles.



01550 4" Flexible *Black & Silver®* Stainless Steel *Hammer Head* Joint Knife

01750 5" Flexible *Black & Silver®* Stainless Steel *Hammer Head* Joint Knife



01850 6" Flexible *Black & Silver®* Stainless Steel *Hammer Head* Joint Knife



02565 3/4" Stiff *Black & Silver®* Chisel Putty Knife



02355 3" Flexible *Black & Silver®* *Hammer Head* Scraper



02568 3" Stiff *Black & Silver®* *Hammer Head* Chisel Scraper



02570 4" Flexible *Black & Silver®* *Hammer Head* Joint Knife

02770 5" Flexible *Black & Silver®* *Hammer Head* Joint Knife

02870 6" Flexible *Black & Silver®* *Hammer Head* Joint Knife

02872 6" Extra Flex *Black & Silver®* SuperFlexx *Hammer Head* Joint Knife

02995 8" Flexible *Black & Silver®* *Hammer Head* Joint Knife

02890 10" Flexible *Black & Silver®* *Hammer Head* Joint Knife

MAXXGRIP PRO™

The ergo-engineered soft-grip handles fit your fist for less user fatigue...cushioned to absorb shock and perform comfortably during extended use.



06100 1-1/2" Flexible *MAXXGRIP PRO™* Putty Knife

06150 1-1/2" Stiff *MAXXGRIP PRO™* Putty Knife

06250 1-1/4" Extra Heavy-Duty *MAXXGRIP PRO™* Chisel Putty Knife



06350 3" Flexible *MAXXGRIP PRO™* Scraper

06400 3" Stiff *MAXXGRIP PRO™* Heavy Duty Chisel Scraper



06570 4" *MAXXGRIP PRO™* Joint Knife

06770 5" Flexible *MAXXGRIP PRO™* Joint Knife

06870 6" Flexible *MAXXGRIP PRO™* Joint Knife

06880 8" Flexible *MAXXGRIP PRO™* Joint Knife

06885 10" Flexible *MAXXGRIP PRO™* Joint Knife

MAXXGRIP PRO™ Brass

Solid brass, spring tempered blades. The ergo-engineered soft-grip handles fit your fist for less user fatigue...cushioned to absorb shock and perform comfortably during extended use.



06080 1-1/4" Stiff *MAXXGRIP PRO™* Brass Putty Knife

06320 2" Stiff *MAXXGRIP PRO™* Brass Putty Knife



06215 1-5/16" Stiff *MAXXGRIP PRO™* Brass Putty Knife



06420 3" Stiff *MAXXGRIP PRO™* Brass Chisel Scraper



FIRE BARRIER CAULK

3M's complete line of fire protection products helps stop the spread of fire, smoke and toxic fumes.

3M™ FIRE BARRIER CAULKS

3M™ intumescent caulks expand up to three times their original size when exposed to temperatures over 300°F (149°C). This intumescent action forms a strong, insulating char which seals the opening for up to four hours when exposed to extreme heat. Fire barrier caulks are ideal for new construction or retrofit in a wide variety of applications such as metal, plastic, insulated and glass pipe, construction gaps, dynamic joints, HVAC ductwork and insulated cable applications. Fire barrier caulks are all one-part systems requiring no mixing or measuring, and are fast drying, becoming tack-free in less than 30 minutes. All come in convenient job-size packages and install easily with a standard caulking gun, pneumatic pumping equipment or putty knife.

3M™ Fire Barrier CP 25WB+ Sealant

3M™ Fire Barrier CP 25WB+ Caulk is a premium elastomeric latex caulk designed for use as a one-part fire, smoke, noxious gas and water sealant. In addition, the unique intumescent property of this material (expands when heated) means that as cable or pipe insulation is consumed by fire, CP 25WB+ Caulk expands to maintain the penetration seal. CP 25WB+ Caulk features superior adhesion strength, caulk rate and no-sag application with expanded UL Classified fire protection systems plus a halogen-free formula. 3M Fire Barrier CP 25WB+ Caulk can be installed with a standard caulking gun, pneumatic pumping equipment or it can be easily applied with a putty knife or trowel. CP 25WB+ Caulk will bond to concrete, metals, wood, plastic and cable jacketing. No mixing is required.



CP 25WB+ Caulk Features

- Water Base: Easy clean up, no special handling, routine disposal.
- Intumescent: Expands when heated to seal around items consumed by fire.
- Endothermic: Absorbs heat energy, releases chemically bound water.
- Thixotropic: Will not sag or run in overhead or vertical applications.
- Halogen-free.
- Fast dry: Tack-free in approximately 10-15 minutes.
- Paintable. (Best results obtained after 72-hour cure.)
- Minimal shrinkage. • Brown color.
- Water seal: Seals against inadvertent water spills in the unexpanded state.
- High caulk rate: 1000 g/min. with in. nozzle.
- Point contact allowed.
- Continuous Operating Temperature not to exceed 120°F (48°C).

Packaged: 2- and 5-Gallon Pails/ 20-oz. Sausage/10.1- and 27-oz. Cartridges.

3M™ Fire Barrier IC 15WB+ Sealant

A low cost, latex based, intumescent smoke and firestopping sealant for wall and floor penetrations. Easy-to-handle formulation that bonds to concrete, metal, wood and cable jacketing. Dries to a firm, rubber-like solid. Provides up to 2 hours of fire protection.

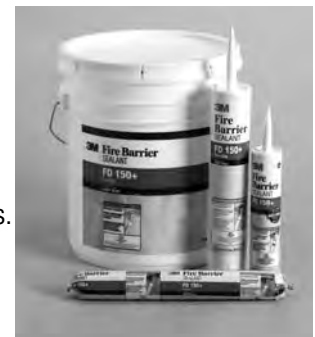
Packaged: 4.5-Gallon Pails/ 20- oz. Sausage/10.1- and 27-oz. Cartridges.

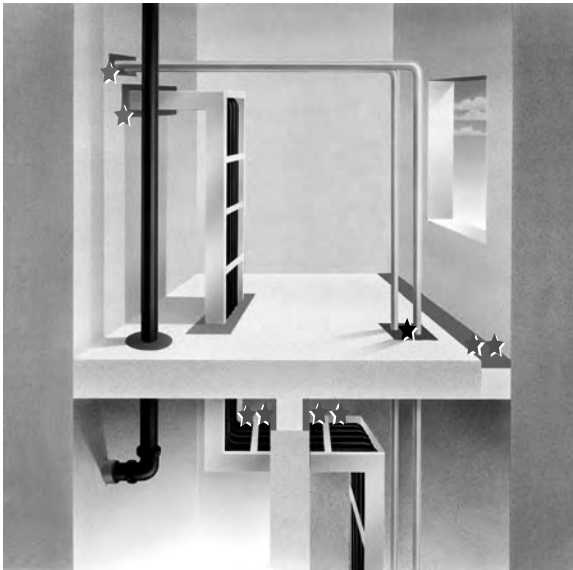


3M™ FireDam™ 150+ Caulk

3M™ FireDam 150+ is the economical alternative to costly firestopping applications. It is used to firestop metal pipes or cables through concrete or gypsum, and for use in dynamic head-of-wall systems. A single-part, non-sag, water-based acrylic latex sealant, 3M FireDam 150+ has excellent adhesion characteristics to most common construction materials. And since it dries to the touch in 30–60 minutes, 3M FireDam 150+ can be painted for a more professional-looking job. 3M FireDam 150+ is a solvent-free sealant that, when fully cured, provides a continuous seal with a movement capability of ±16%. It can be applied with a bulk-loading caulk gun, standard caulk gun, trowel or putty knife. And clean up is easy. All you need is water.

Packaged: 10.1-oz. tube, 28.0-oz. tube and 5-gallon pail.





- ★ A/D FIREBARRIER Silicone, Silicone SL, Seal, Seal NS, Intumescent Caulk or Putty.
- ★★ A/D FIREBARRIER Seal, Seal NS, SprayMastic, Silicone or Silicone SL.

A/D Fire Protection Systems provides a complete system of products required for firestopping. All are independently certified and tested to assure rated fire protection at penetrations and openings in fire-rated floors and walls.

A/D FIREBARRIER products are listed by Underwriters Laboratories, Intertek Testing Services (Warnock Hersey) and Factory Mutual and are certified under rigorous factory inspection programs.

PRODUCTS



Silicone and Silicone SL

- Forms a durable, flexible, water-tight bond.
- May be applied over a wide temperature range, -18°C to 50°C (0°F to 120°F).
- Physical properties will remain stable over time.
- Will not crack or crumble.
- Tools easily.
- SL = self-levels - no tooling required.
- Neutral cure - low odor.
- Underside of floor applications tested.
- Colors – Silicone: Red or Grey
Silicone SL: Red

FEATURES

Plumbing:
Pipes, insulated pipes, glass, copper, steel, iron and combustible (plastic) pipes

Electrical:
Conduits, cables, cable trays, bundled cables

Ducts:
Steel ducts

Joint Systems:
Horizontal and vertical (horizontal only for SL)

Joints - Movement Capable:
UL 2079 tested

Cartridges:
10.3 fl.oz. (304mL)
28.7 fl.oz. (850mL)

Containers:
2.64 US gal. (10 L) pails
4.5 US gal. (17 L) pails

Foil Pack:
20 fl.oz. (600ml).

USAGE

SIZES

LISTED/CERTIFIED

ULI, ULC, cUL, ITS (WH), FM



Seal and Seal NS

- Water based.
- Economical.
- Forms a durable, water-tight bond.
- Seal may be poured, pumped or sprayed.
- Underside of floor applications tested.
- Physical properties remain stable over time.
- Colors – Seal: Blue
Seal NS: White (may be tinted in the field)

Plumbing:
Pipes, insulated pipes, glass, copper, steel, and CPVC

Electrical:
Conduits, cables, cable trays

Joint Systems:
Horizontal and vertical

Joints - Movement Capable:
UL 2079 tested

Cartridges:
(Seal NS only)
10.3 fl.oz. (304mL)
28.7 fl.oz. (850mL)

Containers:
(Seal & Seal NS)
5 US gal. (19 L) pails

ULI, ULC, cUL, ITS (WH), FM



			PRODUCTS
			FEATURES
			USAGE
			SIZES
			LISTED/ CERTIFIED
<p>SprayMastic</p> <ul style="list-style-type: none"> • Water based elastomeric. • Economical • Forms a durable, water tight bond. • Physical properties will remain stable over time. • May be sprayed or brushed. • Curtain wall / floor joints tested. • Color: Maroon. 	<p>Mortar</p> <ul style="list-style-type: none"> • Single component. • Easy to use. • Economical. • Mixes easily with water to form a lightweight nonslumping paste that is easy to place and tool. • Self-supporting. • Tested for very large openings. • Non-combustible. • Color: Grey. 	<p>Mineral Wool</p> <ul style="list-style-type: none"> • Non-combustible. • Pre-cut strips facilitate easy installation and provide a smooth surface to help control depth of sealant that is applied. • High quality, proprietary insulation blankets/strips. • UL and ULC listed and certified. • Color: Brown. 	
<p>Joint Systems: Horizontal and vertical, curtain wall, head-of-wall, perimeter and floor to wall.</p> <p>Joints - Movement Capable: UL 2079 tested.</p>	<p>Plumbing: Glass, copper, steel, iron, insulated pipes and multiple penetrations.</p> <p>Electrical: Conduits, cables, cable trays, multiple penetrations.</p> <p>Ducts: Steel ducts.</p>	<p>General: A/D FIREBARRIER Mineral Wool is the recommended and/or required backing for A/D FIREBARRIER sealants in most firestop applications.</p>	
<p>Containers: 5 US gal. (19 L) pails</p>	<p>Containers: 15.5 lb. (7kg) bags</p>	<p>Packaged: 25 lb. (11kg) nominal in plastic bags in various pre-cut x 4-ft. strips or blankets.</p>	
<p>ULI, cUL</p>	<p>ULI, ULC, cUL, ITS (WH), FM</p>	<p>ULI, ULC, ITS (WH), FM</p>	





PC-7® Epoxy Paste Heavy-Duty Multi-Purpose Epoxy Paste

NO SAG / NO DRIP

SAW • DRILL • TAP • MOLD • SAND • PAINT • MACHINE

PC-7® is our strongest and thickest epoxy. Where critical repairs are a must, this is the product of choice. PC-7® has excellent fill characteristics and is slightly more viscous than peanut butter.

Use for sealing, bonding and filling voids. Permanent repair product that dries to a gray color. Use on dry surfaces only.

PC-7® allows about 1-hour working time and will cure for service overnight at 70°F.

Description:

PC-7® is a tough job epoxy formulation developed for maximum bonding power. PC-7® formulation provides extended working time, giving user ample time to complete larger jobs, reposition work or make changes.

As an Adhesive

- Bonds:
- Fiberglass
- Wood
- Concrete
- Metal
- Brick
- Glass
- Block
- Ceramics
- Rubber and much more

As a Sealant

- Oil • Gas and water tank leaks
- Masonry cracks • Pressure tanks
- Plumbing leaks

As a Filler

- Holes • Castings • Patterns
- Molds and much more

Pkg. - 2 oz., 1/2-, 1-, 4-, 5- and 90- lb.containers.



X-Pando Pipe Joint Compound

The Problem Solver! Use X-Pando Pipe Joint Compound when you can't afford any leaks.

For flanged or threaded joints -

The compound that expands as it sets! (from .002" to .004" per cubic inch)

- Expands as it sets, insuring a tight leak-proof joint as well as correcting imperfections in pipe threads, flanges and other metal surfaces. Corrects burred or mutilated threads. Accommodates fittings from numerous manufacturers with different size threads.
- Recommended for use on joints of most kinds of pipes (will cause discoloration on unanodized aluminum).
- Tasteless, odorless and non-toxic - contains **NO** lead or asbestos. Manufactured without the use of ozone depleting substances.
- Supplied in one formula only - no stocking problems. Handles most materials carried in pipe (except acids below pH2 and bases above pH12), including:

- Air • Alcohol
- Alkalies • Ammonia
- Antifreeze • Benzol
- Brine • Butane
- Chlorine Gas • CO₂
- Ethylene Glycol
- Freon • Gasoline
- Fuel Oils • Glycol
- Heat Exchange
- Fluids • Helium
- Hydraulic Fluids
- Liquid Fertilizers
- LP Gas
- Medical Oxygen
- Methyl Alcohol
- Natural Gas
- Oils • Nitrogen
- Oxyacetylene
- Oxygen • Petroleum
- Propane • SO₂
- Solvents • Syrups
- Superheated Steam
- Vegetable Oils
- Water
- Economical - mix only what you need.
- Sealed joints can be taken apart
- Withstands deflection, high pressures (up to 5000 psi), high temperature (1000°F), low temperature (-300°F), changes in temperatures, and vibrations.

- Certified by Underwriters Laboratory Inc.® as to fire hazard - ignition temperature 1144°F.
- Certified by Underwriters Laboratory Inc.® in accordance with ANSI/NSF Standard 61 for drinking water.
- Pkg. - 14- and 70-oz.; 25-, 50- and 100-lb. containers.



ZRC GALVILITE®

- Closely matches the color of galvanized metal.
- Performance identical to ZRC.
- True galvanic protection.
- Single-component.
- Apply by brush, roller or spray.
- Meets VOC standards in all 50 states.
- Available in clog-free aerosol form.

TYPE: Single pack, premixed, ready-to-apply, liquid organic zinc compound with a shiny finish to closely approximate the color of hot-dip galvanizing.

GENERAL PROPERTIES: Galvilité® is a high-quality metallic zinc coating based on a trade secret organic binder which affords true galvanic anti-corrosion protection to metals. The dried film of GALVILITE is 95% metallic zinc. Because of the uniqueness of the formulation, GALVILITE is the only coating of its type to be recognized under the Component Program of Underwriters Laboratories, Inc.

RECOMMENDED USES: Galvilité is widely used without topcoat in place of hot-dip galvanizing. Also used as a high-performance base coat with a variety of topcoats. Used for repair of damaged hot-dip galvanizing Galvalume® and zinc metallizing, regalvanizing worn hot-dip galvanizing, repair of weldments and repair of damaged inorganic zinc coatings. Excellent for long-term protection of structural steel, water and waste facilities, power plants, transmission towers and antennae, steel decking and bridges and numerous OEM uses.



APPROXIMATE SHIPPING WEIGHT:

Size	Weight
3.5-gallon pails	90 lbs. (40.8kg)
1-gallon can	25 lbs. (13.3kg)
1-quart can	6 lbs. (2.7kg)
12-oz. Aerosol can	1 lb. (.45kg)

ZRC® COLD GALVANIZING COMPOUND

- The original zinc-rich compound .
- Fifty years of proven success.
- True galvanic protection.
- Equivalent to hot-dip galvanizing.
- Single-component.
- Apply by brush, roller or spray.
- Meets VOC standards in all 50 states.
- Available in clog-free aerosol form.



APPROXIMATE SHIPPING WEIGHT:

Size	Weight
3.5 gallon pails	90 lbs. (40.8kg)
1-gallon can	25 lbs. (13.3kg)
1-quart can	6 lbs. (2.7kg)
1/2-pint can	1.5 lbs. (0.68kg)
12-oz. Aerosol can	1 lb. (.45kg)

TYPE: Single pack, premixed, ready-to-apply, liquid organic zinc compound.

GENERAL PROPERTIES: ZRC® is a high-quality metallic zinc coating based on a trade secret organic binder which affords true galvanic anti-corrosion protection to metals. The dried film of ZRC is 95% metallic zinc. Because of the uniqueness of the formulation, ZRC is the only coating of its type to be recognized under the Component Program of Underwriters Laboratories, Inc.

RECOMMENDED USES: ZRC is widely used without topcoat in place of hot-dip galvanizing. Also used as a high-performance base coat with a variety of topcoats. Used for repair of damaged hot-dip galvanizing Galvalume® and zinc metallizing, regalvanizing worn hot-dip galvanizing, repair of weldments and repair of damaged inorganic zinc coatings. Excellent for long-term protection of structural steel, water and waste facilities, power plants, transmission towers and antennae, steel decking and bridges and numerous OEM uses.



DOWFLAKE®

77-80% CALCIUM CHLORIDE

DOWFLAKE® 77-80% calcium chloride is a flaked calcium chloride dehydrate product. DOWFLAKE Meets ASTM D 98 and AASHTO M144 requirements for calcium chloride purity. ASTM classification for DOWFLAKE is "Type S; Grade 1, Class A."

Applications:

DOWFLAKE® 77-80% calcium chloride is primarily used for dust control of unpaved roads and parking lots and as a deicer.

Industrial applications include concrete acceleration, tire weighting, brine refrigeration systems, waste water treatment and as a calcium source for chemical processing.

Many applications of DOWFLAKE® 77-80% calcium chloride require the material to be put into solution.

Availability: DOWFLAKE® 77-80% and PELADOW™ calcium chlorides are available in various package sizes and in bulk truck and bulk rail.

"®"™ Trademark of The Dow Chemical Company"

PELADOW™

90% CALCIUM CHLORIDE

PELADOW™ 90% calcium chloride is a pelletized calcium chloride product. PELADOW meets ASTM D 98 and AASHTO M144 requirements for calcium chloride purity ASTM Classification for PELADOW is "Type S, Grade 2, Class B."

Applications:

PELADOW™ 90% calcium chloride is recommended for deicing asphalt and concrete surfaces that have been designed and constructed for winter conditions.

Fast melting action and cold temperature performance are two properties of PELADOW that distinguish it from other deicers. These attributes stem from the ability of PELADOW to release heat as it melts snow and ice.

PELADOW also has a number of different uses, generally industrial in nature. These include brine refrigeration, wastewater treatment and as a source of calcium for chemical processing.

**"WHARTON also offers bagged ROCK SALT in 50-lb. bags.
We sell any quantity from a single bag to a tractor trailer load.
Please call for more information."**

PROSOCO
SINCE 1939

Innovative solutions for buildings.™

Since 1952, the construction industry has looked to PROSOCO for the highest quality products to clean, protect and maintain

masonry surfaces. Sure Klean® enjoys a well-deserved reputation for effectiveness, reliability, and for being the solution to the most difficult cleaning problems.

Sure Klean® 600 Detergent

A general purpose cleaner for brick, tile and concrete, which dissolves mortar smears, cementitious grout and construction dirt quickly, leaving masonry clean and uniform with no acid burning or streaking.



**"WHARTON" also offers other products such as
Paint Thinner, Lacquer Thinner,
Linseed Oil, Turpentine, Acetone,
Denatured Alcohol and Muriatic Acid
for all your needs.**





*Wood/Aluminum/Fiberglass Ladders
Steel Ladders/Stages/Planks
Guardrails
Roof Brackets • Pump Jacks • Scaffolding
Asphalt Coatings • Geosynthetics
Screw Anchors • Drainage Pipe
Erosion Control • Silt Fence
Steel Fence Posts • Netting • Burlap • Plastic Fence
Buck-Ups • Adhesive Tapes
Floor Sweeps • Brooms • Scrub Brushes
Wire/Roof/Masonry Brushes
Sweeping Compound
Marking Tools • Stamps • Stencils • Tapes*

General Hardware

9

*Caulking Guns • Gasket Cutters
Lanterns • Flashlights • Alkaline Batteries
Mason Line • Rubber Pails/Buckets/Tubs
Floor Jacks • Thermometers • Strap Hinges • Barrel Bolts
Shelf Brackets • Hinge Hasps • Pulls • Repair Plates
Padlocks • Grease Fittings • Rubber Bumpers
Staplers • Tackers • Portable Punches
Propane Torches • Mirrors • Magnets
Plumbing/Woodworking/Machinist/Specialty Tools
Dial/Electronic Indicators
Calipers • Micrometers
Precision Levels*



Trusted by the Pros for Over 60 Years

ALUMINUM STEPLADDERS

Aluminum Stepladder AS1000 SERIES

- Slip resistant rubber feet.
- Heavy gusset bracing.
- Double-rivet step construction.
- Optional molded pail shelf.
- Molded top with recessed tray.
- Inside spreader braces.



300 lbs.
TYPE IA
load capacity*
*Includes weight of man plus materials

Model	Size	Step Size	Bottom Width	Approx. Spread	Approx. Weight	Approx. Cubes
AS1003	3'	3"	18-1/4"	23"	10 lbs.	2.4
AS1004	4'	3"	19-3/4"	29"	12 lbs.	3.3
AS1006	6'	3"	22-3/4"	41"	20 lbs.	5.4
AS1008	8'	3"	25-3/4"	54"	26 lbs.	7.7
AS1010	10'	3"	28-3/4"	66"	33 lbs.	10.3
AS1012	12'	3"	31-3/4"	78"	41 lbs.	13.2
AS1014*	14'	3-5/8"	34-3/4"	90"	64 lbs.	24.1
AS1016*	16'	3-5/8"	37-3/4"	102"	72 lbs.	29.7
AS1020*	20'	3-5/8"	43-3/4"	126"	92 lbs.	41.3

*Pail shelf not available on these models

Aluminum Stepladder AS2000 SERIES

- Molded top with recessed tray.
- Pinch resistant spreader braces.
- Side rails.
- Slip resistant rubber feet.
- Wide back braces.



250 lbs.
TYPE I
load capacity*
*Includes weight of man plus materials

Model	Size	Step Size	Bottom Width	Approx. Spread	Approx. Weight	Approx. Cubes
AS2003	3'	3"	18"	23"	9 lbs.	2.83
AS2004	4'	3"	19-1/2"	29"	11 lbs.	4.01
AS2006	6'	3"	22-1/2"	41"	15 lbs.	6.83
AS2008	8'	3"	25-1/2"	54"	21 lbs.	10.26
AS2010	10'	3"	28-1/2"	66"	26 lbs.	14.20

Aluminum Twin Front Ladder AM1000 SERIES

- Heavy gauge steel hinges.
- Spreader brace reinforcement plates.
- Full channel rail.
- Slip resistant rubber feet.
- Double-rivet step construction.



300 lbs.
TYPE IA
load capacity*
*Includes weight of man plus materials

Model	Size	Step Size	Bottom Width	Approx. Spread	Approx. Weight	Approx. Cubes
AM1003	3'	3"	18-1/4"	30"	14 lbs.	2.7
AM1004	4'	3"	19-3/4"	36"	17 lbs.	3.9
AM1005	5'	3"	21-1/4"	45"	20 lbs.	5.1
AM1006	6'	3"	22-3/4"	52"	24 lbs.	6.3
AM1008	8'	3"	25-3/4"	67"	32 lbs.	9.1
AM1010	10'	3"	28-3/4"	83"	43 lbs.	12.2

BOTH SIDES of an AM1000 twin front ladder can be used simultaneously by one person per side. Each side is designed to support one person including materials up to 300 lbs. Total combined weight on ladder must not exceed 600 lbs. (300 lbs. per side).

Aluminum Platform Stepladder AP1000 SERIES

- Slip resistant rubber feet.
- Top rail guard.
- Double-rivet step construction.
- Slip resistant rubber feet.
- Heavy gusset bracing.
- Full channel rail.



300 lbs.
TYPE IA
load capacity*
*Includes weight of man plus materials

Model	Size to Platform	Step Size	Bottom Width	Approx. Spread	Approx. Weight	Approx. Cubes
AP1003	3'	3"	22-3/4"	38"	18 lbs.	7.4
AP1004	4'	3"	24-1/4"	44"	21 lbs.	9.1
AP1005	5'	3"	25-3/4"	50"	24 lbs.	11.0
AP1006	6'	3"	27-1/4"	56"	28 lbs.	12.9
AP1008	8'	3"	30-1/4"	68"	38 lbs.	17.0

Aluminum Shelf Ladder AH1000 SERIES

- Rubber bumper.
- Heavy gusset bracing.
- Slip resistant rubber feet.
- Double-rivet step construction.
- Angled steps.



300 lbs.
TYPE IA
load capacity*
*Includes weight of man plus materials

Model	Size	Step Size	Width	Approx. Weight	Approx. Cubes
AH1004	3'	3"	15-1/4"	7 lbs.	1.6
AH1005	4'	3"	15-1/4"	8 lbs.	2.0
AH1006	5'	3"	15-1/4"	10 lbs.	2.3
AH1007	6'	3"	15-1/4"	11 lbs.	2.7
AH1008	8'	3"	15-1/4"	13 lbs.	3.1
AH1010	10'	3"	15-1/4"	17 lbs.	3.5
AH1012	12'	3"	15-1/4"	19 lbs.	3.9
AH1014	14'	3"	15-1/4"	21 lbs.	4.3
AH1016	16'	3"	15-1/4"	23 lbs.	4.6



Trusted by the Pros for Over 60 Years

FIBERGLASS AND ALUMINUM LADDERS

Fiberglass Stepladder FS1500 SERIES

- Da Boot™.
- Molded top with tool slots.
- Wide back braces.
- Double-rivet step construction.
- Inside spreader braces.
- Full channel fiberglass rail.



300 lbs.
TYPE IA
load capacity*
*Includes weight of man plus materials

Model	Size	Step Size	Bottom Width	Approx. Spread	Approx. Weight	Approx. Cubes
FS1502*	3'	3"	17"	18-1/4"	10 lbs.	2.07
FS1504	4'	3"	19-5/8"	28"	13 lbs.	3.18
FS1505	5'	3"	21-1/8"	34"	17 lbs.	4.27
FS1506	6'	3"	22-5/8"	40"	20 lbs.	5.49
FS1508	8'	3"	25-5/8"	52"	27 lbs.	8.29
FS1510	10'	3"	28-5/8"	65"	34 lbs.	11.67
FS1512	12'	3"	31-5/8"	78"	47 lbs.	15.49

*FS1502 is a folding step stand and is not equipped with Da Boot™.

Classic™ Fiberglass Mechanic Stepladder FM1000 SERIES

- Twin-front ladder designed as a trestle ladder for entry from either side.
- Full Metal Boot™.
- Heavy gauge steel hinges.
- Inside spreader braces.
- Spreader brace reinforcement plates.
- Double-rivet step construction.
- Nonconductive full channel fiberglass rails.



300 lbs.
TYPE IA
load capacity*
*Includes weight of man plus materials per side.

Model	Size	Step Size	Bottom Width	Approx. Spread	Approx. Weight	Approx. Cubes
FM1004	4'	3"	19-7/8"	36"	18 lbs.	5.10
FM1005	5'	3"	21-3/8"	45"	22 lbs.	6.81
FM1006	6'	3"	22-7/8"	52"	24 lbs.	8.69
FM1007	7'	3"	24-3/8"	60"	35 lbs.	10.77
FM1008	8'	3"	25-7/8"	67"	39 lbs.	13.02
FM1010	10'	3"	28-7/8"	83"	53 lbs.	18.09
FM1012	12'	3"	31-7/8"	98"	66 lbs.	23.90
FM1014	14'	3"	34-7/8"	112"	83 lbs.	30.45
FM1016	16'	3"	37-7/8"	127"	98 lbs.	37.74

Fiberglass Step-to-Straight Ladder FC1200 SERIES

- Hinging mechanism.
- Standard pole grip.
- Utility-style safety shoes.
- Rung lock.
- Double-rivet step construction.



375 lbs.
TYPE IAA
load capacity*
*Includes weight of man plus materials

Model	Step Size	Max. Ext.	Flared Section Min. O.D.	Flared Section Max. O.D.	Parallel Section O.D.	Approx. Weight	Approx. Cubes
FC1206	6'	9'	17-1/8"	23-5/8"	14-5/8"	33 lbs.	6.8
FC1207	7'	11'	17-7/8"	24-5/8"	14-5/8"	38 lbs.	8.0
FC1208	8'	13'	17-7/8"	25-5/8"	14-5/8"	41 lbs.	9.3

Fiberglass Manhole Ladder FE8400 SERIES

- Utility-style safety shoes.
- Round rungs.
- Nonconductive full channel rails.
- All sizes are 14" wide.

Sizes: 8' - 20'
Rail Depth: 3-1/4"
Inside Width: 11-5/8"
Outside Width: 14"

300 lbs.
TYPE IA
load capacity*
*Includes weight of man plus materials



Model	Total Length	Approx. Weight	Approx. Cubes
FE8408	8'	18 lbs.	3.27
FE8410	10'	22 lbs.	4.07
FE8412	12'	25 lbs.	4.86
FE8414	14'	28 lbs.	5.65
FE8416	16'	31 lbs.	6.44
FE8418	18'	34 lbs.	7.23
FE8420	20'	37 lbs.	8.02

Aluminum Extension Trestle Ladder AX1000 SERIES

- Heavy trestle top hinge.
- Slide guides and spreader braces.
- Locking bail.
- Slip resistant rubber feet.
- Double-rivet step construction.
- Full channel rail.



300 lbs.
TYPE IA
load capacity*
*Includes weight of man plus materials

Model	Step	Max. Ext.	Step Size	Bottom Width	Approx. Spread	Inside Width Fly	Outside Width Fly	Approx. Weight	Approx. Cubes
AX1008	8'	12'6"	3"	33"	69"	15-5/8"	17-7/8"	56 lbs.	16.9
AX1010	10'	15'6"	3"	39"	84"	15-5/8"	17-7/8"	70 lbs.	22.7
AX1012	12'	19'6"	3"	34"	99"	15-5/8"	17-7/8"	86 lbs.	29.5



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Clinton, MD (301) 877-8640



Trusted by the Pros for Over 60 Years

FIBERGLASS AND ALUMINUM LADDERS

Fiberglass Extension Ladder FE3200 SERIES

- QuickLatch™.
- Swivel safety shoes.
- Outside slide guides.
- D-shaped rungs.
- Mar-resistant rail end caps.

*Does not include rope and pulley.
 **Type I, 250 lb. rated.
 STRAIGHT LADDERS NOT AVAILABLE IN FE3200 SERIES



SPECIFICATIONS - FE3100

Sizes	Rail Depth	Outside Width	Inside Width
8' - 14'	3-1/4"	17-1/16"	14-11/16"
16' - 20'	3-3/16"	17-11/16"	15-5/16"

300 lbs.
TYPE IA
load capacity*
 *Includes weight of man plus materials

D-RUNG

TWO SECTION EXTENSION LADDERS

Model	Total Length	Length Each Section	Max. Extended Length	Approx. Weight	Approx. Cubes
FE3216*	16'	8'	13'	35 lbs.	6.8
FE3220	20'	10'	17'	43 lbs.	8.4
FE3224	24'	12'	21'	50 lbs.	10.0
FE3228	28'	14'	25'	57 lbs.	11.6
FE3232	32'	16'	29'	68 lbs.	13.7
FE3236**	36'	18'	32'	77 lbs.	15.4
FE3240**	40'	20'	35'	86 lbs.	17.1

SPECIFICATIONS

Sizes	Rail Depth	Stack Height	Inside Width Base	Inside Width Fly	Outside Width Base	Outside Width Fly
16' - 28'	3-1/4"	5-3/4"	14-11/16"	13-11/16"	17-1/16"	16-1/16"
32' - 40'	3-5/16"	6-1/8"	15-5/16"	14-5/16"	17-11/16"	16-11/16"

Aluminum Extension Ladder AE3000 SERIES

- QuickLatch™.
- Swivel safety shoes.
- Modified I-beam.
- D-shaped rungs.
- Mar-resistant blue end caps.

*Does not include rope and pulley.

250 lbs.
TYPE I
load capacity*
 *Includes weight of man plus materials



D-RUNG

TWO SECTION EXTENSION LADDERS

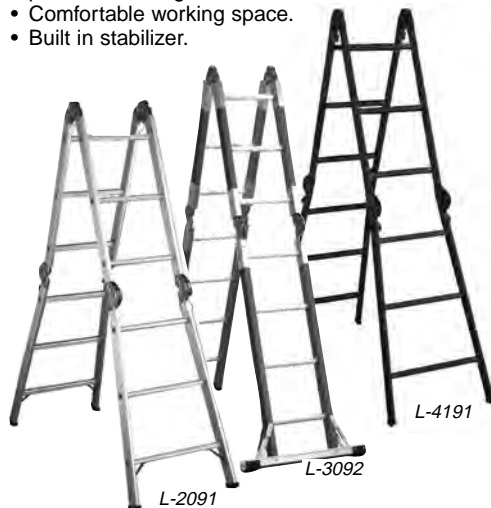
Model	Total Length	Length Each Section	Max. Extended Length	Approx. Weight	Approx. Cubes
AE3216*	16'	8'	13'	25 lbs.	7.1
AE3220	20'	10'	17'	30 lbs.	8.8
AE3224	24'	12'	21'	35 lbs.	10.5
AE3228	28'	14'	25'	50 lbs.	12.2
AE3232	32'	16'	29'	57 lbs.	13.9
AE3236	36'	18'	32'	71 lbs.	15.6
AE3240	40'	20'	35'	78 lbs.	17.3

SPECIFICATIONS

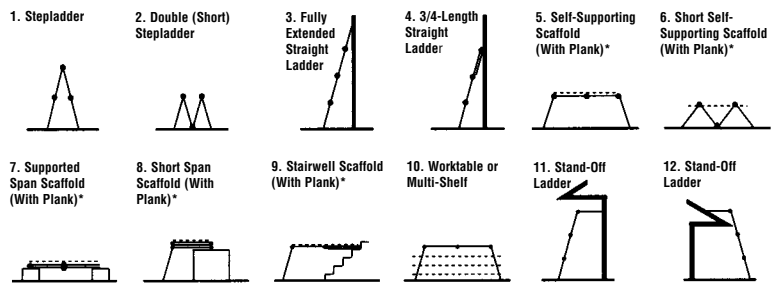
Sizes	Rail Depth	Stack Height	Inside Width Base	Inside Width Fly	Outside Width Base	Outside Width Fly
16' - 40'	3"	5-1/4"	15-1/4"	13-15/16"	17-1/2"	16-3/16"

The Ultimate™ Articulated Ladders L-2091/L-3092/L-4191 SERIES

- EasyHinge™ – Durable, zinc plated steel hinge.
- Comfortable working space.
- Built in stabilizer.



300 lbs.
TYPE IA
load capacity*
 *Includes weight of man plus materials



* 2" x 12" plank needed for these positions.

Model	Desc.	Material	Extended Height	Stepladder Height	Scaffold Height	Folded Height (HxL)	Approx. Weight	Approx. Cubes
L-2091-17	17x93	17' ALUM	17'	18'5"	52"	54"x24"x10"	43 lbs.	7.5
L-2092-13	13x93	13' ALUM	13'	6'5"	40"	43"x23"x9"	36 lbs.	5.15
L-2191-17*	17x93	17' ALUM	17'	8'5"	52"	54"x24"x10"	40 lbs.	7.5
L-3092-13	13x75	13' FG	13'	6'5"	40"	43"x23"x9"	35 lbs.	5.15
L-3092-15	15x75	15' FG	15'	7'5"	52"	54"x24"x10"	37 lbs.	7.5
L-4191-13*	13x51	13' STEEL	13'	6'5"	40"	43"x23"x9"	33 lbs.	5.2

*Type I (250 lbs. working load)





Trusted by the Pros for Over 60 Years

STEEL LADDERS / STAGES / PLANKS

Steel Rolling Warehouse Ladders GSW SERIES

- Spring loaded casters.
- Locking device.
- No forward descent.
- Premium powder paint.
- Toeboard.

All sizes meet or exceed the requirements of ANSI A14.7 and OSHA 1910.29 standard with a **350 LB.** load rating.



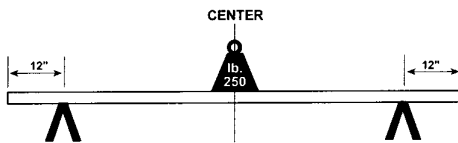
New LLG Model	Steps	Step Width	Platform Height	Overall Height	Overall Depth	Overall Width	Approx. Cube	Weight
NO HANDRAILS								
GSW1601A	1	16"	12"	12"	17"	19"	2.24	16 lbs.
GSW1601-W04	1	16"	12"	12"	17"	19"	2.24	16 lbs.
GSW1602	2	16"	20"	20"	19"	20"	6.66	25 lbs.
GSW2402	2	24"	20"	20"	19"	28"	8.33	30 lbs.
GSW2403	3	24"	30"	30"	27"	28"	13.54	41 lbs.
GSW1604	4	16"	40"	40"	35"	23"	18.05	47 lbs.
GSW2404	4	24"	40"	40"	35"	31"	20.83	55 lbs.
HANDRAILS								
GSW1603A	3	16"	30"	30"	27"	20"	13.54	46 lbs.
GSW2403-W03	3	24"	30"	66"	27"	28"	32.29	56 lbs.
GSW1604-W03	4	16"	40"	76"	35"	23"	30.00	58 lbs.
GSW2404-W03	4	24"	40"	76"	35"	31"	40.00	66 lbs.
GSW1605	5	16"	50"	86"	42"	23"	34.16	67 lbs.
GSW2405	5	24"	50"	86"	42"	31"	45.55	79 lbs.
GSW2406	6	24"	60"	96"	50"	34"	51.11	109 lbs.
GSW2407	7	24"	70"	106"	57"	34"	56.66	121 lbs.
GSW2408	8	24"	80"	116"	63"	34"	62.22	151 lbs.
GSW2409	9	24"	90"	126"	70"	34"	67.77	170 lbs.
GSW2410	10	24"	100"	136"	77"	34"	73.33	198 lbs.
GSW2411	11	24"	110"	146"	83"	34"	78.88	214 lbs.
GSW2412	12	24"	120"	156"	90"	34"	84.44	228 lbs.
GSW2413	13	24"	130"	166"	97"	39"	92.22	289 lbs.
GSW2414	14	24"	140"	176"	104"	39"	97.77	298 lbs.
GSW2415	15	24"	150"	186"	110"	39"	103.33	311 lbs.



Scaffold Planks and Stage Platforms

- Safety Yellow molded handles.
- Easy grip rungs.
- Reinforcing web braces.
- Slip resistant decking.
- Optional handrail system.

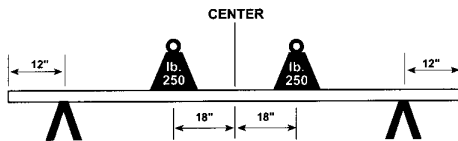
1-Man Decorator Plank 250 lb. Working Load – P1 SERIES



Size	Side Rail Depth	12" Approx. Wide Model	12" Approx. Weight (lbs.)	14" Approx. Wide Model	14" Approx. Weight (lbs.)	20" Approx. Wide Model	20" Approx. Weight (lbs.)
8'*	4"	P11208	21	P11408	22	P12008	25
16'	4"	P11216	47	P11416	50	P12016	57
20'	5"	P11220	63	P11420	67	P12020	77
24'	5"	P11224	76	P11424	80	P12024	92

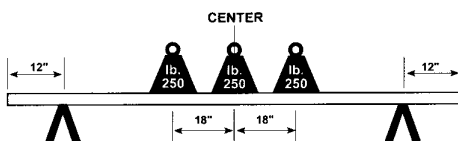
*Full length decking

2-Man Scaffold Plank and Stage 500 lb. Working Load – P2 SERIES



Size	Side Rail Depth	12" Approx. Wide Model	12" Approx. Weight (lbs.)	14" Approx. Wide Model	14" Approx. Weight (lbs.)	20" Approx. Wide Model	20" Approx. Weight (lbs.)	24" Approx. Wide Model	24" Approx. Weight (lbs.)	28" Approx. Wide Model	28" Approx. Weight (lbs.)
5'	4"	-	-	-	-	-	-	-	-	P22805	26
6'	4"	-	-	-	-	-	-	-	-	P22806	31
12'	4"	P21212	37	P21412	39	P22012	45	P22412	49	P22812	54
14'	5"	-	-	-	-	-	-	-	-	P22814	68
16'	5"	P21216	52	P21416	55	P22016	65	P22416	71	P22816	78
20'	6"	P21220	81	P21420	85	P22020	97	P22420	103	P22820	114
24'	6"	P21224	96	P21424	101	P22024	114	P22424	122	P22824	135
28'	6"	P21228	123	P21428	129	P22028	145	P22428	155	P22828	170
30'	6"	-	-	-	-	-	-	-	-	P22830	180
32'	6"	P21232	141	P21432	147	P22032	165	P22432	177	P22832	192

3-Man Stage Platform 750 lb. Working Load – P3 SERIES



Size	Side Rail Depth	12" Approx. Wide Model	12" Approx. Weight (lbs.)	14" Approx. Wide Model	14" Approx. Weight (lbs.)	20" Approx. Wide Model	20" Approx. Weight (lbs.)
16'	6"	P32016	86	P32416	90	P32816	100
20'	6"	P32020	105	P32420	111	P32820	121
24'	6"	P32024	125	P32424	133	P32824	145
28'	7"	P32028	179	P32428	188	P32828	206
32'	7"	-	-	-	-	P32832	262
40'	7"	-	-	-	-	P32840	367



Hardware & Supply Co., Inc.
Supply, Inc. of Virginia
Form Rentals

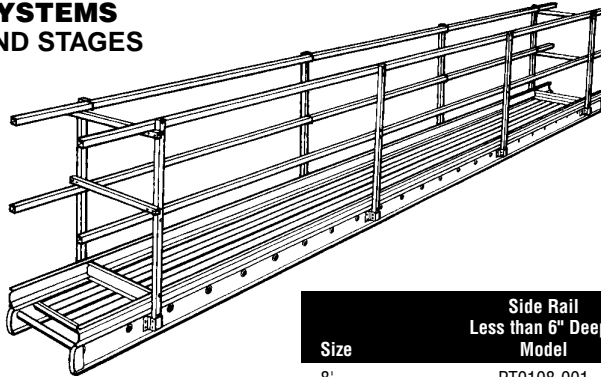
NJ (856) 662-6935 • PA (215) 925-8800
Metro (703) 569-6660 • VA (703) 455-6700
Clinton, MD (301) 877-8640



Trusted by the Pros for Over 60 Years

GUARDRAILS

GUARDRAIL SYSTEMS FOR PLANKS AND STAGES



PT01 SERIES

Guardrail, Midrail, Toeboard Kits Complete 1 Side

Size	Side Rail Less than 6" Deep* Model	Weight (lbs.)	Side Rail 6" Deep & Larger Model	Weight (lbs.)
8'	PT0108-001	28	-	-
12'	PT0112-001	43	-	-
16'	PT0116-001	52	PT0116	41
20'	PT0120-001	64	PT0120	52
24'	PT0124-001	72	PT0124	60
28'	-	-	PT0128	71
30'	-	-	PT0130	77
32'	-	-	PT0132	80
40'	-	-	PT0140	98

PT02 SERIES

Guardrail, Midrail, Toeboard Kits Complete 2 Sides

Size	Side Rail Less than 6" Deep* Model	Weight (lbs.)	Side Rail 6" Deep & Larger Model	Weight (lbs.)
8'	PT0208-001	51	-	-
12'	PT0212-001	77	-	-
16'	PT0216-001	91	PT0216	82
20'	PT0220-001	117	PT0220	105
24'	PT0224-001	132	PT0224	120
28'	-	-	PT0228	142
30'	-	-	PT0230	153
32'	-	-	PT0232	167
40'	-	-	PT0240	197

PG01 SERIES

Guardrail, Midrail Kits Complete 1 Side

Note: OSHA requires toeboards in certain applications. Check your local regulation.

ONE SIDE			ONE SIDE		
Size	Side Rail Less than 6" Deep* Model	Weight (lbs.)	Side Rail 6" Deep & Larger Model	Weight (lbs.)	Weight (lbs.)
8'	PG0108-001	22	-	-	-
12'	PG0112-001	34	-	-	-
16'	PG0116-001	38	PG0116	29	-
20'	PG0120-001	50	PG0120	38	-
24'	PG0124-001	54	PG0124	42	-
28'	-	-	PG0128	51	-
30'	-	-	PG0130	53	-
32'	-	-	PG0132	55	-
40'	-	-	PG0140	70	-

PG02 SERIES

Guardrail, Midrail Kits Complete 2 Sides

Note: OSHA requires toeboards in certain applications. Check your local regulation.

TWO SIDES			TWO SIDES		
Size	Side Rail Less than 6" Deep* Model	Weight (lbs.)	Side Rail 6" Deep & Larger Model	Weight (lbs.)	Weight (lbs.)
8'	PG0208-001	39	-	-	-
12'	PG0212-001	59	-	-	-
16'	PG0216-001	68	PG0216	82	-
20'	PG0220-001	90	PG0220	105	-
24'	PG0224-001	97	PG0224	120	-
28'	-	-	PG0228	142	-
30'	-	-	PG0230	150	-
32'	-	-	PG0232	157	-
40'	-	-	PG0240	194	-

**Stages with side rails under 6" require the addition of web braces when mounting guardrail components. These kits include necessary braces.*

END RAIL KITS (Complete 2 ends)

Kits contain: Guardrail, Midrail, Toeboard, Hardware to two ends of stage.

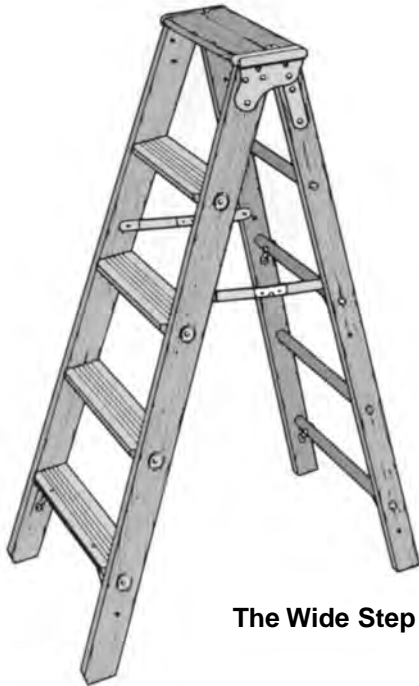
12" Wide Model	Weight	14" Wide Model	Weight	20" Wide Model	Weight	24" Wide Model	Weight	28" Wide Model	Weight
PA1062A	6	PA1062B	6	PA1062C	12	PA1062D	12	PA1062E	12



TRADESMAN

Type IA
MODEL 1320

Ideal for millwork, construction trades and the most demanding jobs. Our best selling 300 pound rated ladder.



The Wide Step

FEATURES:

- Strong southern yellow pine or western hemlock construction.
- Extra heavy-duty wrap around top irons.
- Metal to metal hinge for strength and durability.
- 3-1/2" wide safety grooved steps.
- Heavy-duty angle bracing.
- Heavy-duty spreaders.
- Pinch resistant spreaders on inside for 6' and less.

Model	Size	Weight
1320-03	3'	15
1320-04	4'	20
1320-05	5'	25
1320-06	6'	30
1320-07	7'	35
1320-08	8'	40
1320-10	10'	50
1320-12	12'	60
1320-14	14'	70
1320-16	16'	80

Front rail: 1" x 3-1/4" • Back leg: 1" x 2-9/16" • Step: 3/4" x 3-1/2"

COMMON AUTOMATIC EXTENSION

Type IA
MODEL 1450

Our most popular extension ladder.



FEATURES:

- Western wood construction.
- Through rail construction.
- Gravity locks standard.
- Heavy-duty plated hardware.

Model	Base	Fully Rodded	Rope And Pulley
1450	Parallel	No	Yes

Rails: 1-3/8" x 2-3/4" and 3" • Rungs: 1-5/32"

SINGLE LADDERS

Type IA
MODEL 1530

Available Sizes:

8', 10', 12', 14', 16', 18', 20' and 22'

Width: 16-1/4"



Model	Base	Fully Rodded	Extra Heavy-Duty
1530	Parallel	No	No

Rails: 1-3/8" x 2-3/4" and 3" • Rungs: 1-5/32"



MODEL # 2200

PUMP JACK

Model # 2200

A low cost, easy to operate, safe, portable scaffolding built of rugged steel. It's perfect for shingling, siding, sheathing, insulating, painting, building, roofing, home repair and maintenance. The Pump Jack System allows you to raise workers, equipment and materials with the push of your foot, and to lower them with the turn of the hand crank.

Your weight does the work.

This versatile system can easily be adjusted to any height up to 30 feet and save you half the time over other scaffolding.

The pump jack is held secure to wood poles with a positive double lock system. Raise to position with foot pump and lower with the hand crank.

ECONOMICAL - EASY TO OPERATE - SAFE - DURABLE - TESTED - APPROVED

HEAVY DUTY ROOFING BRACKETS

FIXED and ADJUSTABLE Roofing Brackets

Durable all steel construction sized to fit specific, common roof pitches. Can be easily installed and removed without damaging shingles. The capacity is one worker per 8-foot staging plus 40lbs., with a maximum of 8 feet between brackets.

FOR USE ON 21/12 PITCH ROOFS

Model #2503 6" x 60°

FOR USE ON 12/12 PITCH ROOFS

Model #2501 10" x 45°

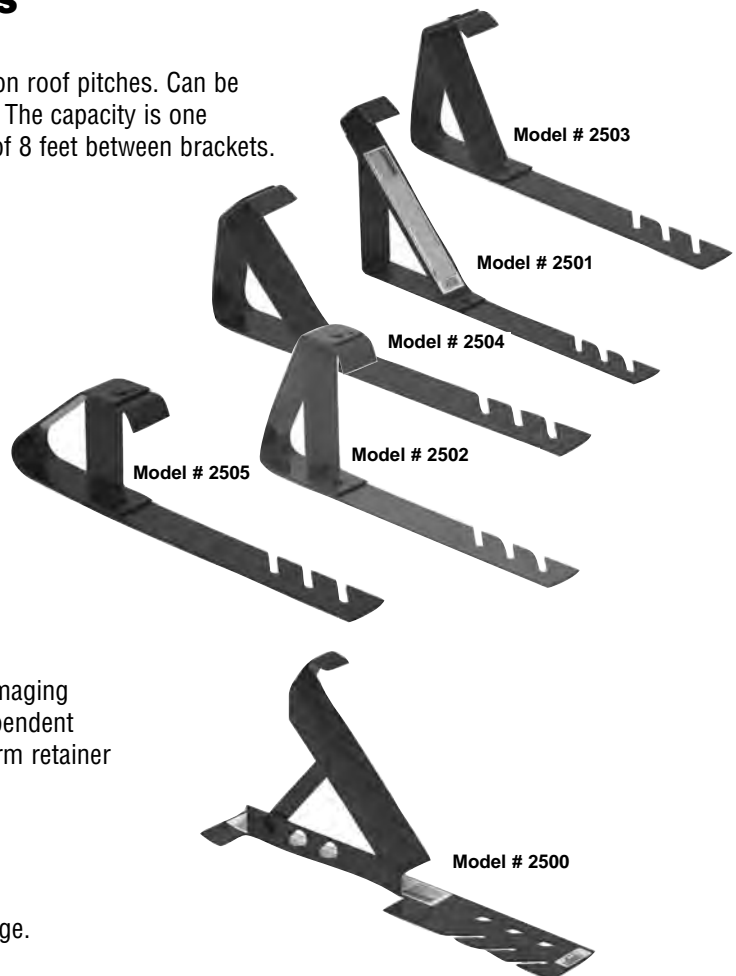
Model #2504 6" x 45°

USE ONLY AS A SLIDEGUARD OR MATERIAL SUPPORT

Model #2502 6" x 90°

FOR USE AS MATERIAL SUPPORT ONLY

Model #2505 4" x 90°



ADJUSTABLE STEEL ROOF BRACKETS

Heavy-Duty Model #2500

Durable heavy duty steel construction. Designed to hold a 10" platform. Easy installation and removal without damaging shingles. Adjustable three- or four-position platform, dependent on model line. Additional safety features include a platform retainer and unique locking mechanism.

Capacity: 1 worker per 8' staging plus 40 lbs.

Maximum 8' between brackets.

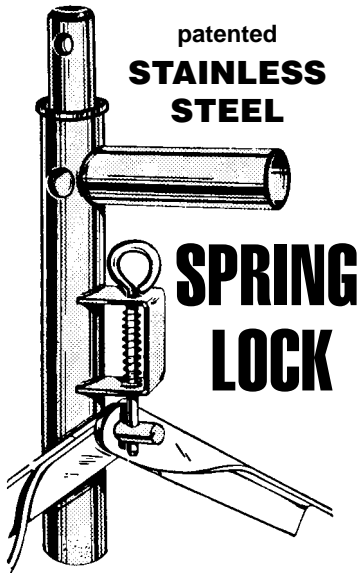
Easy to set up, operate, reposition and take down without damage to shingles. Folds flat for compact storage.

FOR USE ON VARIABLE PITCH ROOFS AND PROJECTS

Model #2500 10" x 30°, 45° or 60°



SPRING-LOCK Heavy-duty Assembly Parts and Accessories

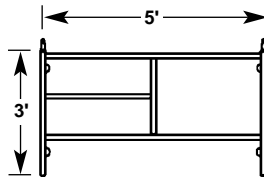


patented
**STAINLESS
STEEL**

**SPRING
LOCK**

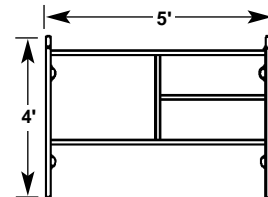
- instant lock
- no loose parts

- no tools required
- safety engineered



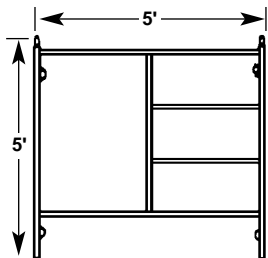
3' STANDARD END FRAME

Model F-101 – Ladder rungs spaced 12" apart. Built-in safety SPRING-LOCK assembly. Weight 31 lbs. Also available without step. Model F-100, Weight 29 lbs. Both models use CB-70 Cross Braces.



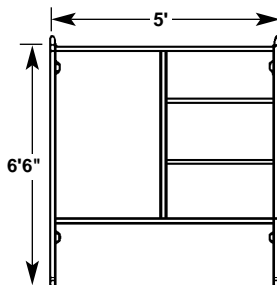
4' MASONS END FRAME

Model F-104 – Standard end frame featuring built-in safety SPRING-LOCK assembly. Weight 35 lbs. Also available without step. Model F-103, Weight 33 lbs. Both models use CB-80 Cross Braces.



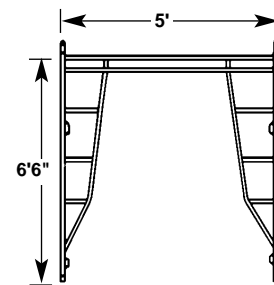
5' STANDARD END FRAME

Model F-125 – Ladder rungs spaced 15" apart. Built-in safety SPRING-LOCK assembly. Weight 40 lbs. Use Model CB-90 Cross Braces.



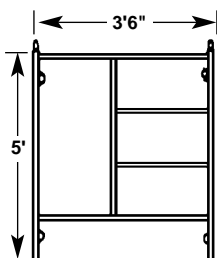
6'6" STANDARD END FRAME

Model F-140 – Ladder rungs spaced 20" apart. Built-in safety SPRING-LOCK assembly. Ideal as combination with Extension Brackets. Use CB-90 Cross Braces. Weight 54 lbs.



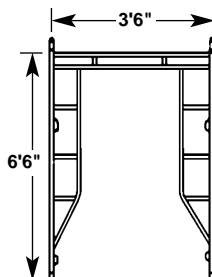
6'6" WALK-THRU STEP FRAME

Model F-135 – 6' clear opening for straddling objects or passageway. Built-in safety SPRING-LOCK assembly. Use CB-90 Cross Braces. Weight 46 lbs.



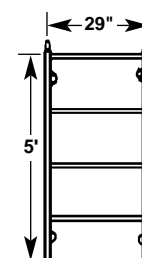
5' MAINTENANCE FRAME

Model MF-315 – For use in narrow spaces between buildings, etc. 3'6" width is ideal for rolling scaffolding in factories, for plumbers, electricians, etc. Weight 33 lbs. Also available in 3'6" height. Model MF-300, Weight 23 lbs. Both models use TB150 Cross Braces.



WALK-THRU MAINTENANCE FRAME

Model MF-366. Ideal for plasterers, used in narrow spaces, easily stacked in small pickup truck. Can be used for most any type scaffolding job. Built-in safety SPRING-LOCK. Use TB150 Cross Braces. Weight 40 lbs.



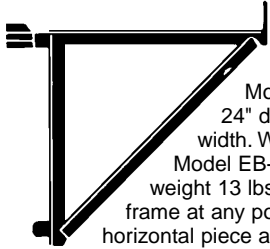
5' LADDER FRAME 29"

27 lbs. Model LF-145 – Ladder rungs spaced every 19". Built-in safety SPRING-LOCK assembly. Also available, LF-146 – 6'6" height, weight 34 lbs. and LF-143 – 3' height, weight 19 lbs. Use Model CB-90 Cross Braces for 5' and 6'6" frames. Use Model CB-70 Cross Braces for 3' frames.





SPRING-LOCK Heavy-duty Assembly Parts and Accessories



EXTENSION BRACKETS

Model EB-120 – adds 24" deck or walkway in width. Weight 10 lbs.
Model EB-130 adds 36", weight 13 lbs. Connects to end frame at any point where a horizontal piece appears.



PLATFORM P-70

19" x 7'. Made with 3/4" plywood. Can be used at various levels, weight 38 lbs. Also available in 19" x 10' P-100, weight 60 lbs.

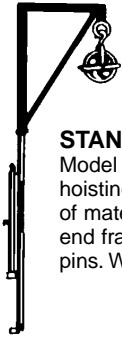


DOUBLE GUARD RAIL POST AND GUARD RAILS

Necessary for safety in scaffolding. Guard rail post fits over top of end frame and guard rails attached to guard rail posts.

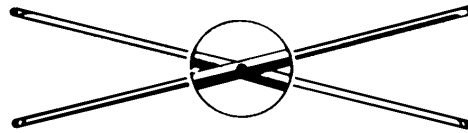
DOUBLE GUARD RAIL POST

Model GP-205 – Line post weight 8 lbs.
Model CP-305 – Corner Post



STANDARD HOIST

Model H-100 – for hoisting up to 100 lbs. of material. Fits over end frame coupling pins. Weight 37 lbs.



No more unsteady scaffolding with PIVOTED CROSS BRACES

Model CB-70 – Weight 13 lbs.
Model CB-80* – Weight 14 lbs.
Model CB-90* – Weight 15 lbs.
Model CB-89* – DBL Hole.

**Ask for special lengths.*

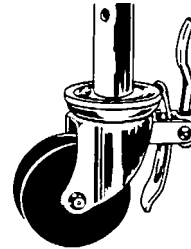


GUARD RAILS

Model GR-105 – 5', weight 5 lbs.
Model GR-107 – 7', weight 6-1/2 lbs.
Also available in 29", 42", 6' and 10' lengths.

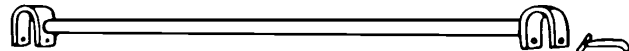
SWIVEL CLAMPS

Model SC-25 – clamp attaches to tubing. Many uses such as bracing to strengthen and tie in towers. Weight 3 lbs.



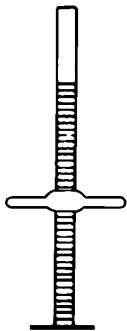
5" RUBBER CASTER

Model C-111 – All casters fully swiveled with built-in brake. Weight 9 lbs.
Model C-112 – 8" caster. Weight 11 lbs.



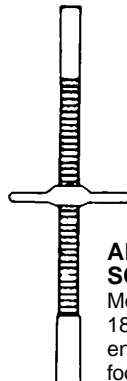
DIAGONAL BRACE

Should be used on rolling towers. Keeps scaffold from racking out of square. Must be used every 20' of height.
Model DB-607 – for 5' wide frames, 7' spacing, weight 9 lbs.
Model DB-427 – for maintenance frames, 7' spacing, weight 8-1/2 lbs.
Model DB-297 – for 29" wide frames, 7' spacing, weight 8 lbs.
Also available in 5', 6' and 10' lengths in all frames.



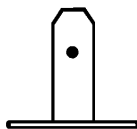
ADJUSTABLE BASE JACK

Model J-300 – provides safe footing on sloping and uneven floors. Weight 11 lbs.



ADJUSTABLE SCREW JACK

Model J-305 – adjusts to 18" inside tubing legs of end frames. Used with foot plate or caster. Weight 11 lbs.



FOOT PLATE

Model FP-100 – locks to column of any standard frame. Weight 1 lb.



TOGGLE PIN

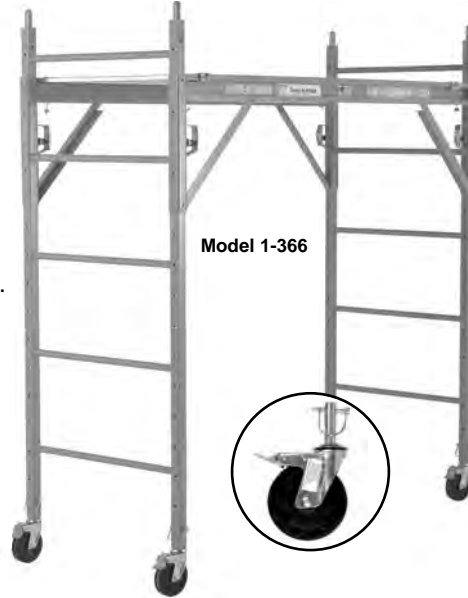
Model TP-30 – used to lock end frames together or to lock accessories, such as Diagonal Braces, Guard Posts, Base Plates, Casters, Toeboard Brackets, etc., to end frames.



Top of the Line Quality Scaffolding

6' Interior Scaffold

- OSHA rated 1,000 lbs. capacity.
- Backed by Sonny's strong commitment to customer service and quality liability insurance.
- Rugged all-steel construction.
- Spring assisted lock-pin for quick assembly and easy height adjustment.
- Fits through all standard doorways.
- Patented "Gravity-Lock" Pin Stop safely guards against unwanted lock-pin release.
- Platform retention clips keep platform board in place.
- Meets OSHA and ANSI standards.
- For interior use only.
- Follow all warnings and instructions.



Mobile Guardrail

- Lightweight design for easier assembly and handling.
- Two guardrail sections each with attached gate.
- Built-in toeboards.
- Easily attaches to trusses for quick set-up and tear-down.
- No loose parts.
- Gates only open to the inside.
- Moves with platform for safety at any work height.
- Adjust platform height to easily fit through standard doorway without removing guardrail.

MADE IN USA

Quick-Step Work Platforms

- 14-gauge platforms.
- EZ-5 hitch-pin casters.
- Quick assembly and takedown.
- Easy to store and transport.
- Built-in platform storage.
- Rugged power coat finish over all-steel construction.
- 500 lb. static load capacity.
- Complies with OSHA and ANSI standards.
- For interior use only.
- Made in the USA.



SDC-2 Residential Drywall Cart

- Load Capacity 2,000 lbs.
- Wider wheel base (15" on center) means greater stability. Designed using the same concepts as our heavy-duty commercial cart, this frame is made for residential application.
- Formed steel support braces offer better load stability, minimize tipping and provide improved maneuverability when moving carts around jobsite.
- Uni-tube design throughout cart reduces wallboard damage and potential shin injuries.
- Formed steel channel bed with Teflon decking offers full support for heavy loads and helps to protect drywall from nicks and scratches.
- Large, rolling casters provide smooth, effortless movement and easy navigation while turning.
- Exceeds OSHA and ANSI specifications, and is possibly the safest cart on the market.
- Made in the USA.





LN-4 SEABOARD NON-FIBRED FOUNDATION COATING

Excellent low cost and quick drying heavy-duty coating prepared to ensure protection against all weather conditions.

DESCRIPTION: Seaboard Non-Fibred Foundation Coating is formulated with asphalt meeting ASTM-D-449-89 Type I specifications. This material is an asphalt cutback for use in dampproofing and waterproofing. This material is impervious to water and remains pliable under normal conditions.

BASIC USES: Seaboard Non-Fibred Foundation Coating is used where below grade water may cause deterioration or damage. This material can be used for private and commercial applications on metal tanks, metal and concrete pipes, foundations, silos, etc.

PACKAGING: 1 Gal., 5 Gal., 55 Gal. and Bulk

LN-7 SEABOARD ROOF AND FOUNDATION COATING

A brush and spray competitive fibre roof coating for long lasting waterproof protection.

DESCRIPTION: Seaboard Roof and Foundation Coating meets ASTM-D-4479 Type I specifications and is 100% ASBESTOS-FREE. This material is an asphalt cutback fortified with fibres and additives.

BASIC USES: Seaboard Roof and Foundation Coating is used as a cold applied system on commercial and private applications. This material is used as a protective coating for various roof types and a resaturant for old roofs. It is also used as a dampproofing and protective coating for concrete, masonry and block walls as well as for metal tanks and concrete pipe.

PACKAGING: 1 Gal., 5 Gal., 55 Gal.

LN-5 SEABOARD FIBRED ROOF COATING

A brush and spray competitive fibre roof coating for long lasting waterproof protection.

DESCRIPTION: Seaboard Fibred Roof Coating meets ASTM-D-4479 Type I specifications and is 100% ASBESTOS-FREE. This material is an asphalt cutback and fortified with fibres and additives.

BASIC USES: Seaboard Fibred Roof Coating is used as a protective coating on commercial and residential cold applied roofing systems.

PACKAGING: 1 Gal., 5 Gal., 55 Gal.

MP-51 CLIPPERSHIP WET and DRY PLASTIC ROOF CEMENT

Our premium and most versatile roof cement. Apply to both dry and wet surfaces and sets to a touch pliable plastic finish.

DESCRIPTION: Clippership Wet and Dry Plastic Roof Cement meets ASTM-D-4586-93 Type I specifications and is 100% ASBESTOS-FREE. This material is an asphalt cutback with fibres to formulate a premium product.

BASIC USES: Clippership Wet and Dry Plastic Roof Cement is used to make repairs and patch areas under wet or dry conditions. This material is excellent for emergency repairs and new roofing applications.

PACKAGING: 12 oz. Tubes, 9 Quarts, 1 Gal., 5 Gal., 55 Gal.

LN-11 EQUINOX ASPHALT GILSONITE DRIVEWAY SEALER

A superior gilsonite driveway sealer that dries to a beautiful black glossy finish.

DESCRIPTION: Seaboard Equinox Sealer is a superior gilsonite driveway sealer that dries to a beautiful black glossy surface.

BASIC USES: Seaboard Equinox Sealer is used as a rejuvenator and sealer on bituminous asphalt parking lots and driveways.

PACKAGING: 5 Gal., 55 Gal. and Bulk



TE-36 EZEE KOTE TAR EMULSION DRIVEWAY SEALER

A coal tar emulsion for coating your driveway and adds protection from oil and water.

DESCRIPTION: Ezee Kote Tar Emulsion Driveway Sealer is formulated from base coal tar emulsion meeting Federal Specification RP-355e specification. This material is a coal tar emulsion.

BASIC USES: Ezee Kote Tar Emulsion Driveway Sealer is used as a protective coating on bituminous surfaces from petroleum and elements of the weather and traffic wear.

PACKAGING: 5 Gal., 55 Gal. and Bulk

MP-52 BITUMINOUS JOINT COMPOUND

A heavy-duty bituminous mastic state approved for joint sealing on concrete and metal pipe and many other applications.

DESCRIPTION: Seaboard Bituminous Joint Compound is a trowel mastic asphaltic compound for joint sealing and is 100% ASBESTOS-FREE.

BASIC USES: Seaboard Bituminous Joint Compound is used as a joint sealant for concrete pipe, foundations and all other masonry and steel joint sealing.

PACKAGING: 5 Gal., 55 Gal.

ACF-1 SEABOARD RUBBERIZED CRACKFILLER

An asphalt emulsion pourable which fills and seals cracks in blacktop and concrete.

DESCRIPTION: Seaboard Rubberized Crackfiller is an asphalt emulsion fortified with latex and fillers and is 100% ASBESTOS-FREE.

BASIC USES: Seaboard Rubberized Crackfiller is used as cold pourable joint sealant in bituminous and concrete surfaces, which are up to 1/4" in width and up to 1/2" in depth.

PACKAGING: 1 Gal., 5 Gal.

EM-50 CLIPPERSHIP PRIMER BINDER

A highly versatile emulsion especially formulated for a variety of applications.

DESCRIPTION: Clippership Primer Binder is a highly versatile asphalt emulsion, which is formulated for a variety of applications.

BASIC USES: Clippership Primer Binder can be used as a primer whenever an asphaltic product is going to be applied. This material can also be used for dampproofing and as a tack coat for application of bituminous surfaces.

PACKAGING: 5 Gal., 55 Gal. and Bulk

SEABOARD RC TACK ASPHALT CUTBACK TACK COAT

Cutback asphalt used in treatment of road surfaces prior to resurfacing.

DESCRIPTION: Seaboard RC Tack Coat is an asphalt cutback formulated to be a premium coating for penetration, priming and binding bituminous surfaces.

BASIC USES: Seaboard RC Tack Coat is used as a treatment to a bituminous surface before resurfacing.

PACKAGING: 5 Gal., 55 Gal. and Bulk

AR-1 SEABOARD TAR and ASPHALT REMOVER

A highly effective coal tar and asphalt cleaner in a spray bottle for personal equipment and the jobsite.

DESCRIPTION: Seaboard Tar and Asphalt Remover is a water soluble cleaner that effectively dissolves tar and asphalt products.

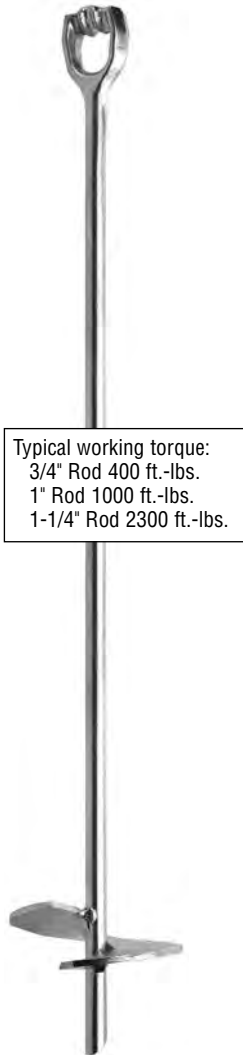
BASIC USES: Seaboard Tar and Asphalt Remover can be used on most washable surfaces including concrete, masonry, wood, metal, glass, ceramic and fabric. This cleaner is excellent for cleaning tools, equipment, vehicles, splatters and overspray.

PACKAGING: 1 Gal., 5 Gal.



NO-WRENCH SCREW ANCHOR

For Hand or Machine Installation



Typical working torque:
3/4" Rod 400 ft.-lbs.
1" Rod 1000 ft.-lbs.
1-1/4" Rod 2300 ft.-lbs.

Chance No-Wrench Screw Anchors may be installed by hand or machine. The Thimbleye® or Tripleye® on the rod has a large opening to admit a turning bar for screwing the anchor down. The eye will also fit into an adapter available from most hole-boring machine manufacturers so the anchor may be power-installed. The No-Wrench Screw Anchor consists of a drop-forged steel Thimbleye or Tripleye rod welded to a steel helix. The entire anchor is hot-dip galvanized for long resistance to rust.

No-Wrench Screw Anchors can be installed to a greater depth to reach a firmer soil by using a 6-foot extension rod with forged coupling and a forged Tripleye, catalog number 402. Maximum installing torque is 2300 ft.-lbs. for 1-1/4" diameter rod.

Catalog numbers 4345, 6346 and 816 may be ordered with a forged Thimbleye rod rather than the standard Tripleye. To order a Thimbleye rod simply add "-1" as the suffix of the catalog number. Example: Catalog No. 6346-1.

Application and ordering information

Catalog No. Tripleye	Anchor Size Dia.	Rod Dia. and Length	Std. Pkg./Pallet	No-Wrench Anchor Holding Strengths – (lbs.) vs Chance Soil Class		
				Class 5	Class 6	Class 7
4345	4"	3/4" x 54"	1/100	4500	3000	1500
6346*	6"	3/4" x 66"	1/100	6500	5000	2500
816	8"	1" x 66"	1/60	11000	9000	6000
10146	10"	1-1/4" x 66"	1/20	13000	10000	7000
10148	10"	1-1/4" x 96"	1/20	13000	10000	7000
12537	14"	1-1/4" x 96"	1/20	16000	15000	12000
402	1-1/4" x 6' Tripleye extension		1/50	N.A.		

*RUS Accepted.

Note: If hand installed, holding strength may be reduced by as much as 10% to 20%.

Ultimate strength ratings apply to properly installed anchors only.

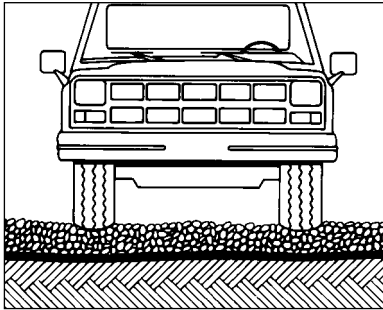
Failure to install within 10° of alignment with the guy load may significantly lower strength.

Soil Classifications

Class	Common Soil Type Description	Geological Soil Classification	Probe Values in.-lbs. (NM)	Typical Blow Count "N" per ASTM-D1586
5	Medium dense coarse sands and sandy gravels; stiff to very stiff silts and clays	Saprolites, residual soils	300 - 400 (34 - 45)	14-25
6	Loose to medium dense fine to coarse sands to stiff clays and silts	Dense hydraulic fill; compacted fill; residual soils	200 - 300 (23 - 34)	7-14
*7	Loose fine sands; Alluvium; loess; medium - stiff and varied clays; fill	Flood plain soils; lake clays; adobe; gumbo, fill	100-200 (11 - 23)	4-8

*It is advisable to install anchors deep enough, by the use of extensions, to penetrate a Class 5 or 6, underlying the Class 7 soil.

WEBTEC geosynthetics are based on time-proven technology—engineered to save construction and maintenance dollars. Each product is end-use designed to aid the contractor and engineer in solving geotechnical and construction problems.

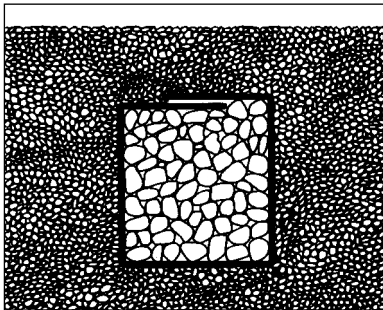


TerraTex GEOTEXTILES For STABILIZATION

TerraTex GS, HD, GS-150 and GS-250 are rugged woven fabrics used to stabilize very poor to moderate strength soils by separating subgrade and aggregate layers. Heavyweight nonwovens such as TerraTex N07, N08, N10, N12 and N16 are also very effective for stabilization.

BENEFITS:

- Faster construction in all weather conditions
- Reduced aggregate requirements
- Excellent performance
- Extended pavement life

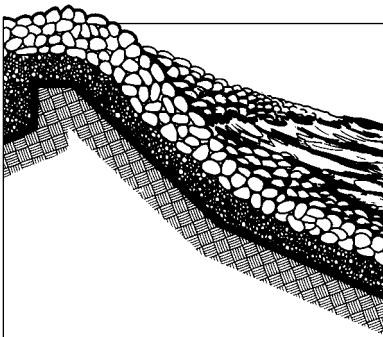


TerraTex GEOTEXTILES For DRAINAGE PROTECTION

TerraTex N03, N04, SD, N04.5, S04, N05 and N06 are nonwoven fabrics designed to prevent soil piping, yet are water permeable to drain even the most demanding conditions.

BENEFITS:

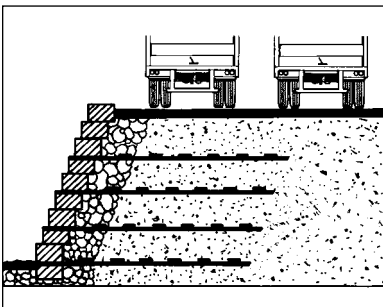
- Extended drain life
- Excellent performance
- Savings in material costs
- Savings in excavation costs



TerraTex GEOTEXTILES For MULTIPLE APPLICATIONS

TerraTex woven and nonwoven fabrics are effective in many geotechnical and related applications:

- TerraTex EP, N07, N08—Erosion control
- TerraTex N10, N12, N16—Geomembrane underliner
- TerraTex NS4, PU1.5, LBF—Light-duty drainage protection
- TerraTex OL, OLI, OLHD—Asphalt overlay
- TerraTop S04, WC—Weed control
- TerraTex SC, SC-90—Sedimentation control
- TerraTex HPG-16, 19, 37, 44, 50, 55, 57—High-performance geotextiles for use where high strength and resistance to elongation are needed

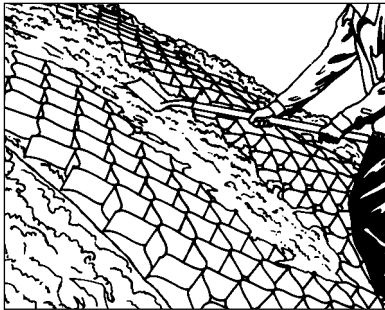


TerraGrid® GEOGRIDS

TerraGrid Geogrids are useful in many applications. High-strength, high-tenacity polyester yarns are woven and then coated with polyvinyl chloride (PVC). They are inert to biological degradation and naturally encountered chemicals, alkalies and acids.

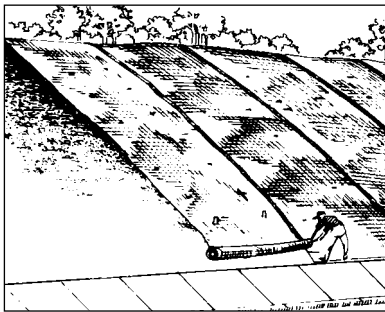
APPLICATIONS:

- Base stabilization
- Slope reinforcement
- Retaining walls
- Berm reinforcement



**TerraCell® GEOCELLS
CELLULAR CONFINEMENT SYSTEM**

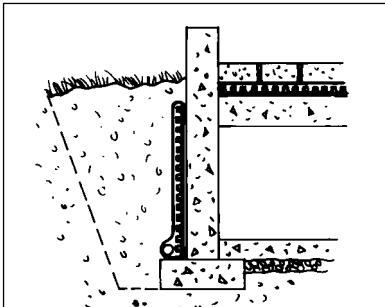
TerraCell® is a cellular confinement system providing innovative solutions for ground stabilization, slope protection, erosion control and retaining walls. It is constructed of high-density polyethylene strips ultrasonically bonded together to form a high-strength network of cells. These cells confine and reinforce all types of fill material. The TerraCell system can often replace expensive or elaborate construction methods. TerraCell is available in various heights and cell sizes. Perforations are standard. Custom colors are available.



**TerraGuard/TerraJute
EROSION CONTROL PRODUCTS**

TerraGuard Turf Reinforcement Mats are an aesthetically pleasing alternative to rigid systems such as concrete or riprap. TerraGuard turf reinforcement mats are comprised of polypropylene fibers sewn between two nettings.

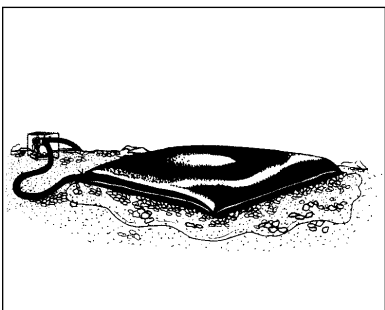
TerraGuard Erosion Control Blankets protect newly-seeded slopes and channels. The broad product line ranges from straw blankets to slow-degrading coconut blankets. Each roll is held together with biodegradable thread and photodegradable plastic netting. TerraJute is an open-weave polypropylene fabric which performs in a similar way. It degrades from exposure to sunlight.



**TerraDrain®
PREFABRICATED DRAINAGE SYSTEMS**

TerraDrain® Sheet Drains offer a cost-effective alternative to conventional drainage systems. TerraDrain 101 consists of a nonwoven fabric attached to a polymeric dimpled core. TerraDrain 50 is a lighter version of the 101. TerraDrain 121 has a membrane backing compatible with soft waterproofing systems. TerraDrain 203 utilizes a heavier-duty core and high-strength woven fabric for horizontal applications.

TerraDrain Strip Drains can often replace trench or pipe drainage systems. Composed of a polymeric core surrounded by a nonwoven fabric, this product features high flow capacities and reduced excavation needs.



**TerraTex
RELATED PRODUCTS**











TerraTex Filter Bags collect sediment from pumped water. Also known as dewatering or sediment filter bags, they can replace straw bale structures or sediment basins.

TerraTex Barrier Fencing marks areas – giving warning that they are dangerous or inaccessible. Made from extruded plastic or high-visibility fabric. Also available preassembled with hardwood posts.

EconoFence Preassembled Silt Fences control sedimentation run-off. WEBTEC manufactures many styles to meet various specifications.

Easy-to-use heavy-duty ADS pipe and fittings

ADS manufactures a complete line of fittings and couplings, simplifying installations for highway and construction drainage applications.

SPLIT COUPLING  3" - 311 12" - 1265 4" - 411 15" - 1565 5" - 511 18" - 1865 6" - 611 24" - 2465 8" - 811 30" - 3065 10" - 1011 36" - 3665	SNAP COUPLING  3" - 312 6" - 612 4" - 412 8" - 812 5" - 512 10" - 1012	INTERNAL COUPLING  4" - 415 5" - 515 6" - 615 8" - 815	SPLIT END CAP  3" - 331 12" - 1267 4" - 431 15" - 1567 5" - 531 18" - 1867 6" - 631 24" - 2467 8" - 831	SEPTIC TANK ADAPTER  4" - 463	45° Y  3" - 322 4" - 422 5" - 522 6" - 622 8" - 822	END PLUGS  Perforated 4" - 434 Solid 3" - 333 4" - 433 5" - 533 6" - 633
REDUCING COUPLER  314 - 4" x 3" 816 - 8" x 6" 514 - 5" x 4" 1018 - 10" x 8" 516 - 6" x 5" 1210 - 12" x 10" 614 - 6" x 4"	SNAP TEE  3" - 321 5" - 525 4" - 421 6" - 626	BLIND TEE  3" - 341 6" - 641 4" - 441 8" - 841 5" - 541	90° ELL  3" - 390 4" - 490	SMOOTHWALL ADAPTER  3" - 362 6" - 662 4" - 462 8" - 862 5" - 562	DOWNSPOUT ADAPTER  3" - 364 (3.25 x 2.5) 4" - 464 (3.25 x 2.5) 4" - 465 (4.25 x 3) 4" - 466 (2.56 x 2.56)RAINGO 6" - 664 (4 x 6 x 6)	SEPTIC SYSTEM LEACH FIELD PIPE  4" - 402 - 10' Lengths 402 also available in coils
SB2 GRAVEL-LESS LEACH BED PIPE  Filter wrapped. 1/2" holes. 8" & 10" diam. 20' Lengths	HEAVY DUTY PIPE  Perf. 8" - 801 851 - 20' Lengths 10" - 1001 1051 - 20' Lengths 12" - 1201 1251 - 20' Lengths 15" - 1501 1551 - 20' Lengths 18" - 1801 1851 - 20' Lengths 24" - 2401 2451 - 20' Lengths Non-Perf 8" - 801 851 - 20' Lengths 10" - 1001 1051 - 20' Lengths 12" - 1201 1251 - 20' Lengths 15" - 1501 1551 - 20' Lengths 18" - 1801 1851 - 20' Lengths 24" - 2401 2451 - 20' Lengths	PERFORATED PIPE  3" - 301 - 300' Coils 4" - 401 - 100' Coils 4" - 401 - 250' Coils 5" - 501 - 165' Coils 6" - 601 - 100' Coils 8" - 801 - 20' Lengths 10" - 1001 - 20' Lengths 12" - 1201 - 20' Lengths 15" - 1501 - 20' Lengths 18" - 1801 - 20' Lengths 24" - 2401 - 20' Lengths 301 and 401 also available in bundles of ten - 10' lengths *Also available in smooth interior N-12 pipe 4" through 60"	NON-PERFORATED PIPE*  3" - 351 - 300' Coils 4" - 451 - 100' Coils 4" - 451 - 250' Coils 5" - 551 - 165' Coils 6" - 651 - 100' Coils 8" - 851 - 20' Lengths 10" - 1051 - 20' Lengths 12" - 1251 - 20' Lengths 15" - 1551 - 20' Lengths 18" - 1851 - 20' Lengths 24" - 2451 - 20' Lengths 351 and 451 also available in bundles of ten - 10' lengths *Also available in smooth interior N-12 pipe 4" through 60"	REDUCING TEE (MULTIPLE)  644 - 6" to 6" 6" to 4" 6" to 3" 844 - 8" to 8" 8" to 6" 8" to 5" 1044 - 10" to 10" 10" to 8" 10" to 6" 1244 - 12" to 12" 12" to 10" 12" to 8" 1544 - 15" to 15" 15" to 12" 1847 - 18" to 18" 18" to 15" 18" to 12"	SUMP LINERS & LIDS FOR BASEMENT  1536 Regular Lid 1537 Heavy Duty Lid 1524 - 24" liner 1530 - 30" liner ADS TRIPLEWALL™ SEWER & DRAIN PIPE  462 - 4" x 10', perforated 465 - 4" x 10', solid	PROTECTIVE WRAP  Pipe Sock 4" 420 - 100' Rolls 4" 424 - 250' Coils 5" 524 - 165' Coils 6" 624 - 100' Rolls 8" 824 - 20' Lengths 12" 1224 - 20' Lengths 15" 1524 - 20' Lengths 18" 1824 - 20' Lengths 24" 2424 - 20' Lengths



N-12 IB ST (soil-tight) Pipe Available in diameters from 4" to 60" and 20' lengths, N-12 pipe is replacing reinforced concrete pipe as a preferred product for storm water applications. The reinforced polyethylene bell of N-12 IB ST pipe minimizes distortion. Chipping and cracking common to concrete pipe bells, is eliminated.

* Fabricated fittings such as elbows, tees, etc. for larger sizes are available in N-12 pipe.

Flexible Shifts with the ground. No problems due to misalignment and clogging. Drainage system continues to work efficiently because ADS pipe aligns itself.



Assured Effluent Flow (Leach Bed Pipe) Uniformly sized and spaced drilled holes for effective outflow of effluent.



Long Life Will not deteriorate. Rust resistant. Not affected by acidic soil content or other problem soils. Not affected by freezing or thawing.



Easy to Install Lightweight and easy to carry. Saves time and labor. No special tools or fittings needed. No waste; just cut to required length.



Strong-Tough-Durable Won't crack or break under normal handling and installation procedures. Tough enough to withstand the heaviest loads.



Unrestricted Water Intake (Drainage Pipe) Uniform slots in the corrugated valleys for unrestricted, rapid water intake. Quicker drainage to handle heavy rains.



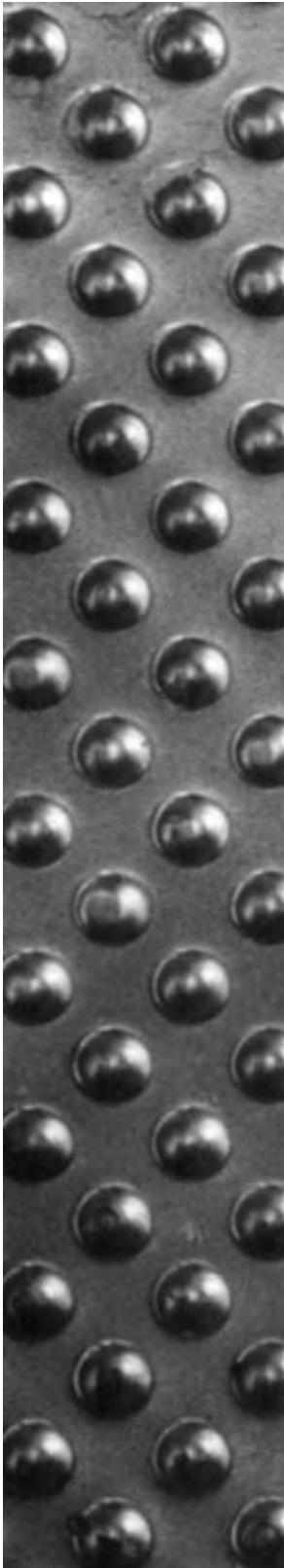
Specifications

Manufactured of selected polyethylene resins, ADS pipe meets the strictest product quality standards and industry specifications.

AASHTO	M-252 4" - 10". M-294 12" - 36".
ASTM	Meets heavy duty pipe requirements of ASTM F405 and F667
BOCA	Research Report #89-41 Also approved by most state, county and local sanitarians and public works departments.

Chemical Resistance
ASTM D 543 Tests verify that ADS plastic pipe resists the following solutions:

Chemical Solution	Concentration in Water
Sodium carbonate	0.1N
Sodium Sulfate	0.1N
Sodium Chloride	5%
Sulfuric acid	0.1N
Acetic acid	5%
Hydrochloric acid	0.2N
Sodium hydroxide	0.2N
Ivory Soap	5%
Household detergent	5%
Raw sewage	-



Erosion Control / Silt Fence

TURBIDITY BARRIER

(Part Number 3200)
Mutual's Floating Turbidity Barrier provides a restricted flow of silt laden runoff from construction sites. Turbidity barriers are highly effective in allowing silt and sediment to settle out before being carried into adjacent or adjoining waterways. Available in 50 ft. lengths for convenient placement.



SEDIMENT FILTER BAG

(Part Number 15925)
10 oz. non woven geotextile bag used to filter sediment from pumped discharged water. Sizes available: 7-1/2" x 7-1/2", 7-1/2" x 15", 15" x 15".



INLET COVER

(Part Number 17682)
Used for reducing the amount of silt and debris that may enter a stormwater inlet during construction.



D.O.T. SPEC SILT FENCE

Mutual is currently approved or certified by many state D.O.T.'s and can manufacture D.O.T. silt fence to meet any requirement. D.O.T. specifications vary by state and will consist of any of the following requirements.

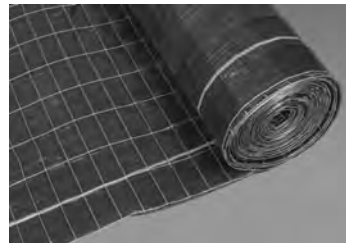
- Specified higher quality fabrics 24", 30", 36", 42" wide.
- Specified stake sizes 1-1/2" x 1-1/2" (nominal) 2" x 2" (nominal) etc.
- Specified stake spacing 10', 8', 7', 6', 4' centers.
- Some D.O.T. specs require mesh backing.



WIRE BACKED SILT FENCE

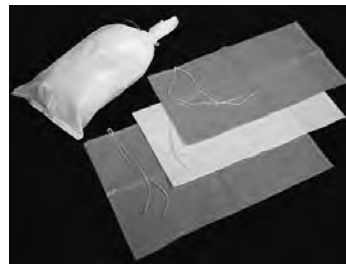
(Part Number 1776-14-36)
36" x 100'
36" MISF 1776 Fabric
36" 14-Gauge Wire Mesh

- Opening of Mesh 2" x 4".
- Fabric hog ringed every 12-18" along top of fence.
- Roll weight 45 lbs.



SAND BAGS (WOVEN POLYPROPYLENE)

(Part Number 14981)
Mutual's "circular woven" polypropylene sandbags come complete with heavy poly-twine ties. They are available in white (400 hr. UV protection) and bright orange (100 hr. UV protection) for increased visibility. The sandbags come in 2 sizes: 14" x 26" weighing 50 pounds when filled, and 18" x 27" weighing 75 pounds when filled. Custom sizes available.



Call Wharton for other Erosion Control and Silt Fence products.

Heavy-duty, Medium duty and Light duty posts in classic Studded Tee design.

- Made from **rail steel**.
- **Strength and resiliency** - guaranteeing a minimum yield point of 50,000 PSI and an ultimate tensile strength greater than 80,000 PSI.
- **Weather resistant** by an industrial quality finish coat of rust-inhibiting green, brown or black paint (other colors upon request).
- Posts can be hot-dip galvanized after fabrication.
- Heavy and light weight posts are available in standard lengths of 6, 7, 8, 9, 10 and 12 ft.



STRONG MAN Building Products Corp.

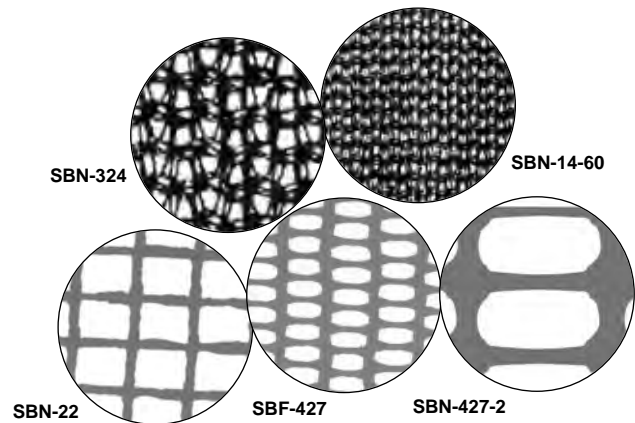
NETTING

Our Debris Nettings are manufactured exclusively by Strong Man Building Products. They meet the highest industry standards and are available for a variety of purposes.

The Mesh (**SBN-324**) is a knitted Polyethylene Netting which offers protection from fine debris and limits the sight of scaffold activity to pedestrians. For heavier duty protection we also have the HD Knitted Mesh (**SBN-14-60**).

When wind may be a problem and protection is needed from larger debris, the Vertical Debris Netting (**SBN-22** and **SBN-22FR**) are available. The Vertical Debris netting (**SBF-427**), a Heavy-Duty PVC Coated Polyester Netting is used where a fine mesh and fire retardancy is required.

For privacy applications on fencing, we offer Privacy Screening, a flat taped knitted high-density polyethylene.

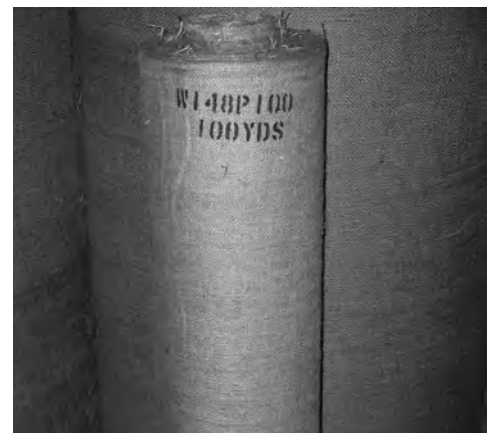


NYP CORP.

BURLAP

Burlap has many applications. Its great strength and low cost make it the ideal textile for inner construction, for industrial packaging and as the supporting fabric for many materials which lack the intrinsic functional strength required.

- Spread over fresh cement to prevent from drying too quickly and checking.
- Wind-breaks.
- Ground cover after seeding on difficult slopes.
- To protect bark from field mice, rabbits or during the shipment and handling of trees.
- In sheet, bag or tube form, burlap is used for packaging many commodities, especially where abrasion resistance and strength are needed.
- Perfect container for balling roots and earth when transplanting trees and shrubs.
- In furniture, rugged burlap inner construction, around springs and over frame, adds strength and long life. Burlap webbing is also widely used to support springs in upholstered furniture.



Through advanced product design, Conwed combines durability, visibility and cost effectiveness to offer our customers a complete fence product selection. Whatever your fencing needs, Conwed has the right product for:

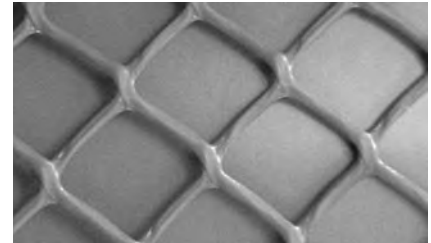
- Construction site safety
- Public event crowd control
- Snow management
- Numerous agricultural applications

Features:

- A variety of product strengths, weight, colors and roll sizes.
- Ultraviolet stabilization for extended outdoor use.
- Temperature service ranges from -40 to 200°F for most products.

Heavy-Duty Diamond Fencing

Heavy-Duty Diamond Fence is our strongest and heaviest fence of all, providing the ultimate in safety fencing performance—without the smooth-top design. This product is available in different heights and colors.



Heavy-Duty Diamond

Perimeter Standard™

Breaking barriers between economy and performance

PERIMETER STANDARD™ is Conwed's newest and most economical fence product – intended for use as a temporary visible barrier and all-purpose perimeter fence.



Perimeter Standard™

Perimeter Plus™

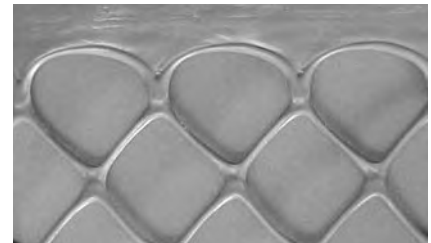
Our most popular fence product

PERIMETER PLUS™ is Conwed's most popular fence product – as a heavier, stronger version of Perimeter Standard, this product provides versatile performance as a visible barrier, perimeter or even as a light snow containment fence.

Smooth-Top™

The look and strength of metal for less

Smooth-Top™ diamond fence is designed to closely match the look and performance of traditional metal chain-link fence. Both visible and strong, this is an excellent contractor-grade fence product – ideal for anywhere restricted access and work site safety is required. This product is available in different sizes, colors and grades to meet specific fencing needs.

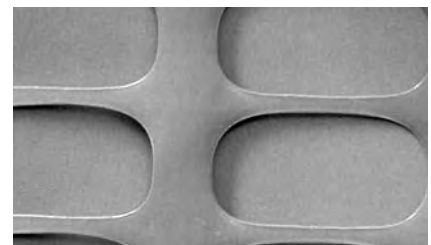


Smooth-Top™

Magna™

All weather strength and durability

MAGNA™ is designed for medium duty applications. Used frequently as a strong barrier against wind, cold and snow. Magna is ideal for fencing applications that require product strength and durability. Temperature resistant from -40° to 200°F.



Magna™

Optimus™

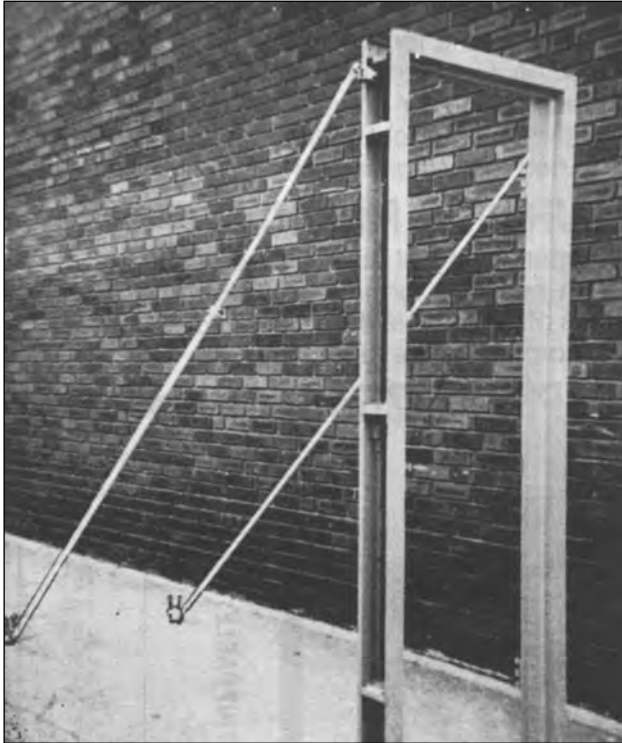
Heavy-duty strength on demand

OPTIMUS™ is Conwed's strongest and most durable fence in the Oval-Series product line. Designed to provide optimal strength and durability, Optimus is ideal for heavy-duty fencing applications – including strong perimeter and snow control. Temperature resistant from -40° to 200°F.

IN STOCK



Regardless of location or type of structure, your BUCKS-UPS are ready to work for you.



Brace bucks from concrete floor where no ceiling is available.



Buck-Ups clamped to bar joists and I beams.

A quick glance at the typical installation photographs above will show you how easy it is to save time and materials in setting metal door bucks and window sash. Buck-Ups can be clamped to bar joists and I beams, duct work or can be attached to stud shot in concrete ceiling or floor. There is no costly measuring, cutting, fitting and figuring how to fasten lumber braces – and no lumber to waste.

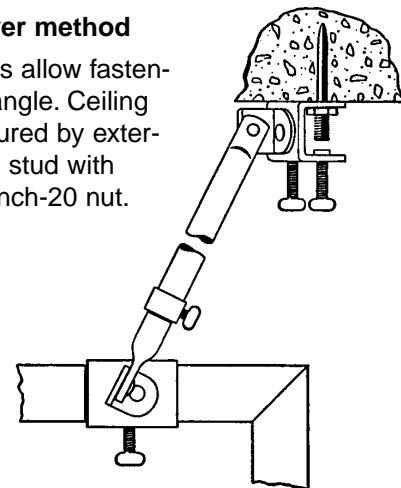
You simply fasten Buck-Ups by the universally jointed spade bolt end clamps to the buck, and then extend to the overhead structure. Plumb bucks and tighten telescope spade bolt. Your job is done. The bucks are held solid, no chance of warp pulling doors out of plumb. No danger of injury from falling bucks. No tools needed. Also, the floor is left clear for masons and others to work.

How many bucks would you have to set before Buck-Ups are earning a nice profit for you?

Sinclair Buck-Ups cut cost of setting door bucks on any job . . . anywhere . . . large or small.

The stud driver method

Universal joints allow fastening from any angle. Ceiling bracket is secured by externally threaded stud with standard 1/4-inch-20 nut.



Specifications:

Made of sturdy steel tubular construction with heavy gauge steel universal clamps and adjustment screws.

No. 480 (For ceiling heights up to 15 feet) – Overall length of Buck-Up ranges from 5' 9" minimum to 10' 6" maximum when fully extended.

PC 609 INDUSTRIAL GRADE CLOTH DUCT TAPE

- HVAC industry on sheet metal, flex duct and thermal insulation.
- Manufactured housing to seam bottom boards and for patching, seaming and sealing.
- Packaging, bundling, holding, wrapping and waterproofing.

CONSTRUCTION:

Overall Grade/Function: Industrial Grade.

Backing: Waterproof polyethylene film with a polyester/cotton cloth carrier.

Adhesive: Natural rubber.



EV 57 UL LISTED ELECTRICAL TAPE

- Splice, insulate and bind wiring harnesses.

CONSTRUCTION:

Overall Grade/Function: UL Listed Electrical Tape.

Backing: Matte finish, soft polyvinylchloride (SPVC).

Adhesive: Non-corrosive, natural rubber.



GS 501 Industrial Grade, Glass Reinforced Strapping Tape

- Medium duty strapping, packaging, bundling and palletizing.

CONSTRUCTION:

Overall Grade/Function: Industrial Grade.

Backing: Fiberglass reinforced, biaxially oriented, polypropylene film.

Adhesive: Hot melt, synthetic rubber.



GS 490 General Purpose, Glass Reinforced Strapping Tape

- Light duty strapping, packaging, bundling and palletizing.

CONSTRUCTION:

Overall Grade/Function: General Purpose.

Backing: Fiberglass reinforced, biaxially oriented, polypropylene film.

Adhesive: Hot melt, synthetic rubber.



CP 107 Industrial Grade Crepe Paper Masking Tape

- Non-critical construction and painting applications.
- General purpose packaging, bundling, holding, splicing and tabbing tape.

CONSTRUCTION:

Overall Grade/Function: Industrial Grade.

Backing: Crepe paper.

Adhesive: Rubber-based adhesive.





FLOOR SWEEPS

Black Tampico

Black tampico is the premier all-purpose sweep for both smooth and rough floors. Lacquered hardwood blacks with 2 threaded handle holes. All items come with 60" lacquered handle 11021.

2-1/2" Trim

Item No.	Description
10583	Floor sweep 16"
10584	Floor sweep 18"
10585	Floor sweep 24"

3" Trim

Item No.	Description
10622	Floor sweep 18"
10623	Floor sweep 24"
10624	Floor sweep 30"
10625	Floor sweep 36"



GARAGE SWEEPS

Solid Fill

Palmyra

Truly heavy-duty – stiff, coarse, natural palmyra fiber will move heavy, caked dirt and debris over rough floor surfaces, under wet or dry conditions. Lacquered hardwood blocks with two threaded handle holes. All items come with 60" lacquered, die cast tip handle 11041.

Item No.	Description
10702	Garage sweep 18", 4" trim
10702-4	Garage sweep 18", 4" trim, w/60" Threaded Handle
10703	Garage sweep 24", 4" trim
10703-4	Garage sweep 24" w/60" Threaded Handle
10704	Garage sweep 30", 4" trim
10705	Garage sweep 36", 4" trim



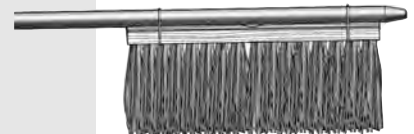
STREET AND BARN BROOMS

Solid Fill

Dyed Palmyra Stalks

Rugged construction for sweeping heavy debris and dirt, under wet or dry conditions. Smooth hardwood blocks with two tapered handle holes. Handles sold separately; suggested 60" x 1-1/8" tapered handle (11061).

Item No.	Description
08502	Street broom 16", 6-1/4" trim.
08512	Street broom 24", 6-1/4" trim.



Poly

Heavy-duty sweeping of liquids or solids for farms, streets and industrial areas. Smooth hardwood blocks with two tapered handle holes. Handles sold separately; suggested 60" x 1-1/8" tapered handle (11061).

Item No.	Description
08504	Street broom 16" 5-1/4" trim



HOUSEWARES

Scrubs

General Purpose Scrubs

Designed for both heavy and light duty scrubbing. Pointed end scrub gets to those hard-to-reach areas such as corners, nooks and crannies. Flared fibers for thorough cleaning. Smooth hardwood blocks.

Item No.	Description
11620	Scrub brush 9", pointed end, white tampico, 1-1/8" trim, with hang-up hole.



Call Wharton if you don't see the brush you need.





MAINTENANCE

Washing Brushes

Fountain style brush cleans all types of vehicles, large window areas, aluminum siding and fences. Molded block has one threaded hole and one tapered hole with protective plastic bumper. Handles sold separately; suggested 11070.

Item No.	Description
11751	Window/vehicle washing brush 10", tampico blend, 2-1/2" trim, poly block, 1 threaded/1 tapered hole.
11752	Window/vehicle washing brush 10", ultra soft white flagged synthetic, 2-1/2" trim, poly block, 1 threaded/1 tapered hole.



Utility/Pot Scrubs

The most versatile of all brushes, the utility scrub is variously known as a gong, pot, dairy or fender brush. Staple-set in durable poly blocks.

Item No.	Description
11670	Utility/pot scrub 8", white tampico, 2" trim, poly block.
11672	Utility/pot scrub 20", white tampico, 2" trim, poly block.



Acid Scrub Brushes

Acid brushes offer high fluid retention and are densely packed in a hardwood block with tapered or threaded handle holes. Heavily filled acid scrubs can be used by hand or with a handle for scrubbing brick or masonry.

Item No.	Description
11638	Acid brush 7", white tampico, 3" trim, 2 tapered holes w/10" handle.
11640	Acid brush 8", white tampico, 1-1/16" trim, 1 tapered/1 threaded hole.
11643	Acid brush 8", white tampico, 1-1/16" trim, 1 threaded hole.



Tin Handle Acid Brushes

These small brushes are ideal for applying acid, paste and solder in tight spots. Horsehair fibers are securely attached to rolled hollow tine handle.

Item No.	Description
11160	Acid brush, No. 1, tin handle, 3/8" wide.
11161	Acid brush, No. 2, tin handle, 7/16" wide.
11162	Acid brush, No. 3, tin handle, 1/2" wide.
11163	Acid brush, No. 5, tin handle, 3/4" wide.
11164	Acid brush, No. 7, tin handle, 11/16" wide.



PAINT SUNDRY

Curved Handle - 3 x 19 Row

Scrapes all kinds of rough surfaces and prepares surfaces for paint. Curved handle for easy reach; 3 x 19 rows of tempered steel wire staple-set in smooth, finished hardwood or poly blocks with hang-up hole.

Item No.	Description
11369	Wire scratch brush, curved handle, 3 x 19 row, Stainless Steel , poly block, 1-1/8" trim, 14" OAL.



Curved Handle - 4 x 18 Row

Tampico, tempered steel or stainless steel. Curved handle for easy reach; 4 x 18 rows of fill material staple-set in smooth, poly blocks with hang-up hole.

Item No.	Description
11372	Wire scratch brush, curved handle, 4 x 18 row, Tempered Steel , poly block, 1-1/8" trim, 14" OAL.



Curved Handle with Scraper - 4 x 18 Row

An extra row of bristles set in a smooth finished poly block with hang-up hole. Curved handle for easy reach and tough steel scraper.

Item No.	Description
11373	Wire scratch brush with scraper, curved handle, 4 x 18 row, Tempered Steel , poly block, 1-1/8" trim, 14" OAL.



Call Wharton if you don't see the brush you need.



PAINT SUNDRY

Shoe Handle - 4 x 16 Row

Designed for comfortable cleaning of all rough surfaces. Shoe handle features a contoured finger grip for strong and constant use; 4 x 16 rows of fill material staple-set in smooth, finished hardwood or poly blocks with hang-up hole.

Item No.	Description
11368	Wire scratch brush, shoe handle, 4 x 16 row, Stainless Steel , poly block, 1-1/8" trim, 10" OAL.
11375	Wire scratch brush, shoe handle, 4 x 16 row, Tempered Steel , poly block, 1-1/8" trim, 10" OAL.



Block Style - 6 x 19 Row

Cleans all rough surfaces and prepares surfaces for paint applications. Easy-to-handle flat block style offers 6 x 19 rows of wire staple-set in smooth, finished hardwood blocks.

Item No.	Description
11382	Wire scratch brush, straight back, 6 x 19 row, Tempered Steel , woodblock, 1-1/2" trim, 7" OAL.



Detail Brushes - Wood Handles

Hard-wearing wood handle with three fill materials: brass wire for static-free cleaning, chemical resilient nylon for durability and stainless steel for resistance to corrosion and high temperatures. Easy-grip curved handle for extra scraping pressure.

Item No.	Description
11350	Detail brush, toothbrush style, wood handle, stainless Steel , 1/2" trim, 7-3/4" OAL.
11351	Detail brush, toothbrush style, wood handle, Brass , 1/2" trim, 7-3/4" OAL.
11352	Detail brush, toothbrush style, wood handle, Nylon , 1/2" trim, 7-3/4" OAL.



Roof Brush

Popular and economical lightweight brush designed for coating roofs, as well as washing and cleaning brick, stone and wood. heavy, hardwood blocks with tapered or threaded handle holes.

Item No.	Description
11945	Roof brush 7", white tampico, 2" trim, 1 tapered hole.



3 Knot Roof Brush

Our pure tampico fiber provides density and flexibility for professional results in jobs ranging from heavy-duty to fine-finish work. Hardwood blocks with two tapered handle holes. handles sold separately; suggested handle 11060.

Item No.	Description
11941	3 knot roof brush, white tampico, 3-1/2" trim.



Masonry Brushes

A terrific all-purpose tool for applying a variety of liquid compounds on rough or smooth masonry surfaces. Available in a variety of fibers and hardwood block designs to meet all specific professional needs.

Item No.	Description
11955	Masonry brush 6-1/2", 4 row, white tampico, 3-1/2" trim.
11956	Masonry brush 6-1/2", 5 row, white tampico, 4" trim.



Call Wharton if you don't see the brush you need.



CLEAN SWEEP SWEEPING COMPOUND



Product Usage	Product Name	Product Number	Container Weight	Container Type
Regular Concrete & Wood Floors	Regular Oil Base (Green or Red)	S2100	50#	Box
		S2110	100#	Box
		S2120	100#	Drum
		S2150	300#	Drum
		S2140	200#	Drum
Finished Wood Painted & Sealed Floors	No Grit Oil Base (Green or Red)	S3010	50#	Box
		S3030	100#	Drum
Resilient Tile, Marble, Rubber, Cork & Terrazzo Floors	Wax Base (Green or Red)	S4065	50#	Box
		S4100	100#	Drum

In stock

Note: All products encased in poly liners.



st. nick brush company

BROOMS AND MOPS

street brooms are the heavy-duty sweeps used by maintenance workers, road crews, and farmers. They make great backyard brooms, moving snow, heavy debris, and leaves with ease. Palmyra and African Bass are natural fibers derived from palm trees. The St. Nick Brush is new to our line. It combines the economy of palmyra with the quality of African bass.

Sizes: 14" (6-1/4" trim); 16" (4-1/4", 5-1/4" and 6-1/4" trim); 18" (5-1/4" trim); 24" (5-1/4" trim); 16" thin block (4-1/4", 5-1/4" and 6-1/4" trim). **Materials:** Choose from Undyed and Dyed Palmyra, African Bass, Bass/Palmyra, Brown and Orange Poly, White Plastic and White Styrene.



garage brushes

Palmyra. The rugged red-dish-brown fiber from India performs well on wet or dry floors. This brush effectively moves everything from shavings to heavy rubbish. Fibers are firmly staple-set into a lacquered hardwood block with two threaded handle holes. **Sizes:** 14", 16", 18", 24", 30" and 36" (4" trim).

Dandy is an economically priced garage or patio brush. There is one threaded staff hole in a hardwood block. **Sizes:** 14", 16", 18" and 24" (3" trim).



floor sweeps

Tampico is a natural fiber for which there is no plastic substitute. It is unsurpassed in most general sweeping applications. It can absorb 65% more water than plastic fibers, and makes an excellent scrubbing and surface finishing brush. **Sizes:** 14", 16", 18", 24", 30" and 36" (2-1/2" trim); 12", 14", 16", 18", 24", 30" and 36" (3" trim); 18" and 24" (3" trim thin block).



Horse Hair Sweeps are champion performers on smooth floors. This broom is able to sweep up the tiniest bits of dust and dirt. It is especially effective on wood floors because its natural characteristics keep it from scratching the floor. **Sizes:** 14", 16", 18", 24", 30" and 36" (3" trim).



Warehouse Brooms

Designed for heavy-duty sweeping. These corn brooms are ideal for industrial and household use.



4-Ply Cotton Mops

With 5" wide band. Industrial grade. Good for general janitorial use.



Metal Head "Wing Nut" Mop Handles

Wooden handle wing nut type head. For use with mop heads up to 16.53" overall w/head.



16" Wide Metal Dust Pan

For heavy-duty cleanups. Black enamel finish. 20-gauge steel corrugated pan.



Dixon Carpenter Pencils

Features:

Dixon's "Red & Black" carpenter pencil lays down a traditional rich black mark. It's easy to see, easy to sharpen, smooth marking and long lasting. Available in three grades: soft, medium and hard.

Item	Description
14100	7" Medium (Red Only)
19971	7" Soft (Red and Black)
19972	7" Medium (Red and Black)
19973	7" Hard (Red and Black)



Dixon Redimark Permanent Marker - Metal Barrel

Features:

Excellent durability! Six inch metal barrel permanent marker is leak-proof with a seamless metal body. Heavy-duty chisel felt-tip with anchored nib construction. Marks on wood, metal and more. Fast drying fade resistant permanent ink. AP certified non-toxic.

Item	Description
87110	Red
87140	Green
87170	Black
87180	Blue



Dixon High Heat Metal Marker

Features:

For use on cold metal prior to heating. Applied at room temperature, legible to 2200°F. No toxic fumes, very low spattering. Hex shaped.

Item	Description
63300	White



Dixon Melt Crayon Marker 66

Features:

For use on hot metal. Applied at 200°F, legible to 1200°F. Hex shaped 4-1/2" x 1/2". Mark will turn from yellow to brown at 1500°F but will still remain visible.

Item	Description
66000	Low Temp, Yellow



Dixon Melt Crayon Marker 63HT

Features:

For use on hot metal. Applied at 300°F keeps white color without flaking to 1200°F. Hexagonal shape 4-1/2" x 1/2". Excellent color stability under long heat soaks.

Item	Description
63000	Medium Temp, White



Dixon Lumber Crayons

Features:

Sets the standard for lumber crayons. These extruded lumber crayons last up to 10 times longer than ordinary molded wax crayons. Fade-proof, water-proof, smear-proof. Won't melt in direct sunlight. Will work on wet (green) lumber or dry wood, metal, concrete and most other surfaces. Each crayon is individually UPC coded. Hex shaped 4-1/2" x 1/2" to fit lumber crayon holders. Thirteen colors to choose from. One dozen per box.



Item	Description
49200	Pink
49300	Purple
49400	Carbon Black
49500	Brown
49600	Yellow
49700	Terra-Cotta
52000	Red
52012	Soft-Red
52100	Blue
52112	Soft-Blue
52200	Green
52300	White
52600	Fluorescent Pink

Dixon Graphite Lumber Crayons

Features:

Contains no wax! Perfect for hot environments. Will not melt when applied to hot metal. Pure black marks, fade-proof, water-proof, smear-proof. Won't melt in direct sunlight. Will work on wet (green) lumber or dry wood, metal, concrete and most other surfaces. Hex shaped 4-1/2" x 1/2" to fit lumber crayon holders. Four grades to choose from. One dozen per box.



Item	Description
36200	Hard
36500	Very Soft
36512	Soft

Dixon Walnut Handle Crayon Holder

Features:

High quality wood holder can accommodate both crayons and markers for increased convenience. It can hold product that is up to 1/2" in diameter and holds both round and hexagonal shapes. Walnut Crayon Holder has a metal chuck and a wrist strap hole for increased durability and functionality.



Item	Description
00500	Wooden Lumber Crayon Holder



BALL POINT MARKERS

All of Nissen Ball Point Markers feature durable aluminum tubes with non-clogging, tough case-hardened steel points and precision 440 Stainless Steel Balls. These handy markers will write in any position: horizontal; vertical; even overhead.

Ball Point Metal Markers

1/8 in. Point Size Metal Markers

Item#	Color
MMWHM	White
MMYEM	Yellow
MMBKM	Black
MMBRM	Brown
MMBUM	Blue
MMGNM	Green
MMORM	Orange
MMPIM	Pink
MMREM	Red
MMPUM	Purple
MMGYM	Gray
MMTAM	Tan

3/16 in. Point Size Metal Markers

Item#	Color
MMWHB	White
MMYEB	Yellow
MMBKB	Black
MMBRB	Brown
MMBUB	Blue
MMGNB	Green
MMORB	Orange
MMPIB	Pink
MMREB	Red
MMPUB	Purple
MMGYB	Gray
MMTAB	Tan

5/64 in. Point Size Metal Markers

Item#	Color
MMWHF	White
MMYEF	Yellow
MMBKF	Black
MMBRF	Brown
MMBUF	Blue
MMGNF	Green
MMORF	Orange
MMPIF	Pink
MMREF	Red
MMPUF	Purple
MMGYF	Gray
MMTAF	Tan



Low Chloride Metal Markers

The Nissen Low Chloride Metal Marker was specifically designed to safely mark metals which are attacked by halogens and low melting metallics. It will not impart contaminants that could cause cracking or weakening of the metal, especially with heat applications such as welding or cutting.

- Marks on rough, smooth, wet, oily or dry surfaces.
- Meets most specifications for Stainless Steel and nuclear components. Independent Laboratory Certifications of Analysis are available and traceable to each marker.
- Marks withstand heat and weathering; they won't chip, peel, fade or rub-off.
- Available in 8 bright, high-gloss colors and in 3 point sizes.

1/8 in. Low Chloride Metal Markers

Item#	Color
LCWHM	White
LCYEM	Yellow
LCBKM	Black
LCBUM	Blue
LCGNM	Green
LCORM	Orange
LCPIM	Pink
LCREM	Red

3/16 in. Low Chloride Metal Marker

Item#	Color
LCWHB	White
LCYEB	Yellow
LCBKB	Black
LCBUB	Blue
LCGNB	Green
LCORB	Orange
LCPIB	Pink
LCREB	Red

5/64 in. Low Chloride Metal Markers

Item#	Color
LCWHF	White
LCYEF	Yellow
LCBKF	Black
LCBUF	Blue
LCGNF	Green
LCORF	Orange
LCPIF	Pink
LCREF	Red

High Temperature Metal Marker

The Nissen High Temperature Metal Marker provides legible markings at temperatures as high as 2100°F (1150°C).

- Marks on any surface; rough or smooth; wet, oily or dry.
- Available in 2 lead-free colors with a 1/8 in. point size.

Item#	Color
HTWHM	White
HTBKM	Black



Penamark Marker

The Nissen Penamark Marker is designed for fabricators. Marks placed on bare metal will bleed through the primer and remain visible. The penetrating action can be stopped, so as not to bleed through the final coating.

- Marks on any surface; rough or smooth; wet oily or dry.
- Available in dark blue ink with a 3/16 in. point size.

Item#	Color	Size
PMS	Dark Blue	3/16 in.



Textile Markers

The Nissen Textile Markers are used to permanently mark fabrics where permanent identification is required.

- Marks resist soaping, washing, degumming, fulling, caustic, scouring, carbonizing and dyeing processes.
- Available in 6 colors and 4 point sizes.

5/64"
1/8"
3/16"





STEEL STAMPS

*General Purpose
Steel Hand
Stamps*



- For hand-held, hammer-struck applications.
- Crowned striking end insures full force to the center of the stamp.
- Textured shanks provide a firm, easy grip.
- Packed in durable plastic or sturdy wood storage containers.

Size In.	Overall Size Inches Sq. x L.	Letter Sets	Number Sets	Combination Sets
1/16	1/4 x 2-3/8	20100	20501	20622
3/32	1/4 x 2-3/8	20150	20521	20623
1/8	1/4 x 2-3/8	20200	20541	20624
3/16	5/16 x 2-3/8	20250	20561	20625
1/4	3/8 x 2-5/8	20300	20581	20626
3/8	1/2 x 2-3/4	20350	20601	20627
1/2	5/8 x 3	20400	20621	--

**STEEL TYPE/
HAND MODEL TYPE HOLDERS**

For multiple character marking

Save time when you mark metal. In one stroke, a series of letters and numbers may be stamped on a product or name plate with uniform legibility. Hand Model Type Holder is furnished with spring pin to hold the notched type. An Allen wrench and screw are included to lock the type together.

When ordering, please include:

- Holder number along with capacity of holder and type size. Hanson notched steel type 1" long must be used with the holder.
- No other steel stamps fit.
- Size and quantity of each character of Hanson notched steel type required.
- Blank spacers for spaces between characters or for filling the unused capacity of the holder. The holder will not stamp unless it is filled to capacity with the steel type or blank spacers.

Number	Character Capacity	Size
27600	10	1/16"
27601	16	1/16"
27620	8	1/8"
27621	12	1/8"
27624	15	1/8"
27604	10	3/16"
27605	15	3/16"
27608	8	1/4"
27609	12	1/4"
27610	6	3/8"
27611	10	3/8"
27612	4	1/2"
27613	6	1/2"



LUMBER CRAYONS

- Professional, long-lasting extruded crayon.
- Durable Premier Grade gives you more impressions per crayon.
- Standard Grade for medium duty marking.
- For marking wood, metal or concrete surfaces.

Standard	Premier	Color
10365	10382	Red
10366	10383	Blue
10367	10384	Black
10368	10385	Yellow

BRASS INTERLOCKING STENCILS

- Durable brass for long-lasting service.
- Clean up easily with paint solvent.
- Quick, legible signs on all surfaces.
- Stencils slide together and come apart easily.
- Use brush or spray ink, paint or use markers.



15 pc. set Numbers	Size	33 pc. set Letters	92 pc. set Combo
10006	1/2"	10026	10146
10007	3/4"	10027	10147
10008	1"	10028	10148
10009	1-1/2"	10029	10149
10011	2"	10031	10151
10012	2-1/2"	10032	10152
10013	3"	10033	10153
10014	4"	10034	10154
10015	5"	10035	10155
10016	6"	10036	10156

**PARKING LOT/
SAFETY SIGN STENCILS**

- Made of sturdy .015" PVC plastic and offer a wide variety of safety warning messages.
- All stencils conform to OSHA regulation 1910.145. Just tape to surface and spray or roll on paint.



**FLAGGING TAPE -
FLUORESCENT COLORS -
1-3/16" X 150'**

Flagging Tape provides superior visibility for construction sites, work zones and safety areas. Hanson's bright selection of colors give our polyplastic Flagging Tape superior visibility when laying out boundaries or marking problem areas. The intense colors permit easy sighting, even from great distances. Fluorescent colors available in 150' rolls, standard colors in 300' rolls. Flagging Tape is 1-3/16" wide.



**METAL TAGS - IN ALUMINUM,
BRASS and STAINLESS STEEL**

- In 18-gauge (.040") unless otherwise indicated.
- Custom lettering and/or numbering.
- Durable brass withstands constant handling.
- Use aluminum to identify machines and equipment.
- Stainless Steel is ideal for severe corrosive conditions.
- Choose steel for attachment by welding.
- Order stamping (sunk) with or without enamel filling in the characters.
- Attach with screws, adhesive backs.

BARRICADE SAFETY TAPE

- 200' - 300' - 1000' lengths available.
- Professional Grade, Easy to Read.
- Other legends and sizes available.
- 3" wide tape with 2" black characters on yellow tape.



ADHESIVE FLOOR MARKING TAPE

This adhesive-backed tape features bold, highly visible black and yellow stripes. Highly durable, it's perfect for marking traffic patterns on floors. Rolls are 2" wide by 54'.





Lee's Raparound: The perfect guide for welders, pipefitters and layout men.

Little Helper 4" x 60" (10 x 152cm). Standard ruler included.



Much more than just an ordinary raparound! Lee's Raparound is the pipefitter's helper that can be used as a straight edge, square and scale. Precision cutting gives our raparounds a smooth, clean, long-lasting edge for marking. It has layouts for 3-, 4-, 5- and 6-piece 90 degree elbows, decimal equivalents, protractor and other useful information for welders and fitters. Made of rugged, heat-resistant material, all printing in dense black. Every tool kit should have one.

Get a Master Helper... made of heavy gauge material, the increasingly popular Master Helper is heat resistant, thicker and more durable. It also provides useful information in dense black printing. 5-3/4" x 60" (15 x 152cm). Standard and metric rulers included.

Lee's Magna Raps

Flexible magnetic Raparounds are now available for use with pipe up to 48". This new high-tech material is self-aligning and "hugs" the pipe. Makes accurate pipe layout a cinch.

<i>for</i> Pipe Sizes	<i>use</i> Raparounds	<i>or use</i> Magna Raparounds
Thru 6"	R-6 Mini Helper	M-6 MiniMag 3" x 48"
Thru 12"	R-12 Little Helper (printed)	M-12 Magna Helper 4" x 60" (printed)
Thru 18"	R-18 Master Helper (printed)	M-18 Magna Master 6" x 60"
Thru 24"	R-24 7" x 90" (18 x 229cm)	M-24 Big Inch 6" x 90"
Thru 36"	R-36 7" x 120" (18 x 305cm)	M-36 Big Inch 6" x 120"
Thru 48"	R-48 7" x 150" (18 x 381cm)	M-48 Big Inch 6" x 150"
Thru 60"	R-60 7" x 190" (18 x 483cm)	

Other Raparounds available on order; cut any length, any width.

★ ★ **LEE Products are Made in the USA** ★ ★

Manufacturers of specialty tools for the welding and pipefitting trades.





Extension Gasket Cutters

Cut accurate gaskets quickly and efficiently.

- Hefty brass cutting head slides easily over a variety of gasket materials.
- Modular extension design allows you to quickly adjust your cutting size from 1/4" up to 61" (6mm-1550mm) in diameter.
- Special cutting blades are held securely, ensuring consistent and repetitive cuts in material up to 3/4" (19mm) thick.
- Cutting boards are complete with fiber cutting pads.
- Choose from 12 convenient kits to accommodate your cutting requirements.



Kit No. 1 (100K13) – Cuts 1/4" I.D. to 13" O.D. Metric Kit (100KM330) – Cuts 6mm I.D. to 330mm O.D.

- Weight:** 10.4 lbs. • Gasket Cutter Blades (6)
- Parts Included:** • Pivot Post
- Cutter Block & Head Assembly
 - Cutter Head Screws (2)
 - Knurled Nuts (2)
 - Fiber Washers (2)

- 1/2" Short Center Pin
- 3/4" Long Center Pin
- 18" Cutting Board
- Post with Offset Pin

- Cutting Knob for Small Diameters
- Piercing Tool
- Hex Key



Kit No. 2 (100K25) – Cuts 1/4" I.D. to 25" O.D. Metric Kit (100KM635) – Cuts 6mm I.D. to 635mm O.D.

- Weight:** 10.5 lbs. • Pivot Post
- Parts Included:** • Pivot Post for Extension Bars
- Cutter Block & Head Assembly
 - Cutter Head Screws (2)
 - Gasket Cutter Blades (6)
 - Knurled Nuts (3)
 - Fiber Washers (3)
 - 1/2" Short Center Pin

- 3/4" Long Center Pin
- Extension Bar 13" to 25"
- 18" Cutting Board
- Cutting Knob for Small Diameters

- Post with Offset Pin
- Piercing Tool
- Hex Key



Kit No. 3 (100K37) – Cuts 1/4" I.D. to 37" O.D. Metric Kit (100KM940) – Cuts 6mm I.D. to 940mm O.D.

- Weight:** 10.8 lbs. • Pivot Post
- Parts Included:** • Pivot Post for Extension Bars
- Cutter Block & Head Assembly
 - Cutter Head Screws (2)
 - Gasket Cutter Blades (6)
 - Knurled Nuts (3)
 - Knurled Nut for Extension Bar
 - Fiber Washers (3)

- 1/2" Short Center Pin
- 3/4" Long Center Pin
- Extension Bar 13" to 25"
- Extension Bar over 25"
- 18" Cutting Board

- Cutting Knob for Small Diameters
- Post with Offset Pin
- Piercing Tool
- Hex Key



Kit No. 4 (100K49) – Cuts 1/4" I.D. to 49" O.D. Metric Kit (100KM1245) – Cuts 6mm I.D. to 1245mm O.D.

- Weight:** 11.8 lbs. • Pivot Post
- Parts Included:** • Pivot Post for Extension Bars
- Cutter Block & Head Assembly
 - Cutter Head Screws (2)
 - Gasket Cutter Blades (6)
 - Knurled Nuts (3)
 - Knurled Nuts for Ext. Bars (2)
 - Fiber Washers (3)

- 1/2" Short Center Pin
- 3/4" Long Center Pin
- Extension Bar 13" to 25"
- Extension Bar over 25" (2)
- 18" Cutting Board

- Cutting Knob for Small Diameters
- Post with Offset Pin
- Piercing Tool
- Hex Key



Kit No. 5 (100K61) – Cuts 1/4" I.D. to 61" O.D. Metric Kit (100KM1550) – Cuts 6mm I.D. to 1550mm O.D.

- Weight:** 11.8 lbs. • Pivot Post
- Parts Included:** • Pivot Post for Extension Bars
- Cutter Block & Head Assembly
 - Cutter Head Screws (2)
 - Gasket Cutter Blades (6)
 - Knurled Nuts (3)
 - Knurled Nuts for Ext. Bars (3)
 - Fiber Washers (3)

- 1/2" Short Center Pin
- 3/4" Long Center Pin
- Extension Bar 13" to 25"
- Extension Bar over 25" (3)
- 18" Cutting Board

- Cutting Knob for Small Diameters
- Post with Offset Pin
- Piercing Tool
- Hex Key



Kit No. 6 (100U13) – Cuts 1/4" I.D. to 13" O.D. Metric Kit (100UM330) – Cuts 6mm I.D. to 330mm O.D.

- Weight:** 4.5 lbs. **Parts Included:** Same as listed in Kit No. 1 but without the cutting board.



Rayovac® Lantern Batteries

Stock Number	Mfr. UPC No. 0-12800-	Description	Batt. Size		Standard Case		Cu. Ft.
			Std. 6V	918 Size	Case Qty.	Wt.	
Lantern and Barricade Batteries							
6V-GP	42135-0	6-Volt Spring Terminals, Industrial, General Purpose	x	-	12	15.50	0.27
6V-HD	42150-3	6-Volt Spring Terminals, Industrial, Heavy-Duty	x	-	12	16.80	0.27
6V-HDM	42168-8	6-Volt Spring Terminals, Industrial, Heavy-Duty Maximum	x	-	12	17.24	0.27
806	46366-4	6-Volt Spring Terminals, Maximum® Alkaline Lantern Battery	x	-	6	9.18	0.17
918	18689-1	6-Volt Screw Terminals, General Purpose	-	x	6	16.90	0.31
928	38026-8	6-Volt Screw Terminals, Heavy-Duty	x	x	6	17.50	0.31
926	20628-5	12-Volt Screw Terminals, General Purpose	-	x	6	16.80	0.31
941*	22285-8	6-Volt Spring Terminals, General Purpose	x	-	12	15.50	0.27
944R	22343-5	6-Volt Spring Terminals, Heavy-Duty	x	-	6	7.98	0.15
944-2R*	37408-3	TWIN PACK, Two 944 6-Volt Heavy-Duty Lantern Batteries in Consumer Sleeve	-	x	4	10.71	0.19
945R4	22335-0	6-Volt Screw Terminals, Heavy-Duty	x	-	4	5.372	0.101
HD-B-12V	38497-6	12-Volt Type B Barricade Flasher Lantern Battery	-	-	2	27.00	0.40
Emergency, Ignition, Fencer Batteries							
641	22640-5	6-Volt Screw Terminals, Electric Fences	-	-	6	37.00	1.08
803	46441-8	7.5-Volt Screw Terminals, Maximum Alkaline Emergency Lantern Battery	-	-	4	22.10	0.40
903	16576-6	7.5-Volt Screw Terminals, Emergency	-	-	4	27.76	0.61
922	20875-3	12-Volt Screw Terminals, Emergency	-	-	4	25.00	0.73

*Consumer Label

Lantern and Barricade Batteries



Lantern and Barricade Batteries

There's a battery designed to provide long lasting life in all your industrial applications.

- Full line of 6-Volt batteries.
- Manufactured in a high performance, no-mercury-added formulation.
- Meets EPA requirements for landfill disposal.
- Guaranteed against leakage.



Alkaline Industrial Maximum Batteries

Rayovac's new and improved Alkaline Industrial batteries are ideal for all of your high drain frequent use devices.

Stock Number	Mfr. UPC No. 0-12800-	Qty.
AL-D	00042-5	6 Pack
AL-AA	00043-2	8 Pack
AL-AAA	00045-6	8 Pack
AL-9V	00044-9	6 Pack



Rayovac® Lights

Stock Number	Mfr. UPC No. 0-12800-	Description	Batt. Size	Bulb Used	Standard Case		
					Qty.	Case Wt.	Cu. Ft.
IN2	45184-5	2-Cell D Size Yellow Industrial Flashlight with Ring Hanger	D	PR2	6	2.20	0.31
IN2-K	45185-2	2-Cell D Size Yellow Industrial Flashlight with Krypton Bulb	D	K2	6	2.20	0.31
IN2-KML	45188-3	2-Cell D Size Yellow Industrial Flashlight with Krypton Bulb and Magnet	D	K2	6	2.50	0.31
IN2-CT	45189-0	2-Cell D Size Yellow Industrial Flashlight w/ Continuity Tester (10 ohms) and Ring Hanger	D	PR2	6	2.50	0.47
IN2-MS*	45190-6	2-Cell D Size Orange Industrial Safety Flashlight w/ Safety Head and Ring Hanger	D	PR2	6	2.50	0.31
IN3	45191-3	3-Cell D Size Yellow Industrial Flashlight with Ring Hanger	D	K3	6	2.60	0.37
IN4	45208-8	2-Cell AA Size Yellow Industrial Flashlight with Ring Hanger	AA	T1	6	0.90	0.12
ISL2D-B	46583-5	2-Cell D Size Industrial Swivel Flashlight with 2 Heavy-Duty D Size Batteries	D	K2	6	6.30	0.60
ILI2AA-B	46580-4	2-Cell AA Size Industrial Swivel Flashlight with 2 Heavy-Duty AA Size Batteries	AA	T1	6	1.30	0.21
ISL4D-BTP6	48613-7	4-Cell D Size Swivel Lantern w/ Adapter and 4 Heavy-Duty Batteries	D	K13	6	15.40	1.347
KFL	40337-0	6-Volt Lantern w/ Krypton Bulb and Flip Stand	6V-HD	K13	6	4.80	0.83
16V-B2	46578-1	6-Volt Industrial Lantern w/ Krypton Bulb w/ Heavy-Duty Battery and Flip Stand	6V-HD	K13	2	5.13	0.445
16V-MS	56338-1	6-Volt Orange Industrial Lantern with Safety Head	6V-HD	PR13	6	5.97	0.134
IHLT4D	47187-4	4-Cell D Size Industrial Head-Light w/ Heavy-Duty Belt Pack in Tuck Carton	D	K13	6	5.10	0.42
IV2D	48233-7	2-Cell D Size Value Worklight w/out Batteries in Tuck Carton	D	PR2	12	3.82	0.44
IV2DM	48739-4	2-Cell D Size Value Worklight with Magnet in Tuck Carton	D	PR2	6	5.00	0.42
301K	46556-9	6-Volt Metal Lantern with Krypton Bulb and 918 General Purpose Battery	918	K13	6	27.00	1.76
H301K	45588-1	6-Volt Metal Lantern with Krypton Bulb (Head Only)	918	K13	6	1.50	0.23

*For use in hazardous locations. UL Listed and approved by U.S. Dept. of Labor, MSHA.



Industrial Lights

Rayovac offers a wide variety of top-quality lighting devices. There's one that's right for every industrial application.

- Superior working spot pattern with numerous quality and performance features.
- Full line includes: superior industrial lights, magnet lights, safety lights and continuity testers.
- Lifetime warranty.

Industrial Lights



Rayovac® Lights

Stock Number	Mfr. UPC No. 0-12800-	Description	Case Qty.	Imprt. Color	Line Qty.	Chrtr. Qty.	Imprt. Area (in.)
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Imprinted Lights (minimum order required*)

IMIN2	43703-0	2-Cell D Size Yellow Industrial Flashlight with Ring Hanger, Interchangeable IN2	24	Black	2	22	2.5 x .4
IMIN2-K	43711-5	2-Cell D Size Yellow Industrial Flashlight with Krypton Bulb and Ring Hanger	24	Black	2	22	2.5 x .4
IMIN2-MS**	45952-0	2-Cell D Size Orange Industrial Safety Flashlight w/ Safety Head and Ring Hanger	24	Black	2	25	3.0 x .4

Stock Number	Mfr. UPC No. 0-12800-	Description	Batt. Size	Bulb Used	Standard Case Qty.	Case Wt.	Cu. Ft.
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Bulk Packaged Lights

I2D Bulk	48059-3	2-Cell D Size Yellow Industrial Flashlight with Ring Hanger	D	PR2	24	10.00	0.72
I2D-K Bulk	49091-2	2-Cell D Size Yellow Industrial Flashlight with Krypton Bulb and Ring Hanger	D	K2	24	10.00	0.72
I2D-KML Bulk	49092-9	2-Cell D Size Yellow Industrial Flashlight with Krypton Bulb and Magnet	D	K2	24	10.00	0.72
IN2-MS** Bulk	43745-0	2-Cell D Size Orange Industrial Safety Flashlight w/ Safety Head and Ring Hanger	D	PR2	24	10.00	0.72
IN4 Bulk	45237-8	2-Cell AA Size Yellow Industrial Flashlight with Ring Hanger	AA	PR4	24	2.07	0.23
IV2D Bulk	48234-4	2-Cell D Size Yellow Utility Flashlight in Bulk	D	PR2	24	6.11	0.65
R2AA Bulk	48046-3	2-Cell AA Size Roughneck® Flashlight with Spot/Flood Focus, Waterproof	AA	T1	144	10.80	1.00
R2D Bulk	48045-6	2-Cell D Size Roughneck® Flashlight with Spot/Flood Focus, Waterproof	D	Xenon	72	33.00	2.81

Imprinted Industrial Lights



Imprinted and Bulk Packaged Lights

Imprinted Lights Information

*Minimum order of 144 pieces of each light ordered. No initial set up charge. Lights can be imprinted with either block Helvetica letters or logos. For logo imprint, supply black/white camera-ready or electronic artwork with order. Imprint available in black. Lead time is eight weeks for new order, six weeks for reorder.

For Use in Hazardous Locations

**Approved by U.S. Department of Labor, MSHA and Underwriters Laboratories (UL) for Class I Groups C and D and Class II Group G.

Meets U.S. Coast Guard ASTM F1014-86 Type II requirements for flashlights for use in hazardous locations on vessels.

Bulk Packaged Lights



Rayovac® Lights

Stock Number	Mfr. UPC No. 0-12800-	Description	Batt. Size	Bulb Used	Qty.	Standard Case	
						Case Wt.	Cu. Ft.
Xtreme™ Industrial Lights							
R2AA-BA	48572-7	2-Cell AA Size Industrial Xtreme™ Flashlight with Alkaline Batteries	AA	T1	6	1.60	0.10
R2D	45113-5	2-Cell D Size Xtreme™ Flashlight without Batteries	D	XPR102	6	3.00	0.34
R2D-BA	48573-4	2-Cell D Size Industrial Xtreme™ Flashlight with Alkaline Batteries	D	XPR102	6	5.70	0.39
R3D	45116-6	3-Cell D Size Xtreme™ Flashlight without Batteries	D	Xenon	6	4.10	0.45
Industrial/Outdoor Lights							
REZ2D	48820-9	2-Cell D Size Industrial Flashlight with Spot/Flood Focus Feature, w/out Batteries	D	XPR102	6	3.90	0.524
SP3NILED-BX	49635-8	3 in 1 LED Flashlight with 3 Alkaline Batteries	AA	T3AAA	4	2.20	0.29
SP4D-KB	47394-6	Camper 4-Cell D Size Lantern with Krypton Bulb	D	K13	6	2.10	0.44
SP8D	48554-3	8-Cell D Size Area Lantern with Fluorescent Twin Tube	D	F9W-1	4	13.20	1.93
SPHLTLED-B	49139-1	LED Headlight	AAA	-	4	1.60	0.25
SPX4D	49932-8	High-Pressure Xenon 4D Beam Lantern (without Batteries)	D	HPX4D	2	4.00	0.43
SPX3AAHL	49933-5	High-Pressure Xenon 3AA Headlight (without Batteries)	AA	HPX3AA	4	1.70	0.26
SPX4AA	49934-2	High-Pressure Xenon 4AA Flashlight (without Batteries)	AA	HPX4AA	4	2.40	0.41



Xtreme™ Industrial Lights



R2AA-BA



R2D



R2D-BA



R3D

Xtreme™ Industrial Lights

The Xtreme™ light is the toughest, most durable flashlight Rayovac makes.

- Withstands a 10 ft. drop test.
- Great spot/flood focus.
- Shock absorbing bulb system.
- Water resistant.

Industrial Lights



REZ2D



SP3NILED-BX



SP4D-KB



SP8D



SPHLTLED-B



SPX4D



SPX3AAHL



SPX4AA



NYLON SEINE TWINE

High tenacity filament nylon. Available in sizes 6 - 22, twisted and braided. Put in 1/4-lb., 1/2-lb., and 1-lb. tubes. A wide variety of colors available. Also referred as chalk line and mason line. Available lengths include 250', 500' and 1,000' tubes.

Size No.	Approx. Avg. Tensile Strength (Lbs.)	Approx. Avg. Tensile Strength (Kgs)	Approx. Yield Per Pound (Feet)	Approx. Yield Per Pound (Meters)
9	84	38	2300	701
12	106	48	1500	457
15	126	57	1400	427
18	170	77	1090	32
21	210	95	860	262
24	54	115	750	229
30	295	134	635	174
36	334	154	570	156
48	430	253	400	122
60	558	253	295	90
92	630	286	270	82

Applications:

- Chalk lines.
- Mason lines.
- Trot lines.
- Hobbies.
- Gardening.
- Fishing lines.
- Net repair.
- Plumb lines.



Properties:

- Excellent resistance to rot, mildew, abrasion, oil and most chemicals.



Atlas
WELDING ACCESSORIES, INC.

WELD CLEANING TOOLS



ATLAS STEEL-GRIP TOMAHAWKS®

There are nine Steel-Grip Tomahawk models with Flex-O steel coil hand grips and a choice of three head styles.

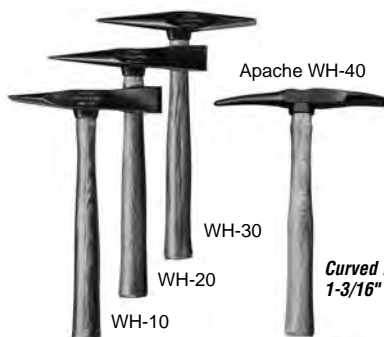
Standard: Most weld cleaning jobs.

Super: Heavy-duty for toughest jobs.

Econo: Lighter and smaller for light duty jobs.

All heads are press fit and cross pinned to steel shafts for the strongest joint possible.

Model	Head Style	Overall Length	Head Length	Overall Weight
Standard				
G	Chisel & Cross Chisel	10-1/2"	6-1/2"	17 oz.
H	Cone & Chisel	10-1/2"	6-1/2"	15 oz.
HCP	Cone & Cross Chisel	10-1/2"	6-1/2"	15 oz.
Super				
K	Chisel & Cross Chisel	11"	7"	18 oz.
L	Cone & Chisel	11"	7-1/2"	17 oz.
LCP	Cone & Cross Chisel	11"	7-1/2"	17 oz.
Econo				
S-10	Chisel & Cross Chisel	10"	6"	14 oz.
S-20	Cone & chisel	10"	6"	13 oz.
S-30	Cone & Cross Chisel	10"	6"	13 oz.



ATLAS LONG-NEK TOMAHAWKS®

Fit-the-hand hickory handles. Balance and feel welders need.

Deep neck steel head design offers 50% greater handle support and protection from splinter when working over edges. Heads are secured by an Atlas process that virtually eliminates loosening.

Curved head with cone and 1-3/16" cross chisel.

Model	Head Style	Overall Length	Head Length	Overall Weight
Long-Nek				
WH-10	Chisel & Cross Chisel	12"	7"	23 oz.
WH-20*	Cone & Chisel	12"	7-3/4"	21 oz.
WH-30	Cone & Cross Chisel	12"	7-3/4"	21 oz.
WH-40	Cone & Cross Chisel	12"	8-1/4"	23 oz.

**In stock at Wharton Hardware & Supply.*



Hardware & Supply Co., Inc.
Supply, Inc. of Virginia
Form Rentals

NJ (856) 662-6935 • PA (215) 925-8800
Metro (703) 569-6660 • VA (703) 455-6700
Clinton, MD (301) 877-8640

The strongest and sturdiest pails on the market

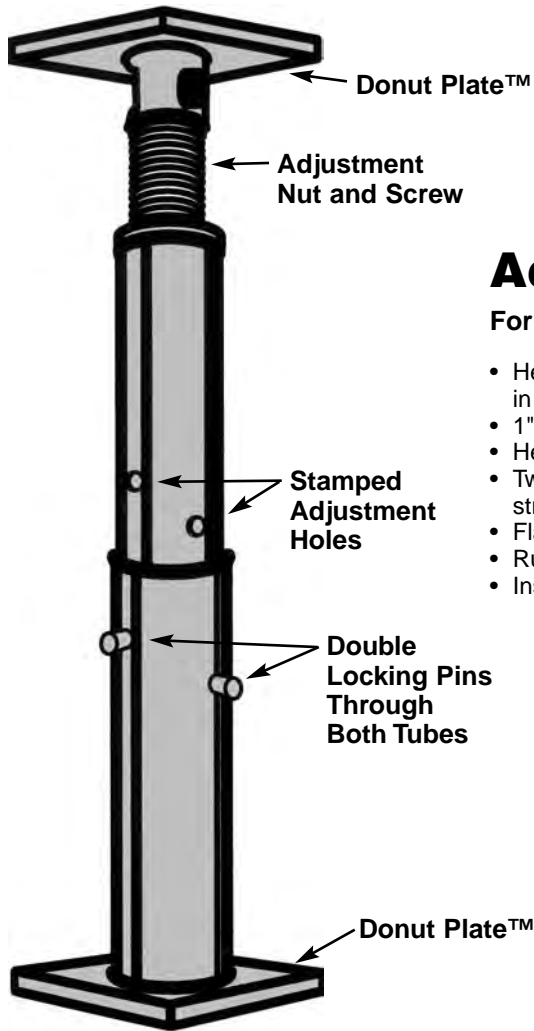
Fortex's pails are ideal for farm, construction or industrial use. 100% reinforced rubber composition makes these products extremely resistant to cold (sub zero) weather cracking. Resistant to rust with its double galvanized fittings and handles.



Specifications

Model	Capacity	Dimensions Dia. x Height	Material	Pouring Lip	Uses
N939-18	18 qt.	13-3/4" x 12"	100% Rubber	x	Ideal for cleaning compounds, general utility and watering stocks.
N700-14	14 qt.	11-1/2" x 11-1/4"	100% Rubber		General purpose use.
N100-12	12 qt.	12-1/2" x 10-1/2"	100% Rubber		Excellent mortar, concrete and plaster pail.
N200-10	10 qt.	11-1/2" x 9-1/4"	100% Rubber		Goat use, maintenance and general utility around the farm.
N400-8	8 qt.	10-3/4" x 8-1/2"	100% Rubber		Calf feeding, excellent for plasterers, farmers and home owners.

Wharton also carries Plastic Pails and Lids.



Adjustable Floor Jacks

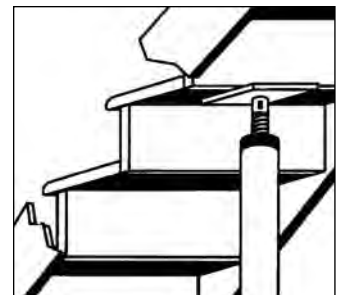
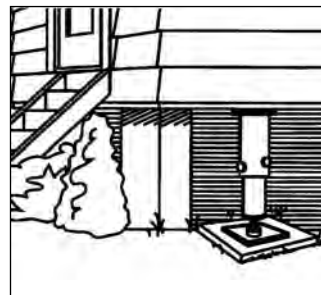
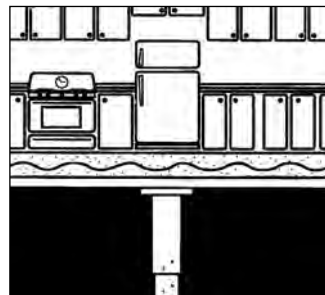
For Temporary Support or Permanent Reinforcement

- Heavy-duty galvanized 13-gauge steel Donut Plates™ lock in top and bottom.
- 1"x7" cold drawn, roll-threaded steel screw (ASTM-A108).
- Heavy-duty steel collar (ASTM-A108).
- Two high carbon steel pins provide additional bearing strength (ASTM-A108).
- Flats for easy adjustment with 3/4" wrench.
- Rust resistant primer on O.D. and I.D.
- Installation instructions included.



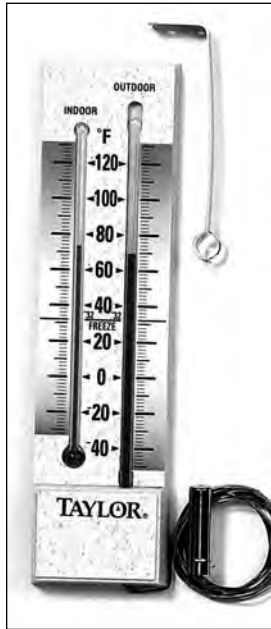
Model #	Adjustment
Mighty Atlas	4'8" - 8'0"
76G - Std	4'3" - 7'6"
79G-Std	4'6" - 7'9"
1G - Std	4'10" - 8'4"
1C - HD	4'10" - 8'4"
2T - HD	3'1" - 5'0"
3T - HD	1'8" - 3'0"
4MH - HD	1'0" - 1'3"

Std = Standard Duty
HD = Heavy-Duty

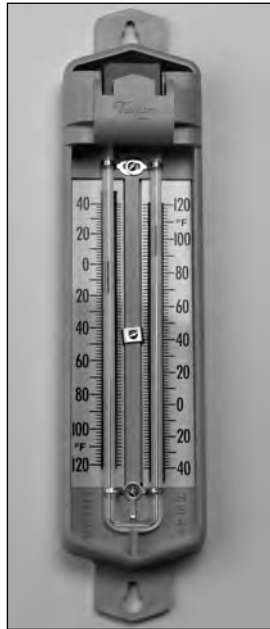


MADE IN THE U.S.A.

Leading the Way in Accuracy™



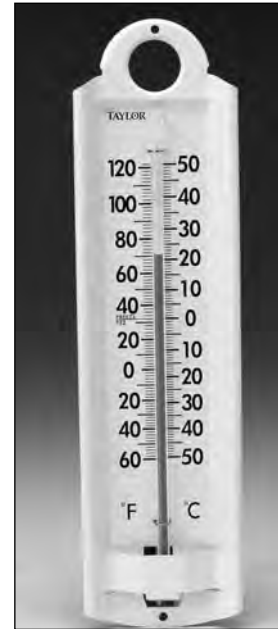
5326
Indoor/Outdoor Thermometer – Read indoor and outdoor temperatures from inside. Large, easy-to-read face. Features the colorful, TempGraph design. Easy installation. 9" x 2-1/2". White.



5458
Indoor/Outdoor Min/Max Thermometer – Magnet reset. Records highest and lowest from last setting. Large easy-to-read face. -40/120°F. Perma-color filled.



5301
Window thermometer – White molded plastic back with aluminum bracket for secure wall mounting. Large, easy-to-read face. Weather resistant and rustproof. 7-5/8" x 2-1/4".



5135
Wall Thermometer – Large, easy-to-read face. Weather resistant and rustproof aluminum for indoor or outdoor use. 8-7/8" x 2-1/4".



5911
Candy-Jelly-Deep Fry Thermometer – Large, easy to read 2-3/4" dial. Temperature range 200°F to 400°F. Adjustable pan clip. Dishwasher safe. Durable 7" stainless steel stem. NSF approved.



6081-5
Meat Thermometer – 2" Dial, 5" stainless steel stem for instant reading when inserting in meat/poultry. Shock proof. Recalibration hex nut. 100°F /200°F. Packed in individual carton. NSF listed.



5989
Instant Read 1" Dial Thermometer – Instant read 0 to 220°F. Shatterproof plastic lens. Exclusive Safe-T-Set recalibration feature. Convenient pocket case. Durable stainless steel stem. NSF approved.



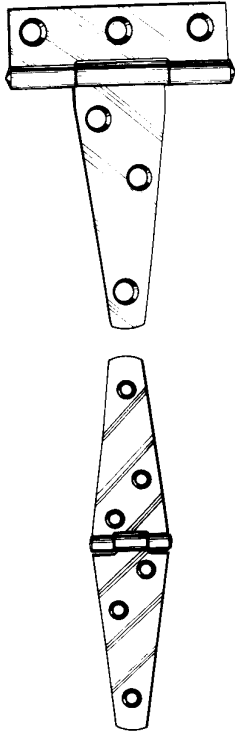
5976J
Soil Thermometer – 20°/180°F and 0°/80°C.



STRAP HINGES AND BARREL BOLTS

TRANS-ATLANTIC CO.

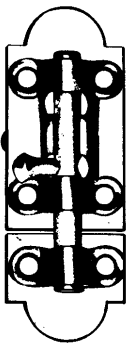
EXTRA HEAVY TEE AND STRAP HINGES FULL USA HEAVY GAUGE & SIZES LIKE STANLEY 902-908 SERIES



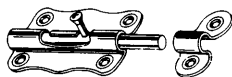
Description	Size	Item No.	Pair Per Case	Weight Per Dozen Pair
TA-1800 — EXTRA HEAVY TEE HINGES				
In Plain Steel, Zinc Plated, and Electro Zinc Plated with Brass Pin and Screws				
NO. TA-1800PS	4"	TA-1800PS	10 doz.	8 lbs.
EXTRA HEAVY TEE HINGES	5"		5 doz.	14 lbs.
plain steel without screws	6"		4 doz.	21 lbs.
Similar Stanley 908	8"		2 doz.	37 lbs.
	10"		1 doz.	57 lbs.
NO. TA-1800GV	4"	TA-1800GV	10 doz.	8 lbs.
EXTRA HEAVY TEE HINGES	5"		5 doz.	14 lbs.
zinc plated without screws	6"		4 doz.	21 lbs.
Similar Stanley 908K	8"		2 doz.	37 lbs.
	10"		1 doz.	57 lbs.
NO. TA-1800HGV-BP	4"	TA-1800HGV-BP	100 pr.	0.8 lbs.
EXTRA HEAVY TEE HINGES	5"		50 pr.	1.1 lbs.
electro zinc plated with brass pin and screws	6"		50 pr.	1.9 lbs.
Similar Stanley SC908RBP	8"		25 pr.	3.3 lbs.
	10"		20 pr.	5.1 lbs.
TA-1900 — HEAVY STRAP HINGES				
In Plain Steel, Zinc Plated, and Electro Zinc Plated with Brass Pin and Screws				
NO. TA-1900PS	4"	TA-1900PS	10 doz.	6.0 lbs.
HEAVY STRAP HINGES,	5"		5 doz.	10 lbs.
plain steel without screws	6"		4 doz.	18 lbs.
Similar Stanley 902	8"		2 doz.	34 lbs.
	10"		1 doz.	51 lbs.
NO. TA-1900GV	4"	TA-1900GV	10 doz.	6.0 lbs.
HEAVY STRAP HINGES	5"		5 doz.	10 lbs.
zinc plated without screws	6"		4 doz.	18 lbs.
Similar Stanley 902K	8"		2 doz.	34 lbs.
	10"		1 doz.	51 lbs.
NO. TA-1900HGV-BP	4"	TA-1900HGV-BP	100 pr.	0.6 lbs.
HEAVY STRAP HINGES	5"		50 pr.	1.0 lbs.
electro zinc plated	6"		50 pr.	1.7 lbs.
with brass pin and screws	8"		25 pr.	3.1 lbs.
Similar Stanley SC1902RBP	10"		20 pr.	4.6 lbs.

BARREL BOLTS

POLYBAGGED AND CARDED (With Screws)



Description	Size	Item No.	Per Case	Weight Per Dozen Units
Barrel Bolts, heavy black Japanned with brass knobs, without screws. (Similar to Stanley #1078)	2"	TA-20651/2J	25 doz.	1.5 lbs.
	2-1/2"		25 doz.	1.8 lbs.
	3"		25 doz.	2.0 lbs.
	4"		25 doz.	3.0 lbs.
	5"		25 doz.	5.3 lbs.
	6"		25 doz.	6.0 lbs.
Barrel Bolts, heavy brass-plated and Cad. plated with screws. (Similar to Stanley #SC1078)	2"	TA-20651/2F	25 doz.	1.5 lbs.
	2-1/2"	TA-20651/2GV	25 doz.	1.8 lbs.
	3"	(both PWS)	25 doz.	2.0 lbs.
	4"		25 doz.	3.0 lbs.
	5"		25 doz.	5.3 lbs.
	6"		25 doz.	6.0 lbs.
Barrel Bolts, heavy brass plated "Carded" with screws. (10 cards/ box). (Similar to Stanley #CD1078)	2"	CD-20651/2F	120 cards	1.0 lbs.
	2-1/2"		120 cards	1.3 lbs.
	3"		120 cards	1.5 lbs.
	4"		120 cards	2.3 lbs.
	5"		120 cards	3.5 lbs.
Barrel Bolts, extra heavy-duty. Steelbrass plated, polybagged with screws.	3"	TA-2084F-PWS	25 doz.	3.1 lbs.
	4"		25 doz.	4.4 lbs.
	5"		25 doz.	6.5 lbs.
	6"		25 doz.	7.6 lbs.



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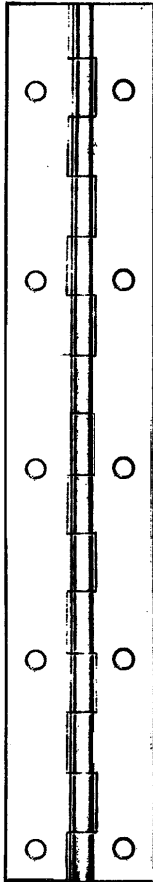
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CONTINUOUS HINGES

TRANS-ATLANTIC CO.

USA HEAVY GAUGE TYPE - USA SPECIFICATIONS BRASS PLATED AND NICKEL PLATED STEEL CONTINUOUS HINGES WITH STEEL PINS



Description	Item No. And Finish	Length	Width Open	Gauge	Length Per Case	Lbs. Per Case
Nickel Plated Steel Pin	TA1311NP-SP (Similar to Stanley 311)	6'	1-1/16"	.040	100	131
With Holes		6'	1-1/4"	.040	100	148
TA1311		6'	1-1/2"	.040	100	168
		6'	2"	.045	50	125
		6'	2-1/2"	.060	50	N/A
		6'	3"	.060	50	N/A
		7'	1-1/2"	.040	100	193
		7'	2"	.045	50	144
		7'	2-1/2"	.060	50	N/A
		7'	3"	.060	50	N/A
		8'	1-1/2"	.040	100	223
		8'	2"	.045	50	166
		8'	2-1/2"	.060	50	N/A
		8'	3"	.060	50	N/A
Brass Plated Steel Pin	TA1311BP-SP (Similar to Stanley 311)	6'	1-1/16"	.040	100	131
With Holes		6'	1-1/4"	.040	100	148
TA1311		6'	1-1/2"	.040	100	168
		6'	2"	.045	50	125
		6'	2-1/2"	.060	50	N/A
		6'	3"	.060	50	N/A
		7'	1-1/2"	.040	100	193
		7'	2"	.045	50	144
		7'	2-1/2"	.060	50	N/A
		7'	3"	.060	50	N/A
		8'	1-1/2"	.040	100	223
		8'	2"	.045	50	166
		8'	2-1/2"	.060	50	N/A
		8'	3"	.060	50	N/A

BRASS PLATED NICKEL PLATED

STEEL CONTINUOUS HINGES WITH SOLID BRASS PINS

Description	Item No. And Finish	Length	Width Open	Gauge	Length Per Case	Lbs. Per Case
TA1311	TA1311BP-BP (Similar to Stanley 311)	6'	1-1/16"	.040	100	131
Brass on steel with Brass Pin, Cold Rolled Steel		6'	1-1/4"	.040	100	148
Screw Holes 2" apart, 1/2" joints		6'	1-1/2"	.040	100	168
		6'	2"	.045	50	125
		6'	2-1/2"	.060	30	120
		6'	3"	.062	20	125
		7'	2-1/2"	.060	30	150
		7'	3"	.062	20	145
		8'	2-1/2"	.060	20	150
		8'	3"	.062	20	155
TA1311	TA1311NP-BP	6'	1-1/16"	.040	100	131
Nickel on Steel Brass Pin		6'	1-1/4"	.040	100	148
		6'	1-1/2"	.040	100	168
		6'	2"	.045	50	125
		6'	2-1/2"	.060	30	120
		6'	3"	.062	20	125
		7'	2-1/2"	.060	30	150
		7'	3"	.062	20	145
		8'	2-1/2"	.060	20	150
		8'	3"	.062	20	155

STEEL CONTINUOUS HINGES WITH STEEL PINS

Description	Item No. and Finish	Length	Width Open	Gauge	Length Per Case	Lbs. Per Case
TA1311 Plain Steel Continuous Hinges, with or without Holes	TA1311PS-SP (Similar to Stanley 311)	6'	1-1/16"	.040	100	131
		6'	1-1/4"	.040	100	148
		6'	1-1/2"	.040	100	168
		6'	2"	.045	50	125



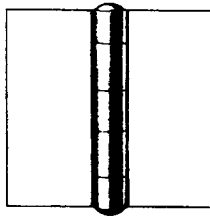


WELDING BUTTS AND SHELF BRACKETS

TRANS-ATLANTIC CO.

HEAVY GAUGE - WROUGHT STEEL WELDING BUTTS FULL SURFACE - BLANK LEAVES NON SWAGGED - TIGHT PIN

3-1/2" x 2-1/4"
144-Gauge

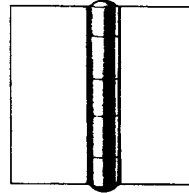


DESCRIPTION:
A full surface welding hinge used extensively on ornamental iron doors and gates.

FINISH: Plain Steel
PACKED: 10 pr./box
WT.: 6 lbs.

TA2850-PS

EXTRA HEAVY-DUTY WROUGHT STEEL WELDING BUTTS



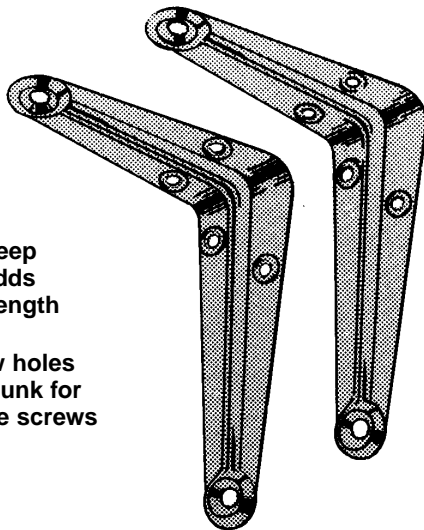
TA2850 PS

Full Service
Blank Leaves
Non-Swagged Tight Pin
Fast spun pin

Size	Gauge Thickness	Pairs Per Box	Pairs Per Master Case
2 x 2	.106	5	100
2-1/2 x 2-1/2	.118	5	100
3 x 3	.128	1	30
3-1/2 x 3-1/2	.144	1	25
4 x 4	.161	1	20
4-1/2 x 4-1/2	.161	1	20
5 x 5	.186	1	20
6 x 6	.206	1	10

HEAVY GAUGE PATTERN SHELF BRACKETS

Heavier than most other lightweight brackets being marketed, such as Stanley 797 Series.



Heavy, deep fluting adds extra strength

All screw holes countersunk for large size screws

NOW AVAILABLE IN 3 ACRYLIC LACQUERED FINISHES

WH - WHITE
BN - BROWN
GE - GREY

These finished brackets need no painting

- 60% heavier than most other lightweight brackets now being marketed such as Stanley #797 Series.
- Acrylic lacquered after fully manufactured, not like many other brands which are manufactured from prepainted sheet steel which result in all unfinished edges and screw holes.
- All screw holes are with fully finished countersinking for use with large size flat countersunk head screws while most USA competitors' brackets are with small non-countersunk screw holes which require round head screws which don't have as much holding power as heavy flathead countersunk screws.

Cross Reference

Lawrence No. 292
Stanley old Series No. 796
National heavy Series No. 110

Description	Size	Lbs. Per Dozen Pair	Dozen Pair Per Master Carton
TA-1100 SERIES	3" x 4"	2.5	12 dz./pr.
Heavy Shelf Brackets	4" x 5"	3.3	12 dz./pr.
(Similar to Stanley old No. 796)	5" x 6"	4.5	12 dz./pr.
Heavy pattern with countersunk holes.	6" x 8"	8.0	6 dz./pr.
Baked Grey Enameled	8" x 10"	11.5	6 dz./pr.
	10" x 12"	14.2	3 dz./pr.
	12" x 14"	18.0	3 dz./pr.



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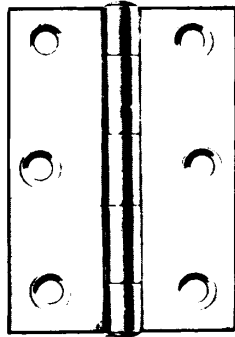
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CABINET HINGES AND BROAD BUTTS

TRANS-ATLANTIC CO.

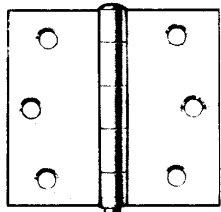
LIGHT NARROW CABINET HINGES AND BACK FLAPS



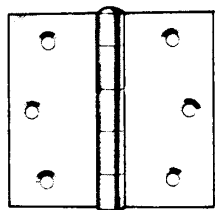
FAST SPUN PIN

Description	Finish	Item No.	Size	Pair Per Case	Weight Per Dozen Pair
TA-2838					
LIGHT NARROW BUTTS Steel, tight pin, without screws					
Light Narrow Butts tight pin Similar Stanley 838	Plain	TA-2838PS	1"	50 doz.	0.5 lbs.
	Steel		1-1/2"	50 doz.	1.0 lbs.
			2"	50 doz.	1.5 lbs.
			2-1/2"	25 doz.	2.3 lbs.
			3"	25 doz.	3.5 lbs.
Light Narrow Butts tight pin Similar Stanley 838	Brass	TA-2838F	1"	50 doz.	0.5 lbs.
	Plated		1-1/2"	50 doz.	1.0 lbs.
			2"	50 doz.	1.5 lbs.
			2-1/2"	25 doz.	2.3 lbs.
			3"	25 doz.	3.5 lbs.
Light Narrow Butts tight pin Similar Stanley 838	Zinc	TA-2838GV	1"	50 doz.	0.5 lbs.
	Plated		1-1/2"	50 doz.	1.0 lbs.
			2"	50 doz.	1.5 lbs.
			2-1/2"	25 doz.	2.3 lbs.
			3"	25 doz.	3.5 lbs.

BROAD BUTTS



LOOSE PIN



FAST SPUN PIN

Description	Size	Item No.	Per Case	Weight Per Dozen Units
BROAD FULL MORTISE, loose pin, without screws, plain steel, (Similar Stanley 804)	2 x 2	TA-2804PS	25 doz. pr.	2.8 lbs.
	2-1/2 x 2-1/2		20 doz. pr.	4.3 lbs.
	3 x 3		12 doz. pr.	6.0 lbs.
	3-1/2 x 3-1/2		5 doz. pr.	12 lbs.
	4 x 4		5 doz. pr.	17 lbs.
BROAD FULL MORTISE, loose pin, electro zinc plated with brass pins & screws (Similar Stanley SC804RBP)	2 x 2	TA-2804HGV-BP	100 pr.	.30 lbs.
	2-1/2 x 2-1/2		100 pr.	.50 lbs.
	3 x 3		100 pr.	.70 lbs.
	3-1/2 x 3-1/2		100 pr.	1.0 lbs.
	4 x 4		100 pr.	1.5 lbs.
BROAD FULL MORTISE, loose pin, electro zinc plated with brass pins & screws (Similar Stanley SC804RBP)	3-1/2 x 3-1/2	RC-2804HGV-BP	100 pr.	1.0 lbs.
	4 x 4	(Rd. Corner)	100 pr.	1.5 lbs.
BROAD FULL MORTISE, tight pin, without screws, plain steel (Similar Stanley 808)	2 x 2	TA-2808PS	25 doz. pr.	2.8 lbs.
	2-1/2 x 2-1/2		20 doz. pr.	4.3 lbs.
	3 x 3		12 doz. pr.	6.0 lbs.
	3-1/2 x 3-1/2		5 doz. pr.	12 lbs.
	4 x 4		5 doz. pr.	17 lbs.
BROAD BLANK Hinges blank, tight pin, flat back (surface welding application) hinges – Plain steel finish (Similar Stanley 808)	2 x 2	TA-2818NH-PS	25 doz. pr.	
	2-1/2 x 2-1/2		20 doz. pr.	
	3 x 3		12 doz. pr.	
	3-1/2 x 3-1/2		5 doz. pr.	
	4 x 4		5 doz. pr.	

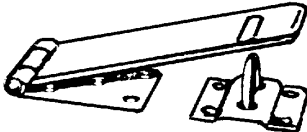
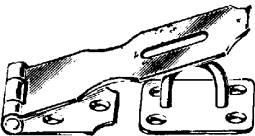





SAFETY AND HINGE HASPS

TRANS-ATLANTIC CO.

SAFETY AND HINGE HASPS NEW WIDER ASSORTMENT INCLUDING SWIVEL TYPE, KEY LOCKING TYPE AND EXTRA HEAVY-DUTY TYPES

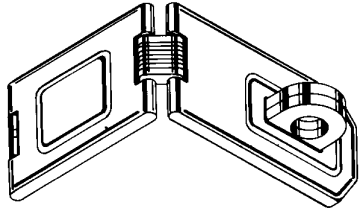
	Description	Size	Item No.	Weight Per Dozen	Per Case	
TA-500 SAFETY HASPS with adjustable staples, boxed per dozen without screws. 	Similar Stanley 915 (plain steel)	3"	TA-500PS	2.75	25 doz.	
		3-1/2"		3.00	25 doz.	
	without screws	4-1/2"		3.75	25 doz.	
		6"		8.00	12 doz.	
	Similar Stanley 915K (zinc plated)	3"	TA-500GV	2.75	25 doz.	
		3-1/2"		3.00	25 doz.	
	without screws	4-1/2"		3.75	25 doz.	
		6"		8.00	12 doz.	
	Hot dipped galv. brass pin individually boxed with screws	3"	TA-500HGV-BP	0.23	100 ea.	
		3-1/2"		0.25	100 ea.	
	4-1/2"	0.31		100 ea.		
Similar Stanley SC915 RBP	6"	0.67		100 ea.		
TA-500L LIGHT SAFETY HASPS with fixed staples, boxed per dozen without screws. 	Similar Stanley 911 (plain steel or zinc plated)	2"	TA-500L-PS	0.65	50 doz.	
		2-1/2"		0.84	50 doz.	
		2"	TA-500L-GV	0.65	50 doz.	
	without screws	2-1/2"		0.84	50 doz.	
	TA-600 HINGE HASPS boxed per dozen without screws. 	Similar Stanley 912 (plain steel)	3"	TA-600PS	1.75	25 doz.
			4-1/2"		2.50	20 doz.
without screws		6"	5.00		12 doz.	
Similar Stanley 912K (zinc plated)		3"	PA-600GV	1.75	25 doz.	
		4-1/2"		2.50	25 doz.	
without screws		6"		5.00	12 doz.	
Staples Only		2" - 2-1/2"				
without screws		3-1/2" - 4"				
(plain steel)	6"					

TA-600X-GV-PWS GARAGE AND UTILITY DOOR EXTRA HEAVY HINGE HASPS



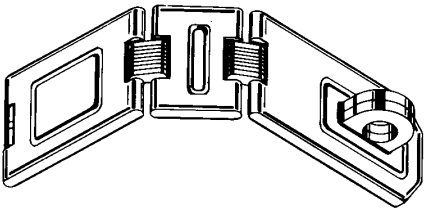
SIZE: 7-1/2"
PACKED: 6/Ctn. - 60/Case
WEIGHT: 12 lbs./Doz.
FINISH: Unichrome Plated

CD-575Z SINGLE FLEXIBLE LINK SAFETY HASP



SIZE: 6-1/2" Zinc Plated
PACKED: 5 Cds./Box - 60/Case
WEIGHT: 4 lbs./Box

CD-577Z DOUBLE FLEXIBLE LINK SAFETY HASP



SIZE: 7-3/4" Zinc Plated
PACKED: 5 Cds./Box - 60/Case
WEIGHT: 4-1/2 lbs./Box



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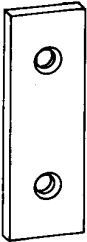
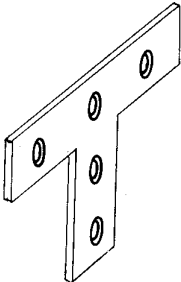
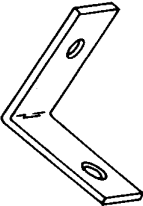
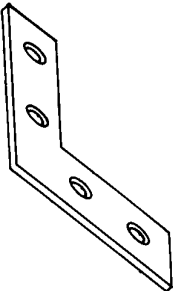
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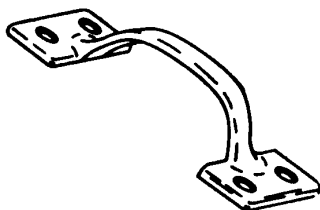
REPAIR PLATES AND PULL HANDLES

TRANS-ATLANTIC CO.

CORNER BRACES, FLAT-CORNER IRONS, MENDING PLATES, TEE PLATES HEAVIER THAN ALL OTHER LEADING BRANDS

HEAVIEST GAUGE TYPE	Description	Item No.	Size	Thickness	Weight Per 144 pc.	Packed Per Case
	MENDING PLATES Similar to Stanley #995 Packed 2 dozen per box without screws.	TA-995PS	2" x 5/8"	.109"	4 lbs.	50 doz.
		TA-995GV	2-1/2" x 5/8"	.109"	5 lbs.	50 doz.
			3" x 3/4"	.109"	7 lbs.	50 doz.
			3-1/2" x 3/4"	.109"	9 lbs.	30 doz.
			4" x 7/8"	.109"	12 lbs.	26 doz.
			5" x 1"	.109"	16 lbs.	18 doz.
			6" x 1-1/8"	.109"	25 lbs.	12 doz.
			8" x 1-1/8"	.109"	34 lbs.	12 doz.
	TEE PLATES Similar to Stanley #9951/2 Packed 2 dozen per box without screws	TA-9951/2PS	2-1/2" x 1/2"	.062"	8 lbs.	60 doz.
		TA-9951/2GV	3" x 5/8"	.062"	11 lbs.	60 doz.
			4" x 3/4"	.078"	21 lbs.	30 doz.
			5" x 7/8"	.078"	39 lbs.	18 doz.
			6" x 7/8"	.078"	46 lbs.	12 doz.
	CORNER BRACES Similar to Stanley #997 Packed 2 dozen per box without screws	TA-997PS	1" x 1/2"	.109"	3 lbs.	120 doz.
		TA-997GV	1-1/2" x 1/2"	.109"	5 lbs.	120 doz.
			2" x 5/8"	.109"	9 lbs.	84 doz.
			2-1/2" x 5/8"	.109"	13 lbs.	48 doz.
			3" x 3/4"	.109"	19 lbs.	36 doz.
			3-1/2" x 3/4"	.109"	26 lbs.	24 doz.
			4" x 7/8"	.156"	35 lbs.	18 doz.
			5" x 1"	.187"	63 lbs.	12 doz.
			6" x 1"	.187"	84 lbs.	12 doz.
	FLAT CORNER IRONS Similar to Stanley #999 Packed 2 dozen per box without screws	TA-999PS	1-1/2" x 3/8"	.062"	3 lbs.	120 doz.
		TA-999GV	2" x 3/8"	.062"	4 lbs.	120 doz.
			2-1/2" x 1/2"	.062"	6 lbs.	84 doz.
			3" x 5/8"	.062"	9 lbs.	48 doz.
			3-1/2" x 5/8"	.062"	10 lbs.	36 doz.
			4" x 3/4"	.078"	18 lbs.	36 doz.
			5" x 7/8"	.078"	24 lbs.	24 doz.
			6" x 7/8"	.078"	31 lbs.	12 doz.
	8" x 1-1/2"	.078"	66 lbs.	12 doz.		

TA-482Z AND TA-483Z – TA-482B AND TA-483B GARAGE AND UTILITY DOOR PULL HANDLE



Description: Heavy stamped steel construction.

Packaging: 10/Box - 250/Case

Size	Finish	Weight Per Box
5-3/4"	Zinc	1-1/4 lbs.
6-1/2"	Zinc	1-3/4 lbs.
5-3/4"	Brass	1-1/4 lbs.
6-1/2"	Brass	1-3/4 lbs.



No. 7 Padlocks

- 1-1/8" (29mm) wide body.
- Laminated steel body for superior strength.
- Steel shackle provides strong cut resistance.
- 4-pin cylinder helps prevent picking.
- Hundreds of key changes maximize key integrity.
- Proprietary rustproofing for longer life.



Product Number	Description
7	Keyed Different
7LF	Keyed Different; 1-1/2" (38mm) shackle
7LJ	Keyed Different; 2-1/2" (64mm) shackle
7KA	Keyed Alike
7KALF	Keyed Alike; 1-1/2" (38mm) shackle
7KALJ	Keyed Alike; 2-1/2" (64mm) shackle
7MK	Master Keyed using N200-N367 and X368-X785 series key ranges
7MKLF	Master Keyed using N200-N367 and X368-X785 series key ranges; 1-1/2" (38mm) shackle
7MKLJ	Master Keyed using N200-N367 and X368-X785 series key ranges; 2-1/2" (64mm) shackle

No. 1 Padlocks

- 1-3/4" (44mm) wide laminated steel body for superior strength.
- Hardened steel shackle for extra cut resistance.
- 4-pin cylinder helps prevent picking.
- Dual locking levers provide extra pry resistance.
- Thousands of key changes maximize key integrity.
- Proprietary rustproofing for longer life.



Product Number	Description
1	Keyed Different
1LF	Keyed Different; 1-1/2" (38mm) shackle
1LJ	Keyed Different; 2-1/2" (64mm) shackle
1LN	Keyed Different; 5-3/4" (15cm) shackle
1KA	Keyed Alike
1KALF	Keyed Alike; 1-1/2" (38mm) shackle
1KALJ	Keyed Alike; 2-1/2" (64mm) shackle
1MK	Master Keyed using 7100-7939 series key ranges
1MKLF	Master Keyed using 7100-7939 series key ranges; 1-1/2" (38mm) shackle
1MKLJ	Master Keyed using 7100-7939 series key ranges; 2-1/2" (64mm) shackle
1KALN	Keyed Alike; 5-3/4" (15cm) shackle

No. 3 Padlocks

- 1-9/16" (40mm) wide laminated steel body for superior strength.
- Hardened steel shackle for extra cut resistance.
- 4-pin cylinder helps prevent picking.
- Dual locking levers provide extra pry resistance.
- Thousands of key changes maximize key integrity.
- Proprietary rustproofing for longer life.



Product Number	Description
3	Keyed Different
3LF	Keyed Different; 1-1/2" (38mm) shackle
3LH	Keyed Different; 2" (51mm) shackle
3KA	Keyed Alike
3KALF	Keyed Alike; 1-1/2" (38mm) shackle
3KALH	Keyed Alike; 2" (51mm) shackle
3MK	Master Keyed using E100-E699 series key range
3MKLF	Master Keyed using E100-E699 series key range; 1-1/2" (38mm) shackle
3MKLH	Master Keyed using E100-E699 series key range; 2" (51mm) shackle

No. 5 Padlocks

- 2" (51mm) wide laminated steel body for superior strength.
- 4-pin cylinder helps prevent picking.
- Hardened boron alloy shackle for superior cut resistance.
- Dual locking levers provide extra pry resistance.
- Thousands of key changes maximize key integrity.
- Proprietary rustproofing for longer life.



Product Number	Description
5	Keyed Different
5LF	Keyed Different; 1-1/2" (38mm) shackle
5LJ	Keyed Different; 2-1/2" (64mm) shackle
5KA	Keyed Alike
5KALF	Keyed Alike; 1-1/2" (38mm) shackle
5KALJ	Keyed Alike; 2-1/2" (64mm) shackle
5MK	Master Keyed using J301-J996 series key range
5MKLF	Master Keyed using J301-J996 series key range; 1-1/2" (38mm) shackle

Laminated Brass Padlocks – Nos. 8, 2, 4 and 6

- Brass construction offers superior corrosion resistance.
- Ideal for marine and other harsh environments.

No. 15 Padlocks

- 2-1/2" (64mm) wide laminated steel body for superior strength.
- 5-pin cylinder helps prevent picking.
- Hardened boron alloy shackle for superior cut resistance.
- Dual locking levers provide extra pry resistance.
- More than 9,000 key changes for great key integrity.
- Proprietary rustproofing for longer life.



Product Number	Description
15DPF	Keyed Different; Yellow bumper; Series Packaging
15	Keyed Different
15LH	Keyed Different; 2" (51mm) shackle
15KA	Keyed Alike
15KALH	Keyed Alike; 2" (51mm) shackle
15MK	Master Keyed using 20N001-25N616 series key range
15MKLH	Master Keyed using 20N001-25N616 series key range; 2" (51mm) shackle

No. 17 Padlocks

- 2" (51mm) wide laminated steel body for superior strength.
- 5-pin cylinder helps prevent picking.
- Hardened boron alloy shackle for superior cut resistance.
- Dual locking levers provide extra pry resistance.
- Thousands of key changes maximize key integrity.
- Proprietary rustproofing for longer life.



Product Number	Description
17	Keyed Different
17LH	Keyed Different; 2" (51mm) shackle
17KA	Keyed Alike
17KALH	Keyed Alike; 2" (51mm) shackle
17MK	Master Keyed using 20T001-23T257 series key range
17MKLH	Master Keyed using 20T001-23T257 series key range; 2" (51mm) shackle

No. 81 Padlocks

- 1-3/4" (44mm) wide laminated steel body for superior strength.
- Hardened steel shackle for extra cut resistance.
- 5-pin cylinder for additional security.
- Dual locking levers provide extra pry resistance.
- More than 9,000 key changes for great key integrity.
- Proprietary rustproofing for longer life.



Product

Number	Description
81	Keyed Different
81LF	Keyed Different; 1-1/2" (38mm) shackle
81LJ	Keyed Different; 2-1/2" (64mm) shackle
81KA	Keyed Alike
81KALF	Keyed Alike; 1-1/2" (38mm) shackle
81KALJ	Keyed Alike; 2-1/2" (64mm) shackle
81MK	Master Keyed using 10M01-97M56 series key ranges

No. 175 Padlocks

- 2" (51mm) wide body.
- Solid brass case for strength and weatherability.
- Set-your-own combination convenience.
- Resettable to any of 10,000 personalized combinations.



Product

Number	Description
175	Set-Your-Own Combination
175LH	Set-Your-Own Combination; 2-1/4" (57mm) shackle

General Use Hasps

- Hard steel bodies for strength.
- Hardened steel staples resist cutting and sawing.
- Hardened steel locking eyes for strong cut resistance.
- Tamper proof hinges help resist prying.



Product

Number	Description
702D	2-1/2" (64mm) Hard wrought steel body
703D	3-1/2" (89mm) Hard wrought steel body
704DPF	4-1/2" (11cm) Hard wrought steel body
706D	6" (15cm) Hardened steel body with reinforced plate

Hinged Hasps

- Secure hard-to-lock property.
- Hardened steel body for added strength.
- Hardened boron alloy staples resist cutting and sawing.
- Single and double hinge styles with hidden hinge pins.
- Ideal for reaching around corners and angles.



Product

Number	Description
722DPF	7-3/4" (20cm) Double-hinge; Series Packaging

No. 420 Safety Lockout Hasp

- Lockout by multiple workers at each lockout point.
- Attach device to energy disconnect switch.
- Keeps equipment inoperative while repairs or adjustments are made.
- Control cannot be turned on until last worker's padlock is removed from hasp.
- Heavy-duty pry proof steel jaw with vinyl coated handle.
- Dimensions are 1-3/4" x 4-1/2" with 1" inside jaw diameter, holds up to 6 padlocks.



No. 8413 Adjustable Locking Cable

- Patented locking mechanism holds the cable tight at any position from 1' (30cm) to 6' (1.8m) for infinite locking positions.
- Interchangeable cables for application flexibility.
- Rekeyable cylinders for keyed alike convenience.
- Available Keyed Alike to any standard M1 key cut.
- 100% steel braided cable.
- Convenient, rekeyable cylinder.
- Weather tough and rust resistant lock body and cable.
- Vinyl sleeve and lock body bumper prevents scratching.
- Velcro strap holds excess cable for compact storage.



Product

Number	Description
8413DPF	Keyed Different; 6' (1.8m) x 3/8" (10mm) Adjustable Locking Cable; Trilingual Series Packaging
8413KA	Keyed Alike; 6' (1.8m) x 3/8" (10mm) Adjustable Locking Cable

Safety Series™ Lockout Stations

- Permanent Centers for equipment and departments.
- High visibility stations facilitate proper and convenient lockouts when located centrally or at each lockout point.
- Polystyrene construction with metal hooks.
- Features Master Lock Lightweight No. 410 Safety Series™ padlocks, designed exclusively for OSHA lockout compliance.
- Durable, lightweight, non-conductive Xenoy lock bodies.
- Include permanent write-on labels (Eng., Fr. & Sp.) that allow instant on-site customization for each worker.
- Compliance with OSHA "one employee, one lock, one key" directive.
- Highly visibility red locks are supplied keyed-different.
- Include high security, reserved-for-safety cylinder, with more than 100,000 key cuts possible.
- Key-retaining – ensures that padlocks are not left unlocked.
- Includes Safety Series™ hasps for lockout by up to 6 workers at each lockout point.
- Includes Safety Series™ heavy-duty "DO NOT OPERATE" lockout I.D. Tags with brass grommets.



Product

Number	Description
1482B	4 Lockout Station – Board Only
1482BP410	4 Lockout Station with four 410RED padlocks, 2 hasps, 12 tags

No. 410 Padlocks

- 1-1/2" (38mm) wide, 1-3/4" (44mm) tall non-conductive Xenoy body.
- Extra-long standard steel shackle for added locking versatility.
- Various bright colors for easy identification.
- Restricted safety lockout 6-pin tumbler cylinder for greater security.
- Tri-lingual Safety Lockout markings and labels.
- Key retaining feature ensures padlock is not left unlocked.



Product

Number	Description
410	Keyed Different
410LT	Keyed Different; Extra Length Shackle
410KA	Keyed Alike
410KALT	Keyed Alike; Extra Length Shackle
410MK	Master Keyed
410KAMK	Keyed Alike; Master Keyed

PRO SERIES WEATHER TOUGH™ — Rekeyable Commercial Use Padlocks

Pro Series Weather Tough™ rekeyable padlocks from Master Lock not only stand up to severe abuse, they also stand up to severe weather. Designed especially for outdoor commercial use, these Pro Series locks feature tough BORON alloy steel shackles to repel saws and bolt cutters. Dual locking shackles resist forcing or prying, and special pick resistant spool pins prevent unauthorized entry. But what makes these padlocks unique is their weather tough design. A durable thermal plastic cover protects the lock body and key cylinder from dirt, dust and other contaminants. Special drain channels actually move water and other debris through the lock body and away from the lock mechanism for years of trouble free operation in the most severe conditions. Pro Series Weather Tough™ locks are ideal for outdoor commercial applications where weather is a problem and security is a concern.

No. 6121 Weather Tough Padlocks

- 2-1/8" (54mm) wide laminated steel body for superior strength.
- Hardened boron alloy shackle for superior cut resistance.
- 5-spool pin tumbler cylinder for added pick resistance.
- Removable cylinder can be replaced or repinned.
- Dual ball bearing locking mechanism resists pulling and prying.
- Body and cylinder covers protect locks from water, dirt and grime.
- Heavy steel bodies withstand forcible attacks.



Product Number	Description
6121	Keyed Different; 5-pin W6000 cylinder
6121LJ	Keyed Different; 5-pin W6000 cylinder; Long shackle
6121KA	Keyed Alike; 5-pin W6000 cylinder
6121KALJ	Keyed Alike; 5-pin W6000 cylinder; Long shackle
6121MK	Master Keyed using 20G001-25G616 series key range; 5-pin W6000 cylinder

No. 6125 Weather Tough Padlocks

- 2-3/8" (61mm) wide laminated steel body for superior strength.
- Hardened boron alloy shackle for superior cut resistance.
- High security solid iron shackle shroud resists harsh physical attacks.
- 5-spool pin tumbler cylinder for added pick resistance.
- Removable cylinder can be replaced or repinned.
- Dual ball bearing locking mechanism resists pulling and prying.



Product Number	Description
6125	Keyed Different; 5-pin W6000 cylinder
6125LJ	Keyed Different; 5-pin W6000 cylinder; Long shackle
6125KA	Keyed Alike; 5-pin W6000 cylinder
6125KALJ	Keyed Alike; 5-pin W6000 cylinder; Long shackle
6125MK	Master Keyed using 20G001-25G616 series key range; 5-pin W6000 cylinder

PRO SERIES — High Security

No. 6327 High Security Padlocks

- 2-5/8" (67mm) wide laminated steel body for superior strength.
- Hardened boron alloy shackle for superior cut resistance.
- Solid iron shackle shroud resists harsh physical attacks.
- 5-spool pin tumbler cylinder for added pick resistance.
- Removable cylinder can be replaced or repinned.
- Dual ball bearing locking mechanism resists pulling and prying.



Product Number	Description
6327	Keyed Different; 5-pin W6000 cylinder
6327KA	Keyed Alike; 5-pin W6000 cylinder
6121MK	Master Keyed using 20G001-25G616 series key range; 5-pin W6000 cylinder

No. 6230 Solid Steel Padlocks

- 2-1/2" (64mm) wide, hardened solid steel body.
- Hardened boron alloy shackle for superior cut resistance.
- 5-spool pin tumbler cylinder for added pick resistance.
- Removable cylinder can be replaced or repinned.
- High security padlock resists tough abuse.



Product Number	Description
6230	Keyed Different; 5-pin W6000 cylinder
6230LH	Keyed Different; 5-pin W6000 cylinder; Long shackle
6230KA	Keyed Alike; 5-pin W6000 cylinder
6230MK	Master Keyed using 20G001-25G616 series key range; 5-pin W6000 cylinder

No. 6270 Shackleless Round Solid Steel

- Ideal for vans, trucks, gates and vending.
- Defeats attempts to pry and cut.
- Hardened solid steel lock body withstands forcible attacks.
- Complete with high security 6-pin Pro Series® cylinder.



Product Number	Description
6270	Keyed Different; 6-pin W7000 cylinder; 2-7/8" (73mm) wide body
6270KA	Keyed Alike; 6-pin W7000 cylinder

No. 770 Solid Steel Hasp

- Works only with the model 6270 lock.
- Ideal for vans, trucks, gates and vending.
- Defeats attempts to pry and cut.



Product Number	Description
770	Solid Steel Hasp for use with No. 6270 lock; 9" (23cm) wide x 4-1/2" (11cm) high

solid steel padlocks



professional 700 & 5000 series



- ◆ Stainless steel double ball locking mechanism enhances the strength and performance of the padlock.
- ◆ Most models are triple plated for corrosion resistance.
- ◆ Case hardened bodies and shackles for strength and durability.
- ◆ Serviceable padlocks provide versatility in system creation.
- ◆ Brass 5- or 6-pin cylinders can be keyed differently, alike, master keyed and grand master keyed.
- ◆ Variety of keyways also available.



#A800LHC
The High Security Hasp with Hidden Shackle Padlock

DIMENSIONS:

Model No.	Body Width	Body Thickness	Shackle Diameter	Shackle Length
A700	1-1/2"	1-1/8"	7/16"	1-1/16"
A701	1-1/2"	1-1/8"	7/16"	1"
A5100	1-1/2"	3/4"	1/4"	1"
A5101	1-1/2"	3/4"	1/4"	1-1/2"
A5102	1-1/2"	3/4"	1/4"	1-1/2"
A5200	1-3/4"	3/4"	5/16"	1-1/8"
A5201	1-3/4"	3/4"	5/16"	2"
A5202	1-3/4"	3/4"	5/16"	3"
A5260	2"	3/4"	3/8"	1-1/8"
A5261	2"	3/4"	3/8"	2"
A5262	2"	3/4"	3/8"	3"



We offer an extensive selection of grease fittings. They are made to the SAE-J534 specifications and are case hardened, zinc-plated, and have a full yellow chromate finish for superior rust protection. We allocate fittings with our computer system and can establish release quantities on blanket orders so you will be able to get your fittings when you need them.

DON'T GET CAUGHT HOLDING UP PRODUCTION WHILE WAITING FOR GREASE FITTINGS.

1/8" PTF Grease Fittings



Model #	Type	Thread	Length
T-7000	Straight	1/8"	.62"
T-7002	Straight	1/8" (female)	1.00"
T-7003	Straight	1/8"	1.25"
T-7004	Straight	1/8"	1.77"
T-7006	30°	1/8"	.91"
T-7008	45°	1/8"	.98"
T-7010	65°	1/8"	.88"
T-7013	90°	1/8"	.82"

1/8" PTF Safety Vent Fittings



Model #	Type	Thread	Length
T-7040	Straight	1/8" PTF-SAE Short	.66"

Vent slot in threads allow bearing to be filled without building up internal pressure.

1/4" PTF Grease Fittings



Model #	Type	Thread	Length
T-7100	Straight	1/4"	.80"
T-7101	67.5°	1/4"	.96"

Thread Forming Grease Fittings



Model #	Type	Thread	Length
T-7300	Straight	1/8"	.60"
T-7302	90°	1/8"	.56"
T-7303	Straight	1/4"-28	.52"
T-7304	45°	1/4"-28	.82"
T-7305	90°	1/4"-28	.68"

1/4"-28 Taper Thread Grease Fittings



Model #	Type	Thread	Length
T-7200	45°	1/4"-28	.88"
T-7201	Straight	1/4"-28	.54"
T-7202	Straight	1/4"-28	.69"
T-7203	Straight	1/4"-28	.93"
T-7204	Straight	1/4"-28	1.08"
T-7206	45°	1/4"-28	.97"
T-7208	90°	1/4"-28	.69"
T-7210	Straight	1/4"-28 UNF	.49"

Metric Thread Grease Fittings



Model #	Type	Thread	Length
T-7400	Straight	M8 x 1 Taper	.59"
T-7401	45°	M8 x 1 Taper	.88"
T-7402	Straight	M6 x 1 Taper	.53"
T-7403	90°	M6 x 1 Taper	.71"
T-7404	Straight	M10 x 1 Taper	.60"
T-7405	90°	M10 x 1 Taper	.75"
T-7406	45°	M6 x 1 Taper	.89"
T-7407	90°	M8 x 1 Taper	.70"
T-7408	45°	M10 x 1 Taper	.93"
T-7409	Straight	M8 x 1.25 Taper	.59"
T-7410	45°	M8 x 1.25 Taper	.89"
T-7411	90°	M8 x 1.25 Taper	.71"
T-7412	Straight	M10 x 1.5 Taper	.60"
T-7413	45°	M10 x 1.5 Taper	.98"
T-7414	90°	M10 x 1.5 Taper	.79"

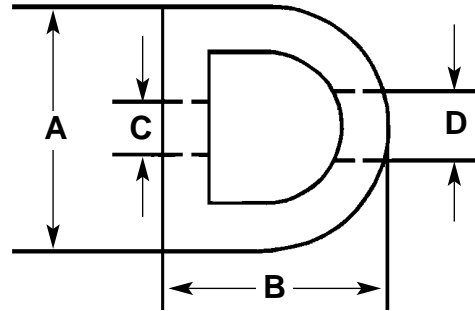
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Extruded Rubber D-Bumpers



Part No.	Dim. A	Dim. B	Dim. C	Dim. D	Number of Holes	C-C of Holes	Length	Weight
D26U	2-1/8"	1-7/8"	3/8"	11/16"	2	3"	6"	1.08 lbs.
D210	2-1/8"	1-7/8"	3/8"	11/16"	2	6"	10"	1.80 lbs.
D232	2-1/8"	1-7/8"	3/8"	11/16"	3	14"	32"	5.76 lbs.
D2120	2-1/8"	1-7/8"	N/A	N/A	None	-	120"	21.60 lbs.
D312	3"	2-7/8"	11/16"	1-1/8"	2	8-1/8"	12"	3.30 lbs.
D324	3"	2-7/8"	11/16"	1-1/8"	4	6-1/2"	24"	6.60 lbs.
D46	4"	3-3/4"	7/8"	1-1/8"	2	3-1/8"	6"	2.75 lbs.
D412	4"	3-3/4"	7/8"	1-1/8"	2	7-7/8"	12"	5.50 lbs.
D424	4"	3-3/4"	7/8"	1-1/8"	3	10"	24"	11.00 lbs.

Extruded Rubber Rectangular Bumpers

Includes steel insert mounting plate.



441463
441464
441465
441466



Part No.	Width	Length	Thickness	Number of Holes	C-C of Holes	Pieces Per Carton	Weight Each
441425	2-1/2"	4-1/8"	2-3/4"	2	5-1/2"	4	1.45 lbs.
441466	4-3/4"	10"	2-3/4"	2	5"	4	5.45 lbs.
441465	4-3/4"	15"	2-3/4"	3	5"	4	7.65 lbs.
441464	4-3/4"	20"	2-3/4"	4	5"	2	10.90 lbs.
441463	4-3/4"	30"	2-3/4"	6	5"	2	15.30 lbs.

Laminated Rubber Wheel Chock



Features durable, recycled tire rubber pressed between two 1/4" steel plates. Includes retaining bracket for use with chains.

Part No.	Description	Weight
WC0888	Laminated Rubber Wheel Chock	13.30 lbs.



STAPLERS / TACKERS

Hammer Tackers



HT50

HT65™

Mighty Mo Extra Heavy-Duty Hammer Tacker

- Ideal for new roofing installation.

Fasteners used:
65S, Staples 3/4" for HT65.
65SIP, Staples 3/4" bulk for HT65.

HT50™

Tomahawk Heavy-Duty Hammer Tacker

- All steel construction.
- High carbon hardened steel working parts.
- Patented jam proof mechanism.
- Precision locked rear loading.
- Retractable striking edge.
- Specially designed power grip handle.
- Durable chrome finish.

Fasteners used:
505, T50 type 5/16" staples.
506, T50 type 3/8" staples.
508, T50 type 1/2" staples.



HT65

Staplers



P35

T50®

Heavy-Duty Tacker Gun

- Choice of homeowners and pros alike.
- All steel construction.
- Patented jam proof mechanism.
- Visual refill window.
- Easy squeeze double-leverage operation.
- Over 50 years of tested durability.
- Used extensively by building contractors, home do-it-yourselfers and specialty trade applications for stapling insulation, ceiling tile, window screening, upholstery, carpet padding, fence wire, metal lath, cornerite and 1,001 other jobs ranging from light to heavy-duty work.

Fasteners used:
504, T50 type 1/4" staples.
504M, T50 type 1/4" Monel® staples.
505, T50 type 5/16" staples.
505M, T50 type 5/16" Monel® staples.
506, T50 type 3/8" staples.
506M, T50 type 3/8" Monel® staples.
506SS, T50 type 3/8" stainless steel staples.
508, T50 type 1/2" staples.

508M, T50 type 1/2" Monel® staples.
509, T50 type 9/16" staples.
509M, T50 type 9/16" Monel® staples.
50CT, T50 type 17/32" Ceillite staples.

Accessories used:
T50®SA, screen attachment.
T50®SHA, window shade attachment.
T50®WA, wire attachment.

Designed for reaching into hard-to-get-at places for stapling from any position or angle.

P22™

Plier Type Stapler

- All steel construction, chrome finish.
- Hand guide loop for ease of use.
- Cam actuated double-leverage mechanism.
- 2-1/2" throat allows more reach.

Fasteners used:
224, P22 1/4" staples.
225, P22 5/16" staples.

P35™

Extra Heavy-Duty Plier Type Stapler

- All steel construction, chrome finish.
- Hand guide loop for ease of use.
- Cam actuated double-leverage mechanism.
- 2-1/2" throat allows more reach.
- More powerful for tougher materials.

Fasteners used:
354, P35 1/4" staples.
356, P35 3/8" staples.



The Original!



Hardware & Supply Co., Inc.
Supply, Inc. of Virginia
Form Rentals

NJ (856) 662-6935 • PA (215) 925-8800
 Metro (703) 569-6660 • VA (703) 455-6700
 Clinton, MD (301) 877-8640



a division of Tiger Enterprises, Inc.

CAULKING GUNS

For over forty years KENMAR guns have been preferred for the accurate application of most any plastic or semi-liquid material - caulks, sealants, mastics, adhesives, greases, inks etc.

The KENMAR line has enjoyed preference among professionals simply because of top quality design and manufacture plus the completeness of the line – a selection of over 20 models. Every KENMAR gun has been carefully machined, critical parts heat treated and exposed parts given a rust-resistant finish – then all guns are thoroughly inspected and carefully packaged.

Users benefit from distinctive design advantages such as the development of extremely high pressure with minimal finger movement, yet quick stop-flow release . . . a trigger finger guard . . . and a comfortable handle grip. Select the guns you need for your particular job from the following tables.



Made in the USA



Model Number	Major Use and Description	Barrel Size (D x L)	Approximate Bulk Capacity	Individually boxed (No. per master carton)
P R O F E S S I O N A L M O D E L S				
27RCT	Standard capacity, bulk material or 8-1/2" cartridge, with or w/o spouts	2" x 8-1/2"	27 ³³ (442 cm ³)	6, 12 or 25
27 RD	Drop-in type, standard, 8-1/2" spouted cartridge	2" x 8-1/2"		6 (bulk packed)
27A	Full barrel, 8-1/2" cartridge with or w/o spouts	2" x 8-1/2"	27 ³³ (442cm ³)	6, 12 or 25
32RCT	Medium capacity, bulk material or 8-1/2" or 10" cartridge with or w/o spouts	2" x 10"	32 ³³ (524cm ³)	6, 12 or 25
45RCT	Large capacity, bulk material or 8-1/2" or 10" cartridge with or w/o spouts	2" x 14"	45 ³³ (737cm ³)	6 or 12
68RCT	Extra large capacity, bulk material or spouted 1-quart cartridge, 2-1/2" x 12-1/4" (please specify)	2-1/2" x 13"	58 ³³ (946cm ³) 1 qt. (.946 L)	6
145RCT	Super capacity, bulk material only	3-1/2" x 16"	145 ³³ (2366cm ³) 2-1/2 qt. (2.366 L)	1
Q U A R T " D R O P - I N C A R T R I D G E " M O D E L S				
58	Large capacity, 2-1/2" x 12-3/4" spouted cartridge	2-1/2" x 13"	1 qt. (.946 L) spouted cartridge	6
58N	Same as No. 58 except it uses cartridges without spouts	2-1/2" x 13"	1 qt. (.946 L) w/o spouted cartridge	6
" P O L Y G U N " M O D E L - F O R U S E W I T H P Y L E S & S E M C O C A R T R I D G E S				
162R	Polyethylene cartridges, 1-5/8" x 6" or 12" (specify length) Anchored in operating position by bezel collar	-	Polyethylene cartridge 1-5/8" x 6" or 12"	6, 12 or 25

Model Number	Major Use and Description	Barrel Size (D x L)	Approximate Bulk Capacity	Packaged (No. per carton)
A I R P R E S S U R E G U N S				
65	High viscosity material, bulk loading only	2" x 14"	45 ³³ (737cm ³)	6
68AB	High viscosity material, bulk loading	2-1/2" x 12-3/4"	1 qt. (.946 L)	6
68AC	Same as No. 65AB except it uses 1-quart spouted cartridges	2-1/2" x 12-3/4"	1 qt. (.946 L)	6
75A	Same as No. 65 except it uses 8-1/2" spouted cartridges	2" x 8-1/2"	8-1/2" spouted cartridge	6
145A	Super capacity, bulk material only	3-1/2" x 16"	2-1/2 qt. (2.366 L)	1

Many caulking guns listed are in stock.



Light Duty Portable Punches are for limited punching power (1.2 tons or less). They're easy to carry in the pocket, on a belt or in a tool box. Hardened, machined bearing surfaces are used in these tools to provide dependable long life within the rated capacity.

The **No. 5 Jr.** punch has a standard 1-3/4" throat depth. It has an optional mounting base and is available as a kit.

- **Maximum rated capacity: 1.2 tons**
- **Smallest available**
- **Hand operation**
- **Adjustable stop gauge**

No. 5 Jr.

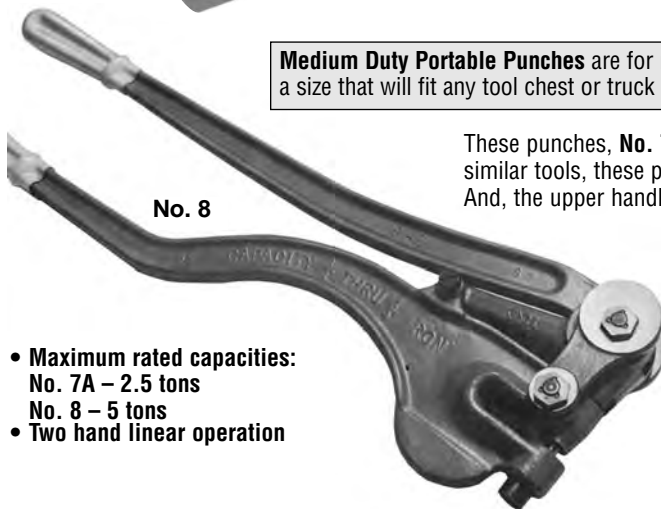
Description	Catalog No.	Weight (lbs.)
Tool Only***	130010050**	2-3/4
Tool in Kit***	135010050*	4
Bench Mounting Base	139010050	3/4

*Includes tool and one 3/32", 1/8", 5/32", 3/16", 7/32", 1/4" and 9/32" round punch and die and plastic box.

**Includes one 3/16" round punch and die.

***No substitutions of punches and dies furnished unless 12 or more tools ordered.

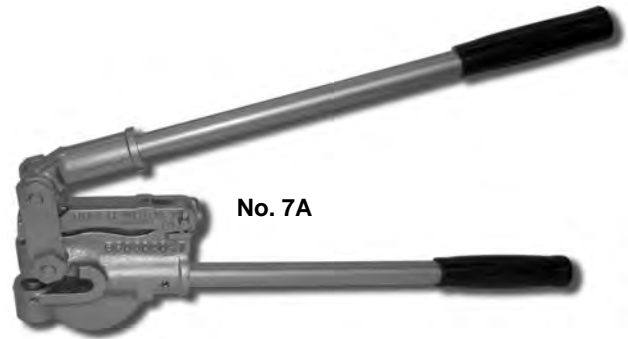
Medium Duty Portable Punches are for medium punching power (up to 5 tons). They are highly portable and of a size that will fit any tool chest or truck locker. The leverage design of these tools assures easy linear operation.



No. 8

These punches, **No. 7A** and **No. 8**, are similar except for punching capacity. Unlike other similar tools, these punches will punch and strip inside a 90° arc movement of the lever. And, the upper handle will not disengage when moved to either extreme.

- **Maximum rated capacities:**
No. 7A – 2.5 tons
No. 8 – 5 tons
- **Two hand linear operation**

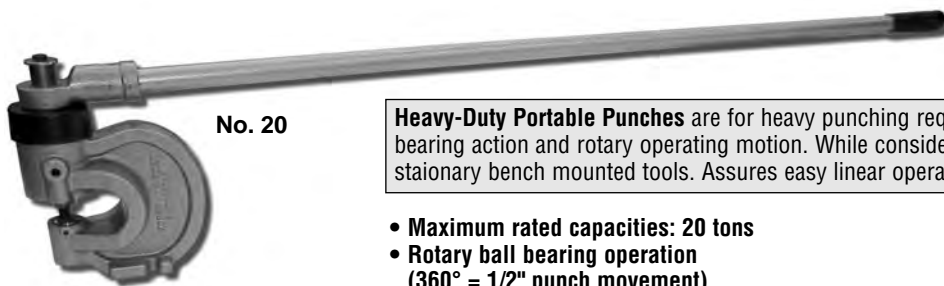


No. 7A

Description	Catalog No.		Weight (lbs.)	
	No. 7A	No. 8	No. 7A	No. 8
Punch	130010070*	130020080**	7-1/2	17-1/2
Bench Mounting	139020070	139020080	5-1/2	8-1/2

*Includes one 7/32" round punch and die

**Includes one 9/32" round punch and die.
No substitutions.



No. 20

Heavy-Duty Portable Punches are for heavy punching requirements. They operate through ball bearing action and rotary operating motion. While considered portable, they are equally adept as stationary bench mounted tools. Assures easy linear operation.

- **Maximum rated capacities: 20 tons**
- **Rotary ball bearing operation**
(360° = 1/2" punch movement)

The **No. 20** tool offers a punching capacity to meet heavier job requirements and greater versatility in punching flat sheets and angles.

Description	Catalog No.	Weight (lbs.)
Punch	130030200*	25
Ratchet Attachment	138031190	4-1/2
48" Pipe Handle	138032026	4

*Includes one 1/2" round punch and die. No substitutions.

No. 20 built after early 1981 requires no separate mounting base.

JT680 – Jumbo Flame Torch

No. 019110



- Produces a high volume 1-1/4" flame for heavy-duty soldering and heating jobs.
- Brass construction for durability.

JT681 – Pencil Flame Jet Torch

No. 019100



- Produces a 1/2" pencil point flame for detail work.
- Brass construction for durability.

UL100 – 2-Piece Pencil Flame Torch Kit

No. 019205

- Kit includes UL2317 torch head and TX9 14.1 oz. propane cylinder.



UL125 – 7-Piece Pencil Flame Torch Kit

No. 019210

- Kit includes UL2317 torch head, TX9 14.1 oz. propane cylinder, 650 utility flame brass tip, 810 flame spreader, spark lighter, TX406 flint and molded plastic carry box.



THREAD SEALING COMPOUND

Proven Every Day
Proven Everywhere®



Slic-Tite® Paste with Teflon®

Heavy-Duty Thread Sealant

Features:

- Slic-Tite contains more Teflon® than other national brands. The higher concentration of Teflon® particles provides greater sealing power on all tapered pipe threads including those that are damaged.
- Brushes easily on wet or oily threads.
- Sticks to hot, oily threads, will not run off. Ideal for use on production lines using high speed pipe threading machines.
- The non-toxic, non-drying formula will not harden or crack in the pipe joint. Provides easy disassembly and break out.
- Seals to high pressures: 10,000 PSI for Liquids, 3,000 PSI for Gases.
- Sealing temperature range: -50°F to 500°F (-46°C to 260°C).
- Meets Fed. Spec. TT-S-1732.
- Slic-Tite contains a product made from Teflon® and other PTFE resins to assure high performance.

Typical Applications:

- Slic-Tite seals all types of pipe threads; steel, stainless steel, brass, aluminum, iron, and PVC, CPVC and ABS plastic.
- Recommended services: Water, natural gas, LP gases, steam, air, gasoline, kerosene, refrigerants, ammonia, caustics and acids. Contact factory for specific use recommendations.
NOT RECOMMENDED FOR USE WITH OXYGEN SERVICE. Use OXYTITE®.

Recommended Industries:

- Plumbing, AC/R, Industrial Piping, Chemical Processing Plants, Manufacturing Plants, Gas Utilities, Fire Sprinkler Piping and Irrigation Systems.



Part No.	Size	Qty./Case	Part No.	Size	Qty./Case	Part No.	Size	Qty./Case
41209	1/4 pt. BIC	12	42012	1 pt. Flat Top	24	42014	1 gal.	4
42009	1/4 pt. BIC	24	42029	1 pt. BIC	24	42015	5 gal.	1
41219	1/2 pt. BIC	12	42013	1 qt. Flat Top	12	42069	55 gal.	1
42019	1/2 pt. BIC	24	42049	1 qt. BIC	12			

BIC = Brush in Cap

* Teflon® is a registered trademark of Dupont.

Heavy-Duty Magnetic Base Indicator Holder No. 659 Series

Heavy-Duty Magnetic Base Indicator Holder with rotary on/off switch. Furnished with or without Starrett AGD Dial Indicators.

This holder has a powerful magnetic base that attaches to flat surfaces or on round work up to 5" (125mm) in diameter by a form-ground involute vee for accurate seating.



A post snug with two 3/4" (19mm) gripping holes positions the dial indicator at any height and at any vertical angle and allows for 360° rotation of the gage rod. After locking the gage in place, the final indicator setting is made by an independent fine adjustment at the back end of the gage rod.

A second tapped hole (3/8"-24) in one side of the base is for mounting the post horizontally or adding another post for multiple inspection work. The base is furnished with a threaded adaptor, making it possible to use the No. 657 Series Magnetic Base post and attachments. Base and snug have a black wrinkle finish with precision ground contact surfaces.

Available with or without Starrett AGD Dial Indicators: Inch reading No. 25-131J (.0005" graduation) or millimeter reading No. 25-181J (0.01mm graduation). Other mechanical AGD indicators are available on request. Electronic indicators, Nos. 2600 and 2700 Series, are also available on request.

Both the upright post and the gage rod are approximately 9-3/8" (238mm) long and 3/4" (19mm) in diameter.

Dial Indicator No. 25 Series AGD Group 2 Ranges up to 1" and 25mm

These indicators have a shockless, hardened steel gear train and jewel bearings for smooth, sensitive action and long wear life.



- Hardened stainless steel rack, pinnions, gears and bottom stem resist shock and extend life.
- Rotatable, serrated-grip bezel lock.
- Contact point is interchangeable. (Furnished with PTO7215 1/4" contact point)
- Easy-to-read dial style.
- Rugged indicator, yet lightweight case.

Inch Reading Model with Jewel Bearings

Graduation	One Rev. Range	Total Range	Dial Reading	Catalog No.	EDP No.
.001"	.100"	1.000"	0-100	25-441J	53295

Micrometers

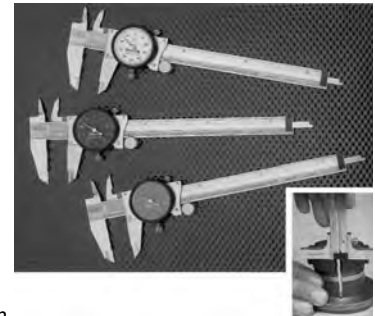
Outside Micrometers
No. 436 Series 6-24"



- Starrett satin chrome finish – no glare – resists rust.
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability.
- Balanced frame and thimble design insure easy handling.
- Ring-type knurled lock nut for quick and sure locking.
- Smooth friction thimble for uniform pressure, the combination ratchet and speeder for uniform pressure and quicker adjustment, or a plain micrometer that depends on your own "feel."
- Gracefully designed tapered frame for use in narrow slots and tight places.

Dial Calipers

No. 120 Series 0-12"



- Sharp, clear dial graduations of .001" (0.02mm) – .100" (2mm) in one revolution.
- Sharp, black graduations on the satin finished bar, every .100" (1mm).
- Knife-edge contacts for both inside and outside measurements.
- One hand use with the thumb-operated, fine adjustment roll.
- Lock screw for dial bezel.
- Lock screw for holding the sliding jaw in position.
- 6" (150mm) and 9" (225mm) models have a covered rack depth rod. A detachable depth rod is available for the 12" (300mm) model.
- Parallel lines can be scribed on a workpiece by setting the caliper jaw to the required dimensions, locking the movable jaw with the lock screw and then using the front edge of the fixed jaw as the scribing surface.

Approximate Jaw Depths for 120 Series

120 6" and 9" (150mm and 225mm) 120 12" (300mm)
Outside 1-1/2" (38mm) 2-1/2" (63mm)
Inside 5/8" (16mm) 3/4" (19mm)

Precision Machinists' Levels

No. 98 Series



- All level bases are made from the finest quality seasoned cast iron and are precision-machined on the reference surface.
- Non machined surfaces have an attractive, black wrinkle finish.
- All models have an involute longitudinal groove between the bearing flats for accurate seating on round work.

"Call us for more information on the complete Starrett Line."



TUNGSTEN CARBIDE SCRIBER AND MAGNET

- Tungsten carbide tip marks hard materials including hardened steel, ceramics and glass.
- Alnico permanent magnet picks up small parts and retrieves steel chips from hard-to-reach places.
- Scriber point reverses for safety.
- Point is replaceable.
- Overall length 6".

UPC Code	No.
31116 0	88CM
31114 6	88P Replaceable point

TUNGSTEN CARBIDE TIP SCRIBER

- Tungsten carbide tip marks stainless steel, copper, ceramics and glass.
- Screw chuck for reversing tungsten carbide point when not in use.
- Tip is replaceable.
- Measures 6" overall.

UPC Code	No.
31112 2	88
31114 6	88P Replaceable point

REPLACEABLE NEEDLEPOINT SCRIBER

- Scribes stainless steel, copper, brass, glass and ceramics.
- Nork pattern scriber measures 5-5/16" overall.
- Four extra points are stored under cap.

UPC Code	No.
31102 3	84
31104 7	84P Replaceable point

STEEL RULES

General's industrial quality steel rules are precision made with etched fine black graduations for easy reading and long life. The two finishes available are polished stainless steel or satin chrome.



UPC Code	Stock No.	Size	Grad Type	Graduation Side 1	Graduation Side 2	Width
6" Precision Stainless Steel Rules (Industrial)						
32108 4	634	6" Flex	4R	8, 16	32, 64	15/32"
32111 4	676	6" Rigid	4R	8, 16	32, 64	3/4"
32114 5	678med	6" Rigid	-	mm, .5mm	10, 20, 50, 100, 16, 32, 64	3/4"
6" Precision Satin Chrome Stainless Steel Rules (Industrial)						
32123 7	CF616	6" Flex	5R	10, 100	32, 64	15/32"
6" Precision Stainless Steel Rules (Economy)						
32036 0	300/1*	6" Flex		32, 64	Dec. Equiv.	15/32"
32046 9	301/1*	6" Flex		32, 64		1/4"
32063 6	307	6" Flex		8, 16 w/32nd End Grads	3/4"	
30266 3	308	6" Flex		32, 64	Dec. Equiv.	3/4"

*Furnished with pocket clip

POCKET SCRIBER

- Replaceable hardened and centerless ground point.
- Point reverses into knurled body for safety.
- Body diameter 3/8".
- Conforms to government specifications GGG-S-131e.

UPC Code	No.	Body Dia.	Blade Length	Overall Length
31092 7	81	3/8"	2-7/8"	5-7/8"
31094 1	81P	Replaceable point		

POCKET SCRIBER

- Replaceable hardened and centerless ground point.
- Point reverses into knurled body for safety.
- Body diameter 1/4".
- Conforms to government specifications GGG-S-131e.

UPC Code	No.	Body Dia.	Blade Length	Overall Length
31098 9	83	1/4"	2-3/8"	4-3/4"
31100 9	83P	Replaceable point		

FIXED TWO-POINT SCRIBER

- Hardened and ground steel needle points are fixed to a knurled body.
- Has one point and one bent point.

UPC Code	No.	Overall Length
31090 3	80	8-1/2"
31091 9	80C	

SINGLE-POINT SCRIBER

- Hardened tempered point.

UPC Code	No.	Overall Length
31106 1	85	4-1/2"

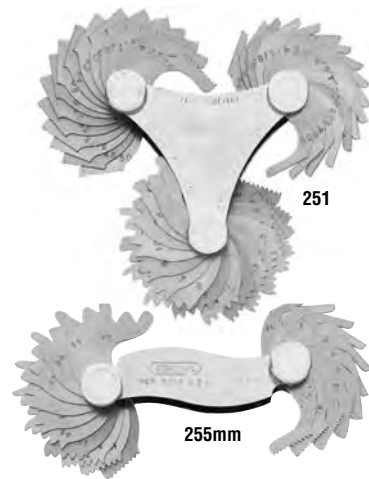
CF616



307



308



SCREW PITCH GAGES

- These finely crafted measuring devices are used for gaging V, American National or U.S. standard 60° threads.
- Gages are notched for measuring inside threads of small holes and nuts as well as external threads.
- Set of 51 screw pitches combines all sizes from 4 to 84, including 11-1/2 and 27 pipe thread sizes.
- Knurled thumb nuts lock the case in an open or closed position.
- Also available in 22-pitch set No. 252 and metric No. 255mm.

UPC Code	No.	No. of Pitches	Sizes
31321 8	251	51	4 to 84
31323 2	252	22	9 to 40
31326 3	255mm	22	.35 to 6.0mm



TAPER LEAF

- 3" (75mm) leaves taper from 1/2" (13mm) to just 1/4" (6.5mm) wide for working in confined spaces.

UPC Code	No.	Leaves	Sizes
31309 6	226T	26	.0015" to .025"



NUT SPLITTER

- Here is a real timesaver for the removal of frozen, hard to remove rusted nuts.
- Only 4-3/4" long, this compact tool will split nuts up to 1/2" automotive series (3/4" or 19mm across flats).
- Standard 3/4" driving hex head for use with wrenches or sockets.
- Angled body for getting into hard-to-reach work areas.
- Replaceable hardened steel chisel point can be reversed to achieve best cutting angle.
- Made of high grade heat treated forged steel for durability. Plated and black oxide finishes to prevent rust.

UPC Code	No.
31325 6	175



BRASS PLUMB BOBS

- Machined of solid brass, fully polished and lacquered.
- Removable self-centering cord cap for easy cord replacement. Cap used with 5/64" (0.078) braided cord.
- Replaceable hardened steel point.
- Available in seven sizes.
- Conforms to government specifications GGG-P-501e.

UPC Code	No.	Weight	Length	Diameter
42621 5	800-6	6 oz.	4-1/4"	1-1/6"
42624 6	800-8	8 oz.	4-1/2"	1-3/16"
42627 7	800-10	10 oz.	4-3/4"	1-5/16"
42630 7	800-12	12 oz.	5"	1-3/8"
42633 8	800-16	16 oz.	5-3/4"	1-1/2"
42636 9	800-24	24 oz.	6-1/2"	1-11/16"
42639 0	800-32	32 oz.	7-1/4"	1-7/8"

REPLACEMENT PARTS

UPC Code	No.	Description
42641 3	800NP	Replacement point 10-32 thread

HEXAGON STEEL PLUMB BOBS

- Made of hexagonal cold drawn steel and nickel plated to prevent rust.
- Removable cord cap for 3/32" (0.094) braided cord.
- Conforms to government specifications GGG-P-501e.
- Available in 3 sizes.

UPC Code	No.	Weight	Length	Hex Width
42612 3	790-5	5 oz.	3-3/8"	3/4"
42615 4	790-8	8 oz.	4"	7/8"
42618 5	790-12	12 oz.	4-1/2"	1"



SWIVEL HEAD PIN VISE

- An exceptional pin vise for delicate work on models, instruments and jewelry.
- Single collet made of hardened tool steel.
- Has large freewheeling swivel head.
- 4" overall and 5/16" diameter body.
- Number 9192 comes with 3 drills; No. sizes 66, 70 and 72 that store in body.

UPC Code	No.	Capacity
41060 3	9192	0.10 to 0.125" 0.0 to 3.2mm
41062 7	92	0.10 to 0.125" 0.0 to 3.2mm



93

ADJUSTABLE PIN VISE

- Use for electronic assembling, toolmaking, model making and hobbies.
- Holds small drills, burrs, wires, files, reamers and other small tools.
- 3-jaw hardened steel keyless chuck, sturdy plastic handle.
- Overall length 6-7/8"; body diameter 1".

UPC Code	No.	Capacity
41065 8	93	0.040 to 0.250" 1mm to 6.4mm



SPC600

SET OF SIX JEWELER'S SCREWDRIVERS

- Nickel plated blade sizes: .100", .080", .070", .055", .040", .025".
- Screw chucks have identification rings showing blade size.
- Overall length 3-7/8".
- Conforms to government specifications GGG-S-1808.
- Plastic case.

UPC Code	No.	Description
42568 3	SPC600	Plastic case
<i>Individual Screwdrivers</i>		

42515 7	600-0	.100 blade width
42518 8	600-1	.080 blade width
42521 8	600-2	.070 blade width
42524 9	600-3	.055 blade width
42527 0	600-4	.040 blade width
42530 0	600-5	.025 blade width



SPC606

JEWELER'S SCREWDRIVER AND HOBBY KIT

- Nickel plated handle with screw chuck.
- Three tempered straight blade sizes, one crosspoint blade and one scratch awl in a fitted vinyl case.

UPC Code	No.	Blade Width
42571 3	SPC606	Straight blade sizes .100", .070", .040"; No. 0 crosspoint and scratch awl.

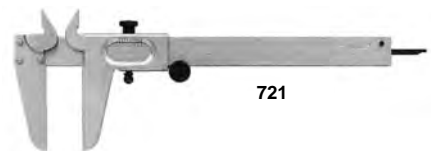


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SWIVEL HEAD DEBURRING TOOL

- Economically priced, with the quality and performance of higher priced deburring tools.
- Two interchangeable blades.
- 5" aluminum handle.

UPC Code	No.	Description
42324 5	482	Blade for steel, copper, aluminum and plastic.
42327 6	482A	
42330 6	482B	Blade for brass and cast iron.



721

FRACTIONAL SCALE VERNIER CALIPER

- Graduated in 16ths and 32nds of an inch with vernier reading of 1/28".
- Economical steel vernier calipers have 5" (125mm) capacity.
- Inside and outside jaws and full length depth gage.
- Friction roller adjustment.
- Slide lock for gaging.

UPC Code	No.
42574 4	721

BULL'S EYE LEVEL

- A circular, all directional level made of unbreakable acrylic plastic.
- For leveling machines, audio and video equipment, pool and game tables, electric appliances, and many other items.



847

UPC Code	No.	Length
43009 0	847	1-3/8"

STEEL PROTRACTORS

- Preferred by machinists, draftspeople, and mechanics for setting bevels, measuring and transferring angles.
- Made of ground stainless steel for optimum accuracy.
- Permanently etched graduations from 0 to 180° in opposite directions.
- 3-3/8" x 2" head.
- 6" adjustable protractor arm locks into desired position with knurled thumb nut.
- Also available with satin chrome finish: No. CF17.

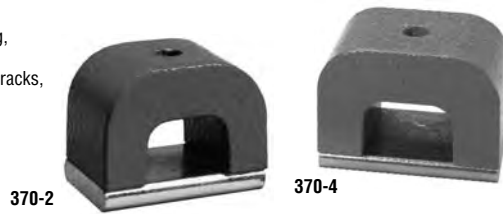


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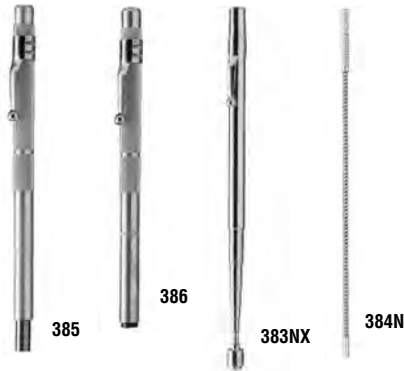
UPC Code	No.	Style
22018 9	17	Square head
22021 9	CF17	Square head
22024 0	18	Round head

POWER ALNICO MAGNETS

- Strong magnetic pull for lifting, holding, sorting, clamping or retrieving steel or iron parts.
- Hole in top of magnet for attaching conveyors, racks, and welding jigs.



UPC Code	No.	Size (oz.)	Approx. Pull (lbs.)	Width (in.)	Height (in.)	Pole Depth (in.)	Pole Width (in.)	Opening Between Poles (in.)	Cored Hole	Weight With Keeper (oz.)
42044 2	370-2	2	13	1-1/8	3/4	3/4	1/4	9/16	3/16	3
42047 3	370-3	3	17	1-5/16	1-3/8	5/8	3/8	5/16	—	4
42050 3	370-4	4	22	1-1/2	1	1	5/16	3/4	3/16	5
42053 4	370-6	6	30	1-3/4	1-1/8	1-1/8	5/16	7/8	3/16	8
42056 5	370-8	8	32	2-3/16	1-13/16	15/16	1/2	1-3/16	3/16	10
42059 6	370-10	10	37	2-7/16	2	15/16	5/8	1-3/16	3/16	13
42061 9	370-12	12	42	2-5/8	2-1/4	15/16	5/8	1-3/8	3/16	15
42064 0	370-16	16	50	3	2-1/2	15/16	3/4	1-1/2	3/16	20
42067 1	370-24	24	70	2-1/2	1-13/16	1-7/8	5/8	1-3/8	1/4	28



POCKET MAGNETIC PICKUPS

- Powerful permanent magnet in a knurled aluminum holder with handy pocket clip.
- No. 386 has a high-powered neodymium magnet which is six times more powerful than a cobalt magnet of the same size and density.
- Ideal for retrieving small steel and iron parts from hard-to-reach areas.
- Measures 5-1/2" overall.

UPC Code	No.	Magnet	Pull
42212 5	385	ALNICO	6 oz. pull
42219 4	386	NEO	2 lbs. pull

TELESCOPING MAGNETIC PICKUPS

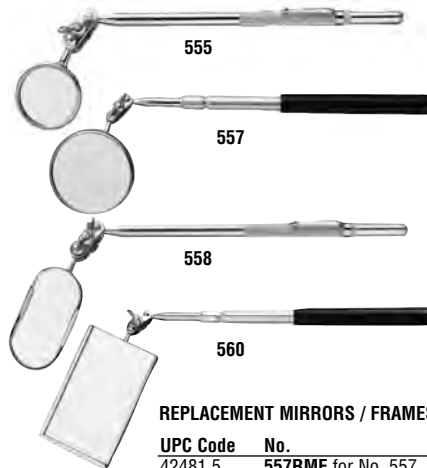
- A powerful permanent magnetic pickup tool.
- Ideal for retrieving steel and iron parts from hard-to-reach work areas.
- Magnet is fitted in a 5-1/2" long nickel plated steel handle that can extend up to 23-1/2".
- Holder is fitted with a pocket clip.

UPC Code	No.	Pull
42206 4	383X	6 oz. pull
42208 8	383NX	2 lbs. pull

FLEX-O-STIFF MAGNETIC PICKUPS

- An ideal tool for retrieving steel parts from hard-to-reach places.
- No. 384N has a high-powered neodymium magnet which is six times more powerful than a cobalt magnet of the same size and density.
- Permanent magnetic power.
- Magnet is fitted into an 18" nickel plated holder, which can be extended to a 32" flexible retriever.

UPC Code	No.	Magnet	Pull
42209 5	384	ALNICO	6 oz. pull
42210 1	384N	NEO	2 lbs. pull



REPLACEMENT MIRRORS / FRAMES

UPC Code	No.
42481 5	557RMF for No. 557
42484 6	560RMF for No. 560 and No. MB560

INSPECTION MIRRORS

- These mirrors facilitate inspection of inaccessible workpieces and machines by toolmakers, assemblers, inspectors and mechanics.
- Fully polished mirrors are enclosed in plated holders which are attached to knurled handles with ball and socket joints.
- Nos. 557 and 560 have telescoping arms and vinyl cushion grip handles.

UPC Code	No.	Size	Overall Length
42465 5	555	1-1/4" dia.	8"
42468 6	557	2-1/4" dia.	10-1/2", ext. to 15"
42471 6	558	1" x 2" oval	9"
42473 0	560	3-1/2" x 2" oblg.	11-1/2", ext. to 16"

BUTT MARKING GAGES

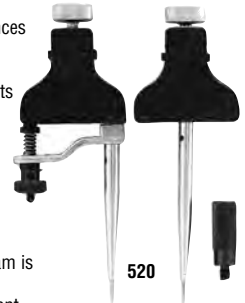
- Mark position of mortises for hinges on doors and jambs.
- Make chiseling of mortises easy and accurate.
- Durable forged steel with hardened and ground cutting edges.
- Available in 4 sizes packed in protective vinyl sleeves.

UPC Code	No.	Size
24056 9	823-3	3"
24059 0	823-3-1/2	3-1/2"
24061 3	823-4	4"
24064 4	823-4-1/2	4-1/2"



PRECISION ADJUSTABLE TRAMMELS

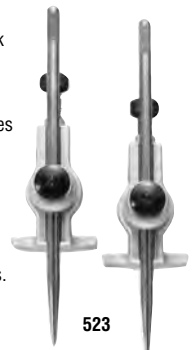
- Draw large circles and measure sizable distances with the accuracy of a divider.
- Fine adjusting screw sets points accurately.
- Points are removable and may be replaced with the pencil holder.
- Die-cast bodies with hardened and ground 3" needlepoint legs.
- Clamp opening for beam is 3/8" x 3/4".
- Conforms to government specifications GGG-T-661b.
- Includes package of 12 Replacement Points No. 84P.



UPC Code	No.
23090 4	520
31104 7	84P Replacement points

ADJUSTABLE TRAMMELS

- Accurately measure and mark distances that are too great for conventional compasses and dividers.
- For layouts, marking templates and drawing large circles.
- 6" off-center eccentric points provide fine adjustment.
- Points can be replaced with pencils, ballpoint pens, crayons, or soapstone sticks for marking various materials.
- Clamps onto beam 5/8" to 1-1/2" thick of any length.



UPC Code	No.
23093 5	523



UPC Code	No.
24044 6	817

SCREWDRIVER HANDLE SCRATCH AWL

- Blade is firmly attached to durable plastic handle.
- Measures 5-3/4" overall, with 3-1/2" blade.



- For making lighter markings than our Heavy-Duty Punch No. 78.
- Black oxide finish inhibits rust.
- All-steel 5" body with threaded, replaceable, hardened steel point and shaft.
- Body diameter is 1/2".

UPC Code	No.
31072 9	79
31078 1	79P Replacement point
31079 8	79P/2 Replacement points (2)



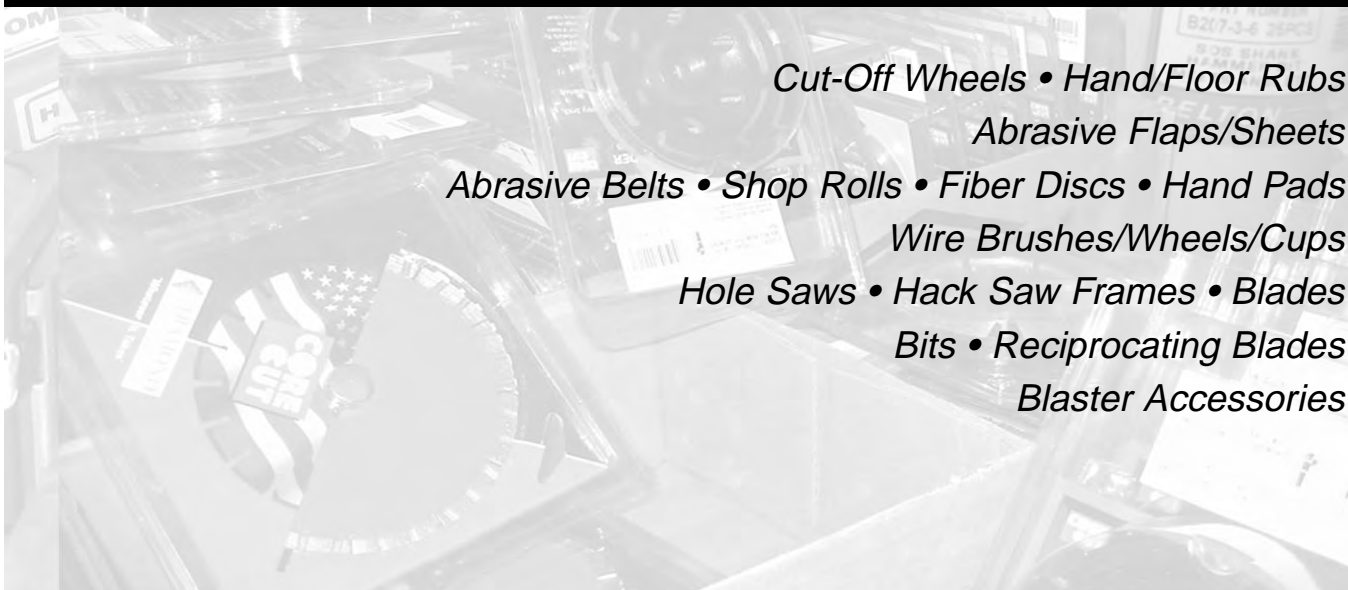
- Heavy-duty center punch.
- Black oxide finish inhibits rust.
- All-steel 6" body with threaded, replaceable, hardened steel point and shaft.
- Body diameter is 5/8".

UPC Code	No.
31066 8	78
31068 2	78P Replacement point



*Acetylene/Gas Torches
Cutting/Welding Outfits
Cutting Tips • Spark Lighters
Saw Blades
Files • Rasps • File Handles • Cleaner
Step Drill Bits • Drill Bits
Screw Extractors • Taps • Dies
Countersinks • Reamers
Machine Tool Accessories • Burrs
Core Bits • Extensions
Cup Grinders • Hammer Bits
Masonry Drill Bits • Adaptors • Anchor/Carbide Bits
Metal-Cutting Fluids
Lubricating Wax • Cutting Oil
Cutting/Grinding Wheels*

Abrasives/Cutting Tools

10

*Cut-Off Wheels • Hand/Floor Rubs
Abrasive Flaps/Sheets
Abrasive Belts • Shop Rolls • Fiber Discs • Hand Pads
Wire Brushes/Wheels/Cups
Hole Saws • Hack Saw Frames • Blades
Bits • Reciprocating Blades
Blaster Accessories*

Extreme™ Standard Torch Kits This line of kits has been the industry standard for decades. Reliable and well engineered, the standard line of kits combines our Extreme Swirl Technology with a traditional manual lighting torch. All tips feature quick disconnect couplings and color coded O-rings for gas identification.



X-3B (0386-0335)

COMPONENTS

- AR-B (CGA 520) Regulator
- G-4 Handle • AH-12 Hose
- A-3 Tip • A-11 Tip
- Soft solders to 3" (75mm)
- Silver brazes to 1-5/8" (40mm)
- "B" Tank Connection
- Instruction Manual



X-5MC (0386-0384)

COMPONENTS

- AR-MC (CGA 520) Regulator
- G-4 Handle • AH-12 Hose
- A-5 Tip
- Soft solders to 1-1/2" (40mm)
- Silver brazes to 3/4" (20mm)
- "MC" Tank Connection
- Instruction Manual

Kit No.	Model	Soft Solders	Silver Brazes	Regulator	Handle	Hose	Tips	Tank Connection	Valve Position
X-3B	0386-0335	3" 75mm	1-5/8" 40mm	AR-B (CGA-520)	G4	AH-12	A-3, A-11	B	Rear
X-4B	0386-0336	3-1/2" 90mm	2" 50mm	AR-B (CGA-520)	G4	AH-12	A-5, A-14	B	Rear
X-5B	0386-0338	1-1/2" 40mm	3/4" 20mm	AR-B (CGA-520)	G4	AH-12	A-5	B	Rear
X-5MC	0386-0384	1-1/2" 40mm	3/4" 20mm	AR-MC (CGA-200)	G4	AH-12	A-5	MC	Rear
X-6MC	0386-0339	2" 50mm	1" 30mm	AR-MC (CGA-200)	G4	AH-12	A-3, A-8	MC	Rear
MSKA-1	0386-0366	3" 75mm	3/4" 20mm	AR-B (CGA-520)	G4	AH-12	MSA-8	B	Rear

Extreme™ Standard Tips A full series of manual lighting tips can be used with any Air Acetylene torch (PLF-A5 or G-4) handle. Add range to your torch kit with economical tips that also feature a removable orifice screw.

With Color Coded "O" Rings
(Red for Acetylene)



A-2 (0386-0100) **A-3** (0386-0101) **A-5** (0386-0102) **A-8** (0386-0103) **A-11** (0386-0104) **A-14** (0386-0105) **A-32** (0386-0106) **MSA-8** (0386-0365)

Tip No.	Tip Size		Gas Flow		Soft Solder		Silver Braze		Replacement Orifice Model
	(in.)	(mm)	@14PSI SCFH	(0.9 BAR) M ³ /HR	(in.)	(mm)	(in.)	(mm)	
A-2	1/8	4.8	2.0	.17	1/8-1/2	3-15	1/8-1/4	3-10	OR-A2
A-3	3/16	6.4	3.6	.31	1/4-1	10-25	1/8-1/2	3-12	OR-A3
A-5	1/4	7.9	5.7	.48	3/4-1 1/2	20-40	1/4-3/4	10-20	OR-A5
A-8	5/16	9.5	8.3	.71	1-2	25-50	1/2-1	15-25	OR-A8
A-11	7/16	11.1	11.0	.94	1 1/2-3	40-75	7/8-1 5/8	20-40	OR-A11
A-14	1/2	12.7	14.5	1.23	2-3 1/2	50-90	1-2	30-50	OR-A14
A-32	3/4	19.0	33.2	2.82	4-6	100-150	1 1/2-4	40-100	OR-A32
MSA-8	3/8	9.5	5.8	.50	3/4-3	20-75	1/4-3/4	10-20	OR-A5

Proline Standard Propane & MAPP Kits Designed with the same Swirl Combustion Technology that is featured in the Proline Self Lighting Series, the manual series offers an economical alternative for use with Propane and Mapp gasses. A variety of tips sizes helps complete the job quickly and economically.



LP-1 KIT
(0386-0247)

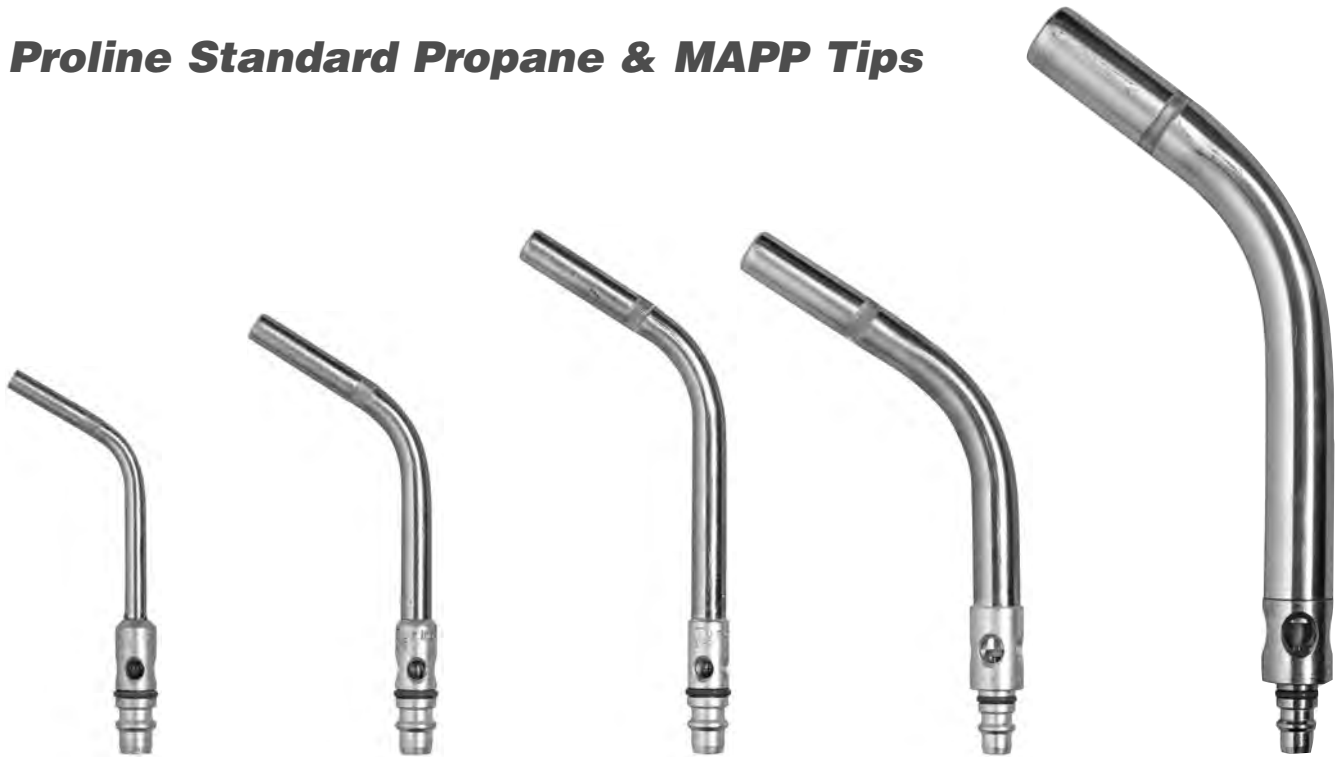
COMPONENTS

- R-LP Adjustable Regulator, CGA-510
- H-4 Handle • H-12 Hose
- T-4 Tip • T-6 Tip
- Soft solders to 6" (150mm) with MAPP
- Silver brazes to 4" (100mm) with MAPP
- Instruction Manual

With Color Coded "O" Rings
(Blue for LP)

Kit No.	Model	Regulator	Handle	Hose	Tips	
LP-1	0386-0247	RL-P (CGA-510)	H-4	H-12	T-4, T-6	Refer to tip chart below for soldering and brazing capacities
LP-2	0386-0007	RL-P (CGA-510)	H-4	H-12	T-3, T-5	
LP-3	0386-0006	RL-P (CGA-510)	H-4	H-12	T-4	

Proline Standard Propane & MAPP Tips



T-2
(0386-0150)

T-3
(0386-0151)

T-4
(0386-0152)

T-5
(0386-0153)

T-6
(0386-0154)

Tip No.	Tip Size		Gas Flow		Copper Tubing Size Capacity Propane Gas				Copper Tubing Size Capacity MAPP® Gas				Replacement Orifice Model
	(in.)	(mm)	@24 PSI (lbs./hr.)	@36 PSI (lbs./hr.)	Soft Solder		Silver Braze		Soft Solder		Silver Braze		
					(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	
T-2	5/16	8.0	.14	.17	1/8-1/4	3-10	1/16-1/4	1-6	1/8-1/2	3-12	1/8-1/4	3-10	OR-A2 0386-1000
T-3	7/16	11.1	.20	.25	1/4-1	6-25	1/8-1/2	3-10	1/4-1 1/2	10-40	1/4-1/2	6-15	OR-T3 0386-1021
T-4	1/2	12.7	.39	.48	1/4-1 1/2	10-40	1/4-3/4	6-15	1/4-2 1/2	10-60	1/4-1 1/4	6-35	OR-A3 0386-1001
T-5	3/4	19.0	1.10	1.3	1 1/2-2 1/2	25-60	1/2-1 1/4	15-35	1-4	25-100	1/2-2	15-50	OR-A8 0386-1003
T-6	1	25.4	2.10	2.5	1 1/2-4	40-100	3/4-2	20-50	1 1/2-6	25-150	3/4-4	20-100	OR-T6 0386-1024

Extreme™ STK Torches and Tips A longtime industry benchmark, the TurboTorch line of STK torches and tips now features the new Extreme Swirl technology. All torches have 360 degree swivel tips and easy to clean orifice screws. Torch kits include the STK-R Pressure Regulator with CGA-600 connection and instruction manuals.



STK-1
(0386-0408)
STK-R Regulator
ST-1 Tip



STK-9
(0386-0403)
STK-R Regulator
ST-3 Tip



STK-11
(0386-1283)
STK-R Regulator
ST-11 Double Barrel Tip



STK-99
(0386-0851)
STK-R Regulator
ST-33 Self Lighting Tip



STK-8B
(0386-0404)
Dual Fuel Kit
with Case



ST-1
(0386-0170)



ST-3
(0386-0171)



ST-4
(0386-0183)



ST-5
(0386-0184)



ST-11
(0386-1282)



ST-33
(0386-0850)



STK-4
(0386-0687)



44TL-TE
(0386-1263)



Fits ST-33, STK 99
and TL-44

Tip No.	Model	Propane		MAPP		Replacement Orifice	BTU MAPP
		Soft Solders	Silver Brazes	Soft Solders	Silver Brazes		
ST-1	0386-0170	1/8"-1/2" (3-13mm)	1/8"-3/8" (3-10mm)	1/8"-3/4" (3-20mm)	1/8"-1/2" (3-13mm)	STOR-1	1,200
ST-3	0386-0171	1/4"-3" (6-76mm)	1/4"-1" (6-25mm)	1/4"-3 1/2" (6-90mm)	1/4"-1 3/4" (6-45mm)	STOR-3	1,800
ST-4	0386-0183	1 3/8"-2" (35-51mm)	1 3/8"-1 1/2" (35-38mm)	1 3/8"-2 1/2" (35-64mm)	1/4"-1 3/8" (6-35mm)	STOR-3	1,800
ST-5	0386-0184	1/8"-3/8" (3-10mm)	1/8"-3/8" (3-10mm)	1/8"-1/2" (3-13mm)	3/8"-1/2" (10-13mm)	STOR-1	1,800
ST-11	0386-1282	1"-4" (25-102mm)	1/2"-2" (13-51mm)	1 1/2"-6" (38-152mm)	3/4"-3" (20-76mm)	STOR-3	3,600
ST-33	0386-0850	1/4"-3" (6-76mm)	1/4"-1" (6-25mm)	1/4"-3 1/2" (6-90mm)	1/4"-1 3/4" (6-45mm)	STOR-3	1,700



CUTTING AND WELDING

CUTTING AND WELDING OUTFITS

V
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KV830-21

	<i>Metal Thickness</i>
Cutting range with proper tip	Up to 12"

PROFESSIONAL

- The **Professional** is a basic heavy-duty cutting outfit. The ultimate for construction and industrial applications. Additional accessories are required.
- The **KV outfit** includes the **RV Series regulators** which incorporate a durable stainless steel diaphragm, an accessible seat assembly and easy to read single scale brass cased **2-1/2"** gauges.
- The outfit comes with either the **830 or 850 series Cutting Torches** which have precision CNC machine forged body and head and a time tested universal mixer for most **fuel** gases 3 PSIG and above with the proper tip.

Hand Cutting Torch.....	830-21 (90°)
Oxygen Regulator 5-125 PSIG.....	RV8010 (Cylinder Connection CGA540)
Acetylene Regulator 2-15 PSIG	RV8011 (Cylinder Connection CGA510)
Gauge.....	2-1/2"

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KAV98A

<i>Capacity</i>	<i>As Supplied</i>	<i>With Optional Tips</i>
Cutting range	1/2"	8"
Welding range	1/8"	1-1/2"
Heating range	—	45/225 CFH acet. 340,000 BTU/HR.

ALL AMERICAN

- This **All American** is a basic heavy-duty outfit with the necessary components for most industrial and commercial applications including cutting, brazing and welding. Optional equipment may be added as needed.
- **RV Series** regulators incorporate a durable stainless steel diaphragm, an accessible rear loaded seat assembly and easy to read single scale brass cased **2-1/2"** gauges.
- The **CA98A Cutting Attachment**, with its sturdy triangular tube construction and tip mix, is the most reliable choice for difficult cutting environments. Use with most **fuel** gases 3 PSIG and up with proper tip.
- The **98L9 Welding Handle** has a durable, 2-tube silver brazed construction and ergonomically designed ribbed outer handle that is vented for safety.

Torch Handle.....	98L9
Cutting Attachment	CA98A
Cutting Tip	144 (Size 1)
Weld/Braze Tip.....	Type 98 (Size 3)
Oxygen Regulator 5-125 PSIG.....	RV8010 (Cylinder Connection CGA540)
Acetylene Regulator 2-15 PSIG	RV8011 (Cylinder Connection CGA510)
Accessories.....	Twin Hose 20'-1/4" "B", Goggles, Lighter

HAND CUTTING TORCHES

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- Precision CNC machine forged brass head and body.
- Copper nickel tubes for strength and heat dissipation.
- Stainless steel ball point valves for accurate gas control and positive shutoff.
- Stainless steel high pressure cutting oxygen lever.
- Visible external reverse flow check valves for ease of testing and service.
- Time tested universal mixer for most **fuel** gases 3 PSIG and above with proper tip.
- Capable of cutting up to 12" with proper tip.



830-21

A
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- All **fuel** gases are mixed in the cutting tip for maximum safety.
- Precision CNC machine forged brass body.
- Forged brass head precision machined and reamed to assure proper tip seating.
- Triangular shaped tube design. Silver brazed for strength and durability.
- Stainless steel ball point valves for accurate gas control and positive shutoff.
- Contoured forged brass cutting oxygen lever.
- External reverse flow check valves for ease of testing, servicing and repair.
- Capable of cutting up to 12" with proper tip.
- Used with most **fuel** gases 3 PSIG and above with proper tip.



50A-21



54A-21



Hardware & Supply Co., Inc.
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CUTTING AND WELDING ACCESSORIES

CUTTING TIPS

V ACETYLENE – “V” STYLE SEAT – ONE-PIECE TIPS

Part #	Sizes	Use with Torch Series	Application	Preheat	Illustration
1-101	000 - 8	Cutting Attachment.....780 Hand Cutting Torches.....830, 850, EC72780 Machine Cutting Torches .....67	General purpose and machine cutting	Medium	

NATURAL GAS/PROPANE – “V” STYLE SEAT – TWO-PIECE TIPS

Part #	Sizes	Use with Torch Series	Application	Preheat	Illustration
GPN	000 - 6, 8	Cutting Attachment.....780 Hand Cutting Torches.....830, 850, EC72780 Machine Cutting Torches .....67F	General purpose and machine cutting	Medium	

A ACETYLENE – “A” STYLE SEAT – ONE-PIECE TIPS

Part #	Sizes	Use with Torch Series	Application	Preheat	Illustration
144	00 - 10	Cutting Attachment..CA98, CA730, CA370, CA330 Hand Cutting Torches.....30, 50, 54 Machine Cutting Torches .....64	General purpose hand and machine cutting	Medium	
164	00 - 10	Cutting Attachment..CA98, CA730, CA370, CA330 Hand Cutting Torches.....30, 50, 54 Machine Cutting Torches .....64	General purpose hand and machine cutting for rusted and painted surfaces	Medium	

NATURAL GAS/PROPANE – “A” STYLE SEAT – TWO-PIECE TIPS

Part #	Sizes	Use with Torch Series	Application	Preheat	Illustration
229	0 - 10	Cutting Attachment..CA98, CA730, CA370, CA330 Hand Cutting Torches.....30, 50, 54 Machine Cutting Torches .....64	General purpose hand and machine cutting, scrap cutting	Heavy	

REGULATORS – SINGLE STAGE



RV8010



RUH8210

RV80 Heavy-Duty Series

- Forged brass body and bonnet.
- Easy-to-read single scale 2-1/2" gauges.
- 3-1/4" stainless steel diaphragm.
- Heavy-duty mechanical stem type seat and nozzle assembly.
- Delrin bushing for smooth flow adjustment.
- Removable back plug for ease of seat service.
- Porous metal inlet filter.
- Fine mesh filter screen between inlet seat and body.
- Pressure relief device for low pressure gauge protection only.
- UL Listed.
- Maximum inlet - 3000PSIG.

RUH82 Medium Duty Series

- Machined brass body.
- Polished chrome bonnet.
- Easy-to-read single scale 2" gauges.
- 2" tri-layered reinforced neoprene diaphragm.
- Heavy-duty mechanical stem type seat and nozzle assembly.
- Delrin bushing for smooth flow adjustment.
- Porous metal inlet filter.
- Fine mesh filter screen between inlet seat and body.
- Pressure relief device for low pressure gauge protection only.
- UL Listed.
- Maximum inlet - 3000PSIG.

Part #	CGA Inlet	Outlet Connection	Del PSIG	Replacement Gages
RV8010	Oxygen 540	"B" (RH) 9/16"-18 (M)	5-125	G24, 200 PSI G27, 4000 PSI
RV8011	Acetylene 510	"B" (LH) 9/16"-18 (M)	2-15	G22, 30 PSI G21, 400 PSI
RUH8210	Oxygen 540	"B" (RH) 9/16"-18 (M)	5-125	G4S, 200 PSI G7S, 4000 PSI
RUH8211	Acetylene 510	"B" (LH) 9/16"-18 (M)	2-15	G2S, 30 PSI G1S, 400 PSI

FLASHBACK ARRESTORS



TFA100 TFA101

- Stops backfire and flashback by preventing reverse flow of gases.
- Built in Check Valve.
- UL Listed.
- Available for torch and regulator.
- Sufficient flow to cut up to 10".

Flashback arrestors should be installed at the torch to help protect the welder and at the regulator to help protect equipment and cylinders.

Single	9/16"-18 "B" Fitting	
	Regulator	Torch
	Part #	Part #
Oxy	RFA100	TFA100
Fuel	RFA101	TFA101
Display Set of (1) Oxy & (1) Fuel	RFAB	TFAB



CUTTING AND WELDING

THE SPECIALIST™ – HEAVY-DUTY



The Uniweld Specialist™ is an oxy/fuel outfit for cutting, welding and brazing. Oxygen and fuel flashback arrestors with built-in check valves prevent reverse flow of gases and flashback. Packed in its own handy tool box with utility tray. Use with most fuel gases.

780A CUTTING ATTACHMENT cuts up to 3/4" with supplied tip.

RUH SERIES REGULATORS with large, easy-to-read single scale 2-1/2" gauges.

WH360 WELDING HANDLE with stainless steel ball point valves for accurate gas control and positive shutoff.

Cutting Capacity: 3/4" with supplied tip; up to 8" with optional tips.

Welding Capacity: 3/32" with supplied tips; up to 3" with optional tips.

Part #	Torch Handle	Cutting Attachment	Cutting Tips	Weld/Braze Tips	Oxygen Regulator 5-80PSIG	Acetylene Regulator 2-15PSIG	Toolbox W/Tray
KAR780ASPF-4	WH360	780A	1-101#1	Type 4 #1	RUH8310 CGA540	RUH8311 CGA510	Black Plastic

Torch Flashback Arrestors included.

Optional Twin Hose Set, "B" Fittings, Flint Lighter, Spiral Tip Cleaners, Safety Goggles, Wrenches

SCORCHER® TORCH KIT

A multipurpose propane gas flame tool for use on farms and ranches; at home and business; in construction, maintenance and factories; on railways; in parks and on highways.

- Easy to ignite using striker included in kit.
- 36" all-steel handle and torch head.
- Hooks up to standard 20 lb. Bar-B-Que grill type liquid propane tank.
- P.O.L. valve prevents excess flow of L.P. gas if hose is cut or melted.
- 10' durable neoprene hose, UL Listed.

Unleash the Power of 500,000 BTUs.

Use for:

- ICE MELTING
- ASPHALT REPAIR
- WEED BURNING
- DOZENS OF OTHER USES

WB500



TWISTER® KITS



89602



89600

Get fast heat transfer with Twister® Swirl combustion.

The air/acetylene Twister® is our most popular air/fuel flametool for the plumber and HVAC tradesmen. The Twister® swirl combustion tips produce a high energy efficient flame that is stable even in windy conditions.

Part #	Regulator	Handle	Tips	Carrying Stands	Tanks
89600	RB Acetylene	TH6 Quick Connect Handle with Rear Control Valve	A-3, A-11 Twister® Tips	w/o	w/o
89602	RB Acetylene	TH6 Quick Connect Handle with Rear Control Valve	A-3, A-11 Twister® Tips	502	"B" Acet. Tank



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Universal Round File Lighter – Model #3001



Designed for the welding industry, the #3001 is capable of lighting any flammable gas. The #3001 lighter features a very long lifespan and provides the lowest cost per ignition of any lighter anywhere. This lighter showcases the SHURLITE commitment to quality, and is guaranteed to spark vigorously and reliably. This is the ideal lighter for professional welders.

The #3001's flint tip may be easily replaced with one of our Universal Single Flint Renewals. The #3001 features a round file made with our secret SHURLITE process, a large square hood for trapping flammable gases for easy ignition and a wire frame made from a specialty steel which retains its springiness over the life of the lighter.

Unlike competitive products, the hood or cup will not fall off when dropped, and the round file may be easily rotated for a fresh striking surface.

Universal Single Flint Renewals – Model #3001X



SHURLITE #3001X renewal flints are economically priced and designed for any of the SHURLITE family of single flint lighters; the #3011, #3021, #3001, #3001B, #1511, #1521, #1501 or #1501B. Even your old SHURLITE #2001 or #2501 can utilize these replacement flints. In fact these replacement flints are guaranteed to fit perfectly on any SHURLITE single flint lighter and should fit on competitive products as well.

The flint itself is guaranteed to remain seated in the aluminum flint holder and is larger than competitive products for longer life.



TIP CLEANERS

SPIRAL TIP CLEANERS

- Quality aluminum case – cleaning data stamped on back of case.
- Rustproof, high quality stainless steel wire.
- Strongest construction; spiral is roll-formed.
- Exclusive LOCK-IN KNOT on small wires.
- Long spiral cleans larger number of tip styles.
- Tapered pilot ends will not damage tip orifice.
- Hardened steel file included in each case.



**Our Stock of
Small Tools
Is Most Complete**

No. TCS Standard Set 12 Cleaners (Box of 12)	
No.	Drill
1	75-74
2	73-72-71
3	70-69-68
4	67-66-65
5	64-63-62
6	61-60
7	59-58
8	57
9	56
10	55-54
11	53-52
12	51-50-49

No. TCJ Jumbo Set 9 Cleaners (Box of 12)	
No.	Drill
13	48-47
14	46-45
15	44-43
16	42-41
17	40-39-38
18	37-36
19	35-34-33
20	32-31
21	30

Steel-Pro® Series

TENRYU's steel cutting carbide tipped saw blades for INDUSTRIAL PERFORMANCE

Cut ferrous metals (mild steel) faster, cleaner and easier. Save time, money, the environment and your respiratory health.

TENRYU's complete series of steel cutting saw blades called "Steel-Pro®" makes light work out of all kinds of mild steel: steel studs, steel sheet, steel pipe, channel, threaded rod and much, much more.

Specially formulated C-6 carbide grade, combined with our unique tip design, resists breakage on impact and lasts longer- much longer than standard carbides or abrasive discs. Special tooth geometry with "inserted" tooth design greatly improves security of the tip, efficiency and durability.

Abrasive discs throw sparks and lots of dust including unhealthful fiberglass. You shouldn't be breathing it in! Steel-Pro® blades reduce spark production and eliminate abrasive wheel dust.

Abrasive discs wear quickly, requiring frequent blade changes. Steel-Pro® blades allow you to keep working; eliminating down time for frequent blade changes. In addition, Steel-Pro® cuts 5 to 10 times faster than abrasives. Typically, one Steel-Pro® blade will outlast somewhere between 15 to 30 abrasive blades. Think of all that non-productive "down time."

Abrasive discs leave a sharp burr at the cutting edge that must be removed later. Steel-Pro® blades cut clean; eliminating this extremely time-consuming after-cut process. "Time is money." Steel-Pro® saves BOTH!

EACH BLADE FEATURES:

- Rugged plates and specially formulated carbide tips with a special tooth grind for fast, clean cuts.
- High quality cuts without the clouds of dust and scorch marks associated with friction blades.
- Cool cuts that leave the work piece edge free of burrs.
- Reduced cost-per-cut and maximized performance for the operator as a result of fewer blade changes.

Please note all safety instructions before use and adhere to instructions for maximum RPM speeds.



MODEL #	DIA.	TEETH	ARBOR	GRIND	KERF	RAKE	APPLICATION
PRF-15238	6"	38	1/2"	MTCG	.079"	0	For cordless or corded saws.
PRF-16048	6-1/4"	48	5/8"	MTCG	.079"	0	For cordless or corded saws.
PRF-18536BWK	7-1/4"	36	5/8"KO	MTCG	.079"	0	New, STABILIZER. Ferrous Metal 1/8" up to 1/4".
PRF-18356BWK2	7-1/4"	36	20mm	MTCG	.079"	0	New, STABILIZER. Ferrous Metal 1/8" up to 1/4".**
PRF-18538BW	7-1/4"	38	5/8"KO	ATB	.079"	0	Our Steel-Pro for cutting ferrous metal up to 1/4" thick.
PRF-18538BW2	7-1/4"	38	20mm	MTCG	.079"	0	Mild steel up to 1/4" thick.**
PRF-18548BW	7-1/4"	48	5/8"KO	ATB	.079"	0	Our most popular Steel-Pro. Cuts thick (up to 1/8") and thin.
PRF-18548BWK	7-1/4"	48	5/8"KO	MTCG	.079"	0	New, STABILIZER. Ferrous Metal up to 1/8".
PRF-18548BW2	7-1/4"	48	20mm	ATB	.079"	0	Mild steel up to 1/8" thick.**
PRF-18548BWK2	7-1/4"	48	20mm	MTCG	.079"	0	New, STABILIZER. Ferrous Metal up to 1/8".**
PRF-18556CB	7-1/4"	56	5/8"KO	ATAF	.071"	-10	Additional carbide tip for smoother cutting of thin materials.
PRF-18570CBN	7-1/4"	70	5/8"KO	ATB	.069"	-10	For very thin steel. (Steel sheet, corrugated steel sheet etc.)
PRF-18570BW2	7-1/4"	70	20mm	ATB	.069"	-10	For very thin steel. (Steel sheet, corrugated steel sheet etc.)
PRF-20348CBN	8"	48	5/8"	ATB	.087"	0	For ferrous metal cutting. General application.
PRF-21048BW	8-1/4"	48	5/8"KO	MTCG	.087"	0	The 8-1/4" Steel-Pro for ferrous metal cutting with circular saws.
PRF-23048CBN	9"	48	1"	ATB	.087"	0	For up to 1/8" thick steel on the Evolution Saw.
PRF-25550D	10"	50	1" 5/8"	TCG	.098"	0	For 10" circular saws and low RPM saws for ferrous metal.
PRF-30560D*	12"	60	1"	TCG	.098"	0	For cutting mild steel on low RPM dry cut saws.
PRF-30560DK	12"	60	1"	TCG	.098"	0	New, STABILIZER. For use on dry-cut low RPM saws.
PRF-35572D*	14"	72	1"	TCG	.094"	0	For use on dry-cut low RPM saws for cutting mild steel.
PRF-35572DK	14"	72	1"	TCG	.098"	0	New, STABILIZER. For use on dry-cut low RPM saws
PRF-40580D*	16"	80	1"	TCG	.102"	0	For use on low RPM saws for cutting mild steel.

*These blades are for use on low RPM "dry-cut" chop saws only. **Fits Jancy, Evolution® Saw.

Alumi-Cut Series

**TENRYU'S best value
for your non-ferrous
metal cutting needs.
Thin Kerf.
Very Economical.**



The Alumi-Cut Series offers true quality and affordability.

These blades are available in a wide variety of sizes to fit most popular jobsite and shop saws. Excellent results in aluminum, copper, brass, bronze and other non-ferrous metals. Even works well in many plastics. Also good for woodworking and plastic cutting when needed. Resharpenable for long life, the Alumi-Cut blades will help you improve your bottom line!

These blades are also an excellent choice for cutting laminated flooring (i.e.: Pergo®, etc.) with slide-miters or table saws.

EACH BLADE FEATURES:

- Fully-hardened, expertly-tensioned tool steel bodies for true and accurate cuts.
- Appropriate triple-chip grind pattern for non-ferrous metals.
- Quality carbide ground to precision. Please note all safety instructions before use and adhere to instructions for maximum RPM speeds.

MODEL #	DIA.	TEETH	ARBOR	GRIND	KERF	RAKE	APPLICATION
AC-10036	4"	36	20mm	ATB	.055"	10	For use on 4" trim saws, including Makita, for cutting aluminum.
AC-18560D*	7-1/4"	60	5/8"KO	TCG	.079"	0	The very popular 7-1/4" Alumi-Cut blade for non-ferrous metal. Also works in plastic.
AC-20360DN	8"	60	5/8"	TCG	.087"	-5	An exceptional Alumi-Cut for 8" saws. Also works in plastic.
AC-21060DN	8-1/4"	60	5/8"KO	TCG	.087"	-5	A great 8-1/4" blade for non-ferrous metals and plastics.
AC-21660DN	8-1/2"	60	5/8"	TCG	.087"	-5	Our 8-1/2" Alumi-Cut blade for work in non-ferrous and plastic.*
AC-25560DN	10"	60	5/8"	TCG	.087"	-5	A super easy cutting Alumi-Cut blade.
AC-25580DN	10"	80	5/8"	TCG	.094"	-5	The hugely popular Alumi-Cut blade for clean non-ferrous work.*
AC-255100DN	10"	100	5/8"	TCG	.094"	-5	Especially for thin-wall extrusions and use on slide-miter saws.
AC-30580DN	12"	80	1"	TCG	.110"	-5	Great for non-ferrous or plastics on miter or radial arm saws.*
AC-305100DN	12"	100	1"	TCG	.110"	-5	For thin stock non-ferrous and plastics on miter or RAS.
AC-355100DN	14"	100	1"	TCG	.118"	-5	Our 14" Alumi-Cut blade. Great value and performance.
AC-380100DN	15"	100	1"	TCG	.118"	-5	Fantastic for 15" miter saws for non-ferrous and plastics.
AC-405120DN	16"	120	1"	TCG	.134"	-5	An outstanding blade for non-ferrous cutting. Also works in plastics.

CORD-FREE for NON-FERROUS METALS – Designed specifically for cordless saws

MODEL #	DIA.	TEETH	ARBOR	GRIND	KERF	RAKE	APPLICATION
CF-15254A	6"	54	1/2"	TCG	.063"	0	For aluminum cutting on 6" cordless saws.
CF-16560A	6-1/2"	60	5/8"	TCG	.079"	0	For aluminum cutting on 6-1/2" cordless saws.

*Also for cutting laminated flooring such as Pergo®.

Power Tool Series

Power Tool Series for the Contractor

Exceptional features and superior quality, thin kerf.

TENRYU's comprehensive line of blades for portable and stationary power tools. More variety, better quality and greater value. Sizes range from 4" to 14" for most types of applications. The TENRYU PT SERIES goes on to include thin kerf wood cutting blades designed especially for smooth cuts on miter and slide-compound.



BLADE FEATURES:

- Fully hardened, expertly tensioned tool steel bodies absorb impact, remain flat and true, and resist excess heat build-up.
- High-grade, C-3, fine-grain tungsten carbide tips resist erosion for extended blade life.
- Aggressive rake angles for maximum cutting speed and efficiency.
- Each tip is precision honed on all four exposed surfaces. This minimizes micro-chipping along the sharp edge of the blade and results in a sharper, longer-lasting edge.
- Thin kerf for less waste and lighter cutting performance (reduced feed pressure).
- Inserted tooth design on some models greatly increases the body-to-tip braze area for greater support and tip strength.
- Expansion slots and/or variable pitch gullets keep blade cool under stressful work loads.
- Can be resharpened for extended blade life.

POWER TOOL SERIES – Primarily for Portable Saws and 8-1/4" Table Saws

MODEL #	DIA.	TEETH	ARBOR	GRIND	KERF	RAKE	APPLICATION
PT-10024	4"	24	20mm	ATAF	.055"	18	For woodworking on Makita 4" trim saw.
PT-10006-1	4"	6	22mm	FTG	.157"	20	For very clean and accurate biscuit slots in all woods.
PT-10006-2	4"	6	22mm	ATAFR	.157"	25/-15	For exceptionally clean and smooth biscuit slots in all woods.
PT-11036	4-3/8"	36	20mm	ATAF	.063"	15	For fine trim work on corded Makita trim saws.
PT-11536	4-1/2"	36	3/8"	ATAF	.063"	15	For clean and easy trim work on the Porter Cable trim saw.
PT-14036	5-1/2"	36	5/8"/1/2"	ATAF	.063"	15	For fine and easy trim work on Makita or Skil circular saws.
PT-15236	6"	36	1/2"	ATAF	.063"	15	For excellent results on 6" Porter Cable corded or cordless saws.
PT-16524	6-1/2"	24	5/8"KO	ATB	.079"	20	For woodworking on 6-1/2" corded saws. FAST!
PT-16524-T	6-1/2"	24	5/8"KO	ATAF	.059"	20	For very fast and easy work on 6-1/2" corded or cordless saws.
PT-16540	6-1/2"	40	5/8"KO	ATB	.079"	20	For finer cuts on corded 6-1/2" saws.
PT-16540-CR	6-1/2"	40	BEVEL	ATB	.063"	18	For use on the CRAIN JAMB SAW for carpet/flooring installers.
PT-16540-T	6-1/2"	40	5/8"KO	ATB	.063"	18	ULTRA-THIN kerf for fine work on corded or cordless saws.
PT-16552-T	6-1/2"	52	5/8"KO	ATAF	.063"	18	ULTRA-THIN kerf for SUPER clean work on 6-1/2" saws.
PT-18516B	7-1/4"	16	5/8"KO	ATB	.073"	27	Our super fast framing and ripping blade with INSERTED teeth.
PT-18520B	7-1/4"	20	5/8"KO	ATB	.073"	27	Fast and furious 20-tooth INSERTED TOOTH blade for framers.
PT-18524AM	7-1/4"	24	5/8"KO	ATB	.070"	20	24-tooth contractor blade. Fast with long cutting life.
PT-18524-P	7-1/4"	24	5/8"KO	ATB	.070"	20	The choice when cutting pressure treated or wet lumber. COATED.
PT-18524V	7-1/4"	24	5/8"KO	ATB	.070"	20	CITATION. VARIABLE PITCH framing blade for FAST, smooth cutting.
PT-18540	7-1/4"	40	5/8"KO	ATB	.073"	27	Spectacular INSERTED TOOTH finish blade. Great performance.
PT-18540B	7-1/4"	40	5/8"KO	ATAF	.063"	27	ULTRA-THIN kerf for finish cross-cutting. Bulk packaged.
PT-18540-T	7-1/4"	40	5/8"KO	ATB	.063"	18	ULTRA-THIN blade for finish work on circular or trim saws.
PT-18552-T	7-1/4"	52	5/8"KO	ATAF	.063"	18	ULTRA-THIN, ultra-fine blade for trim work. For finest cuts.
PT-20360	8"	60	5/8"KO	ATAF	.087"	5	A no-nonsense clean cutting 8" woodcutting blade. Also for Panel saws.
PT-21018	8-1/4"	18	5/8"KO	ATB	.075"	25	Fast cutting for woodworking and ripping on table or circular saws. INSERTED TOOTH DESIGN.
PT-21040	8-1/4"	40	5/8"KO	ATB	.079"	15	The tremendously popular 8-1/4" Power Tool Series blade. For table or portable saws.
PT-21060	8-1/4"	60	5/8"KO	ATAF	.079"	12	For fine cuts in wood with a table saw or circular saw.

Rescue Blades

The RESCUE BLADE series is a high quality line of carbide tipped blades for cutting most building materials including roofing and most non-ferrous metals. Designed for heavy-duty demolition and for use by fire departments in fire fighting operations, these blades are excellent for use in pallet breaking and floor removal. Please be aware of SAFETY issues when operating gas powered saw machines.

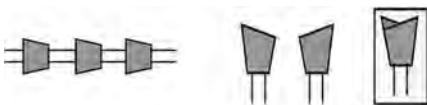
EACH BLADE FEATURES:

- Individually hammer-tensioned steel plates for true run.
- Specially selected, extremely tough grade of carbide for excellent work in a variety of materials.
- Tooth geometry selected for effective cutting under high-impact conditions.

MODEL #	DIA.	TEETH	ARBOR	GRIND	KERF	RAKE	APPLICATION
PT-30512	12"	12	1"	FTG	.134"	-8	For use by rescue squads and fire department. Faster cuts in wood materials, non-ferrous and sheet metal.
PT-30524	12"	24	1"	FTG	.134"	-8	For use by rescue squads and fire department. Fast cuts in wood materials, non-ferrous and sheet metal.
PT-30524A	12"	24	20mm	FTG	.142"	-8	Rescue saw, 20mm arbor. Fast cuts in wood materials, non-ferrous and sheet metal.
PT-35514	14"	14	1"	FTG	.142"	-8	For use by rescue squads and fire department. Fast cuts in wood materials, non-ferrous and sheet metal.
PT-35524	14"	24	1"	FTG	.142"	-8	For use by rescue squads and fire department. Fast cuts in wood materials, non-ferrous and sheet metal.

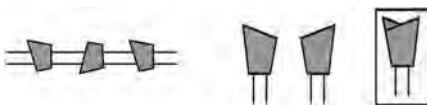
*Includes 7/8" and 20mm arbor adaptor bushings.

TOOTH GEOMETRY



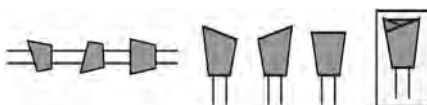
ATB (Alternate Top Bevel)

- Typical for cross-grain. Also used on ripping blades.



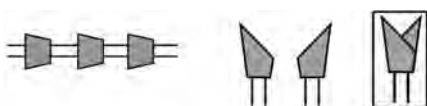
ATAF (Alternate Top Alternate Face)

- Extra sharp cutting tips reduce load on saw.
- Face beveling diverts cutting load left and right, instead of straight on.
- Creates a better shearing action, especially in cross-grain, natural wood.



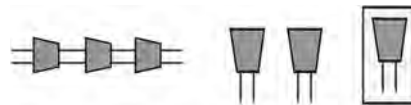
ATAFR (Alternate Top Alternate Face w/ Raker)

- Also known as ATBR.
- The FLAT-TOP RAKER sits LOWER, adds stability during cut and helps clean out and eject chips.



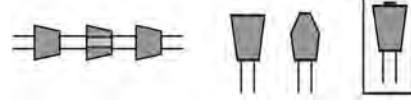
HATB (High, Alternate Top Bevel)

- Steep, top bevel angle grind, combined with unaggressive rake angle for chip free cuts in malamine and the finest plywoods.



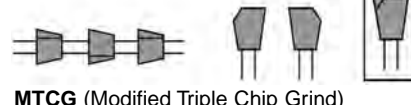
FTG (Flat Top Grind)

- Most effective when cutting with the grain.



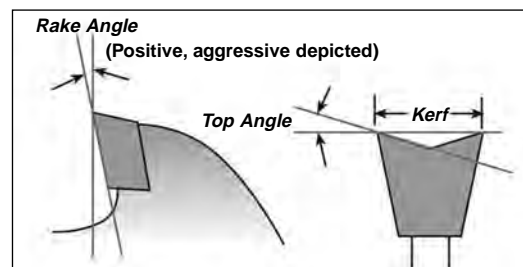
TCG (Triple Chip Grind)

- Center of kerf is cut first. Then FLAT-TOP RAKER cleans out chips and widens the cut.
- Commonly used for longer SHARP-LIFE in hard materials. Also good for ripping if RAKE is POSITIVE.



MTCG (Modified Triple Chip Grind)

- Commonly used for mild steel cutting.



Flat Files

Nicholson®

- Used by machinists, machinery builders, ship and engine builders, repairmen and others who require rapid removal of metal.
- Rectangular in cross section and taper slightly towards point in width.



- Double-cut on sides, single-cut on edges.
- American pattern, available in bastard, second and smooth-cut.

Inch	mm	Bastard Cut		Second Cut		Smooth Cut		Wt. Per Doz.			Shelf Pack
		Cat. No.	UPC No. 037103	Cat. No.	UPC No. 037103	Cat. No.	UPC No. 037103	lb.	oz.	g	
4	100	03367	033673	03401	034014	03434	034342	0	9	255	12
6	150	03467	034670	03500	035004	03533	035332	1	9	709	12
8	200	03566	035660	03599	035998	03632	036322	3	12	1701	12
10	250	03665	036650	03698	036988	03731	037312	7	3	3261	6
12	300	03764	037640	03797	137978	03830	038302	11	4	5103	6
14	350	03863	038630	03896	038968	03929	039293	16	10	7541	6
16	400	03980	039804	-	-	-	-	24	2	10943	6

Half Round Files

- Used on concave and flat surfaces.
- Rounded on 1 side, flat on opposite.
- Backs of all half-round bastard files are double-cut.
- Backs of all half-round second-cut files longer than 6" are double-cut.
- Backs of all 4" and 6" files are single-cut.



- Backs of all half-round smooth files are single-cut.
- Flat sides of all half-round files are double-cut.
- Pipeliner file (#05190) is single-cut on back and flat sides.

Inch	mm	Bastard Cut		Second Cut		Smooth Cut		Wt. Per Doz.			Shelf Pack
		Cat. No.	UPC No. 037103	Cat. No.	UPC No. 037103	Cat. No.	UPC No. 037103	lb.	oz.	g	
4	100	04695	046956	04729	047298	04762	047625	0	10	284	12
6	150	04795	047953	04828	048288	04861	048615	1	9	709	12
8	200	04896	048967	04927	049278	04960	049605	3	5	1503	12
10	250	04995	049957	05026	050267	05059	050595	6	1	2750	6
12	300	05094	050946	05125	051257	05158	051585	10	8	4763	6
12	300	05094H*	167958	-	-	-	-	12	0	5443	1
14	350	05194	051943	05225	052254	05258	052582	16	4	7371	6
14	350	05190	051905	Pipeliner	-	-	-	16	4	7371	6
16	400	05307	053077	-	-	-	-	23	14	10830	6

Round Files

- Primarily used to file circular openings or concave surfaces.
- Round shape.
- All 4", 5", 6", 8", 10" and 12" files are single-cut.



- 14" bastard file is double-cut.
- Tapered slightly towards point.

Length Inch	Diameter mm	Inch	mm	Bastard Cut		Second Cut		Smooth Cut		Wt. Per Doz.			Shelf Pack
				Cat. No.	UPC No. 037103	Cat. No.	UPC No. 037103	Cat. No.	UPC No. 037103	lb.	oz.	g	
4	100	1/8	3	11526	115263	11559	100009	11592	115928	0	4	113	12
5	125	3/16	5	11637	116376	11665	116659	-	-	0	9	255	12
6	150	1/4	6	11716	117168	11748	117489	11781	117816	0	14	397	12
8	200	5/16	8	11904	119049	11936	119360	11969	119698	1	6	624	12
10	250	3/8	10	12019	120199	12051	120519	12084	120847	3	3	1446	12
12	300	1/2	13	12131H*	167842	-	-	-	-	1	1	482	1
12	300	1/2	13	12134	121349	12166	121660	12199	121998	6	13	3090	6
14	350	5/8	16	12248	122483	12282	122827	-	-	11	15	5415	6

Wood Rasps - Half Round

- Used by woodworkers, hobbyists and plumbers.
- Half-round shape.
- Single-cut file teeth on edge.



- For use on wood and soft metals

Length Inch	mm	Packed	Bastard Cut		Second Cut		Wt. Per Shelf Pack.			Shelf Pack
			Cat. No.	UPC No. 037103	Cat. No.	UPC No. 037103	lb.	oz.	g	
6	150	Boxed	19361	193612	-	-	1	8	680	12
8	200	Boxed	19394	193940	19575	195753	3	7	1559	12
10	250	Boxed	19427	194275	19593	195937	6	8	2948	6
12	300	Boxed	19460	194602	19611	196118	10	8	4763	6
14	350	Boxed	19493	194930	-	-	16	15	7683	6

*Indicated ergonomic handle



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FILE HANDLE / CLEANER

Skroo-Zon File Handle

The Lutz Skroo-Zon File Handle is made with a white birch handle and heavy gauge steel ferrule. This handle is different from others and is preferred by many because the file screws onto a hardened steel insert inside the handle. It stays on because it screws on – the handle insert cuts a thread on the file tang. Packed 3 dozen per box.



Catalog #	For Use With
T-1	Small Files
T-2	4" files
T-3	5" files
T-4	6" files
T-5	8" files
T-6	10" files
T-7	12" files
T-8	14" files
T-9	Farrier Rasp

#10 Lutz File Cleaner

The Lutz #10 file cleaner is made with sharp steel bristles to dig and quickly remove shavings from grooves of files to restore their clean cutting capacity. For machinists, mechanics and others in cutting, cleaning and roughing applications. 8-1/4" long. Packed one dozen per box. Also available carded.



GRINDING WHEEL DRESSERS

YOU CAN LOWER YOUR GRINDING COSTS AND INCREASE PRODUCTION WITH DESMOND DRESSERS.

Desmond Huntington Dressers (Patented)

For Medium and Coarse Wheels



Code No.	Dresser No.	(For Use on Wheels) Diameter	Face	Weight
11210	.....0 Huntington*	.....Up to 10"	.....2"	.....2 lbs.
11310	.....1 Huntington	.....10" to 16"	.....3"	.....2-1/2 lbs.
11510	.....2 Huntington	.....16" to 36"	.....3-1/2"	.....5-1/2 lbs.
11410	.....21 Huntington	.....10" to 16"	.....3-1/2"	.....2-1/2 lbs.
11610	.....22 Huntington	.....16" to 36"	.....4"	.....7 lbs.

*No. 0 also available in plain non-hooded.

Fulfill most general dressing needs where fast dressing is the primary requirement.

High Speed Steel Fractional Self-Starting



- Single-flute cutting edge for greater control through steps.
- Three flatted shank prevents slipping in drill chuck.
- Also available with titanium nitride coating for longer life.
- New SpeedPoint tip penetrates faster than previous Unibits and prevents walking.
- Ideal for drilling holes into thin materials such as stainless steel, copper, brass, aluminum, plastic and laminates.

Style	Item No.	Hole Sizes	Number of Holes	Max. Mat. Thickness	Shank Size	KO Size
#1	10231	1/8" - 1/2"	13 steps	1/8"	1/4"	
	10232	3/16" - 1/2"	6 steps	3/8"	1/4"	
#3	10233	1/4" - 3/4"	9 steps	1/8"	3/8"	
#4	10234	3/16" - 7/8"	12 steps	1/8"	3/8"	
	10235	1/4" - 1-3/8"	10 steps	1/8"	1/2"	
#10	10239	7/8" and 1-1/8"	2 steps	1/8"	1/2"	1/2" and 3/4"
	10310	1/2"	N/A	N/A	1/4"	
	10311	7/8"	N/A	N/A	3/8"	1/2"
	10312	3/8"	N/A	N/A	1/4"	
	10313	1-1/8"	N/A	N/A	1/2"	3/4"
	10314	1-7/32"	N/A	N/A	1/2"	Oil tight switches

High Speed Steel Metric Self-Starting



- Ideal for drilling holes into thin materials such as stainless steel, copper, brass, aluminum, plastic and laminates.
- Single-flute cutting edge for greater control through steps.
- Three flatted shank prevents slipping in drill chuck.
- Also available with titanium nitride coating for longer life.
- New SpeedPoint tip penetrates faster than previous Unibits and prevents walking.

Item No.	Hole Sizes	Number of Holes	Max. Mat. Thickness	Shank Size
11101	4mm - 12mm	9 steps	5mm	1/4" / 6.5mm
11102	4mm - 12mm	5 steps	11mm	1/4" / 6.5mm
11103	6mm - 18mm	7 steps	5mm	3/8" / 10mm
11104	4mm - 22mm	10 steps	5mm	3/8" / 10mm
11105	5mm - 35mm	13 steps	3.5mm	1/2" / 13mm
11194	5mm - 28.3mm	10 steps	5mm	
11195	5mm - 29mm	10 steps	5mm	

Titanium Fractional Self-Starting



- Ideal for drilling holes into thin materials such as stainless steel, copper, brass, aluminum, plastic and laminates.
- Single-flute cutting edge for greater control through steps.
- Three flatted shank prevents slipping in drill chuck.
- New SpeedPoint tip penetrates faster than previous Unibits and prevents walking.

Item No.	Hole Sizes	Number of Holes	Max. Material Thickness	Shank Size	KO Size
15101	1/8" - 1/2"	13 steps	1/8"	1/4"	
15102	3/16" - 1/2"	6 steps	3/8"	1/4"	
15103	1/3" - 3/4"	9 steps	1/8"	3/8"	
15104	3/16" - 7/8"	12 steps	1/8"	3/8"	
15313	1-1/8"	N/A	N/A	1/2"	3/4"

Titanium Metric Self-Starting



- Ideal for drilling holes into thin materials such as stainless steel, copper, brass, aluminum, plastic and laminates.
- Single-flute cutting edge for greater control through steps.
- Three flatted shank prevents slipping in drill chuck.
- New SpeedPoint tip penetrates faster than previous Unibits and prevents walking.

Item No.	Hole Sizes	Number of Holes	Max. Material Thickness	Shank Size
16101	4mm - 12mm	9 steps	5mm	1/4" / 6.5mm
16102	4mm - 12mm	5 steps	11mm	1/4" / 6.5mm
16103	6mm - 18mm	7 steps	5mm	3/8" / 10mm
16104	4mm - 22mm	10 steps	5mm	3/8" / 10mm
16105	5mm - 35mm	13 steps	3.5mm	1/2" / 13mm

High Speed Steel Fractional Hole Enlarging



- Single-flute cutting edge for greater control through steps.
- Three flatted shank prevents slipping in drill chuck.
- Also available with titanium nitride coating for longer life.
- Patented single-flute cutting edge gives the user a true round hole every time.
- Ideal for drilling holes into thin materials such as stainless steel, copper, brass, aluminum, plastic and laminates.

Item No.	Hole Sizes	Number of Holes	Max. Material Thickness	Shank Size
10220	9/16" - 1"	8 steps	1/8"	1/2"
10221	13/16" - 1-3/8"	10 steps	1/8"	1/2"

High Speed Steel Metric Hole Enlarging



- Ideal for drilling holes into thin materials such as stainless steel.
- Single-flute cutting edge for greater control through steps.
- Three flatted shank prevents slipping in drill chuck.
- Also available with titanium nitride coating for longer life.
- Patented single-flute cutting edge gives the user a true round hole every time.

Item No.	Hole Sizes	Number of Holes	Max. Material Thickness	Shank Size
11580	14mm - 24mm	6 steps	5mm	1/2" / 13mm
11581	20mm - 34mm	8 steps	5mm	1/2" / 13mm

Titanium Fractional Hole Enlarging



- Ideal for drilling holes into thin materials such as stainless steel, copper, brass, aluminum, plastic and laminates.
- Single-flute cutting edge for greater control through steps.
- Three flatted shank prevents slipping in drill chuck.
- Patented single-flute cutting edge gives the user a true round hole every time.
- Pilot hole required.

Item No.	Hole Sizes	Number of Holes	Max. Material Thickness	Shank Size
15221	13/16" - 1-3/8"	10 steps	1/8"	1/2"

Unibit Step Drill Sets

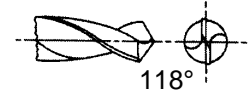


- Single-flute cutting edge for greater control through steps.
- Three flatted shank prevents slipping in drill chuck.
- Non-skid self-starting tip eliminates skidding and the need for center punching.

Item No.	Contents
10225	4-piece set includes HSS #1, 2, 4 and 21 sizes
10228	4-piece set includes HSS #1, 2, 3 plus #1T
10502	3-piece set includes HSS #1, 2 and 3
15502	3-piece TiN set includes TiN #1T, 2T and 3T

Drills

Surface Treated, High Speed Steel, Jobber Length



A dependable, general purpose drill designed to perform in a broad range of materials in the iron and steel families. Ideal for production, maintenance or portable drilling jobs. Surface treated with abrasion-resistant black oxide.

WIRE GAUGE SIZES

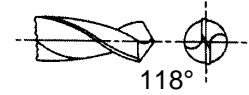
Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
1	.2280	2-5/8	3-7/8	DWDN1
2	.2210	2-5/8	3-7/8	DWDN2
3	.2130	2-1/2	3-3/4	DWDN3
4	.2090	2-1/2	3-3/4	DWDN4
5	.2055	2-1/2	3-3/4	DWDN5
6	.2040	2-1/2	3-3/4	DWDN6
7	.2010	2-7/16	3-5/8	DWDN7
8	.1990	2-7/16	3-5/8	DWDN8
9	.1960	2-7/16	3-5/8	DWDN9
10	.1935	2-7/16	3-5/8	DWDN10
11	.1910	2-5/16	3-1/2	DWDN11
12	.1890	2-5/16	3-1/2	DWDN12
13	.1850	2-5/16	3-1/2	DWDN13
14	.1820	2-3/16	3-3/8	DWDN14
15	.1800	2-3/16	3-3/8	DWDN15
16	.1770	2-3/16	3-3/8	DWDN16
17	.1730	2-3/16	3-3/8	DWDN17
18	.1695	2-1/8	3-1/4	DWDN18
19	.1660	2-1/8	3-1/4	DWDN19
20	.1610	2-1/8	3-1/4	DWDN20
21	.1590	2-1/8	3-1/4	DWDN21
22	.1570	2	3-1/8	DWDN22
23	.1540	2	3-1/8	DWDN23
24	.1520	2	3-1/8	DWDN24
25	.1495	1-7/8	3	DWDN25
26	.1470	1-7/8	3	DWDN26
27	.1440	1-7/8	3	DWDN27
28	.1405	1-3/4	2-7/8	DWDN28
29	.1360	1-3/4	2-7/8	DWDN29
30	.1285	1-5/8	2-3/4	DWDN30
31	.1200	1-5/8	2-3/4	DWDN31
32	.1160	1-5/8	2-3/4	DWDN32
33	.1130	1-1/2	2-5/8	DWDN33
34	.1110	1-1/2	2-5/8	DWDN34
35	.1100	1-1/2	2-5/8	DWDN35
36	.1065	1-7/16	2-1/2	DWDN36
37	.1040	1-7/16	2-1/2	DWDN37
38	.1015	1-7/16	2-1/2	DWDN38
39	.0995	1-3/8	2-3/8	DWDN39
40	.0980	1-3/8	2-3/8	DWDN40
41	.0960	1-3/8	2-3/8	DWDN41
42	.0935	1-1/4	2-1/4	DWDN42
43	.0890	1-1/4	2-1/4	DWDN43
44	.0860	1-1/8	2-1/8	DWDN44
45	.0820	1-1/8	2-1/8	DWDN45
46	.0810	1-1/8	2-1/8	DWDN46
47	.0785	1	2	DWDN47
48	.0760	1	2	DWDN48
49	.0730	1	2	DWDN49
50	.0700	1	2	DWDN50



Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
51	.0670	1	2	DWDN51
52	.0635	7/8	1-7/8	DWDN52
53	.0595	7/8	1-7/8	DWDN53
54	.0550	7/8	1-7/8	DWDN54
55	.0520	7/8	1-7/8	DWDN55
56	.0465	3/4	1-3/4	DWDN56
57	.0430	3/4	1-3/4	DWDN57
58	.0420	11/16	1-5/8	DWDN58
59	.0410	11/16	1-5/8	DWDN59
60	.0400	11/16	1-5/8	DWDN60
61	.0390	11/16	1-5/8	DWDN61
62	.0380	5/8	1-1/2	DWDN62
63	.0370	5/8	1-1/2	DWDN63
64	.0360	5/8	1-1/2	DWDN64
65	.0350	5/8	1-1/2	DWDN65
66	.0330	1/2	1-3/8	DWDN66
67	.0320	1/2	1-3/8	DWDN67
68	.0310	1/2	1-3/8	DWDN68
69	.0292	1/2	1-3/8	DWDN69
70	.0280	3/8	1-1/4	DWDN70
71	.0260	3/8	1-1/4	DWDN71
72	.0250	5/16	1-1/8	DWDN72
73	.0240	5/16	1-1/8	DWDN73
74	.0225	1/4	1	DWDN74
75	.0210	1/4	1	DWDN75
76	.0200	3/16	7/8	DWDN76
77	.0180	3/16	7/8	DWDN77
78	.0160	3/16	7/8	DWDN78
79	.0145	1/8	3/4	DWDN79
80	.0135	1/8	3/4	DWDN80
81	.0130	3/32	3/4	DWDN81
82	.0125	3/32	3/4	DWDN82
83	.0120	3/32	3/4	DWDN83
84	.0115	3/32	3/4	DWDN84
85	.0110	3/32	3/4	DWDN85
86	.0105	3/32	3/4	DWDN86
87	.0100	5/64	3/4	DWDN87
88	.0095	5/64	3/4	DWDN88
89	.0091	5/64	3/4	DWDN89
90	.0087	5/64	3/4	DWDN90
91	.0083	5/64	3/4	DWDN91
92	.0079	1/16	3/4	DWDN92
93	.0075	1/16	3/4	DWDN93
94	.0071	1/16	3/4	DWDN94
95	.0067	1/16	3/4	DWDN95
96	.0063	1/16	3/4	DWDN96
97	.0059	1/16	3/4	DWDN97

Drills

Surface Treated, High Speed Steel, Jobber Length



A dependable, general purpose drill designed to perform in a broad range of materials in the iron and steel families. Ideal for production, maintenance or portable drilling jobs. Surface treated with abrasion-resistant black oxide.

FRACTIONAL SIZES

Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
1/64	.0156	3/16	3/4	DWDN1/64
1/32	.0312	1/2	1-3/8	DWDN1/32
3/64	.0469	3/4	1-3/4	DWDN3/64
1/16	.0625	7/8	1-7/8	DWDN1/16
5/64	.0781	1	2	DWDN5/64
3/32	.0938	1-1/4	2-1/4	DWDN3/32
7/64	.1094	1-1/2	2-5/8	DWDN7/64
1/8	.1250	1-5/8	2-3/4	DWDN1/8
9/64	.1406	1-3/4	2-7/8	DWDN9/64
5/32	.1562	2	3-1/8	DWDN5/32
11/64	.1719	2-1/8	3-1/4	DWDN11/64
3/16	.1875	2-5/16	3-1/2	DWDN3/16
13/64	.2031	2-7/16	3-5/8	DWDN13/64
7/32	.2188	2-1/2	3-3/4	DWDN7/32
15/64	.2344	2-5/8	3-7/8	DWDN15/64
1/4	.2500	2-3/4	4	DWDN1/4
17/64	.2656	2-7/8	4-1/8	DWDN17/64
9/32	.2812	2-15/16	4-1/4	DWDN9/32
19/64	.2969	3-1/16	4-3/8	DWDN19/64
5/16	.3125	3-3/16	4-1/2	DWDN5/16
21/64	.3281	3-5/16	4-5/8	DWDN21/64
11/32	.3438	3-7/16	4-3/4	DWDN11/32



Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
23/64	.3594	3-1/2	4-7/8	DWDN23/64
3/8	.3750	3-5/8	5	DWDN3/8
25/64	.3906	3-3/4	5-1/8	DWDN25/64
13/32	.4062	3-7/8	5-1/4	DWDN13/32
27/64	.4219	3-15/16	5-3/8	DWDN27/64
7/16	.4375	4-1/16	5-1/2	DWDN7/16
29/64	.4531	4-3/16	5-5/8	DWDN29/64
15/32	.4688	4-5/16	5-3/4	DWDN15/32
31/64	.4844	4-3/8	5-7/8	DWDN31/64
1/2	.5000	4-1/2	6	DWDN1/2
33/64	.5156	4-13/16	6-5/8	DWDN33/64
17/32	.5312	4-13/16	6-5/8	DWDN17/32
35/64	.5469	4-13/16	6-5/8	DWDN35/64
9/16	.5625	4-13/16	6-5/8	DWDN9/16
37/64	.5781	4-13/16	6-5/8	DWDN37/64
19/32	.5938	5-3/16	7-1/8	DWDN19/32
39/64	.6094	5-3/16	7-1/8	DWDN39/64
5/8	.6250	5-3/16	7-1/8	DWDN5/8
41/64	.6406	5-3/16	7-1/8	DWDN41/64
21/32	.6562	5-3/16	7-1/8	DWDN21/32
43/64	.6719	5-5/8	7-5/8	DWDN43/64
11/16	.6875	5-5/8	7-5/8	DWDN11/16

LETTER SIZES

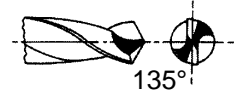
Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
A	.2340	2-5/8	3-7/8	DWDNA
B	.2380	2-3/4	4	DWDNB
C	.2420	2-3/4	4	DWDNC
D	.2460	2-3/4	4	DWDND
E	.2500	2-3/4	4	DWDNE
F	.2570	2-7/8	4-1/8	DWDNF
G	.2610	2-7/8	4-1/8	DWDNG
H	.2660	2-7/8	4-1/8	DWDNH
I	.2720	2-7/8	4-1/8	DWDNI
J	.2770	2-7/8	4-1/8	DWDNJ
K	.2810	2-15/16	4-1/4	DWDNK
L	.2900	2-15/16	4-1/4	DWDNL
M	.2950	3-1/16	4-3/8	DWDNM



Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
N	.3020	3-1/16	4-3/8	DWDNN
O	.3160	3-3/16	4-1/2	DWDNO
P	.3230	3-5/16	4-5/8	DWDNP
Q	.3320	3-7/16	4-3/4	DWDNQ
R	.3390	3-7/16	4-3/4	DWDNR
S	.3480	3-1/2	4-7/8	DWDNS
T	.3580	3-1/2	4-7/8	DWDNT
U	.3680	3-5/8	5	DWDNU
V	.3770	3-5/8	5	DWDNV
W	.3860	3-3/4	5-1/8	DWDNW
X	.3970	3-3/4	5-1/8	DWDNX
Y	.4040	3-7/8	5-1/4	DWDNY
Z	.4130	3-7/8	5-1/4	DWDNZ

Drills

HD Split Point, Cobalt Steel, Jobber Length



Manufactured to National Aerospace standard 907. Made of heat resistant cobalt, they display higher red hardness which permits speeds up to 30% greater than high speed steel drills and are especially effective in drilling tough, high tensile strength materials like PH stainless steel, inconel and titanium. The 135° split point is self-centering and reduces thrust. Sizes smaller than 1/16 have the 118° standard point.

WIRE GAUGE SIZES

Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
1	.2280	2-5/8	3-7/8	DWDCO1
2	.2210	2-5/8	3-7/8	DWDCO2
3	.2130	2-1/2	3-3/4	DWDCO3
4	.2090	2-1/2	3-3/4	DWDCO4
5	.2055	2-1/2	3-3/4	DWDCO5
6	.2040	2-1/2	3-3/4	DWDCO6
7	.2010	2-7/16	3-5/8	DWDCO7
8	.1990	2-7/16	3-5/8	DWDCO8
9	.1960	2-7/16	3-5/8	DWDCO9
10	.1935	2-7/16	3-5/8	DWDCO10
11	.1910	2-5/16	3-1/2	DWDCO11
12	.1890	2-5/16	3-1/2	DWDCO12
13	.1850	2-5/16	3-1/2	DWDCO13
14	.1820	2-3/16	3-3/8	DWDCO14
15	.1800	2-3/16	3-3/8	DWDCO15
16	.1770	2-3/16	3-3/8	DWDCO16
17	.1730	2-3/16	3-3/8	DWDCO17
18	.1695	2-1/8	3-1/4	DWDCO18
19	.1660	2-1/8	3-1/4	DWDCO19
20	.1610	2-1/8	3-1/4	DWDCO20
21	.1590	2-1/8	3-1/4	DWDCO21
22	.1570	2	3-1/8	DWDCO22
23	.1540	2	3-1/8	DWDCO23
24	.1520	2	3-1/8	DWDCO24
25	.1495	1-7/8	3	DWDCO25
26	.1470	1-7/8	3	DWDCO26
27	.1440	1-7/8	3	DWDCO27
28	.1405	1-3/4	2-7/8	DWDCO28
29	.1360	1-3/4	2-7/8	DWDCO29
30	.1285	1-5/8	2-3/4	DWDCO30
31	.1200	1-5/8	2-3/4	DWDCO31
32	.1160	1-5/8	2-3/4	DWDCO32
33	.1130	1-1/2	2-5/8	DWDCO33
34	.1110	1-1/2	2-5/8	DWDCO34
35	.1100	1-1/2	2-5/8	DWDCO35
36	.1065	1-7/16	2-1/2	DWDCO36
37	.1040	1-7/16	2-1/2	DWDCO37
38	.1015	1-7/16	2-1/2	DWDCO38
39	.0995	1-3/8	2-3/8	DWDCO39
40	.0980	1-3/8	2-3/8	DWDCO40

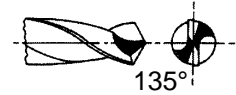


Cobalt

Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
41	.0960	1-3/8	2-3/8	DWDCO41
42	.0935	1-1/4	2-1/4	DWDCO42
43	.0890	1-1/4	2-1/4	DWDCO43
44	.0860	1-1/8	2-1/8	DWDCO44
45	.0820	1-1/8	2-1/8	DWDCO45
46	.0810	1-1/8	2-1/8	DWDCO46
47	.0785	1	2	DWDCO47
48	.0760	1	2	DWDCO48
49	.0730	1	2	DWDCO49
50	.0700	1	2	DWDCO50
51	.0670	1	2	DWDCO51
52	.0635	7/8	1-7/8	DWDCO52
53	.0595	7/8	1-7/8	DWDCO53
54	.0550	7/8	1-7/8	DWDCO54
55	.0520	7/8	1-7/8	DWDCO55
56	.0465	3/4	1-3/4	DWDCO56
57	.0430	3/4	1-3/4	DWDCO57
58	.0420	11/16	1-5/8	DWDCO58
59	.0410	11/16	1-5/8	DWDCO59
60	.0400	11/16	1-5/8	DWDCO60
61	.0390	11/16	1-5/8	DWDCO61
62	.0380	5/8	1-1/2	DWDCO62
63	.0370	5/8	1-1/2	DWDCO63
64	.0360	5/8	1-1/2	DWDCO64
65	.0350	5/8	1-1/2	DWDCO65
66	.0330	1/2	1-3/8	DWDCO66
67	.0320	1/2	1-3/8	DWDCO67
68	.0310	1/2	1-3/8	DWDCO68
69	.0292	1/2	1-3/8	DWDCO69
70	.0280	3/8	1-1/4	DWDCO70
71	.0260	3/8	1-1/4	DWDCO71
72	.0250	5/16	1-1/8	DWDCO72
73	.0240	5/16	1-1/8	DWDCO73
74	.0225	1/4	1	DWDCO74
75	.0210	1/4	1	DWDCO75
76	.0200	3/16	7/8	DWDCO76
77	.0180	3/16	7/8	DWDCO77
78	.0160	3/16	7/8	DWDCO78
79	.0145	1/8	3/4	DWDCO79
80	.0135	1/8	3/4	DWDCO80

Drills

HD Split Point, Cobalt Steel, Jobber Length



Manufactured to National Aerospace standard 907. Made of heat resistant cobalt, they display higher red hardness which permits speeds up to 30% greater than high speed steel drills and are especially effective in drilling tough, high tensile strength materials like PH stainless steel, inconel and titanium. The 135° split point is self-centering and reduces thrust. Sizes smaller than 1/16 have the 118° standard point.

FRACTIONAL SIZES

Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
1/64	.0156	3/16	3/4	DWDCO1/64
1/32	.0312	1/2	1-3/8	DWDCO1/32
3/64	.0469	3/4	1-3/4	DWDCO3/64
1/16	.0625	7/8	1-7/8	DWDCO1/16
5/64	.0781	1	2	DWDCO5/64
3/32	.0938	1-1/4	2-1/4	DWDCO3/32
7/64	.1094	1-1/2	2-5/8	DWDCO7/64
1/8	.1250	1-5/8	2-3/4	DWDCO1/8
9/64	.1406	1-3/4	2-7/8	DWDCO9/64
5/32	.1562	2	3-1/8	DWDCO5/32
11/64	.1719	2-1/8	3-1/4	DWDCO11/64
3/16	.1875	2-5/16	3-1/2	DWDCO3/16
13/64	.2031	2-7/16	3-5/8	DWDCO13/64
7/32	.2188	2-1/2	3-3/4	DWDCO7/32
15/64	.2344	2-5/8	3-7/8	DWDCO15/64
1/4	.2500	2-3/4	4	DWDCO1/4
17/64	.2656	2-7/8	4-1/8	DWDCO17/64



Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
9/32	.2812	2-15/16	4-1/4	DWDCO9/32
19/64	.2969	3-1/16	4-3/8	DWDCO19/64
5/16	.3125	3-3/16	4-1/2	DWDCO5/16
21/64	.3281	3-5/16	4-5/8	DWDCO21/64
11/32	.3438	3-7/16	4-3/4	DWDCO11/32
23/64	.3594	3-1/2	4-7/8	DWDCO23/64
3/8	.3750	3-5/8	5	DWDCO3/8
25/64	.3906	3-3/4	5-1/8	DWDCO25/64
13/32	.4062	3-7/8	5-1/4	DWDCO13/32
27/64	.4219	3-15/16	5-3/8	DWDCO27/64
7/16	.4375	4-1/16	5-1/2	DWDCO7/16
29/64	.4531	4-3/16	5-5/8	DWDCO29/64
15/32	.4688	4-5/16	5-3/4	DWDCO15/32
31/64	.4844	4-3/8	5-7/8	DWDCO31/64
1/2	.5000	4-1/2	6	DWDCO1/2

LETTER SIZES

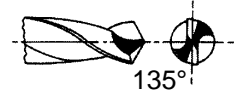
Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
A	.2340	2-5/8	3-7/8	DWDCOA
B	.2380	2-3/4	4	DWDCOB
C	.2420	2-3/4	4	DWDCOC
D	.2460	2-3/4	4	DWDCOD
E	.2500	2-3/4	4	DWDCOE
F	.2570	2-7/8	4-1/8	DWDCOF
G	.2610	2-7/8	4-1/8	DWDCOG
H	.2660	2-7/8	4-1/8	DWDCOH
I	.2720	2-7/8	4-1/8	DWDCOI
J	.2770	2-7/8	4-1/8	DWDCOJ
K	.2810	2-15/16	4-1/4	DWDCOK
L	.2900	2-15/16	4-1/4	DWDCOL
M	.2950	3-1/16	4-3/8	DWDCOM

Cobalt

Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
N	.3020	3-1/16	4-3/8	DWDCON
O	.3160	3-3/16	4-1/2	DWDCOO
P	.3230	3-5/16	4-5/8	DWDCOP
Q	.3320	3-7/16	4-3/4	DWDCOQ
R	.3390	3-7/16	4-3/4	DWDCOR
S	.3480	3-1/2	4-7/8	DWDCOS
T	.3580	3-1/2	4-7/8	DWDCOT
U	.3680	3-5/8	5	DWDCOU
V	.3770	3-5/8	5	DWDCOV
W	.3860	3-3/4	5-1/8	DWDCOW
X	.3970	3-3/4	5-1/8	DWDCOX
Y	.4040	3-7/8	5-1/4	DWDCOY
Z	.4130	3-7/8	5-1/4	DWDCOZ

Drills

HD Split Point, High Speed Steel, Screw Machine



Manufactured to National Aerospace standard 907. 135° split point is self-centering and reduces thrust. Ideal for portable or machine drilling. Short, rugged construction performs well in a broad range of materials in the iron and steel families. Screw machine drills are popular in the automotive and construction industries. They are often used in screw machine set-ups where spindle clearance is limited. The shorter flute and overall length increase the rigidity, resulting in less deflection, better hole accuracy and longer tool life. Sizes smaller than 1/16 and larger than 1/2 have the 118° standard point

WIRE GAUGE SIZES

Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
1	.2280	1-5/16	2-7/16	DWDST1
2	.2210	1-5/16	2-7/16	DWDST2
3	.2130	1-1/4	2-3/8	DWDST3
4	.2090	1-1/4	2-3/8	DWDST4
5	.2055	1-1/4	2-3/8	DWDST5
6	.2040	1-1/4	2-3/8	DWDST6
7	.2010	1-3/16	2-1/4	DWDST7
8	.1990	1-3/16	2-1/4	DWDST8
9	.1960	1-3/16	2-1/4	DWDST9
10	.1935	1-3/16	2-1/4	DWDST10
11	.1910	1-3/16	2-1/4	DWDST11
12	.1890	1-3/16	2-1/4	DWDST12
13	.1850	1-1/8	2-3/16	DWDST13
14	.1820	1-1/8	2-3/16	DWDST14
15	.1800	1-1/8	2-3/16	DWDST15
16	.1770	1-1/8	2-3/16	DWDST16
17	.1730	1-1/8	2-3/16	DWDST17
18	.1695	1-1/16	2-1/8	DWDST18
19	.1660	1-1/16	2-1/8	DWDST19
20	.1610	1-1/16	2-1/8	DWDST20
21	.1590	1-1/16	2-1/8	DWDST21
22	.1570	1-1/16	2-1/8	DWDST22
23	.1540	1	2-1/16	DWDST23
24	.1520	1	2-1/16	DWDST24
25	.1495	1	2-1/16	DWDST25
26	.1470	1	2-1/16	DWDST26
27	.1440	1	2-1/16	DWDST27
28	.1405	15/16	1-15/16	DWDST28
29	.1360	15/16	1-15/16	DWDST29
30	.1285	15/16	1-15/16	DWDST30



Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
31	.1200	7/8	1-7/8	DWDST31
32	.1160	7/8	1-7/8	DWDST32
33	.1130	7/8	1-7/8	DWDST33
34	.1110	7/8	1-7/8	DWDST34
35	.1100	7/8	1-7/8	DWDST35
36	.1065	13/16	1-13/16	DWDST36
37	.1040	13/16	1-13/16	DWDST37
38	.1015	13/16	1-13/16	DWDST38
39	.0995	13/16	1-13/16	DWDST39
40	.0980	13/16	1-13/16	DWDST40
41	.0960	13/16	1-13/16	DWDST41
42	.0935	3/4	1-3/4	DWDST42
43	.0890	3/4	1-3/4	DWDST43
44	.0860	3/4	1-3/4	DWDST44
45	.0820	3/4	1-3/4	DWDST45
46	.0810	3/4	1-3/4	DWDST46
47	.0785	11/16	1-11/16	DWDST47
48	.0760	11/16	1-11/16	DWDST48
49	.0730	11/16	1-11/16	DWDST49
50	.0700	11/16	1-11/16	DWDST50
51	.0670	11/16	1-11/16	DWDST51
52	.0635	11/16	1-11/16	DWDST52
53	.0595	5/8	1-5/8	DWDST53
54	.0550	5/8	1-5/8	DWDST54
55	.0520	5/8	1-5/8	DWDST55
56	.0465	1/2	1-3/8	DWDST56
57	.0430	1/2	1-3/8	DWDST57
58	.0420	1/2	1-3/8	DWDST58
59	.0410	1/2	1-3/8	DWDST59
60	.0400	1/2	1-3/8	DWDST60

LETTER SIZES

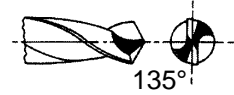
Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
A	.2340	1-5/16	2-7/16	DWDSTA
B	.2380	1-3/8	2-1/2	DWDSTB
C	.2420	1-3/8	2-1/2	DWDSTC
D	.2460	1-3/8	2-1/2	DWDSTD
E	.2500	1-3/8	2-1/2	DWDSTE
F	.2570	1-7/16	2-5/8	DWDSTF
G	.2610	1-7/16	2-5/8	DWDSTG
H	.2660	1-1/2	2-11/16	DWDSTH
I	.2720	1-1/2	2-11/16	DWDSTI
J	.2770	1-1/2	2-11/16	DWDSTJ
K	.2810	1-1/2	2-11/16	DWDSTK
L	.2900	1-9/16	2-3/4	DWDSTL
M	.2950	1-9/16	2-3/4	DWDSTM



Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
N	.3020	1-5/8	2-13/16	DWDSTN
O	.3160	1-11/16	2-15/16	DWDSTO
P	.3230	1-11/16	2-15/16	DWDSTP
Q	.3320	1-11/16	3	DWDSTQ
R	.3390	1-11/16	3	DWDSTR
S	.3480	1-3/4	3-1/16	DWDSTS
T	.3580	1-3/4	3-1/16	DWDSTT
U	.3680	1-13/16	3-1/8	DWDSTU
V	.3770	1-7/8	3-1/4	DWDSTV
W	.3860	1-7/8	3-1/4	DWDSTW
X	.3970	1-15/16	3-5/16	DWDSTX
Y	.4040	1-15/16	3-5/16	DWDSTY
Z	.4130	2	3-3/8	DWDSTZ

Drills

HD Split Point, High Speed Steel, Screw Machine



Manufactured to National Aerospace standard 907. 135° split point is self-centering and reduces thrust. Ideal for portable or machine drilling. Short, rugged construction performs well in a broad range of materials in the iron and steel families. Screw machine drills are popular in the automotive and construction industries. They are often used in screw machine set-ups where spindle clearance is limited. The shorter flute and overall length increase the rigidity, resulting in less deflection, better hole accuracy and longer tool life. Sizes smaller than 1/16 and larger than 1/2 have the 118° standard point

FRACTIONAL SIZES

Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
3/64	.0469	1/2	1-3/8	DWDST3/64
1/16	.0625	5/8	1-5/8	DWDST1/16
5/64	.0781	11/16	1-11/16	DWDST5/64
3/32	.0938	3/4	1-3/4	DWDST3/32
7/64	.1094	13/16	1-13/16	DWDST7/64
1/8	.1250	7/8	1-7/8	DWDST1/8
9/64	.1406	15/16	1-15/16	DWDST9/64
5/32	.1562	1	2-1/16	DWDST5/32
11/64	.1719	1-1/16	2-1/8	DWDST11/64
3/16	.1875	1-1/8	2-3/16	DWDST3/16
13/64	.2031	1-3/16	2-1/4	DWDST13/64
7/32	.2188	1-1/4	2-3/8	DWDST7/32
15/64	.2344	1-5/16	2-7/16	DWDST15/64
1/4	.2500	1-3/8	2-1/2	DWDST1/4
17/64	.2656	1-7/16	2-5/8	DWDST17/64
9/32	.2813	1-1/2	2-11/16	DWDST9/32
19/64	.2969	1-9/16	2-3/4	DWDST19/64
5/16	.3125	1-5/8	2-13/16	DWDST5/16
21/64	.3281	1-11/16	2-15/16	DWDST21/64
11/32	.3438	1-11/16	3	DWDST11/32
23/64	.3594	1-3/4	3-1/16	DWDST23/64
3/8	.3750	1-13/16	3-1/8	DWDST3/8
25/64	.3906	1-7/8	3-1/4	DWDST25/64
13/32	.4062	1-15/16	3-5/16	DWDST13/32
27/64	.4219	2	3-3/8	DWDST27/64
7/16	.4375	2-1/16	3-7/16	DWDST7/16
29/64	.4531	2-1/8	3-9/16	DWDST29/64
15/32	.4688	2-1/8	3-5/8	DWDST15/32
31/64	.4844	2-3/16	3-11/16	DWDST31/64
1/2	.5000	2-1/4	3-3/4	DWDST1/2
33/64	.5156	2-3/8	3-7/8	DWDST33/64
17/32	.5312	2-3/8	3-7/8	DWDST17/32
35/64	.5469	2-1/2	4	DWDST35/64
9/16	.5625	2-1/2	4	DWDST9/16
37/64	.5781	2-5/8	4-1/8	DWDST37/64
19/32	.5938	2-5/8	4-1/8	DWDST19/32
39/64	.6094	2-3/4	4-1/4	DWDST39/64
5/8	.6250	2-3/4	4-1/4	DWDST5/8
41/64	.6406	2-7/8	4-1/2	DWDST41/64
21/32	.6562	2-7/8	4-1/2	DWDST21/32
43/64	.6719	2-7/8	4-5/8	DWDST43/64



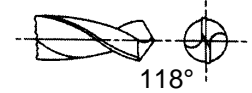
Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
11/16	.6875	2-7/8	4-5/8	DWDST11/16
45/64	.7031	3	4-3/4	DWDST45/64
23/32	.7188	3	4-3/4	DWDST23/32
47/64	.7344	3-1/8	5	DWDST47/64
3/4	.7500	3-1/8	5	DWDST3/4
49/64	.7656	3-1/4	5-1/8	DWDST49/64
25/32	.7812	3-1/4	5-1/8	DWDST25/32
51/64	.7969	3-3/8	5-1/4	DWDST51/64
13/16	.8125	3-3/8	5-1/4	DWDST13/16
53/64	.8281	3-1/2	5-3/8	DWDST53/64
27/32	.8438	3-1/2	5-3/8	DWDST27/32
55/64	.8594	3-1/2	5-1/2	DWDST55/64
7/8	.8750	3-1/2	5-1/2	DWDST7/8
57/64	.8906	3-5/8	5-5/8	DWDST57/64
29/32	.9062	3-5/8	5-5/8	DWDST29/32
59/64	.9219	3-3/4	5-3/4	DWDST59/64
15/16	.9375	3-3/4	5-3/4	DWDST15/16
61/64	.9531	3-7/8	5-7/8	DWDST61/64
31/32	.9688	3-7/8	5-7/8	DWDST31/32
63/64	.9844	4	6	DWDST63/64
1	1.0000	4	6	DWDST1INCH
1-1/64	1.0156	4	6	DWDST1-1/64
1-1/32	1.0312	4	6-1/4	DWDST1-1/32
1-3/64	1.0469	4	6-1/4	DWDST1-3/64
1-1/16	1.0625	4	6-1/4	DWDST1-1/16
1-5/64	1.0781	4	6-1/4	DWDST1-5/64
1-3/32	1.0938	4	6-1/4	DWDST1-3/32
1-7/64	1.1094	4	6-1/4	DWDST1-7/64
1-1/8	1.1250	4	6-3/8	DWDST1-1/8
1-9/64	1.1406	4	6-3/8	DWDST1-9/64
1-5/32	1.1562	4-1/4	6-5/8	DWDST1-5/32
1-11/64	1.1719	4-1/4	6-5/8	DWDST1-11/64
1-3/16	1.1875	4-1/4	6-5/8	DWDST1-3/16
1-1/4	1.2500	4-3/8	6-3/4	DWDST1-1/4
1-9/32	1.2812	4-3/8	7	DWDST1-9/32
1-5/16	1.3125	4-3/8	7	DWDST1-5/16
1-3/8	1.3750	4-1/2	7-1/8	DWDST1-3/8
1-13/32	1.4062	4-3/4	7-3/8	DWDST1-13/32
1-7/16	1.4375	4-3/4	7-3/8	DWDST1-7/16
1-1/2	1.5000	4-7/8	7-1/2	DWDST1-1/2
2	2.0000	5-5/8	8-1/2	DWDST2INCH

Screw Machine Over 1" Available by 64ths P.O.A.

Drills

Surface Treated Flutes, High Speed Steel, Reduced Shank

qualiTECH™



Expands the size range capacity of a 1/2" portable drill chuck. Common flute and overall length for minimal adjustment during tool changes. Precision ground for high degree of concentricity between shank and body diameter. Ideal for drilling in low and medium tensile strength materials.

1 / 2 " S H A N K

Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
33/64	.5156	3	6	DWDRSD33/64
17/32	.5313	3	6	DWDRSD17/32
35/64	.5469	3	6	DWDRSD35/64
9/16	.5625	3	6	DWDRSD9/16
37/64	.5781	3	6	DWDRSD37/64
19/32	.5938	3	6	DWDRSD19/32
39/64	.6094	3	6	DWDRSD39/64
5/8	.6250	3	6	DWDRSD5/8
41/64	.6406	3	6	DWDRSD41/64
21/32	.6563	3	6	DWDRSD21/32
43/64	.6719	3	6	DWDRSD43/64
11/16	.6875	3	6	DWDRSD11/16
45/64	.7031	3	6	DWDRSD45/64
23/32	.7188	3	6	DWDRSD23/32
47/64	.7344	3	6	DWDRSD47/64
3/4	.7500	3	6	DWDRSD3/4
49/64	.7656	3	6	DWDRSD49/64
25/32	.7813	3	6	DWDRSD25/32
51/64	.7969	3	6	DWDRSD51/64
13/16	.8125	3	6	DWDRSD13/16
53/64	.8281	3	6	DWDRSD53/64
27/32	.8438	3	6	DWDRSD27/32
55/64	.8594	3	6	DWDRSD55/64
7/8	.8750	3	6	DWDRSD7/8
57/64	.8906	3	6	DWDRSD57/64
29/32	.9063	3	6	DWDRSD29/32
59/64	.9219	3	6	DWDRSD59/64
15/16	.9375	3	6	DWDRSD15/16
61/64	.9531	3	6	DWDRSD61/64
31/32	.9688	3	6	DWDRSD31/32
63/64	.9844	3	6	DWDRSD63/64
1	1.0000	3	6	DWDRSD1



Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
1-1/64	1.0156	3	6	DWDRSD1-1/64
1-1/32	1.0313	3	6	DWDRSD1-1/32
1-3/64	1.0469	3	6	DWDRSD1-3/64
1-1/16	1.0625	3	6	DWDRSD1-1/16
1-5/64	1.0781	3	6	DWDRSD1-5/64
1-3/32	1.0938	3	6	DWDRSD1-3/32
1-7/64	1.1094	3	6	DWDRSD1-7/64
1-1/8	1.1250	3	6	DWDRSD1-1/8
1-9/64	1.1406	3	6	DWDRSD1-9/64
1-5/32	1.1563	3	6	DWDRSD1-5/32
1-11/64	1.1719	3	6	DWDRSD1-11/64
1-3/16	1.1875	3	6	DWDRSD1-3/16
1-13/64	1.2031	3	6	DWDRSD1-13/64
1-7/32	1.2188	3	6	DWDRSD1-7/32
1-15/64	1.2344	3	6	DWDRSD1-15/64
1-1/4	1.2500	3	6	DWDRSD1-1/4
1-17/64	1.2656	3	6	DWDRSD1-17/64
1-9/32	1.2813	3	6	DWDRSD1-9/32
1-19/64	1.2969	3	6	DWDRSD1-19/64
1-5/16	1.3125	3	6	DWDRSD1-5/16
1-21/64	1.3281	3	6	DWDRSD1-21/64
1-11/32	1.3438	3	6	DWDRSD1-11/32
1-23/64	1.3594	3	6	DWDRSD1-23/64
1-3/8	1.3750	3	6	DWDRSD1-3/8
1-25/64	1.3906	3	6	DWDRSD1-25/64
1-13/32	1.4063	3	6	DWDRSD1-13/32
1-27/64	1.4219	3	6	DWDRSD1-27/64
1-7/16	1.4375	3	6	DWDRSD1-7/16
1-29/64	1.4531	3	6	DWDRSD1-29/64
1-15/32	1.4688	3	6	DWDRSD1-15/32
1-31/64	1.4844	3	6	DWDRSD1-31/64
1-1/2	1.5000	3	6	DWDRSD1-1/2



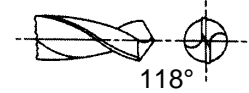
1 / 4 " S H A N K

Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
17/64	.2656	2-1/4	3-1/2	DWDRSD17/64
9/32	.2812	2-1/4	3-9/16	DWDRSD9/32
19/64	.2969	2-3/8	3-11/16	DWDRSD19/64
5/16	.3125	2-1/2	3-13/16	DWDRSD5/16
21/64	.3281	2-9/16	3-15/16	DWDRSD21/64
11/32	.3438	2-5/8	4	DWDRSD11/32
23/64	.3594	2-3/4	4-1/8	DWDRSD23/64
3/8	.3750	2-7/8	4-1/4	DWDRSD3/8

Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
25/64	.3906	3	4-5/16	DWDRSD25/64
13/32	.4062	3-1/8	4-7/16	DWDRSD13/32
27/64	.4219	3-1/8	4-9/16	DWDRSD27/64
7/16	.4375	3-3/8	4-11/16	DWDRSD7/16
29/64	.4531	3-3/8	4-3/4	DWDRSD29/64
15/32	.4688	3-1/2	4-7/8	DWDRSD15/32
31/64	.4844	3-1/2	5	DWDRSD31/64
1/2	.5000	3-5/8	5-1/16	DWDRSD1/2

Drills

Surface Treated Flutes, High Speed Steel, Reduced Shank



Expands the size range capacity of a 1/2" portable drill chuck. Common flute and overall length for minimal adjustment during tool changes. Precision ground for high degree of concentricity between shank and body diameter. Ideal for drilling in low and medium tensile strength materials.

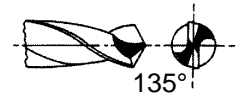
3 / 8 " S H A N K

Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
25/64	.3906	3	6	DWDRSD3/8X25/64
13/32	.4063	3	6	DWDRSD3/8X13/32
27/64	.4219	3	6	DWDRSD3/8X27/64
7/16	.4375	3	6	DWDRSD3/8X7/16
29/64	.4531	3	6	DWDRSD3/8X29/64
15/32	.4688	3	6	DWDRSD3/8X15/32
31/64	.4844	3	6	DWDRSD3/8X31/64
1/2	.5000	3	6	DWDRSD3/8X1/2
33/64	.5156	3	6	DWDRSD3/8X33/64
17/32	.5313	3	6	DWDRSD3/8X17/32
35/64	.5469	3	6	DWDRSD3/8X35/64
9/16	.5625	3	6	DWDRSD3/8X9/16



Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
37/64	.5781	3	6	DWDRSD3/8X37/64
19/32	.5938	3	6	DWDRSD3/8X19/32
39/64	.6094	3	6	DWDRSD3/8X39/64
5/8	.6250	3	6	DWDRSD3/8X5/8
41/64	.6406	3	6	DWDRSD3/8X41/64
21/32	.6563	3	6	DWDRSD3/8X21/32
43/64	.6719	3	6	DWDRSD3/8X43/64
11/16	.6875	3	6	DWDRSD3/8X11/16
45/64	.7031	3	6	DWDRSD3/8X45/64
23/32	.7188	3	6	DWDRSD3/8X23/32
47/64	.7344	3	6	DWDRSD3/8X47/64
3/4	.7500	3	6	DWDRSD3/8X3/4

Cobalt Steel, HD Notched Point, Reduced Shank



Made of heat resistant cobalt. Common flute and overall length for minimal adjustment during tool changes. Precision ground for high degree of concentricity between shank and body diameter. Ideal for drilling in tough, high tensile strength materials.

Cobalt

1 / 2 " S H A N K

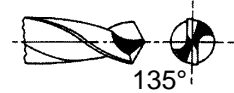
Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
33/64	.5156	3	6	DWDCO33/64
17/32	.5312	3	6	DWDCO17/32
35/64	.5469	3	6	DWDCO35/64
9/16	.5625	3	6	DWDCO9/16
37/64	.5781	3	6	DWDCO37/64
19/32	.5938	3	6	DWDCO19/32
39/64	.6094	3	6	DWDCO39/64
5/8	.6250	3	6	DWDCO5/8
41/64	.6406	3	6	DWDCO41/64
21/32	.6563	3	6	DWDCO21/32
43/64	.6719	3	6	DWDCO43/64
11/16	.6875	3	6	DWDCO11/16
45/64	.7031	3	6	DWDCO45/64
23/32	.7188	3	6	DWDCO23/32
47/64	.7344	3	6	DWDCO47/64
3/4	.7500	3	6	DWDCO3/4
49/64	.7656	3	6	DWDCO49/64
25/32	.7813	3	6	DWDCO25/32
51/64	.7969	3	6	DWDCO51/64
13/16	.8125	3	6	DWDCO13/16



Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
53/64	.8281	3	6	DWDCO53/64
27/32	.8438	3	6	DWDCO27/32
55/64	.8594	3	6	DWDCO55/64
7/8	.8750	3	6	DWDCO7/8
57/64	.8906	3	6	DWDCO57/64
29/32	.9062	3	6	DWDCO29/32
59/64	.9219	3	6	DWDCO59/64
15/16	.9375	3	6	DWDCO15/16
61/64	.9531	3	6	DWDCO61/64
31/32	.9688	3	6	DWDCO31/32
63/64	.9844	3	6	DWDCO63/64
1	1.0000	3	6	DWDCO1INCH
1-1/16	1.0625	3	6	DWDCO1-1/16
1-1/8	1.1250	3	6	DWDCO1-1/8
1-3/16	1.1875	3	6	DWDCO1-3/16
1-1/4	1.2500	3	6	DWDCO1-1/4
1-5/16	1.3125	3	6	DWDCO1-5/16
1-3/8	1.3750	3	6	DWDCO1-3/8
1-7/16	1.4375	3	6	DWDCO1-7/16
1-1/2	1.5000	3	6	DWDCO1-1/2

Drills

High Speed Steel, 12" Aircraft Extension



Manufactured to National Aerospace standard 907. 135° split point is self-centering and reduces thrust. Ideal for drilling in mild steels where extra length for reach is required. They have a black oxide surface treatment that is abrasion resistant, reduces chip welding and improves chip flow. Sizes smaller than 1/16 have the 118° standard point.

1 2 " W I R E G A U G E S I Z E S

Size	Dec. Equiv.	Flute Length	Part Number
1	.2280	2-5/8	DWDA/CX121
2	.2210	2-5/8	DWDA/CX122
3	.2130	2-1/2	DWDA/CX123
4	.2090	2-1/2	DWDA/CX124
5	.2055	2-1/2	DWDA/CX125
6	.2040	2-1/2	DWDA/CX126
7	.2010	2-7/16	DWDA/CX127
8	.1990	2-7/16	DWDA/CX128
9	.1960	2-7/16	DWDA/CX129
10	.1935	2-7/16	DWDA/CX1210
11	.1910	2-5/16	DWDA/CX1211
12	.1890	2-5/16	DWDA/CX1212
13	.1850	2-5/16	DWDA/CX1213
14	.1820	2-3/16	DWDA/CX1214
15	.1800	2-3/16	DWDA/CX1215
16	.1770	2-3/16	DWDA/CX1216
17	.1730	2-3/16	DWDA/CX1217
18	.1695	2-1/8	DWDA/CX1218
19	.1660	2-1/8	DWDA/CX1219
20	.1610	2-1/8	DWDA/CX1220
21	.1590	2-1/8	DWDA/CX1221
22	.1570	2	DWDA/CX1222
23	.1540	2	DWDA/CX1223
24	.1520	2	DWDA/CX1224
25	.1495	1-7/8	DWDA/CX1225
26	.1470	1-7/8	DWDA/CX1226
27	.1440	1-7/8	DWDA/CX1227
28	.1405	1-3/4	DWDA/CX1228
29	.1360	1-3/4	DWDA/CX1229
30	.1285	1-5/8	DWDA/CX1230



Size	Dec. Equiv.	Flute Length	Part Number
31	.1200	1-5/8	DWDA/CX1231
32	.1160	1-5/8	DWDA/CX1232
33	.1130	1-1/2	DWDA/CX1233
34	.1110	1-1/2	DWDA/CX1234
35	.1100	1-1/2	DWDA/CX1235
36	.1065	1-7/16	DWDA/CX1236
37	.1040	1-7/16	DWDA/CX1237
38	.1015	1-7/16	DWDA/CX1238
39	.0995	1-3/8	DWDA/CX1239
40	.0980	1-3/8	DWDA/CX1240
41	.0960	1-3/8	DWDA/CX1241
42	.0935	1-1/4	DWDA/CX1242
43	.0890	1-1/4	DWDA/CX1243
44	.0860	1-1/8	DWDA/CX1244
45	.0820	1-1/8	DWDA/CX1245
46	.0810	1-1/8	DWDA/CX1246
47	.0785	1	DWDA/CX1247
48	.0760	1	DWDA/CX1248
49	.0730	1	DWDA/CX1249
50	.0700	1	DWDA/CX1250
51	.0670	1	DWDA/CX1251
52	.0635	7/8	DWDA/CX1252
53	.0595	7/8	DWDA/CX1253
54	.0550	7/8	DWDA/CX1254
55	.0520	7/8	DWDA/CX1255
56	.0465	3/4	DWDA/CX1256
57	.0430	3/4	DWDA/CX1257
58	.0420	11/16	DWDA/CX1258
59	.0410	11/16	DWDA/CX1259
60	.0400	11/16	DWDA/CX1260

1 2 " F R A C T I O N A L S I Z E S

Size	Dec. Equiv.	Flute Length	Part Number
3/64	.0469	3/4	DWDA/CX123/64
1/16	.0625	7/8	DWDA/CX121/16
5/64	.0781	1	DWDA/CX125/64
3/32	.0938	1-1/4	DWDA/CX123/32
7/64	.1094	1-1/2	DWDA/CX127/64
1/8	.1250	1-5/8	DWDA/CX121/8
9/64	.1406	1-3/4	DWDA/CX129/64
5/32	.1563	2	DWDA/CX125/32
11/64	.1719	2-1/8	DWDA/CX1211/64
3/16	.1875	2-5/16	DWDA/CX123/16
13/64	.2031	2-7/16	DWDA/CX1213/64
7/32	.2188	2-1/2	DWDA/CX127/32
15/64	.2344	2-5/8	DWDA/CX1215/64
1/4	.2500	2-3/4	DWDA/CX121/4
17/64	.2656	2-7/8	DWDA/CX1217/64

Size	Dec. Equiv.	Flute Length	Part Number
9/32	.2813	2-15/16	DWDA/CX129/32
19/64	.2969	3-1/16	DWDA/CX1219/64
5/16	.3125	3-3/16	DWDA/CX125/16
21/64	.3281	3-5/16	DWDA/CX1221/64
11/32	.3438	3-7/16	DWDA/CX1211/32
23/64	.3594	3-1/2	DWDA/CX1223/64
3/8	.3750	3-5/8	DWDA/CX123/8
25/64	.3906	3-3/4	DWDA/CX1225/64
13/32	.4063	3-7/8	DWDA/CX1213/32
27/64	.4219	3-15/16	DWDA/CX1227/64
7/16	.4375	4-1/16	DWDA/CX127/16
29/64	.4531	4-3/16	DWDA/CX1229/64
15/32	.4688	4-5/16	DWDA/CX1215/32
31/64	.4844	4-3/8	DWDA/CX1231/64
1/2	.5000	4-1/2	DWDA/CX121/2



Drill Sets

qualTECH™

Other Sets Available

JOBBER LENGTH

Size & Description	HSS Part No.	Split-Point Part No.	Cobalt Steel Part No.
13 pc 1/16-1/4 x 64ths	DWD13J-SET		
15 pc 1/16-1/2 x 32nds	DWD15J-SET		DWD15J-CO-SET
21 pc 1/16-3/8 x 64ths	DWD21J-SET		DWD21J-CO-SET
29 pc 1/16-1/2 x 64ths	DWD29J-SET	DWD29J-SP-SET	DWD29J-CO-SET
26 pc A-Z Letter Sizes	DWD26J-SET		DWD26J-CO-SET
60 pc 1-60 Wire Gage Sizes	DWD60J-SET		DWD60J-CO-SET
20 pc 61-80 Wire Gage Sizes	DWD20J-SET		
115 pc Fractions, Letters, Wire	DWD115J-SET		DWD115J-CO-SET
11 pc 1.00-6.00mm x 0.5mm	DWD4011-SET		
19 pc 1.00-10.00mm x 0.5mm	DWD4019-SET		
25 pc 11.00-13.00mm x 0.5mm	DWD4025-SET		

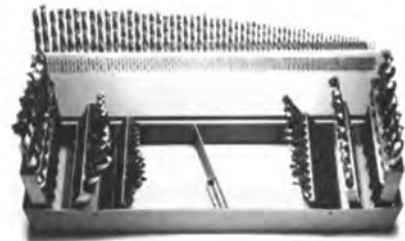


JOBBER LENGTH (CONT'D)

Size & Description	Tin-Coated Part No.	Left-Handed Part No.	K.F.D. Part No.
13 pc 1/16-1/4 x 64ths	DWD13J-TN-SET	DWD13J-LH-SET	KFD13J-SET
15 pc 1/16-1/2 x 32nds	DWD15J-TN-SET	DWD15J-LH-SET	KFD15J-SET
21 pc 1/16-3/8 x 64ths	DWD21J-TN-SET	DWD21J-LH-SET	KFD21J-SET
29 pc 1/16-1/2 x 64ths	DWD29J-TN-SET	DWD29J-LH-SET	KFD29J-SET
26 pc A-Z Letter Sizes			KFD26J-SET
60 pc 1-60 Wire Gage Sizes		DWD60J-LH-SET	KFD60J-SET
115 pc Fractions, Letters, Wire	DWD115J-TN-SET		

JOBBER LENGTH BLANKS

Size & Description	HSS Part No.
29 pc 1/16-1/2 x 64ths	DWD29J-DB-SET
26 pc A-Z Letter Sizes	DWD26J-DB-SET
60 pc 1-60 Wire Gage Sizes	DWD60J-DB-SET
115 pc Fractions, Letters, Wire	DWD115J-DB-SET



SCREW MACHINE LENGTH

Size & Description	HSS Part No.
13 pc 1/16-1/4 x 64ths	DWD13S-SET
29 pc 1/16-1/2 x 64ths	DWD29S-SET
26 pc A-Z Letter Sizes	DWD26S-SET
60 pc 1-60 Wire Gage Sizes	DWD60S-SET



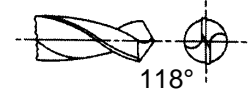
REDUCED SHANK

Size & Description	HSS Part No.
29 pc 1/16-1/2 x 64ths 1/4" Shank	DWD29JX1/4-SET
29 pc 1/16-1/2 x 64ths 3/8" Shank	DWD29JX3/8-SET
8 pc 9/16-1 x 16ths	DWD1008-SET
33 pc 1/2-1 x 64ths	DWD833SD-SET
5 pc 9/16-1 x 8ths	DWDSWD
8 pc 9/16-1 x 16ths x 1/2 Shank	KFD1008-SET



Drills

Standard Shank, High Speed Steel, Taper Length



Designed for general purpose drilling where a length longer than Jobber Length is required. Performs under a variety of normal conditions and in a broad range of materials in the iron and steel families.

FRACTIONAL SIZES

Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
1/64	.0156	5/16	1-1/2	DWDTL1/64
1/32	.0312	3/4	2	DWDTL1/32
3/64	.0469	1-1/8	2-1/4	DWDTL3/64
1/16	.0625	1-3/4	3	DWDTL1/16
5/64	.0781	2	3-3/4	DWDTL5/64
3/32	.0938	2-1/4	4-1/4	DWDTL3/32
7/64	.1094	2-1/2	4-5/8	DWDTL7/64
1/8	.1250	2-3/4	5-1/8	DWDTL1/8
9/64	.1406	3	5-3/8	DWDTL9/64
5/32	.1562	3	5-3/8	DWDTL5/32
11/64	.1719	3-3/8	5-3/4	DWDTL11/64
3/16	.1875	3-3/8	5-3/4	DWDTL3/16
13/64	.2031	3-5/8	6	DWDTL13/64
7/32	.2188	3-5/8	6	DWDTL7/32
15/64	.2344	3-3/4	6-1/8	DWDTL15/64
1/4	.2500	3-3/4	6-1/8	DWDTL1/4
17/64	.2656	3-7/8	6-1/4	DWDTL17/64
9/32	.2813	3-7/8	6-1/4	DWDTL9/32
19/64	.2969	4	6-3/8	DWDTL19/64
5/16	.3125	4	6-3/8	DWDTL5/16
21/64	.3281	4-1/8	6-1/2	DWDTL21/64
11/32	.3438	4-1/8	6-1/2	DWDTL11/32
23/64	.3594	4-1/4	6-3/4	DWDTL23/64
3/8	.3750	4-1/4	6-3/4	DWDTL3/8
25/64	.3906	4-3/8	7	DWDTL25/64
13/32	.4062	4-3/8	7	DWDTL13/32
27/64	.4219	4-5/8	7-1/4	DWDTL27/64
7/16	.4375	4-5/8	7-1/4	DWDTL7/16
29/64	.4531	4-3/4	7-1/2	DWDTL29/64
15/32	.4688	4-3/4	7-1/2	DWDTL15/32
31/64	.4844	4-3/4	7-3/4	DWDTL31/64
1/2	.5000	4-3/4	7-3/4	DWDTL1/2
33/64	.5156	4-3/4	8	DWDTL33/64
17/32	.5312	4-3/4	8	DWDTL17/32
35/64	.5469	4-7/8	8-1/4	DWDTL35/64
9/16	.5625	4-7/8	8-1/4	DWDTL9/16
37/64	.5781	4-7/8	8-3/4	DWDTL37/64
19/32	.5938	4-7/8	8-3/4	DWDTL19/32
39/64	.6094	4-7/8	8-3/4	DWDTL39/64
5/8	.6250	4-7/8	8-3/4	DWDTL5/8
41/64	.6406	5-1/8	9	DWDTL41/64
21/32	.6562	5-3/8	9	DWDTL21/32
43/64	.6719	5-3/8	9-1/4	DWDTL43/64
11/16	.6875	5-3/8	9-1/4	DWDTL11/16
45/64	.7031	5-5/8	9-1/2	DWDTL45/64
23/32	.7188	5-5/8	9-1/2	DWDTL23/32



Size	Dec. Equiv.	Flute Length	O.A.L.	Part Number
47/64	.7355	5-7/8	9-3/4	DWDTL47/64
3/4	.7500	5-7/8	9-3/4	DWDTL3/4
49/64	.7656	6	9-7/8	DWDTL49/64
25/32	.7812	6	9-7/8	DWDTL25/32
51/64	.7969	6-1/8	10	DWDTL51/64
13/16	.8125	6-1/8	10	DWDTL13/16
53/64	.8281	6-1/8	10	DWDTL53/64
27/32	.8438	6-1/8	10	DWDTL27/32
55/64	.8594	6-1/8	10	DWDTL55/64
7/8	.8750	6-1/8	10	DWDTL7/8
57/64	.8906	6-1/8	10	DWDTL57/64
29/32	.9062	6-1/8	10	DWDTL29/32
59/64	.9219	6-1/8	10-3/4	DWDTL59/64
15/16	.9375	6-1/8	10-3/4	DWDTL15/16
61/64	.9531	6-3/8	11	DWDTL61/64
31/32	.9688	6-3/8	11	DWDTL31/32
63/64	.9844	6-3/8	11	DWDTL63/64
1	1.0000	6-3/8	11	DWDTL1INCH
1-1/64	1.0156	6-1/2	11-1/8	DWDTL1-1/64
1-1/32	1.0312	6-1/2	11-1/8	DWDTL1-1/32
1-3/64	1.0469	6-5/8	11-1/4	DWDTL1-3/64
1-1/16	1.0625	6-5/8	11-1/4	DWDTL1-1/16
1-5/64	1.0781	6-7/8	11-1/2	DWDTL1-5/64
1-3/32	1.0938	6-7/8	11-1/2	DWDTL1-3/32
1-7/64	1.1094	7-1/8	11-3/4	DWDTL1-7/64
1-1/8	1.1250	7-1/8	11-3/4	DWDTL1-1/8
1-9/64	1.1406	7-1/4	11-7/8	DWDTL1-9/64
1-5/32	1.1562	7-1/4	11-7/8	DWDTL1-5/32
1-11/64	1.1719	7-3/8	12	DWDTL1-11/64
1-3/16	1.1875	7-3/8	12	DWDTL1-3/16
1-13/64	1.2031	7-1/2	12-1/8	DWDTL1-13/64
1-7/32	1.2188	7-1/2	12-1/8	DWDTL1-7/32
1-15/64	1.2344	7-7/8	12-1/2	DWDTL1-15/64
1-1/4	1.2500	7-7/8	12-1/2	DWDTL1-1/4
1-9/32	1.2812	8-1/2	14-1/8	DWDTL1-9/32
1-5/16	1.3125	8-5/8	14-1/4	DWDTL1-5/16
1-11/32	1.3438	8-3/4	14-3/8	DWDTL1-11/32
1-3/8	1.3750	8-7/8	14-1/2	DWDTL1-3/8
1-13/32	1.4062	9	14-5/8	DWDTL1-13/32
1-7/16	1.4375	9-1/8	14-3/4	DWDTL1-7/16
1-15/32	1.4688	9-1/4	14-7/8	DWDTL1-15/32
1-1/2	1.5000	9-3/8	15	DWDTL1-1/2
1-9/16	1.5625	9-5/8	15-1/4	DWDTL1-9/16
1-5/8	1.6250	9-7/8	15-5/8	DWDTL1-5/8
1-3/4	1.7500	10-1/2	16-1/4	DWDTL1-3/4

HSS Taper Length Up to 2" Available P.O.A.



Drills

High Speed Steel, Screw Extractor



SCREW EXTRACTORS

No.	Bolt Size	Small End	Large End	Flute Length	Drill Size	O.A.L.	Part Number
1	3/16-1/4	1/16	1/8	1/2	5/64	2	DEWEZ1
2	1/4-5/16	3/32	13/64	7/8	7/64	2-3/8	DEWDZ2
3	5/16-7/16	1/8	1/4	1	5/32	2-11/16	DEWEZ3
4	7/16-9/16	3/16	11/32	1-1/4	1/4	3	DEWEZ4
5	9/16-3/4	1/4	7/16	1-1/2	17/64	3-3/8	DEWEZ5
6	3/4-1	3/8	19/32	1-3/4	13/32	3-3/4	DEWEZ6
7	1-1-3/8	1/2	25/32	2-1/4	17/32	4-1/8	DEWEZ7
8	1-3/8-1-3/4	3/4	1-1/32	2-1/4	13/16	4-3/8	DEWEZ8
9	1-3/4-2-1/8	1	1-9/32	2-1/4	1-1/16	4-5/8	DEWEZ9
10	2-1/8-2-1/2	1-1/4	1-9/16	2-1/2	1-5/16	5	DEWEZ10
11	2-1/2-3	1-1/2	1-7/8	3	1-9/16	5-5/8	DEWEZ11
12	3-3-1/2	1-27/32	2-5/16	3-1/2	1-15/16	6-1/4	DEWEZ12

SETS

Size Range	Part Number
1-5	DEWEZS1-5
1-6	DEWEZS1-6
6-9	DEWEZS6-9
1-6*	DEWEZS1-6W/DRL



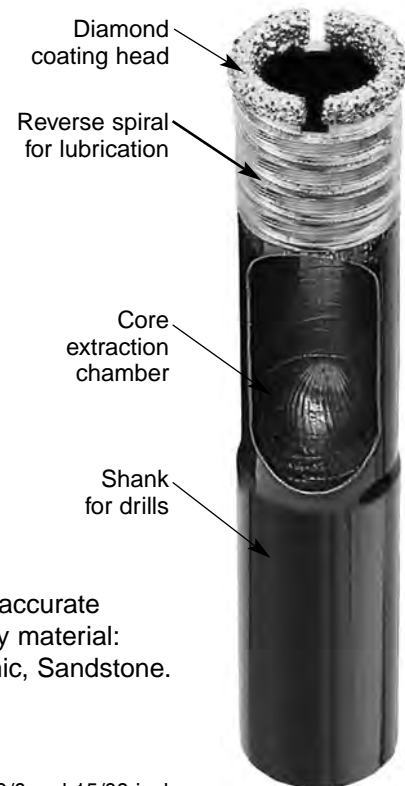
*Set includes corresponding drills

DIAGER®

DRILL BITS



THE DIAGER DRILLING SOLUTION FOR SANDSTONES AND CERAMICS.



CAUTION: Drilling without lubrication can reduce the drill's life by 5.

With Pro Ceram, drill accurate and clean holes in any material: Marble, China, Ceramic, Sandstone.

Available range:
 Ø 5, 6, 7, 8, 10 and 12mm
 Ø 3/16, 15/64, 9/32, 5/16, 3/8 and 15/32 inches.

Fast and Accurate

Taps

High Speed Steel, Hand Tap

qualTECH™



Hand Taps are the most versatile taps for hand use or for tapping under power. Hand Taps are popular for use in general machine tapping or CNC tapping. They are also appropriate for tapping the vast majority of materials in through or blind holed conditions. **Taper Style** – Starts the thread square with the workpiece. **Plug Style** – Generally used in thru holes. **Bottom Style** – Generates the thread to the bottom of the hole.

MACHINE AND FRACTIONAL SIZES

Size	Limit	No. of Flutes	Taper	Plug	Bottom	Sets
0-80	H1	2	DWT54025	DWT54026	DWT54027	DWT54028
1-64	H1	2	DWT54055	DWT54056	DWT54057	DWT54058
1-72	H1	2	DWT54060	DWT54061	DWT54062	DWT54063
2-56	H2	3	DWT54089	DWT54090	DWT54091	DWT54092
2-64	H2	3	DWT54093	DWT54094	DWT54095	DWT54096
3-48	H2	3	DWT54115	DWT54116	DWT54117	DWT54118
3-56	H2	3	DWT54120	DWT54121	DWT54122	DWT54123
4-36	H2	3	DWT54139	DWT54140	DWT54141	DWT54137
4-40	H2	3	DWT54149	DWT54150	DWT54151	DWT54152
4-48	H2	3	DWT54153	DWT54154	DWT54155	DWT54156
5-40	H2	3	DWT54188	DWT54189	DWT54190	DWT54191
5-44	H2	3	DWT54192	DWT54193	DWT54194	DWT54195
6-32	H3	3	DWT54223	DWT54224	DWT54225	DWT54226
6-40	H2	3	DWT54232	DWT54233	DWT54234	DWT54235
8-32	H3	4	DWT54277	DWT54278	DWT54279	DWT54280
8-36	H2	4	DWT54289	DWT54290	DWT54291	DWT54292
10-24	H3	4	DWT54329	DWT54330	DWT54331	DWT54332
10-32	H3	4	DWT54356	DWT54357	DWT54358	DWT54359
12-24	H3	4	DWT54385	DWT54386	DWT54387	DWT54388
12-28	H3	4	DWT54389	DWT54390	DWT54391	DWT54392
14-20	H3	4	DWT54393	DWT54394	DWT54395	DWT54396
14-24	H3	4	DWT54397	DWT54398	DWT54399	DWT54400
1/4-20	H3	4	DWT54453	DWT54454	DWT54455	DWT54460
1/4-28	H3	4	DWT54469	DWT54470	DWT54471	DWT54476
5/16-18	H3	4	DWT54504	DWT54505	DWT54506	DWT54511
5/16-24	H3	4	DWT54518	DWT54519	DWT54520	DWT54523
3/8-16	H3	4	DWT54582	DWT54583	DWT54584	DWT54587
3/8-24	H3	4	DWT54595	DWT54596	DWT54597	DWT54600
7/16-14	H3	4	DWT54652	DWT54653	DWT54654	DWT54656
7/16-20	H3	4	DWT54661	DWT54662	DWT54663	DWT54665
1/2-13	H3	4	DWT54726	DWT54727	DWT54728	DWT54731
1/2-20	H3	4	DWT54737	DWT54738	DWT54739	DWT54741
9/16-12	H3	4	DWT54759	DWT54760	DWT54761	DWT54762
9/16-18	H3	4	DWT54765	DWT54766	DWT54767	DWT54768
5/8-11	H3	4	DWT54779	DWT54780	DWT54781	DWT54782
5/8-18	H3	4	DWT54787	DWT54788	DWT54789	DWT54790
11/16-11	H3	4	DWT54813	DWT54814	DWT54815	DWT54816
11/16-16	H3	4	DWT54817	DWT54818	DWT54819	DWT54820
3/4-10	H3	4	DWT54838	DWT54839	DWT54840	DWT54841
3/4-16	H3	4	DWT54846	DWT54847	DWT54848	DWT54849
7/8-9	H4	4	DWT54884	DWT54885	DWT54886	DWT54887
7/8-14	H4	4	DWT54890	DWT54891	DWT54892	DWT54893
1-8	H4	4	DWT54923	DWT54924	DWT54925	DWT54926
1-12	H4	4	DWT54928	DWT54929	DWT54930	DWT54931
1-14	H4	4	DWT54933	DWT54934	DWT54935	DWT54936
1-1/8-7	H4	4	DWT54965	DWT54966	DWT54967	DWT54944
1-1/8-12	H4	4	DWT54971	DWT54972	DWT54973	DWT54937
1-1/4-7	H4	4	DWT54994	DWT54995	DWT54996	DWT54938
1-1/4-12	H4	4	DWT55000	DWT55001	DWT55002	DWT54939
1-3/8-6	H4	4	DWT55027	DWT55028	DWT55029	DWT54940
1-3/8-12	H4	4	DWT55030	DWT55031	DWT55032	DWT54941
1-1/2-6	H4	6	DWT55057	DWT55058	DWT55059	DWT54942
1-1/2-12	H4	6	DWT55063	DWT55064	DWT55065	DWT54943

Taper



7-10 Threads

Plug



3-5 Threads

Bottom



1-2 Threads

Taps

High Speed Steel, Hand Tap



qualTECH™

Hand Taps are the most versatile taps for hand use or for tapping under power. Hand Taps are popular for use in general machine tapping or CNC tapping. They are also appropriate for tapping the vast majority of materials in through or blind holed conditions. **Taper Style** – Starts the thread square with the workpiece. **Plug Style** – Generally used in thru holes. **Bottom Style** – Generates the thread to the bottom of the hole.

METRIC SIZES

Size	No. of Flutes	Taper	Plug	Bottom	Sets
1.6x0.35	2	DWTT1.6X.35	DWTP1.6X.35	DWTB1.6X.35	DWTS1.6X.35
1.8x0.35	2	DWTT1.8X.35	DWTP1.8X.35	DWTB1.8X.35	DWTS1.8X.35
2x0.4	3	DWTT2X.4	DWTP2X.4	DWTB2X.4	DWTS2X.4
2.2x0.45	3	DWTT2.2X.45	DWTP2.2X.45	DWTB2.2X.45	DWTS2.2X.45
2.5x0.45	3	DWTT2.5X.45	DWTP2.5X.45	DWTB2.5X.45	DWTS2.5X.45
3x0.5	3	DWTT3X.5	DWTP3X.5	DWTB3X.5	DWTS3X.5
3.5x0.6	3	DWTT3.5X.6	DWTP3.5X.6	DWTB3.5X.6	DWTS3.5X.6
4x0.7	4	DWTT4X.7	DWTP4X.7	DWTB4X.7	DWTS4X.7
4.5x0.75	4	DWTT4.5X.75	DWTP4.5X.75	DWTB4.5X.75	DWTS4.5X.75
5x0.8	4	DWTT5X.8	DWTP5X.8	DWTB5X.8	DWTS5X.8
6x1	4	DWTT6X1	DWTP6X1	DWTB6X1	DWTS6X1
7x1	4	DWTT7X1	DWTP7X1	DWTB7X1	DWTS7X1
8x1	4	DWTT8X1	DWTP8X1	DWTB8X1	DWTS8X1
8x1.25	4	DWTT8X1.25	DWTP8X1.25	DWTB8X1.25	DWTS8X1.25
10x1.25	4	DWTT10X1.25	DWTP10X1.25	DWTB10X1.25	DWTS10X1.25
10x1.5	4	DWTT10X1.5	DWTP10X1.5	DWTB10X1.5	DWTS10X1.5
12x1.25	4	DWTT12X1.25	DWTP12X1.25	DWTB12X1.25	DWTS12X1.25
12x1.75	4	DWTT12X1.75	DWTP12X1.75	DWTB12X1.75	DWTS12X1.75
14x1.25	4	DWTT14X1.25	DWTP14X1.25	DWTB14X1.25	DWTS14X1.25
14x1.5	4	DWTT14X1.5	DWTP14X1.5	DWTB14X1.5	DWTS14X1.5
14x2	4	DWTT14X2	DWTP14X2	DWTB14X2	DWTS14X2
16x1.5	4	DWTT16X1.5	DWTP16X1.5	DWTB16X1.5	DWTS16X1.5
16x2	4	DWTT16X2	DWTP16X2	DWTB16X2	DWTS16X2
18x1.5	4	DWTT18X1.5	DWTP18X1.5	DWTB18X1.5	DWTS18X1.5
18x2.5	4	DWTT18X2.5	DWTP18X2.5	DWTB18X2.5	DWTS18X2.5
20x1.5	4	DWTT20X1.5	DWTP20X1.5	DWTB20X1.5	DWTS20X1.5
20x2.5	4	DWTT20X2.5	DWTP20X2.5	DWTB20X2.5	DWTS20X2.5
22x1.5	4	DWTT22X1.5	DWTP22X1.5	DWTB22X1.5	DWTS22X1.5
22x2.5	4	DWTT22X2.5	DWTP22X2.5	DWTB22X2.5	DWTS22X2.5
24x2	4	DWTT24X2	DWTP24X2	DWTB24X2	DWTS24X2
24x3	4	DWTT24X3	DWTP24X3	DWTB24X3	DWTS24X3
27x2	4	DWTT27X2	DWTP27X2	DWTB27X2	DWTS27X2
27x3	4	DWTT27X3	DWTP27X3	DWTB27X3	DWTS27X3
30x2	4	DWTT30X2	DWTP30X2	DWTB30X2	DWTS30X2
30x3.5	4	DWTT30X3.5	DWTP30X3.5	DWTB30X3.5	DWTS30X3.5
33x2	4	DWTT33X2	DWTP33X2	DWTB33X2	DWTS33X2
33x3.5	4	DWTT33X3.5	DWTP33X3.5	DWTB33X3.5	DWTS33X3.5
36x3	4	DWTT36X3	DWTP36X3	DWTB36X3	DWTS36X3
36x4	4	DWTT36X4	DWTP36X4	DWTB36X4	DWTS36X4
39x3	6	DWTT39X3	DWTP39X3	DWTB39X3	DWTS39X3
39x4	6	DWTT39X4	DWTP39X4	DWTB39X4	DWTS39X4

Taper



7-10 Threads

Plug



3-5 Threads

Bottom



1-2 Threads

Taps

High Speed Steel, Spiral Pointed

qual  **TECH™**



Spiral-Pointed taps, or Machine Taps, were originated to solve the problem of tap breakage in through hole tapping. The Machine Tap shoots chips ahead of the cutting action, thus reducing loading and clogging in the flutes. They are recommended for use in through or blind holes which allow for chip accumulation in the bottom of the hole. Ideal for threading a wide variety of ductile materials, copper and copper alloys, brass and non-metals.

MACHINE AND FRACTIONAL SIZES

Size	Limit	No. of Flutes	Part Number
0-80	H1	2	DWT57009
1-64	H1	2	DWT57021
1-72	H1	2	DWT57023
2-56	H2	2	DWT57031
2-64	H2	2	DWT57033
3-48	H2	2	DWT57038
3-56	H2	2	DWT57041
4-36	H2	2	DWT57046
4-40	H2	2	DWT57048
4-48	H2	2	DWT57051
5-40	H2	2	DWT57062
5-44	H2	2	DWT57064
6-32	H2	2	DWT57072
6-40	H2	2	DWT57076
8-32	H3	2	DWT57085
8-36	H2	2	DWT57089
10-24	H3	2	DWT57097
10-32	H3	2	DWT57104
12-24	H3	2	DWT57112
12-28	H3	2	DWT57114
14-24	H3	2	DWT57115
1/4-20	H3	2	DWT57129



Size	Limit	No. of Flutes	Part Number
1/4-28	H3	2	DWT57139
5/16-18	H3	2	DWT57151
5/16-24	H3	2	DWT57160
3/8-16	H3	3	DWT57176
3/8-24	H3	3	DWT57181
7/16-14	H3	3	DWT57192
7/16-20	H3	3	DWT57195
1/2-13	H3	3	DWT57215
1/2-20	H3	3	DWT57220
9/16-12	H3	3	DWT91612
9/16-18	H4	3	DWT91618
5/8-11	H3	3	DWT57230
5/8-18	H3	3	DWT57555
11/16-11	H3	3	DWT111611
11/16-16	H3	3	DWT111616
3/4-10	H3	3	DWT57246
3/4-16	H3	3	DWT60999
7/8-9	H3	3	DWT789
7/8-14	H3	3	DWT7814
1-8	H3	3	DWT18
1-12	H3	3	DWT112
1-14	H3	3	DWT114

Pipe Tap

General Purpose Pipe Taps are appropriate for threading a wide variety of materials both ferrous and non-ferrous. The nominal size of a Pipe Tap is that of the pipe fitting to be tapped, not the actual size of the tap. The thread tapers 3/4 of an inch per foot. All Pipe Taps furnished with a 2-1/2 to 3-1/2 thread chamfer. NPT threads require the use of a "sealer" like teflon tape or pipe compound.

HSS NPT PIPE

Size	No. of Flutes	Part Number
1/16-27	4	DWT64003
1/8-27	4	DWT64005
1/4-18	4	DWT64006
3/8-18	4	DWT64007
1/2-14	4	DWT64008
3/4-14	5	DWT64009
1-11-1/2	5	DWT64010

Size	No. of Flutes	Part Number
1-1/4-11-1/2	5	DWT64011
1-1/2-11-1/2	7	DWT64012
2-11-1/2	7	DWT64013
2-1/2-8	8	DWT64014
3-8	8	DWT64015
3-1/2-8	8	DWT64016
4-8	8	DWT64017



Taps

High Speed Steel, Pulley Taps

qualTECH™



Extension Taps are used for tapping the hubs of pulleys for oil caps or set screws. The long shank is also ideal for reaching holes inaccessible with standard length taps. Extension Taps are furnished in several different overall lengths. Available in plug chamfer only.

6" O.A.L.

Size	Part Number
6-32	DWTET6X6-32
8-32	DWTET6X8-32
10-24	DWTET6X10-24
10-32	DWTET6X10-32
12-24	DWTET6X12-24
1/4-20	DWTET6X1/4-20
1/4-28	DWTET6X1/4-28
5/16-18	DWTET6X5/16-18
5/16-24	DWTET6X5/16-24
3/8-16	DWTET6X3/8-16
3/8-24	DWTET6X3/8-24
7/16-14	DWTET6X7/16-14
7/16-20	DWTET6X7/16-20
1/2-13	DWTET6X1/2-13
1/2-20	DWTET6X1/2-20
5/8-11	DWTET6X5/8-11
5/8-18	DWTET6X5/8-18
3/4-10	DWTET6X3/4-10
3/4-16	DWTET6X3/4-16
7/8-9	DWTET6X7/8-9



8" O.A.L.

Size	Part Number
1/4-20	DWTET8X1/4-20
5/16-18	DWTET8X5/16-18
3/8-16	DWTET8X3/8-16
7/16-14	DWTET8X7/16-14
7/16-20	DWTET8X7/16-20
9/16-18	DWTET8X9/16-18
5/8-11	DWTET8X5/8-11
3/4-10	DWTET8X3/4-10
1-14	DWTET8X1-14

10" O.A.L.

Size	Part Number
1/4-20	DWTET10X1/4-20
7/16-14	DWTET10X7/16-14
1/2-13	DWTET10X1/2-3
5/8-11	DWTET10X5/8-11
1-8	DWTET10X1-8

12" O.A.L.

Size	Part Number
3/8-16	DWTET12X3/8-16
7/16-14	DWTET12X7/16-14
5/8-11	DWTET12X5/8-11
7/8-9	DWTET12X7/8-9

UNDERSIZE SHANK

Size	Part Number
1/4-20	DWTET6X1/4-20SS
5/16-18	DWTET6X5/16-18SS
3/8-16	DWTET6X3/8-16SS



Reiff & Nestor Company

THREAD RESTORER

Battered Bolt or Pipe Threads Restored Quickly with NU-TRIX Without Changing Fit

A few easy passes with the appropriate land of NU-TRIX over the damaged face of the bolt or pipe thread will restore the thread without reducing the diameter. As only the displaced metal is removed, the original fit is preserved. Any bolt or pipe of the corresponding thread number, regardless of diameter, may be repaired instantly with NU-TRIX.

	NU-TRIX No.	Thread Sizes on Each	EDP Number
For Bolts	No. 1	11, 12, 13, 14, 16, 18, 20 and 24	63400
	No. 2	9, 10, 12, 16, 20, 27, 28 and 32	63410
For Pipe (External)	No. 3	8 and 10	63420
	No. 4	8 and 11-1/2	63430
	No. 5	10 and 14	63440
For Pipe (Internal)	No. 6	8 and 10	63450
	No. 7	8 and 11-1/2	63460
	No. 8	10 and 14	63470
Metric NU-TRIX For Bolts	No. 9	Metric Pitches 2.0 - 1.75 — 1.5 - 1.25 Metric Pitches 3.0 - 2.50 — 1.0 - 0.75	63480

NU-TRIX #1 #2 #9



NU-TRIX #3 #4 #5



NU-TRIX #6 #7 #8



Dies

Carbon Steel, Hex Die



Carbon Steel Hex Dies are for dressing over bruised or rusty threads, they are the most cost effective rethreading tool available. No special holder is required for this type of die, any wrench large enough will suffice. Ideal for maintenance in the shop or field.

MACHINE AND FRACTIONAL SIZES

Size	Part Number
4-40	DWTHX440
5-40	DWTHX540
6-32	DWTHX632
8-32	DWTHX832
10-24	DWTHX1024
10-32	DWTHX1032
12-24	DWTHX1224
1/4-20	DWTHX1420
1/4-28	DWTHX1428
5/16-18	DWTHX51618
5/16-24	DWTHX51624
3/8-16	DWTHX3816
3/8-24	DWTHX3824

Size	Part Number
7/16-14	DWTHX71614
7/16-20	DWTHX71620
1/2-13	DWTHX1213
1/2-20	DWTHX1220
9/16-12	DWTHX91612
9/16-18	DWTHX91618
5/8-11	DWTHX5811
5/8-18	DWTHX5818
11/16-11	DWTHX111611
11/16-16	DWTHX111616
3/4-10	DWTHX3410
3/4-16	DWTHX3416
7/8-9	DWTHX789

Size	Part Number
7/8-14	DWTHX7814
1-8	DWTHX18
1-12	DWTHX112
1-14	DWTHX114
1-1/8-7	DWTHX1187
1-1/8-12	DWTHX11812
1-1/4-7	DWTHX1147
1-1/4-12	DWTHX11412
1-3/8-6	DWTHX1386
1-3/8-12	DWTHX13812
1-1/2-6	DWTHX1126
1-1/2-12	DWTHX11212

Special Hex Dies Up to 4" Available P.O.A.

NPT PIPE SIZES

Size	Part Number
1/8NPT	DWTHXNPT18
1/4NPT	DWTHXNPT14
3/8NPT	DWTHXNPT38
1/2NPT	DWTHXNPT12
3/4NPT	DWTHXNPT34
1NPT	DWTHXNPT1INCH
1-1/4NPT	DWTHXNPT114



Size	Part Number
1-1/2NPT	DWTHXNPT112
2NPT	DWTHXNPT2INCH
2-1/2NPT	DWTHXNPT212
3NPT	DWTHXNPT3INCH
3-1/2NPT	DWTHXNPT312
4NPT	DWTHXNPT4INCH

Die Stocks

Size	Part Number
5/8	DWTDS5/8
13/16	DWTDS13/16
1	DWTDS1INCH
1-1/2	DWTDS1-1/2
2	DWTDS2INCH
2-1/2	DWTDS2-1/2
3	DWTDS3INCH



Dies

High Speed Steel, Round Adjustable, Standard Sizes



For threading, a High Speed Steel Round Adjustable Die is desired for improved wear life. Round Dies are chamfered on both faces. One side has a 2- to 3-thread chamfer for threading, the other side has a 1 to 1-1/2 thread chamfer for threading close to a shoulder. Adjustment is obtained by a fine pitch screw which forces the sides of the die apart, or allows them to spring together. The slot is beveled so that when the dies are used in a machine holder the adjusting screw can be removed and adjustment made by the adjusting screws in the holder.

1 3 / 16 " O D

Size	Part Number
0-80	DWTH1316-080
1-64	DWTH1316-164
1-72	DWTH1316-172
2-56	DWTH1316-256
2-64	DWTH1316-264
3-48	DWTH1316-348
3-56	DWTH1316-356
4-36	DWTH1316-436
4-40	DWTH1316-440
4-48	DWTH1316-448
5-40	DWTH1316-540
5-44	DWTH1316-544
6-32	DWTH1316-632
6-40	DWTH1316-640
8-32	DWTH1316-832
8-36	DWTH1316-836
10-24	DWTH1316-1024
10-32	DWTH1316-1032
12-24	DWTH1316-1224
12-28	DWTH1316-1228
1/4-20	DWTH1316-1420
1/4-28	DWTH1316-1428
5/16-18	DWTH1316-51618
5/16-24	DWTH1316-51624

1 " O D

Size	Part Number
2-56	DWTH1-256
3-56	DWTH1-356
4-36	DWTH1-436
4-40	DWTH1-440
4-48	DWTH1-448
5-40	DWTH1-540
5-44	DWTH1-544
6-32	DWTH1-632
6-40	DWTH1-640
8-32	DWTH1-832
8-36	DWTH1-836
10-24	DWTH1-1024
10-32	DWTH1-1032
12-24	DWTH1-1224
12-28	DWTH1-1228
1/4-20	DWTH1-1420
1/4-28	DWTH1-1428
5/16-18	DWTH1-51618
5/16-24	DWTH1-51624
3/8-16	DWTH1-3816
3/8-24	DWTH1-3824
7/16-14	DWTH1-71614
7/16-20	DWTH1-71620
1/2-13	DWTH1-1213
1/2-20	DWTH1-1220

1 - 1 / 2 " O D

Size	Part Number
1/4-20	DWTH112-1420
1/4-28	DWTH112-1428
5/16-18	DWTH112-51618
5/16-24	DWTH112-51624
3/8-16	DWTH112-3816
3/8-24	DWTH112-3824
7/16-14	DWTH112-71614
7/16-20	DWTH112-71620
1/2-13	DWTH112-1213
1/2-20	DWTH112-1220
9/16-12	DWTH112-91612
9/16-18	DWTH112-91618
5/8-11	DWTH112-5811
5/8-18	DWTH112-5818
11/16-11	DWTH112-111611
11/16-16	DWTH112-111616
3/4-10	DWTH112-3410
3/4-16	DWTH112-3416

2 " O D

Size	Part Number
1/4-20	DWTH2-1420
1/4-28	DWTH2-1428
5/16-18	DWTH2-51618
5/16-24	DWTH2-51624
3/8-16	DWTH2-3816
3/8-24	DWTH2-3824
7/16-14	DWTH2-71614
7/16-20	DWTH2-71620
1/2-13	DWTH2-1213
1/2-20	DWTH2-1220
9/16-12	DWTH2-91612
9/16-18	DWTH2-91618
5/8-11	DWTH2-5811
5/8-18	DWTH2-5818
11/16-11	DWTH2-111611
3/4-10	DWTH2-3410
3/4-16	DWTH2-3416
7/8-9	DWTH2-789
7/8-14	DWTH2-7814
1-8	DWTH2-18
1-12	DWTH2-112
1-14	DWTH2-114

2 - 1 / 2 " O D

Size	Part Number
3/4-16	DWTH212-3416
7/8-9	DWTH212-789
7/8-14	DWTH212-7814
1-8	DWTH212-18
1-12	DWTH212-112
1-14	DWTH212-114
1-1/8-7	DWTH212-1187
1-1/8-12	DWTH212-11812
1-1/4-7	DWTH212-1147
1-1/4-12	DWTH212-11412
1-3/8-6	DWTH212-1386
1-3/8-12	DWTH212-13812
1-1/2-6	DWTH212-1126
1-1/2-12	DWTH212-11212

3 " O D

Size	Part Number
1-1/8-7	DWTH3-1187
1-1/8-12	DWTH3-11812
1-1/4-7	DWTH3-1147
1-1/4-12	DWTH3-11412
1-3/8-6	DWTH3-1386
1-3/8-12	DWTH3-13812
1-1/2-6	DWTH3-1126
1-1/2-12	DWTH3-11212

**Any Sizes
 Not Listed,
 Please Inquire.**



Countersinks

High Speed Steel

qualTECH™



SINGLE FLUTE HSS

Size	Shank Dia.	O.A.L.	60° Part No.	82°* Part No.	90° Part No.	100° Part No.	120° Part No.
3/16	3/16	1-1/2	DEWSFC3/16-60	DEWSFC3/16-82	DEWSFC3/16-90	DEWSFC3/16-100	DEWSFC3/16-120
1/4	1/4	2	DEWSFC1/4-60	DEWSFC1/4-82	DEWSFC1/4-90	DEWSFC1/4-100	DEWSFC1/4-120
5/16	1/4	2	DEWSFC5/16-60	DEWSFC5/16-82	DEWSFC5/16-90	DEWSFC5/16-100	DEWSFC5/16-120
3/8	1/4	2	DEWSFC3/8-60	DEWSFC3/8-82	DEWSFC3/8-90	DEWSFC3/8-100	DEWSFC3/8-120
1/2	1/4	2	DEWSFC1/2-60	DEWSFC1/2-82	DEWSFC1/2-90	DEWSFC1/2-100	DEWSFC1/2-120
5/8	3/8	2-1/4	DEWSFC5/8-60	DEWSFC5/8-82	DEWSFC5/8-90	DEWSFC5/8-100	DEWSFC5/8-120
3/4	3/8	2-3/4	DEWSFC3/4-60	DEWSFC3/4-82	DEWSFC3/4-90	DEWSFC3/4-100	DEWSFC3/4-120
7/8	1/2	2-3/4	DEWSFC7/8-60	DEWSFC7/8-82	DEWSFC7/8-90	DEWSFC7/8-100	DEWSFC7/8-120
1	1/2	2-3/4	DEWSFC1-60	DEWSFC1-82	DEWSFC1-90	DEWSFC1-100	DEWSFC1-120
1-1/4	3/4	3-3/8	DEWSFC1-1/4-60	DEWSFC1-1/4-82	DEWSFC1-1/4-90	DEWSFC1-1/4-100	DEWSFC1-1/4-120
1-1/2	3/4	3-3/8	DEWSFC1-1/2-60	DEWSFC1-1/2-82	DEWSFC1-1/2-90	DEWSFC1-1/2-100	DEWSFC1-1/2-120
2	3/4	3-3/8	DEWSFC2-60	DEWSFC2-82	DEWSFC2-90	DEWSFC2-100	DEWSFC2-120

***IN STOCK ITEMS**



Reamers

High Speed Steel, Bridge

Used to align existing holes prior to bolt or rivet installation. Point is tapered to permit entry into overlapping holes. Short length facilitates use in areas with limited access. Heavy-duty hex shank designed for portable pneumatic tools.

HEX SHANK

Size	Shank Dia.	Flute Length	O.A.L.	Part Number
13/16	1-1/4	5	6-7/8	DWRRB13/16HEX
15/16	1-7/16	5	6-7/8	DWRRB15/16HEX
1-1/16	1-5/8	5	6-7/8	DWRRB1-1/16HEX
1-3/16	1-3/4	5	6-7/8	DWRRB1-3/16HEX



HEX SHANK - LONG LENGTH

Size	Shank Dia.	Flute Length	O.A.L.	Part Number
9/16	3/8	5-1/8	9	DWRRB9/16HEX-LONG
11/16	13/32	7-1/8	11-3/4	DWRRB11/16HEX-LONG
13/16	35/64	7-3/8	12	DWRRB13/16HEX-LONG
15/16	43/64	7-3/8	12	DWRRB15/16HEX-LONG
1-1/16	13/16	7-3/8	12	DWRRB1-1/16HEX-LONG
1-3/16	59/64	7-3/8	12	DWRRB1-3/16HEX-LONG

Reamers

High Speed Steel, Bridge



Designed for hard service, these reamers are especially suitable for use in structural iron or steel bridgework and ship construction in lining up bolt or rivet holes. They have a sharp point and long taper for easy entry in badly misaligned holes. The taper shank bridge reamer is commonly used in electric and pneumatic portable equipment.

TAPER SHANK

Size	Point Dia.	Morse Taper	Flute Length	O.A.L.	Spiral Flute	Straight Flute
3/8	7/32	2	4-3/8	8-1/4	DWRRB3/8	
7/16	17/64	2	4-3/8	8-1/4	DWRRB7/16	DWRRBST7/16
1/2	5/16	2	5-1/8	9	DWRRB1/2	DWRRBST1/2
9/16	3/8	2	5-1/8	9	DWRRB9/16	DWRRBST9/16
5/8	25/64	2	6-1/8	10	DWRRB5/8	DWRRBST5/8
11/16	13/32	2	7-1/8	11-3/4	DWRRB11/16	DWRRBST11/16
3/4	15/32	3	7-3/8	12	DWRRB3/4	DWRRBST3/4
13/16	35/64	3	7-3/8	12	DWRRB13/16	DWRRBST13/16
7/8	39/64	3	7-3/8	12	DWRRB7/8	DWRRBST7/8
15/16	43/64	3	7-3/8	12	DWRRB15/16	DWRRBST15/16
1	47/64	3	7-3/8	12	DWRRB1INCH	DWRRBST1INCH
1-1/16	13/16	3	7-3/8	12	DWRRB1-1/16	DWRRBST1-1/16
1-1/8	55/64	3	7-3/8	12	DWRRB1-1/8	DWRRBST1-1/8
1-3/16	59/64	3	7-3/8	12	DWRRB1-3/16	DWRRBST1-3/16
1-1/4	63/64	3	7-3/8	13	DWRRB1-1/4	DWRRBST1-1/4
1-5/16	1-1/16	3	7-3/8	13	DWRRB1-5/16	DWRRBST1-5/16
1-3/8	1-1/8	4	7-3/8	13	DWRRB1-3/8	DWRRBST1-3/8
1-7/16	1-3/16	4	7-3/8	13	DWRRB1-7/16	DWRRBST1-7/16
1-1/2	1-1/4	4	7-3/8	13	DWRRB1-1/2	DWRRBST1-1/2
1-9/16	1-1/4	4	7-3/8	13	DWRRB1-9/16	DWRRBST1-9/16
1-5/8	1-3/8	4	7-3/8	13	DWRRB1-5/8	DWRRBST1-5/8
1-11/16	1-3/8	4	7-3/8	13	DWRRB1-11/16	DWRRBST1-11/16
1-3/4	1-7/16	4	7-3/8	13	DWRRB1-3/4	DWRRBST1-3/4
1-13/16	1-7/16	4	7-3/8	13	DWRRB1-13/16	DWRRBST1-13/16
1-7/8	1-1/2	4	7-3/8	13	DWRRB1-7/8	DWRRBST1-7/8
1-15/16	1-1/2	4	7-3/8	13	DWRRB1-15/16	DWRRBST1-15/16
2	1-3/4	4	7-3/8	13	DWRRB2INCH	



Used to align existing holes prior to bolt or rivet installation. Point is tapered to permit entry into overlapping holes. Three symmetrically placed flats on shank provide positive grip in portable electric and pneumatic tools.

1/2" ROUND SHANK

Size	Point Dia.	Flute Length	O.A.L.	Straight Flute
1/2	5/16	4	5-7/8	DWRRBSS1/2
9/16	3/8	4	5-7/8	DWRRBSS9/16
5/8	25/64	4-1/2	6-3/8	DWRRBSS5/8
11/16	13/32	4-1/2	6-3/8	DWRRBSS11/16
3/4	15/32	5	6-7/8	DWRRBSS3/4
13/16	35/64	5	6-7/8	DWRRBSS13/16
7/8	39/64	5	6-7/8	DWRRBSS7/8
15/16	43/64	5	6-7/8	DWRRBSS15/16
1	47/64	5	6-7/8	DWRRBSS1INCH
1-1/16	13/16	5	6-7/8	DWRRBSS1-1/16



Machine Tool Accessories

Sleeves and Sockets



Extend tool lengths and application distances while adapting for increases or decreases in applied tool Morse taper sizes.

EXTENSION SOCKETS

Size	Hole Number	Shank Dia.	Part Number
1-2	1MT	2MT	DEWES1-2
1-3	1MT	3MT	DEWES1-3
1-4	1MT	4MT	DEWES1-4
1-5	1MT	5MT	DEWES1-5
2-1	2MT	1MT	DEWES2-1
2-2	2MT	2MT	DEWES2-2
2-3	2MT	3MT	DEWES2-3
2-4	2MT	4MT	DEWES2-4
2-5	2MT	5MT	DEWES2-5
3-1	3MT	1MT	DEWES3-1
3-2	3MT	2MT	DEWES3-2



Size	Hole Number	Shank Dia.	Part Number
3-3	3MT	3MT	DEWES3-3
3-4	3MT	4MT	DEWES3-4
3-5	3MT	5MT	DEWES3-5
4-2	4MT	2MT	DEWES4-2
4-3	4MT	3MT	DEWES4-3
4-4	4MT	4MT	DEWES4-4
4-5	4MT	5MT	DEWES4-5
4-6	4MT	6MT	DEWES4-6
5-4	5MT	4MT	DEWES5-4
5-5	5MT	5MT	DEWES5-5
5-6	5MT	6MT	DEWES5-6

Permit the use of Morse taper shank tools in straight-hole mounting systems.

SOLID (TURRET) SOCKETS

Size	Hole Number	Shank Dia.	Part Number
1	1MT	1	DEWSMS1
2	1MT	1-1/4	DEWSMS2
3	1MT	1-1/2	DEWSMS3
4	2MT	1	DEWSMS4
5	2MT	1-1/4	DEWSMS5
6	2MT	1-1/2	DEWSMS6
7	2MT	1-3/4	DEWSMS7
8	2MT	2	DEWSMS8



Size	Hole Number	Shank Dia.	Part Number
9	3MT	1-1/4	DEWSMS9
10	3MT	1-1/2	DEWSMS10
11	3MT	1-3/4	DEWSMS11
12	3MT	2	DEWSMS12
13	4MT	1-1/2	DEWSMS13
14	4MT	1-3/4	DEWSMS14
15	4MT	2	DEWSMS15

Adapt smaller Morse taper shank tools to larger machine spindles.

MORSE TAPER SLEEVES

Size	Hole Number	Shank Dia.	Part Number
1-2	1MT	2MT	DEWS1-2
1-3	1MT	3MT	DEWS1-3
1-4	1MT	4MT	DEWS1-4
1-5	1MT	5MT	DEWS1-5
2-3	2MT	3MT	DEWS2-3
2-4	2MT	4MT	DEWS2-4



Size	Hole Number	Shank Dia.	Part Number
2-5	2MT	5MT	DEWS2-5
3-4	3MT	4MT	DEWS3-4
3-5	3MT	5MT	DEWS3-5
4-5	4MT	5MT	DEWS4-5
4-6	4MT	6MT	DEWS4-6
5-6	5MT	6MT	DEWS5-6

Burrs

Carbide Burrs, Rotary Files - Double Cut

CYLINDRICAL

Cut Dia.	Cut Length	Part Number
1/8	1/2	DULSA11
1/8	5/8	DULSA12
5/32	5/8	DULSA13
3/16	5/8	DULSA14
1/4	5/8	DULSA1
1/4	1	DULSA1A
5/16	3/4	DULSA2
5/16	1	DULSA2A
3/8	3/4	DULSA3
3/8	1	DULSA3A
3/8	1-1/2	DULSA3B
7/16	1	DULSA4
1/2	1	DULSA5
5/8	1	DULSA6
3/4	1	DULSA7
3/4	3/4	DULSA16
1	1	DULSA9



CYLINDRICAL (END-CUT)

Cut Dia.	Cut Length	Part Number
1/8	1/2	DULSB11
1/8	5/8	DULSB12
3/16	5/8	DULSB14
1/4	5/8	DULSB1
1/4	1	DULSB1A
5/16	3/4	DULSB2
5/16	1	DULSB2A
3/8	3/4	DULSB3
3/8	1	DULSB3A
3/8	1-1/2	DULSB3B
7/16	1	DULSB4
1/2	1	DULSB5
5/8	1	DULSB6
3/4	1	DULSB7
3/4	3/4	DULSB16
1	1	DULSB9



CYLINDRICAL (RADIUS END)

Cut Dia.	Cut Length	Part Number
1/8	1/2	DULSC11
1/8	5/8	DULSC12
3/16	5/8	DULSC14
1/4	5/8	DULSC1
1/4	1	DULSC1A
5/16	3/4	DULSC2
5/16	1	DULSC2A
3/8	3/4	DULSC3
3/8	1	DULSC3A
3/8	1-1/2	DULSC3B
7/16	1	DULSC4
1/2	1	DULSC5
5/8	1	DULSC6
3/4	1	DULSC7
1	1	DULSC9



BALL-END

Cut Dia.	Cut Length	Part Number
1/8	3/32	DULSD11
3/16	1/4	DULSD14
1/4	3/16	DULSD1
5/16	1/4	DULSD2
3/8	5/16	DULSD3
7/16	3/8	DULSD4
1/2	7/16	DULSD5
5/8	9/16	DULSD6
3/4	11/16	DULSD7
1	15/16	DULSD9



OVAL

Cut Dia.	Cut Length	Part Number
3/16	5/16	DULSE11
3/16	1/4	DULSE14
1/4	3/8	DULSE1
3/8	5/8	DULSE3
1/2	7/8	DULSE5
5/8	1	DULSE6
3/4	1	DULSE7



TREE (RADIUS END)

Cut Dia.	Cut Length	Part Number
1/8	1/2	DULSF11
1/4	5/8	DULSF1
3/8	3/4	DULSF3
7/16	1	DULSF4
1/2	1	DULSF5
1/2	3/4	DULSF13
5/8	1	DULSF6
3/4	1	DULSF7
3/4	1-1/4	DULSF14
3/4	1-1/2	DULSF15



TREE (POINTED-END)

Cut Dia.	Cut Length	Part Number
1/4	5/8	DULSG1
5/16	3/4	DULSG2
3/8	3/4	DULSG3
1/2	1	DULSG5
1/2	3/4	DULSG13
5/8	1	DULSG6
3/4	1	DULSG7
3/4	1-1/2	DULSG15



FLAME

Cut Dia.	Cut Length	Part Number
1/4	5/8	DULSH1
5/16	3/4	DULSH2
1/2	1-1/4	DULSH5
5/8	1-7/16	DULSH6
3/4	1-5/8	DULSH7



60° (INCLUDED ANGLE)

Cut Dia.	Cut Length	Part Number
1/4	3/16	DULSJ1
5/16	1/4	DULSJ2
3/8	5/16	DULSJ3
1/2	7/16	DULSJ5
5/8	1/2	DULSJ6
3/4	5/8	DULSJ7
7/8	3/4	DULSJ8
1	3/4	DULSJ9



CONE (RADIUS-END 14° TAPER)

Cut Dia.	Cut Length	Part Number
1/4	5/8	DULSL1
5/16	7/8	DULSL2
3/8	1-1/16	DULSL3
1/2	1-1/8	DULSL4
5/8	1-3/16	DULSL5
5/8	1-5/16	DULSL6
3/4	1-1/2	DULSL7



6" OVERALL

Cut Dia.	Cut Length	Part Number
1/4	1/2	DULSA1X6
3/8	3/4	DULSA3X6
1/2	1	DULSA5X6
1/4	1/2	DULSC1X6
3/8	3/4	DULSC3X6
1/2	1	DULSC5X6
1/2	7/16	DULSD5X6
1/4	3/8	DULSE1X6
3/8	5/8	DULSE3X6
1/2	7/8	DULSE5X6
1/4	1/2	DULSF1X6
3/8	3/4	DULSF3X6
1/2	1	DULSF5X6
1/4	1/2	DULSG1X6
3/8	3/4	DULSG3X6
1/2	1	DULSG5X6
1/2	1-1/4	DULSH5X6
3/8	1-1/16	DULSL3X6

INVERTED CONE

Cut Dia.	Cut Length	Part Number
1/4	5/16	DULSN1
3/8	3/8	DULSN2
1/2	1/2	DULSN4
5/8	3/4	DULSN6
3/4	5/8	DULSN7
3/16	1/4	DULSN81



CONE (POINTED-END)

Cut Dia.	Cut Length	Part Number
1/4	1/2	DULSM1
1/4	3/4	DULSM2
1/4	1	DULSM3
1/4	1-1/4	DULSM3A
3/8	5/8	DULSM4
1/2	7/8	DULSM5
5/8	1	DULSM6



Burrs

Carbide Burrs for Aluminum and Non-Ferrous

CYLINDRICAL

Cut Dia.	Cut Length	Part Number
3/8	3/4	DULSA3NF
1/2	1	DULSA5NF
3/4	1	DULSA7NF



CYLINDRICAL (RADIUS-END)

Cut Dia.	Cut Length	Part Number
3/8	3/4	DULSC3NF
1/2	1	DULSC5NF
3/4	1	DULSC7NF



BALL-END

Cut Dia.	Cut Length	Part Number
3/8	3/8	DULSD3NF
1/2	1/2	DULSD5NF
5/8	5/8	DULSD6NF



TREE (RADIUS-END)

Cut Dia.	Cut Length	Part Number
1/4	5/8	DULSF1NF
3/8	3/4	DULSF3NF
1/2	1	DULSF5NF
5/8	1	DULSF6NF



CONE (RADIUS-END)

Cut Dia.	Cut Length	Part Number
3/8	1-1/16	DULSL3NF
1/2	1-1/8	DULSL4NF
5/8	1-5/16	DULSL6NF
3/4	1-1/2	DULSL7NF



OVAL

Cut Dia.	Cut Length	Part Number
1/2	7/8	DULSE5NF
5/8	1	DULSE6NF

CYLINDRICAL (END-CUT)

Cut Dia.	Cut Length	Part Number
3/8	3/4	DULSB3NF

Miniature Carbide Burrs



CYLINDRICAL

Cut Dia.	Cut Length	Part Number
1/16	1/4	DULSA41
3/32	7/16	DULSA42
1/8	9/16	DULSA43
1/4	1/2	DULSA51
5/32	1/2	DULSA52
3/16	1/2	DULSA53
3/32	1/4	DULSA61
3/32	3/8	DULSA63
3/16	5/8	DULSA81

CYLINDRICAL (END-CUT)

Cut Dia.	Cut Length	Part Number
1/16	1/4	DULSB41
3/32	7/16	DULSB42
1/4	3/16	DULSB51

CYLINDRICAL (RADIUS-END)

Cut Dia.	Cut Length	Part Number
3/32	7/16	DULSC41
1/8	9/16	DULSC42
1/4	1/2	DULSC51
5/32	1/2	DULSC52
3/16	1/2	DULSC53
3/32	3/8	DULSC61
3/16	5/8	DULSC81

BALL-END

Cut Dia.	Cut Length	Part Number
3/32	3/32	DULSD41
1/8	1/8	DULSD42
1/4	1/4	DULSD51
3/16	3/16	DULSD53
3/32	3/32	DULSD61
3/16	3/16	DULSD81

OVAL

Cut Dia.	Cut Length	Part Number
1/8	7/32	DULSE41
1/4	3/8	DULSE51
3/16	9/32	DULSE53
3/32	1/8	DULSE61
3/16	9/32	DULSE81

TREE (RADIUS-END)

Cut Dia.	Cut Length	Part Number
1/8	1/4	DULSF41
1/8	1/2	DULSF42
1/4	1/2	DULSF51
3/16	1/2	DULSF53
3/32	1/4	DULSF61
3/16	1/2	DULSF81

90° (INCLUDE ANGLE)

Cut Dia.	Cut Length	Part Number
1/8	1/16	DULSK42
3/16	1/2	DULSK81

TREE (POINTED-END)

Cut Dia.	Cut Length	Part Number
1/8	1/4	DULSG41
1/8	3/8	DULSG43
1/8	1/2	DULSG44
1/4	1/2	DULSG51
3/16	1/2	DULSG53
3/32	1/4	DULSG61
3/16	1/2	DULSG81

FLAME

Cut Dia.	Cut Length	Part Number
1/8	1/4	DULSH41
3/16	3/8	DULSH53

60° (INCLUDED ANGLE)

Cut Dia.	Cut Length	Part Number
1/8	3/32	DULSJ42
3/16	3/16	DULSJ81

CONE (POINTED-END)

Cut Dia.	Cut Length	Part Number
1/8	11/32	DULSM41
1/8	7/16	DULSM42
1/8	5/8	DULSM43
1/4	1/2	DULSM51
3/16	1/2	DULSM53
3/32	1/4	DULSM61
3/16	1/2	DULSM81

INVERTED CONE

Cut Dia.	Cut Length	Part Number
1/8	3/16	DULSN42
1/4	1/4	DULSN51
3/16	1/4	DULSN53
3/32	1/8	DULSN61
3/32	1/8	DULSN41

40 & 50 Series have 1/8" Dia. Shank
 60 Series have 3/32" Dia. Shank
 80 Series have 3/16" Dia. Shank

CONE (RADIUS-END 14° TAPER)

Cut Dia.	Cut Length	Part Number
1/8	3/8	DULSL41
1/8	1/2	DULSL42
3/16	1/2	DULSL53
3/16	7/16	DULSL81





WET DIAMOND CORE BITS

PREMIUM BLACK


Our **Premium Black** bit is the industry standard. Its very high diamond concentration gives maximum footage and drilling speed. **Designed for all types of wet drilling. Good in moderate to high steel applications.** Choose Premium Black for your lowest total drilling cost.

SPECIFICATIONS

P33F Hard Aggregate
POL General Purpose, Fast Cutting
P64L Asphalt/Block, Long Life

*Many other bonds available to fit your exact application.

HEAVY-DUTY ORANGE


The **Heavy-Duty Orange** bit is our most popular bit. It has a high diamond concentration for excellent footage and cutting speed. **Designed for all types of wet drilling in applications with light to moderate steel.** Go with Heavy-Duty Orange for the best general purpose bit on the market.

SPECIFICATIONS

H33F Hard Aggregate
HOL General Purpose, Fast Cutting
H64L Asphalt/Block, Long Life

*Many other bonds available to fit your exact application.

Premium Black Core Bits

SIZE	POL Cat. No.	P33F Cat. No.	P64L Cat. No.
1/2"	05826	05820	28585
5/8"	05917	05912	28586
3/4"	05962	05957	28587
7/8"	06004	05998	25115
1"	05293	05286	19871
1-1/8"	05338	23309	28588
1-1/4"	05381	05373	22003
1-3/8"	05404	05399	28589
1-1/2"	05441	05427	05438
1-5/8"	05472	18689	28594
1-3/4"	05483	05476	28595
1-7/8"	05509	28580	28596
2"	05529	05516	05525
2-1/4"	05571	05565	23771
2-1/2"	05607	05596	28597
2-3/4"	05629	28581	28598
3"	05661	05643	21246
3-1/4"	05688	26748	05686
3-1/2"	05709	22306	28599
4"	05761	05742	05753
4-1/4"	05791	05782	05788
4-1/2"	05805	28582	23173
5"	05843	05831	24580
5-1/2"	05867	27102	28600
6"	05892	20265	05886
6-1/4"	05921	05919	28601
6-1/2"	05927	28583	28602
7"	05945	26932	28603
8"	05984	05969	05980
9"	06013	28584	28604
10"	05306	27971	28605
12"	05361	05351	05359
14"	05417	05412	28606
16"	05462	26250	28607
18"	05498	26254	05496
20"	05536	26258	28608
24"	05584	26262	05583

Expansion Adapters

SIZE	Part No.
1"	4010476
1-1/8"	4010477
1-1/4"	4010478
1-3/8"	4010479
1-1/2"	4010480
1-5/8"	4010481
1-3/4"	4010482
1-7/8"	4010483
2"	4010484
2-1/4"	4010485
2-1/2"	4010486
2-3/4"	4010487
3"	4010488
3-1/4"	4010489
3-1/2"	4010490
4"	4010491
4-1/4"	4010492
4-1/2"	4010493
5"	4010494
5-1/2"	4010495
6"	4010496
6-1/4"	4010497
6-1/2"	4010498
7"	4010499
8"	4010500
9"	4010501
10"	4010502

Heavy-Duty Orange Core Bits

SIZE	HOL Cat. No.	H33F Cat. No.	H64L Cat. No.
1"	04812	21156	04810
1-1/8"	04837	04835	27000
1-1/4"	15509	04859	25596
1-3/8"	04874	19356	25597
1-1/2"	15525	04886	28619
1-5/8"	04907	19933	28620
1-3/4"	04910	21343	28621
1-7/8"	04920	19934	28622
2"	15479	04926	04934
2-1/4"	04959	04955	04957
2-1/2"	00004	04972	04976
2-3/4"	04992	04991	28623
3"	00005	04999	05013
3-1/4"	05032	28616	28624
3-1/2"	00006	22376	28625
4"	00007	05052	05060
4-1/4"	05079	05075	05077
4-1/2"	00008	05083	05086
5"	00009	05101	05107
5-1/2"	05117	27758	28626
6"	00010	05123	05131
6-1/4"	05144	20285	05143
6-1/2"	05151	05148	05150
7"	05163	19092	24977
8"	05183	05176	05180
9"	05199	05196	28627
10"	04822	04815	04820
12"	04853	04841	04848
14"	04882	04877	24889
16"	04903	18777	25130
18"	04918	04914	28628
20"	04947	28617	28636
24"	04968	28618	04966

DRY HIGH PERFORMANCE TURBO BLADES

- ◆ Faster cutting, lower cost version of our original outstanding turbo blade.
- ◆ Designed for use on right-angle grinders, high speed, portable, electric, masonry and tile saws.
- ◆ The faster cut from its freestanding turbo segments and high diamond concentration.
- ◆ Smooth cutting from our advanced, high density metal bond technology and our unique segment design.
- ◆ Especially well suited for cutting harder materials such as concrete pavers, fire brick, marble, granite and other natural stone.



Utility Green - HPT7G



Standard Gold - HPT7S



Heavy-Duty Orange - HPT7H

- ◆ Utility Green segmented turbo blade used for general purpose cutting.
- ◆ New quality grade for a wider range to choose from.
- ◆ Standard Gold segmented turbo blade for cutting a wide range of materials including concrete, asphalt, brick & block, marble and stone.
- ◆ Heavy-Duty Orange segmented turbo blade for cutting a wide range of materials including concrete, asphalt, brick and block, marble and stone.
- ◆ Longest Life, High Performance Turbo blade.

High Performance Turbo Blades

	Utility Green	Standard Gold	Heavy-Duty Orange
Size	HPT7G Cat #	HPT7S Cat #	HPT7H Cat #
4" x .080 x 7/8"	94189	11703	11637
4-1/2" x .080 x 7/8"	94190	11704	11639
5" x .080 x 7/8"	94191	28247	11641
6" x .080 x 7/8"	94192	19906	11642
7" x .095 x 7/8"	94193	11705	11643
8" x .095 x 7/8"	94194	11707	11645
9" x .095 x 7/8"	94195	22322	11646
10" x .110 x 1"	94196	11708	11648
12" x .125 x 1"	94197	--	--
12" x .125 x UNV	--	58452	58210
14" x .125 x 1"	94198	--	--
14" x .125 x UNV	--	58453	58451
16" x .125 x 1"	94199	28654	11675
16" x .125 x 20MM	--	40755	27144
20" x .140 x 1"	94200	11715	11678

DRY/WET MASONRY BLADES

- ◆ Fast, smooth cutting in a wide range of brick, block, concrete pavers, marble & stone.
- ◆ High diamond concentrations and advanced metal bond technology.
- ◆ Very competitively priced.
- ◆ Cut at a constant depth of cut with less dust than abrasive blades.
- ◆ Cuts brick, block, concrete pavers, concrete, marble and stone.
- ◆ These blades increase operator safety and reduce time spent on blade changes.
- ◆ May be used wet or dry.
- ◆ Laser welded for added safety and performance in wet and dry applications.

Standard Gold Masonry Blades



- ◆ **DM80S** - Hard Materials, Fast Cutting, Hard Brick
- ◆ **DM85S** - General Purpose, Comb. Brick/Block
- ◆ **DM86S** - Combination Brick, Block
- ◆ **DM87S** - Abrasive Brick/Block

Size	M80S Cat #	DM85S Cat #	CM86S Cat #	CM87S Cat #
10" x .110 x 1"	11947	11948	11949	11950
12" x .110 x 1"	11952	11954	11955	11956
14" x .110 x 1"	11959	11961	11964	11965
16" x .125 x 1"	76800	74823	76801	11968
20" x .125 x 1"	11976	11977	11978	11979
24" x .140 x 1"	40793	40794	40795	40796

Heavy-Duty Orange Masonry Blades



- ◆ **DM80H** - Hard Materials, Fast Cutting, Hard Brick
- ◆ **DM85H** - General Purpose, Comb. Brick/Block
- ◆ **DM86H** - Combination Brick, Block - Long Life
- ◆ **DM87H** - Abrasive Brick/Block - Long Life

Size	DM80H Cat #	DM85H Cat #	CM86H Cat #	CM87H Cat #
10" x .110 x 1"	11817	11819	11820	11821
12" x .110 x 1"	11825	11827	11828	11829
14" x .110 x 1"	11847	11850	11853	11855
16" x .125 x 1"	21697	11876	21421	46214
20" x .125 x 1"	11893	11895	11897	11898
24" x .140 x 1"	40797	40798	40799	40800

Premium Black Masonry Blades



- ◆ **DM80P** - Hard Materials, Fast Cutting, Hard Brick
- ◆ **DM85P** - General Purpose, Comb. Brick/Block
- ◆ **DM86P** - Combination Brick, Block - Longest Life
- ◆ **DM87P** - Abrasive Brick/Block - Longest Life

Size	DM80P Cat #	DM85P Cat #	CM86P Cat #	CM87P Cat #
10" x .110 x 1"	11904	11905	11906	11907
12" x .110 x 1"	11908	11909	11910	11911
14" x .110 x 1"	11917	11920	11921	11922
16" x .125 x 1"	11930	11931	76802	53034
20" x .125 x 1"	11940	11942	11943	11944
24" x .140 x 1"	40801	40802	40803	40804

SEGMENTED DRY HIGH SPEED BLADES

- ◆ The most competitively priced on the market.
- ◆ Designed for fast, smooth cutting in many materials.
- ◆ More constant depth of cut and far fewer blade changes compared to abrasive blades.
- ◆ May be used wet or dry.
- ◆ Designed for use on high speed gasoline and electric hand held saws. May also be used on masonry and low horsepower (>20HP) concrete floor saws.
- ◆ Great for cutting concrete, concrete curbing, brick or block walls, expansion joints, precast and prestressed materials and much more.

Quality Grade (code)	Quality Level	Diamond Depth	Material Being Cut				
			Cured Concrete	General Purpose	Green Concrete	Asphalt	Brick and Block
Quality code denotes grade and color code	Based on quality, not seg height						
Star Blue (SB)	◆	.374	SB4000	SB4000			
Utility Green (G)	◆◆	.276	G4000	G4000			
Imperial Purple (I)	◆◆◆	.354	I4000	I4000			
Standard Gold (S)	◆◆◆◆	.250	H7S	H8S	H10S	H10S	H10S
X-tra Plus REd (X)	◆◆◆◆	.250	H7X	H8X	H10X	H10X	H10X
Heavy-Duty Orange (H)	◆◆◆◆◆	.250	H7H	H8H	H10H	H10H	H10H
Premium Black (P)	◆◆◆◆◆◆	.250	H7P	H8P	H10P	H10P	H10P
Super Heavy-Duty Silver (SH)	◆◆◆◆◆◆	.375	H7SH	H8SH	H10SH	H10SH	H10SH
Standard Gold Ultimate (SU)	◆◆◆◆◆	.250	H7SU	H8SU	H10SU	H10SU	H10SU
X-tra Plus Red Ultimate (XU)	◆◆◆◆◆	.250	H7XU	H8XU	H10XU	H10XU	H10XU
Heavy-Duty Orange Ultimate (HU)	◆◆◆◆◆◆	.250	H7HU	H8HU	H10HU	H10HU	H10HU
Cut-ALL Multi-Purpose (HCA)	◆◆◆◆◆◆◆	.310	HCA1600	HCA1600	HCA1600	HCA1600	HCA1600



Star Blue - SB4000

- ◆ Our Most Economical Blade
- ◆ General Purpose, Concrete with Minimal Rebar
- ◆ Now with .374" diamond depth (total segment height .472")

Star Blue Dry High Speed Blades

Size	SB4000 Catalog #
12" x .110 x UNV	92398
14" x .125 x UNV	85261



Utility Green - G4000

- ◆ Best Value
- ◆ G4000 - Long Life For Cutting Concrete, Hard Material

Utility Green Dry High Speed Blades

Size	G4000 Catalog #
12" x .110 x 1"	94143
12" x .110 x 20MM	94144
12" x .125 x 1"	94145
14" x .110 x 1"	94146
14" x .110 x 20MM	94147
14" x .125 x 1"	94148
14" x .125 x 20MM	94204
16" x .125 x 1"	94149



Imperial Purple - I4000

- ◆ High Quality, Competitively Priced General Purpose Long Life
- ◆ Diamond Depth is .375

Imperial Purple Dry High Speed Blades

Size	I4000 Catalog #
12" x .110 x UNV	85149
14" x .125 x UNV	78976

UNV = Designates a Universal arbor that accommodates 1" and 20mm.

SEGMENTED DRY HIGH SPEED BLADES



Standard Gold

- ◆ **H7S** - Reinforced Concrete Hard Materials
- ◆ **H8S** - Concrete with some Rebar - Long Life
- ◆ **H10S** - Green Concrete Asphalt, Brick & Block



X-tra Plus Red

- ◆ **H7X** - Reinforced Concrete Hard Materials
- ◆ **H8X** - Concrete with some Rebar, General Purpose
- ◆ **H10X** - Green Concrete Asphalt, Brick & Block, Soft Materials



Heavy-Duty Orange

- ◆ **H7H** - Hard Materials, Reinforced Concrete
- ◆ **H8H** - Concrete - Long Life
- ◆ **H10H** - Green Concrete Abrasive, Soft Materials - Long Life
- ◆ **Our Most Popular High Speed Blade!**



Premium Black

- ◆ **H7P** - Hard Materials, Reinforced Concrete, Fast Cutting
- ◆ **H8P** - Concrete - Long Life
- ◆ **H10P** - Green Concrete Abrasive, Soft Materials - Long Life



Super Heavy-Duty Silver

- ◆ **H7SH** - Hard Materials, Reinforced Concrete, Fast Cutting - Longest Life
- ◆ **H8SH** - Concrete - Longest Life
- ◆ **H10SH** - Abrasive, Soft Materials, Green Concrete - Longest Life
- ◆ **.375" Diamond Depth!**

Standard Gold Dry High Speed Blades

Size	H7S Catalog #	H8S Catalog #	H10S Catalog #
10" x .110 x 1"	11719	11720	11717
12" x .110 x UNV	57706	57707	57708
12" x .125 x UNV	57710	57711	57712
14" x .110 x UNV	57714	57715	57716
14" x .125 x UNV	57719	57720	57721
16" x .125 x 1"	11757	11758	26527
18" x .125 x 1"	28303	16868	14395
20" x .125 x 1"	28270	28271	13846

X-tra Plus Dry High Speed Blades

Size	H7X Catalog #	H8X Catalog #	H10X Catalog #
10" x .110 x 1"	11762	11763	11761
12" x .110 x UNV	53717	53714	53715
12" x .125 x UNV	53717	53718	53719
14" x .110 x UNV	53721	53722	53723
14" x .125 x UNV	53725	53726	53727
16" x .125 x 1"	18040	11797	26916
18" x .125 x 1"	15713	11799	11798
20" x .125 x 1"	11802	15137	11801

Heavy-Duty Orange Dry High Speed Blades

Size	H7H Catalog #	H8H Catalog #	H10H Catalog #
10" x .110 x 1"	11421	11422	11418
12" x .110 x UNV	53729	53730	53731
12" x .125 x UNV	53733	53734	53735
12" x .235 x 1" **	28279	23249	28282
14" x .110 x UNV	53737	53738	53739
14" x .125 x UNV	53741	53742	53743
14" x .235 x 1" **	11546	11547	28280
16" x .125 x 1"	11550	11551	11549
18" x .125 x 1"	11555	11556	14231
20" x .125 x 1"	11560	11561	11558

Premium Black Dry High Speed Blades

Size	H7P Catalog #	H8P Catalog #	H10P Catalog #
10" x .110 x 1"	11566	11567	11564
12" x .110 x UNV	53745	53746	53747
12" x .125 x UNV	53749	53750	53751
12" x .235 x 1" **	11593	28284	28285
14" x .110 x UNV	53753	53754	53755
14" x .125 x UNV	53757	53758	53759
14" x .235 x 1" **	11626	11627	23437
16" x .125 x 1"	11629	11630	11628
18" x .125 x 1"	11633	11634	11631
20" x .125 x 1"	11635	16713	15557

Super H.D. Silver Dry High Speed Blades

Size	H7SH Catalog #	H8SH Catalog #	H10SH Catalog #
12" x .125 x UNV	57727	57728	57729
14" x .110 x UNV	57731	57732	57733
14" x .125 x UNV	57735	57736	57737
16" x .125 x 1"	33327	32399	74438
16" x .125 x 20MM	46239	52415	77750

UNV = Designates a Universal arbor that accommodates 1" and 20mm.

** Blades designed for precutting in diamond chain applications where overcuts are not allowed.

DRY TURBO BLADES

- ◆ Designed for use on right-angle grinders, high speed, portable electric, masonry and tile saws.
- ◆ Advanced, high-density metal bond technology and high diamond concentration.
- ◆ Patented slotted core makes these the coolest running dry blades on the market.
- ◆ Long life and smooth cutting in the widest range of materials.



Star Blue - T4000SB

- ◆ Our Lowest Priced Turbo Blade
- ◆ General Purpose, Minimal Rebar



Utility Green - TG4000

- ◆ Our Best Quality Value Priced Turbo Blade
- ◆ General Purpose, Harder Materials Some Rebar



Imperial Purple - TI4000

- ◆ Innovative Turbo Blade with Undercut Protection
- ◆ Holes in Core Keep the Blade Cool As It Cuts



Standard Gold - T7S

- ◆ Fast Cutting
- ◆ Cuts a Wide Range of Materials - Concrete, Asphalt, Block



Heavy-Duty Orange - T7H

- ◆ Fast Cutting, Long Life
- ◆ Cuts Reinforced Materials While Staying Cool

Turbo Blades

Size	Star Blue T4000SB Cat #	Utility Green TG4000 Cat #	Imperial Purple TI4000 Cat #	Stand. Gold T7S Cat #	H.D. Orange T7H Cat #
4" x .080 x 7/8"	74959	94153	--	12480	12281
4-1/2" x .080 x 7/8"	74960	94154	--	12483	12286
5" x .080 x 7/8"	80002	94155	--	12486	12290
6" x .080 x 7/8"	80003	94156	--	12487	12292
7" x .095 x 7/8"	74961	94157	--	12489	12298
8" x .095 x 7/8"	80004	94205	--	12493	12309
9" x .095 x 7/8"	80005	94158	--	12494	12312
10" x .110 x 1"	80006	94159	--	12495	12315
12" x .125 x 1"	74962	94160	79952	--	--
12" x .125 x UNV	--	--	--	58454	53862
12" x .125 x 20MM	74963	--	--	--	--
14" x .125 x 1"	74964	94161	79953	--	--
14" x .125 x UNV	--	--	--	58455	53863
14" x .125 x 20MM	74965	--	--	--	--
16" x .125 x 1"	--	--	--	14527	12336
16" x .125 x 20MM	--	--	--	--	28824
20" x .140 x 1"	--	--	--	15584	12338
5 Pack					
4" x .080 x 7/8"	76589	94162	--	55237	55240
4-1/2" x .080 x 7/8"	76590	94163	--	55238	55241
7" x .095 x 7/8"	76591	94164	--	255239	55242

Above blades with 7/8" arbor include 5/8", 20mm and 15mm bushings.

TUCK POINTING BLADES

- ◆ For hand-held circular saws and small, right-angle grinders.
- ◆ Provide constant depth of cut and far fewer blade changes compared to abrasive blades.



Star Blue - DT4000SB

- ◆ Newest Grade of Tuck Point Blades - Star Blue
- ◆ .250 Segment Width
- ◆ Available in a bonded 3-stack blade for faster cutting



Utility Green - DTG4000

- ◆ Best value for tuck point cutting
- ◆ For cleaning mortar joints
- ◆ Available in a bonded 3-stack blade for faster cutting



Standard Gold - DT9S

- ◆ Long Life, wide gullets
- ◆ For cleaning mortar joints



Heavy-Duty Orange - DT9H

- ◆ Longest life tuck point blade
- ◆ For cleaning mortar joints



Heavy-Duty Orange High Performance - HPDT9H

- ◆ Staggered Segments for Faster Cutting
- ◆ Heavy-Duty Diamond Concentration

Tuck Pointing Blades

Size	Star Blue DT4000SB Cat #	Utility Green DTG4000 Cat #	Stand. Gold DT9S Cat #	H.D. Orange DT9H Cat #	(HP) H.D. Orange HPDT9H Cat #
4" x .250 x 7/8"	74966	94186	12462	12418	11697
4-1/2" x .250 x 7/8"	74967	94187	12466	12429	11698
5" x .250 x 7/8"	--	--	12470	12437	11700
7" x .250 x 7/8"	74968	--	12475	12446	11702
8" x .250 x 7/8"	--	--	12476	12454	16638
3-In-One Blades					
4" x .375 x 7/8"	79892	94183	--	--	--
4-1/2" x .375 x 7/8"	79893	94184	--	--	--
5 Pack					
4" x .250 x 7/8"	76592	94206	55225	55228	55280
4-1/2" x .250 x 7/8"	76593	94207	55226	55229	55360
7" x .250 x 7/8"	76594	--	55227	55230	55361

Grinding Pins - VT2H



- ◆ Great for cleaning out mortar from hard to reach mortar joints and butt (vertical) joints
- ◆ Grinds out a butt joint in seconds (with no damage to existing blocks)
- ◆ Usable on many routers

Vertical Tuck Pointing Grinding Pins

Size	VT2H Cat. #
1/4" Diameter Grinding Pin	12524
3/8" Diameter Grinding Pin	12529

Tuck pins have a 5/16" shaft, 1/4" shaft available upon request.

SEGMENTED DRY SMALL DIAMETER BLADES FOR ELECTRIC SAWS

- ◆ For use on hand-held circular saws and most right-angle grinders
- ◆ Diamond blade maintains a constant depth of cut with fewer blade changes than abrasive blades
- ◆ Provide fast, free cutting in concrete, block, marble, soft granite, stone, tile and other materials



Star Blue - SB4000

- ◆ **General purpose, for cutting through materials with minimal or no rebar**



Utility Green - G4000

- ◆ **General purpose - Long Life for cutting material with some rebar**

Size	Star Blue	Utility Green
	SB4000 Catalog #	G4000 Catalog #
4" x .070 x 7/8"	74950	94140
4-1/2" x .070 x 7/8"	74951	94141
7" x .080 x 7/8"	74952	94142
8" x .080 x 7/8"	74953	--
5 Pack		
4" x .070 x 7/8"	--	94208
4-1/2" x .070 x 7/8"	--	94209
7" x .080 x 7/8"	--	94210

All blades with 7/8" arbor include 5/8", 20mm and 15mm bushings.



Standard Gold

- ◆ **E2S - General purpose, harder materials**
- ◆ **E5S - Soft, abrasive materials**



X-Tra Plus Red

- ◆ **E2X - General purpose, harder materials**
- ◆ **E5X - Soft, abrasive materials good life**



Heavy-Duty Orange

- ◆ **E2H - General purpose, harder materials**
- ◆ **E5H - Soft, abrasive materials - Long Life**



Premium Black

- ◆ **E2P - General purpose, harder materials**
- ◆ **E5P - Soft, abrasive materials - Longest Life**

Size	Standard Gold		X-Tra Plus Red		Heavy-Duty Orange		Premium Black	
	E2S Catalog #	E5S Catalog #	E2X Catalog #	E5X Catalog #	E2H Catalog #	E5H Catalog #	E2P Catalog #	E5P Catalog #
4" x .070 x 7/8"	11344	11346	11366	11368	11242	11244	11304	11305
4-1/2" x .070 x 7/8"	11347	11349	11370	11373	11249	11253	11307	11308
5" x .080 x 7/8"	11350	11351	11374	11375	11257	11259	11310	11311
5-1/2" x .080 x 7/8"	17232	28289	28290	11376	16300	11260	18197	11312
6" x .080 x 7/8"	11352	16866	11378	11379	11263	11264	11315	11316
7" x .080 x 7/8"	11355	11357	11380	11381	11268	11274	11319	11322
8" x .080 x 7/8"	11359	11360	11383	11386	11290	11293	11338	11339
9" x .080 x 7/8"	11362	11364	11387	11388	11297	11302	11340	11342
5 Pack								
4" x .070 x 7/8"	55255	55256	55261	55262	55267	55268	55274	55275
4-1/2" x .070 x 7/8"	55257	55258	55263	55264	55270	55271	55276	55277
7" x .080 x 7/8"	55259	55260	55265	55266	55272	55273	55278	55279



Crack Chasing V Blades

Size & Description	V4000 Cat. #
4" Crack Chasing V Blade w/5/8-11 hub	27542
7" Crack Chasing V Blade w/5/8-11 hub	75739
4" Utility Yellow Crack Chasing V Blade w/ 5/8-11 hub	92497
5 Pack	
4" Crack Chasing V Blade w/5/8-11 hub	55223
7" Crack Chasing V Blade w/5/8-11 hub	55224

- ◆ Cleans, routs and repairs cracks in concrete and other materials
- ◆ Fast cutting and long lasting blade with laser welded diamond segs that leave a clean groove
- ◆ Designed for use on small angle grinders
- ◆ Segmented design provides longer life and faster cutting than competitive blades
- ◆ Segment width .250 at thickest point
- ◆ Now available in a Utility Yellow grade



Early Entry Heavy-Duty Orange Green Concrete Blades

Size	GCS100H Catalog #	GCS200H Catalog #	GCS300H Catalog #
8" x .100 x 1"	44486	44487	44488
8" x .125 x 1"	44489	44490	44491
8" x .250 x 1"	44492	44493	44494

- ◆ **GCS100H - Soft bond for hard aggregates**
- ◆ **GCS200H - Medium bond for average aggregates**
- ◆ **GCS300H - Hard bond for soft abrasive aggregate**

DRY WALK BEHIND SAW BLADES FOR CONCRETE, GREEN CONCRETE AND ASPHALT BLADES

- ◆ For the contractor who wants to make intermittent cuts without water for patch/repair work or expansion joints
- ◆ More efficient than abrasives for speed and consistent depth
- ◆ .125 wide blades may now be used on high speed cutoff saws
- ◆ Use on low horsepower (< 20 HP) walk behind concrete saws



Imperial Purple

- ◆ **DC1SG** - General Purpose for Concrete, Asphalt and Green Concrete with no rebar
- ◆ **Diamond Depth is .375**

Dry Walk Behind Blades

Size	DC1SG Cat #
12" x .125 x 1"	73079
14" x .125 x 1"	73080

Dry Concrete, Asphalt & Green Concrete Blades

Standard Gold



- ◆ **DC1S** - Cured concrete, minimal rebar
- ◆ **DA2S** - Asphalt, abrasive material
- ◆ **DG3S** - Green concrete, concrete under 72 hours old
- ◆ **DA64WS** - Can be used for both concrete and asphalt when you are unsure of material being cut

Size	DC1S Cat #	DA2S Cat #	DG3S Cat #	DA64WS Cat #
12" x .125 x 1"	11208	11189	11219	13531
12" x .187 x 1"	27278	14702	---	78804
14" x .125 x 1"	11210	11190	11222	13530
14" x .187 x 1"	11211	11191	---	78805

Heavy-Duty Orange



- ◆ **DC1H** - Cured concrete with some rebar
- ◆ **DA2H** - Asphalt, abrasive material
- ◆ **DG3H** - Green concrete, concrete under 72 hours old with some rebar

Size	DC1H Cat #	DA2H Cat #	DG3H Cat #
12" x .125 x 1"	11196	11156	11213
12" x .187 x 1"	11197	11158	50718
14" x .125 x 1"	11199	11162	11215
14" x .187 x 1"	11200	11170	19093

Premium Black



- ◆ **DC1P** - Cured concrete with rebar
- ◆ **DA2P** - Asphalt, abrasive material
- ◆ **DG3P** - Green concrete, concrete under 72 hours old with rebar

Size	DC1P Cat #	DA2P Cat #	DG3H Cat #
12" x .125 x 1"	11204	11175	11217
12" x .187 x 1"	11205	15954	24109
14" x .125 x 1"	11206	11178	11218
14" x .187 x 1"	11207	11183	77223

DRY SPECIALTY BLADES - DUCTILE IRON BLADES



Ductile Iron Blade

- ◆ Ideal For Cutting Ductile Iron and Thin Gauge Metal Drywall Studs
- ◆ Cuts Much Faster and Safer Than Traditional Abrasives with Fewer Blade Changes
- ◆ Abrasive Material Adhered to the Blade Core to Clean Metal Burrs and Make Beveled Edges After the Cut
- ◆ Specification: D17

Diamond Blades for Ductile Iron and Metal Studs

Size	D17 Cat #
12" x .110 x UNV	71508
14" x .125 x UNV	68000

UNV = Designates a Universal arbor that accommodates 1" and 20mm.

Abrasive Material Adhered to the Blade Core to Clean Metal Burrs and Make Beveled Edges After the Cut.

DRY TURBO CUP GRINDERS

- ◆ The most efficient way to grind all types of concrete, masonry, brick, block and stone
- ◆ Grinds faster than conventional cup grinders
- ◆ May be used on most right-angle grinders
- ◆ Use the turbo and single row cup grinders for faster removal of material.

Dry Spiral Turbo Cup Grinders



- ◆ **T5G Utility Green Spiral Turbo Cup Grinders**
- ◆ **Competitively priced**
- ◆ **Fast Cutting**
- ◆ **Three sizes**



- ◆ **T5S Standard Gold Spiral Turbo Cup Grinders**
- ◆ **Fast grinding and removal**
- ◆ **Long Life cup grinder**



- ◆ **T5H Heavy-Duty Orange Spiral Turbo Cup Grinders**
- ◆ **Fast grinding and removal**
- ◆ **Longest Life cup grinder**

Description	Size	Utility Green T5G Cat #	Standard Gold T5S Cat #	Heavy Duty Orange T5H Cat #
Spiral Turbo Cup Grinder with 9 Segs	4" x 5/8-11"	94133	17846	17943
Spiral Turbo Cup Grinder with 9 Segs	4" x 7/8"	94134	23177	20710
Spiral Turbo Cup Grinder with 18 Segs	4" x 5/8-11"	94127	--	--
Spiral Turbo Cup Grinder with 18 Segs	4" x 7/8"	94128	--	--
Spiral Turbo Cup Grinder with 9 Segs	4-1/2" x 5/8-11"	94131	--	--
Spiral Turbo Cup Grinder with 9 Segs	4-1/2" x 7/8"	94132	--	--
Spiral Turbo Cup Grinder with 18 Segs	4-1/2" x 5/8-11"	94129	--	--
Spiral Turbo Cup Grinder with 18 Segs	4-1/2" x 7/8"	94130	--	--
Spiral Turbo Cup Grinder with 12 Segs	7" x 5/8-11"	94135	16410	15095
Spiral Turbo Cup Grinder with 12 Segs	7" x 7/8"	94136	17834	18155
Spiral Turbo Cup Grinder with 24 Segs	7" x 5/8-11"	94137	15263	15096
Spiral Turbo Cup Grinder with 24 Segs	7" x 7/8"	94138	18641	18396
Spiral Turbo Cup Grinder with 24 Segs	10" x 7/8"	--	--	56505

Dry Ring Turbo Cup Grinders



- ◆ **Dry Ring Turbo Style Cup Grinders for fast, smooth removal and grinding**
- ◆ **Fine Grit for the smoothest finish**
- ◆ **Medium Grit for basic grinding & removal**
- ◆ **Coarse Grit for heavy, aggressive removal**

Size	Grit	Bond	Catalog #
4" x 7/8"	Fine	KT5HF	35645
4" x 7/8"	Medium	KT5HM	26060
4" x 7/8"	Coarse	KT5HC	23329
4" x 5/8-11"	Fine	KT5HF	19546
4" x 5/8-11"	Medium	KT5HM	17539
4" x 5/8-11"	Coarse	KT5HC	23051
7" x 5/8-11"	Coarse	KT5HC	23154

Segmented Cup Grinders



- ◆ **S5G Single Row for general grinding and removal**



- ◆ **D5G Double Row for long life grinding and a smooth finish**



- ◆ **S5S Single Row for general grinding and removal**



- ◆ **D5S Double Row for heavier material removal**



- ◆ **R5S Ring Style, Continuous Segment for smooth grinding**



- ◆ **S5H Single Row for general grinding and removal, Long Life**



- ◆ **D5H Double Row for heavier material removal, Long Life**



- ◆ **R5H Ring Style, Continuous Segment for smooth grinding, Long Life**

Utility Green

Size/Description	Specification	Catalog #
4" x 5/8-11" Single Row	S5G	94177
4" x 5/8-11" Double Row	D5G	94175
7" x 5/8-11" Single Row	S5G	94178
7" x 5/8-11" Double Row	D5G	94176

Standard Gold

Size/Description	Specification	Catalog #
4" x 5/8-11" Single Row	S5S	07442
4" x 5/8-11" Double Row	D5S	07429
4" x 5/8-11" Ring	R5S	07439
5" x 5/8-11" Single Row	S5S	28508
5" x 5/8-11" Double Row	D5S	07431
7" x 5/8-11" Single Row	S5S	07450
7" x 5/8-11" Double Row	D5S	07434

Heavy-Duty Orange

Size/Description	Specification	Catalog #
4" x 5/8-11" Single Row	S5H	00015
4" x 5/8-11" Double Row	D5H	00016
4" x 5/8-11" Ring	R5H	07385
5" x 5/8-11" Single Row	S5H	07404
5" x 5/8-11" Double Row	D5H	07370
7" x 5/8-11" Single Row	S5H	00017
7" x 5/8-11" Double Row	D5H	00018

NOTE: All cup grinders come with 5/8-11 threaded hub. Available with 7/8" arbor upon request.



SDS-max SHANK



SINGLE CUTTER

POINT DIA.	OVERALL LENGTH	DRILLING DEPTH	PART NUMBER
3/8"	10"	4"	MX-6-10
3/8"	14"	8"	MX-6-14
3/8"	18"	12"	MX-6-18
7/16"	14"	8"	MX-7-14
1/2"	14"	8"	MX-8-14
1/2"	18"	12"	MX-8-18
1/2"	22"	16"	MX-8-22
1/2"	28"	22"	MX-8-28
1/2"	42"	36"	MX-8-42
1/2"	54"	48"	MX-8-54
1/2"	66"	60"	MX-8-66
9/16"	14"	8"	MX-9-14
9/16"	18"	12"	MX-9-18
9/16"	22"	16"	MX-9-22
9/16"	28"	22"	MX-9-28
5/8"	14"	8"	MX-10-14
5/8"	18"	12"	MX-10-18
5/8"	22"	16"	MX-10-22
5/8"	28"	22"	MX-10-28
11/16"	14"	8"	MX-11-14
11/16"	22"	16"	MX-11-22
3/4"	14"	8"	MX-12-14
3/4"	18"	12"	MX-12-18
3/4"	22"	16"	MX-12-22
3/4"	28"	22"	MX-12-28
13/16"	14"	8"	MX-13-14
13/16"	22"	16"	MX-13-22
27/32"	14"	8"	MX-13A-14
27/32"	22"	16"	MX-13A-22
7/8"	14"	8"	MX-14-14
7/8"	18"	12"	MX-14-18
7/8"	22"	16"	MX-14-22
7/8"	28"	22"	MX-14-28
1"	14"	8"	MX-16-14
1"	18"	12"	MX-16-18
1"	22"	16"	MX-16-22
1"	28"	22"	MX-16-28
1-1/8"	14"	8"	MX-18-14
1-1/8"	22"	16"	MX-18-22
1-1/8"	28"	22"	MX-18-28
1-1/4"	14"	8"	MX-20-14
1-1/4"	22"	16"	MX-20-22
1-1/4"	28"	22"	MX-20-28
1-3/8"	22"	16"	MX-22-22
1-1/2"	14"	8"	MX-24-14
1-1/2"	22"	16"	MX-24-22
1-1/2"	28"	22"	MX-24-28

SPLINE SHANK



SINGLE CUTTER

POINT DIA.	OVERALL LENGTH	DRILLING DEPTH	PART NUMBER
3/8"	10"	4"	202-6-10
3/8"	14"	8"	202-6-14
3/8"	18"	12"	202-6-18
7/16"	14"	8"	202-7-14
1/2"	14"	8"	202-8-14
1/2"	18"	12"	202-8-18
1/2"	22"	16"	202-8-22
1/2"	28"	22"	202-8-28
1/2"	42"	36"	202-8-42
1/2"	54"	48"	202-8-54
1/2"	66"	60"	202-8-66
9/16"	14"	8"	202-9-14
9/16"	18"	12"	202-9-18
9/16"	22"	16"	202-9-22
9/16"	28"	22"	202-9-28
5/8"	14"	8"	202-10-14
5/8"	18"	12"	202-10-18
5/8"	22"	16"	202-10-22
5/8"	28"	22"	202-10-28
11/16"	14"	8"	202-11-14
11/16"	22"	16"	202-11-22
3/4"	14"	8"	202-12-14
3/4"	18"	12"	202-12-18
3/4"	22"	16"	202-12-22
3/4"	28"	22"	202-12-28
13/16"	14"	8"	202-13-14
13/16"	22"	16"	202-13-22
27/32"	14"	8"	202-13A-14
27/32"	22"	16"	202-13A-22
7/8"	14"	8"	202-14-14
7/8"	18"	12"	202-14-18
7/8"	22"	16"	202-14-22
7/8"	28"	22"	202-14-28
1"	14"	8"	202-16-14
1"	18"	12"	202-16-18
1"	22"	16"	202-16-22
1"	28"	22"	202-16-28
1-1/8"	14"	8"	202-18-14
1-1/8"	22"	16"	202-18-22
1-1/8"	28"	22"	202-18-28
1-1/4"	14"	8"	202-20-14
1-1/4"	22"	16"	202-20-22
1-1/4"	28"	22"	202-20-28
1-3/8"	22"	16"	202-22-22
1-1/2"	14"	8"	202-24-14
1-1/2"	22"	16"	202-24-22
1-1/2"	28"	22"	202-24-28



MULTIPLE CUTTER

PYRAMID POINT®



Call Wharton
for available
sizes.

- Patented, new technology tip.
- Five Premium-grade carbide inserts.
- Faster smoother drilling and longer lasting.
- Precise hole location, easy start center point.
- Heat-treated, shot-peened, superior steel.
- Ultra efficient dust removal flute design.
- Available in longer lengths.
- Available in different shank types.
- 42", 54", and 66" bits have 31" flute length and undercut body.



"A" AND "B" TAPER HAMMER BITS AND ADAPTORS

ADAPTORS

SDS+	PART NUMBER
AEG® PH210, PHE 16RL, 19RL, 26 PHE 24; B & D® 5013-16, 5043-57; BOSCH® 11207, 10-13, 11215, 11221-22, 24, 25, 28; DEWALT DW514, 556, 557; HILTI® 1, 5, 10, 12, 14, 15, 17, 18, 22, 24; HITACHI® VA16, DH15-18-22-24-25; KANGO® 200, 285, 327, 422, 426, 439D; MAKITA® HR 1821, 2511; METABO® 6010, 11, 15, 18 / 6020, 21, 24, 26, 28; MILWAUKEE® 5362-69, 5303, 5320, 5324; PHILLIPS® 555, 715; PORTER CABLE® 639; RAMSET® 425; RYOBI® ED-211; SKIL® 1740	207A 207B
SPLINE	
AEG® PH350, 240, 38 & PHD 26, 38; B & D® 5041-45, 5059, 5093 / 95 / 96 / 98; BOSCH® 11202, 03, 05, 09, 14, 19, 20; DEWALT DW530, 533; HITACHI® DH25, DH38, DH50; KANGO® 950S, 637S, 501S, 430S, 728S, 750S; MAKITA® HR 3851; METABO® RH-32, 33 RH-66, RH-99, 1129, 6030; MILWAUKEE® 5311-12, 16-17 / 5334 / 5341-44, 47-48; MILWAUKEE® 5352, 53; PHILLIPS® 747-2; RAMSET® 442, 445, 475; RYOBI® ED 382P, ER382; WACKER® 11/110	202A 202B
SDS-max	
B & D® 5097, 5099; DEWALT 545; HILTI® TE 52, 54, 55, 60, 72, 74, 75, 92, 94; BOSCH® 11216, 11214, 11223, 11227, 11230, 11231, 11309, 11, 12 (Percussion only); MILWAUKEE® 5308, 5313	MX-A MX-B
1/2" x 1" HEX	
SKIL® 717, 1750	SK17A
7/16" x 1-5/16" HEX	
AEG® BH 25	25A
9/16" x 1-1/4" HEX	
BOSCH® 11201; METABO® RH90; PHILLIPS® 747, 700	201A 201B
3/8" x 1-1/4" HEX	
B & D® 5040-90; RAMSET® 620; ROCKWELL® 600, 601, 1600; SKIL® 706-07-08, 1706	706A
7/16" x 1-5/8" HEX	
MILWAUKEE® 5300-05-10-15; SKIL® 726	726A 726B
3/4" x 3-1/4" HEX	
SKIL® 736	736B
HILTI HEX	
HILTI TORNA® 765	765B
9/16" x 2-3/8" HEX	
B & D® 5048; MILLER FALLS® SP499K; MILWAUKEE® 5325-26; PORTER CABLE® 1602; ROCKWELL® 602; SKIL® 628, 728, 731, 732, 1760	728A 728B
7/16" x 1-13/16" HEX	
B & D® 717, 5045-50	717A
KANGO HEX	
KANGO® 950	950B
TRI-FLAT	
RAMSET® 640, 340, 342, 345, 375	64A 64B
3/4" x 3-1/2" HEX	
WACKER® EHB 10/110	110B
PNEUMATIC	
CHICAGO PNEUMATIC® CP9R	CP-9A CP-9B

"A" TAPER HAMMER BITS

POINT DIA.	OVERALL LENGTH	DRILLING DEPTH	PART NUMBER
3/16"	4-1/4"	1-3/4"	A-3-4
3/16"	6-1/2"	4"	A-3-6
1/4"	4-3/4"	2"	A-4-4
1/4"	6-1/2"	4"	A-4-6
1/4"	8-3/4"	6"	A-4-8
1/4"	12-3/4"	10"	A-4-12
5/16"	5-1/4"	2-3/4"	A-5-5
5/16"	6-3/4"	4"	A-5-6
3/8"	6"	3-1/2"	A-6-6
3/8"	8-3/4"	6"	A-6-8
3/8"	11-3/4"	9"	A-6-11
3/8"	14-3/4"	12"	A-6-14
3/8"	20"	18"	A-6-20
7/16"	8-1/2"	6"	A-7-8
1/2"	6"	3-1/2"	A-8-6
1/2"	9"	6-1/2"	A-8-9
1/2"	11-1/4"	9"	A-8-11
1/2"	14-1/2"	12"	A-8-14
9/16"	9"	6-1/2"	A-9-9
5/8"	9"	6-1/2"	A-10-9
5/8"	12"	9"	A-10-12
5/8"	15"	12"	A-10-15
11/16"	9"	6-1/2"	A-11-9
3/4"	9"	6-1/2"	A-12-9
3/4"	15"	12"	A-12-15
27/32"	9"	6-1/2"	A-13A-9
7/8"	9"	6-1/2"	A-14-9
7/8"	19"	16"	A-14-19

Bulk: Call for availability.

"B" TAPER HAMMER BITS

POINT DIA.	OVERALL LENGTH	DRILLING DEPTH	PART NUMBER
1/2"	9"	6"	B-8-9
1/2"	19"	16"	B-8-19
9/16"	9"	6"	B-9-9
9/16"	19"	16"	B-9-19
5/8"	9"	6"	B-10-9
5/8"	19"	16"	B-10-19
11/16"	9"	6"	B-11-9
3/4"	9"	6"	B-12-9
3/4"	19"	16"	B-12-19
7/8"	9"	6"	B-14-9
1"	9"	6"	B-16-9
1"	19"	16"	B-16-19



Drift Key

PART NUMBER	TO FIT
DK-1	Both A and B Taper Adaptors





FORGED HAMMER TOOLS

SCALING CHISELS



- Use for:
- Removing scale, rust and concrete spatter.

FITS THESE HAMMERS	DESCRIPTION	PART NUMBER
SPLINE	12" OAL x 2"	SC-12S
	18" OAL x 2"	SC-18S
SDS-max	12" OAL x 2"	SC-12MX
	12" OAL x 3"	SC-312MX
SDS+	10" OAL x 1-1/2"	SC-12DS
	3/4" Hex	12" OAL x 2"	SC-12HX
	12" OAL x 3"	SC-312HX

COLD CHISELS



- Use for:
- Edging, chipping and channeling concrete, masonry or brick.

FITS THESE HAMMERS	DESCRIPTION	PART NUMBER
SPLINE	12" OAL x 1"	CC-12S
	18" OAL x 1"	CC-18S
SDS-max	12" OAL x 1"	CC-12MX
	18" OAL x 1"	CC-18MX
SDS+	10" OAL x 3/4"	CC-12DS
	3/4" Hex	12" OAL x 1"	CC-12HX
	18" OAL x 1"	CC-18HX

BULL POINTS or MOIL POINTS



- Use for:
- Breaking up concrete, brick, asphalt, etc.
 - Light demolition applications.
 - Starting holes in concrete slabs.

FITS THESE HAMMERS	DESCRIPTION	PART NUMBER
SPLINE	12" OAL	BP-12S
	18" OAL	BP-18S
SDS-max	12" OAL	BP-12MX
	18" OAL	BP-18MX
SDS+	10" OAL	BP-12DS
	3/4" Hex	12" OAL	BP-12HX
	18" OAL	BP-18HX

BUSHING TOOLS



- Use for:
- Roughing concrete surface prior to applying a surface finish.
 - Concrete surface removal to produce a rough exterior finish.

FITS THESE HAMMERS	DESCRIPTION	PART NUMBER
SPLINE	1 pc Bushing Tool	BT-16S
SDS-max	1 pc Bushing Tool	BT-16MX
3/4" Hex	1 pc Bushing Tool	BT-16HX
	16 Pt. Bushing Head	BH-16
SPLINE	Bushing Head Shk	BS-8S
SDS-max	Bushing Head Shk	BS-8MX
3/4" Hex	Bush Shank	BS-8HX

SLOTING CHISELS



- Use for:
- Slotting in concrete and masonry.
 - Breaking web between predrilled holes in concrete to make large opening.

FITS THESE HAMMERS	DESCRIPTION	PART NUMBER
SPLINE	12" OAL x 1-1/8"	CR-12S
SDS-max	12" OAL x 1-1/8"	CR-12MX

CARBIDE BUSHING TOOLS



FITS THESE HAMMERS	DESCRIPTION	PART NUMBER
SPLINE	1 pc Bushing Tool	BT-25CS*
SDS-max	1 pc Bushing Tool	BT-25CMX*
3/4" Hex	1 pc Bushing Tool	BT-25CHX*

*Carbide Bushing Tools have 25 carbide points.

CLAY SPADE



- Use for:
- Digging clay, dirt, hard-packed gravel, shale, etc.

FITS THESE HAMMERS	DESCRIPTION	PART NUMBER
3/4" Hex	4-1/2" x 6" x 17"	CS-HX
SDS-max	4-1/4" x 5-1/4" x 15-1/2"	CS-MX

MORTAR CHISELS



- Use for:
- Cleaning out old mortar between bricks and masonry prior to tuck pointing or caulking.
 - Cutting narrow channels.

FITS THESE HAMMERS	DESCRIPTION	PART NUMBER
SPLINE	15" OAL x 1-1/8"	MC-15S
SDS-max	15" OAL x 1-1/8"	MC-15MX

ASPHALT CUTTER



- Use for:
- Cutting asphalt or hard ground – not for concrete.

FITS THESE HAMMERS	DESCRIPTION	PART NUMBER
3/4" Hex	3-1/2" x 4-1/2" x 17"	AC-HX
SDS-max	4" x 4-1/2" x 15-1/2"	AC-MX

GROUND ROD DRIVERS



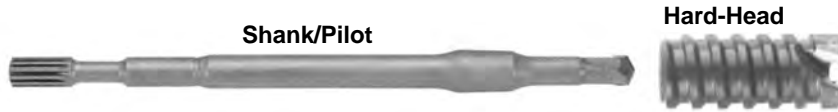
- Use for:
- Driving electrical grounding rods into earth.

FITS THESE HAMMERS	DESCRIPTION	PART NUMBER
SPLINE	for 5/8" - 3/4" rebar	DR-S
SDS-max	for 5/8" - 3/4" rebar	DR-MX
3/4" Hex	for 5/8" - 3/4" rebar	DR-HX



SOLID-BODY "HARD-HEAD" BITS

Relton's "Hard-Head" bits are designed to bore large holes through concrete without the need to break out the core every few inches.



Slide taper end of shank into the "Hard-Head" bit. A slight twisting motion will help keep the bit from falling off before beginning the cut. The pilot is integrated on the shank, so drilling can be accomplished without interruption! (Once used, shank and head become one-piece.)



Head only
For 1-1/8" thru 1-1/2"

DIAMETER	PART NUMBER
1-1/8"	SB-18
1-1/4"	SB-20
1-1/2"	SB-24

For 1-1/8" thru 1-1/2" Heads

DRILLING DEPTH	FITS THESE HAMMERS	PART NUMBER
10"	SPLINE	S02-10S
	SDS-max	SMX-10S
	SDS+	S07-10S
18"	SPLINE	S02-18S
	SDS-max	SMX-18S
	SDS+	S07-18S
24"	SPLINE	S02-24S
	SDS-max	SMX-24S
	SDS+	S07-24S

Head only



Head only
For 1-3/4" thru 3"

DIAMETER	PART NUMBER
1-3/4"	SB-28
2"	SB-32
2-1/2"	SB-40
3"	SB-48



For 1-3/4" thru 3" Heads

DRILLING DEPTH	FITS THESE HAMMERS	PART NUMBER
10"	SPLINE	S02-10
	SDS-max	SMX-10
18"	SPLINE	S02-18
	SDS-max	SMX-18
24"	SPLINE	S02-24
	SDS-max	SMX-24



HAMMER CORE BITS



CORE BODIES & STARTER POINTS



Starter points are included.

DIAMETER	PART NUMBER
1-3/4"	CBT-28
2"	CBT-32
2-1/2"	CBT-40
2-3/4"	CBT-44
3"	CBT-48
3-1/2"	CBT-56
4"	CBT-64
4-1/2"	CBT-72
5"	CBT-80

SHANKS



SDS-max SHANK

DRILLING DEPTH	PART NUMBER
10"	SMXTL-10
18"	SMXTL-18
24"	SMXTL-24



SPLINE SHANK

DRILLING DEPTH	PART NUMBER
10"	S02TL-10
18"	S02TL-18
24"	S02TL-24

REPLACEMENT PARTS



CORE BODIES ONLY

DIAMETER	PART NUMBER
1-3/4"	CBT-28HO
2"	CBT-32HO
2-1/2"	CBT-40HO
2-3/4"	CBT-44HO
3"	CBT-48HO
3-1/2"	CBT-56HO
4"	CBT-64HO
4-1/2"	CBT-72HO
5"	CBT-80HO



STARTER POINTS

DIAMETER	PART NUMBER
1-3/4"	CBSP-28
2"	CBSP-32
2-1/2"	CBSP-40
2-3/4"	CBSP-44
3"	CBSP-48
3-1/2"	CBSP-56
4"	CBSP-64
4-1/2"	CBSP-72
5"	CBSP-80

3 Components . . . (Once the hammer core bit has been used, the shank and core bit become a one-piece system.)

1. TAPER FIT SHANK



SPLINE or SDS-max Shank
(other shank styles & Lengths
available on request.)

2. HEAVY-DUTY CORE BIT



6" Body Length
4-1/2" Core Depth
Carbide teeth can be replaced
or sharpened

3. STARTER POINT



Heat-Treated, Spring-Loaded

- No stress points
- Tapered Shank • No knock-out hole for pilot
- Extra thick core body wall • Extra length core body • Core Bits made from solid steel.



STRAIGHT-SHANK MASONRY DRILL BITS

DIAMETER POINT	DIAMETER SHANK	OVERALL LENGTH	DRILLING DEPTH	PART NUMBER
11/64"	11/64"	3"	1-7/8"	RT-1-3
1/8"	1/8"	3"	1-7/8"	RT-2-3
3/16"	3/16"	3"	1-7/8"	RT-3-3
3/16"	3/16"	4"	2-3/8"	RT-3-4
3/16"	3/16"	6"	4-1/2"	RT-3-6
3/16"	3/16"	8"	6"	RT-3-8
7/32"	1/4"	8-1/2"	6-1/2"	RT-2-8
1/4"	1/4"	4"	2-1/4"	RT-4-4
1/4"	1/4"	6"	3-3/4"	RT-4-6
1/4"	1/4"	8"	6"	RT-4-8
1/4"	1/4"	12"	10"	RT-4-12
1/4"	1/4"	18"	16"	RT-4-18
1/4"	1/4"	24"	22"	RT-4-24
5/16"	1/4"	4"	2-1/2"	RT-5-4
5/16"	1/4"	6"	4"	RT-5-6
5/16"	1/4"	12"	10"	RT-5-12
5/16"	1/4"	18"	16"	RT-5-18
3/8"	3/8"	4"	2-1/2"	RT-6-4
3/8"	1/4"	4"	2-1/2"	RT-6-4A
3/8"	3/8"	6"	4"	RT-6-6
3/8"	1/4"	6"	4"	RT-6-6A
3/8"	3/8"	12"	10"	RT-6-12
3/8"	3/8"	18"	16"	RT-6-18
3/8"	3/8"	24"	22"	RT-6-24
7/16"	1/4"	4"	2-1/2"	RT-7-4
7/16"	1/4"	6"	4"	RT-7-6
1/2"	3/8"	4"	2-1/2"	RT-8-4
1/2"	3/8"	6"	4"	RT-8-6
1/2"	1/4"	6"	4"	RT-8-6A
1/2"	3/8"	14"	12"	RT-8-14
1/2"	3/8"	18"	16"	RT-8-18
1/2"	3/8"	24"	22"	RT-8-24
9/16"	3/8"	6"	4"	RT-9-6
5/8"	1/2"	6"	4"	RT-10-6
5/8"	1/2"	14"	12"	RT-10-14
5/8"	1/2"	18"	16"	RT-10-18
5/8"	1/2"	24"	22"	RT-10-24
11/16"	1/2"	6"	4"	RT-11-6
3/4"	1/2"	6"	4"	RT-12-6
3/4"	1/2"	14"	12"	RT-12-14
3/4"	1/2"	18"	16"	RT-12-18
3/4"	1/2"	24"	22"	RT-12-24
7/8"	1/2"	6"	4"	RT-14-6
7/8"	1/2"	14"	12"	RT-14-14
1"	1/2"	6"	4"	RT-16-6
1"	1/2"	18"	16"	RT-16-18
1"	1/2"	24"	22"	RT-16-24



ROTARY/PERCUSSION RAM TIP™ PROFESSIONAL MASONRY BITS

Relton's premium straight-shank masonry bit is designed for use in light-weight, rotating-vibrating hammers, but it can be used equally well in standard drill motors as a rotary bit.

A special hard, tough carbide cutter is precisely located for maximum support and strength.

Shank diameters 3/8" and larger have 3 flats on the shank to reduce the possibility of slipping in the chuck.

All RT bits are available in GRT Style.

RAM TIP STRAIGHT SHANK 5-PIECE BIT KIT

Refillable Case

Contains: 3/16" x 6"
1/4" x 6"
5/16" x 6"
3/8" x 6"
1/2" x 6"



RAM-TIP™

PART
NUMBER
RT-K5





QUIK-LOK™ ADAPTORS



Quik-Lok™ Adaptors accept SDS+ Shank Bits



SDS-max SHANK

PART NUMBER	DESCRIPTION
QL-MX	SDS-max to SDS+



SPLINE SHANK

PART NUMBER	DESCRIPTION
QL-202	Spline Drive to SDS+



TRI-FLAT SHANK

- Ramset 340, 342, 345, 375, 640

PART NUMBER	DESCRIPTION
QL-64	Tri-flat to SDS+



7/16" x 1-5/8" HEX SHANK

- Milwaukee 5300-05-15
- Skil 726

PART NUMBER	DESCRIPTION
QL-726	7/16" Hex to SDS+



9/16" x 2-3/8" HEX SHANK

- B & D 5048
- Miller Falls SP499K
- Milwaukee 5325-26
- Rockwell 602
- Porter Cable 1602
- Skil 628, 728, 731, 732, 1760

PART NUMBER	DESCRIPTION
QL-728	9/16" Hex to SDS+



9/16" x 1-1/4" HEX SHANK

- Bosch 11201
- Metabo RH90
- Philips 747, 700

PART NUMBER	DESCRIPTION
QL-201	9/16" Hex to SDS+

Additional Shank-types available on request.
Replacement parts are available on request.

CONCRETE SCREW ANCHOR BITS



TC bits meet or exceed all specifications established by manufacturers of screw-type masonry anchors.

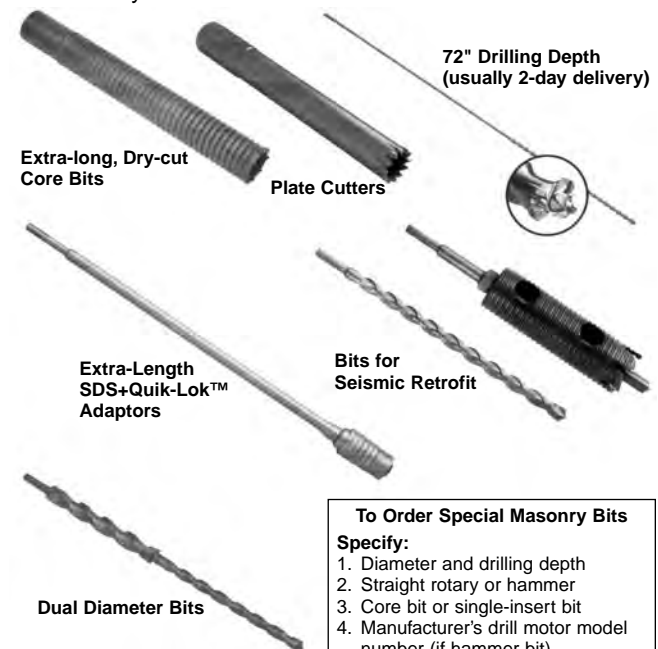
Recommended for use with Tapcon® anchors or other screw-type anchors requiring 5/32" or 3/16" tip diameters.

FOR THESE ANCHORS	USE THESE SIZE RELTON SCREW-TYPE MASONRY BIT	PART NUMBER
3/16" x 1-1/4"	5/32" DIA x 3-1/2" LGTH	TC-5-3
3/16" x 1-3/4"		
3/16" x 2-1/4"	5/32" DIA x 4-1/2" LGTH	TC-5-4
3/16" x 2-3/4"		
3/16" x 3-1/4"	5/32" DIA x 5-1/2" LGTH	TC-5-5
3/16" x 3-3/4"		
3/16" x 4"		
1/4" x 1-1/4"	3/16" DIA x 3-1/2" LGTH	TC-3-3
1/4" x 1-3/4"		
1/4" x 2-1/4"	3/16" DIA x 4-1/2" LGTH	TC-5-4
1/4" x 2-3/4"		
1/4" x 3-1/4"	3/16" DIA x 5-1/2" LGTH	TC-3-5
1/4" x 3-3/4"		
1/4" x 4"		

To order bulk, use prefix "B" before part number. Example: **BTC-3-5**

SPECIALTY CARBIDE BITS

Relton can manufacture special diameters and lengths for most of our products. We will manufacture custom designs to your blueprints or other specifications, even in 1 piece quantities. If you don't see what you need, just ask us to make it for you!



72" Drilling Depth
(usually 2-day delivery)

Extra-long, Dry-cut
Core Bits

Plate Cutters

Extra-Long
SDS+Quik-Lok™
Adaptors

Bits for
Seismic Retrofit

Dual Diameter Bits

To Order Special Masonry Bits

Specify:

1. Diameter and drilling depth
2. Straight rotary or hammer
3. Core bit or single-insert bit
4. Manufacturer's drill motor model number (if hammer bit)

Example:

2-1/2" x 10" hammer core bit for Milwaukee 5300



ROTARY-ONLY REBAR CUTTERS

At last, the answer to drilling through concrete-embedded rebar! No more broken or shattered hammer bits; now you can drill through the rebar and not have to relocate the hole to avoid the rebar!

DIA	OVERALL LENGTH	Straight-Shank PART NUMBER	SDS+ Shank PART NUMBER	SUGGESTED RPM'S	PIECES
3/8"	8"	RB-6	SRB-6	850-1200	This is a one-piece system. (Shanks are non-removable.)
1/2"	12"	RB-8	SRB-8	850-1200	
1/2"	18"	RB-8-18	SRB-8-18	850-1200	
9/16"	12"	RB-9	SRB-9	850-1200	
5/8"	12"	RB-10	SRB-10	750-1000	
5/8"	18"	RB-10-18	SRB-10-18	750-1000	
11/16"	12"	RB-11	SRB-11	750-1000	
3/4"	12"	RB-12	SRB-12	600-850	
3/4"	18"	RB-12-18	SRB-12-18	600-850	
3/4"	24"	RB-12-24	SRB-12-24	600-850	
13/16"	12"	RB-13	SRB-13	600-850	
7/8"	12"	RB-14	SRB-14	600-850	
1"	12"	RB-16	SRB-16	500-750	
1-1/8"	12"	RB-18	SRB-18	500-750	
1-1/4"	12"	RB-20	SRB-20	450-600	
1-3/8"	12"	RB-22	SRB-22	450-600	
1-1/2"	12"	RB-24	SRB-24	350-500	
1-3/4"	12"	RB-28	SRB-28	350-500	
2"	12"	RB-32	SRB-32	350-500	
2-1/2"	12"	RB-40	SRB-40	350-500	

STRAIGHT SHANK

SDS+ SHANK



This is a **one-piece** system.

(Shanks are non-removable.)

This is a **two-piece** system, and comes with a shank to make an overall length of 12"; however, longer or shorter shanks are available ... see shanks below.

REPLACEMENT CUTTER HEAD 7/8" AND LARGER



REPLACEMENT SHANKS 7/8" AND LARGER



STRAIGHT SHANK

SDS+ SHANK

DIA	PART NUMBER	SUGGESTED RPM'S	THREAD SIZE	PART NUMBER	SHANK	TO MAKE OAL BIT LENGTH	THREAD SIZE
7/8"	RB-14HO	600-850	1/2 - 13 FEMALE	TDS-2-9	1/2"	9"	1/2 - 13 MALE
1"	RB-16HO	500-750		TDS-2-12*	1/2"	12"	
1-1/8"	RB-18HO	500-750		TDS-2-18	1/2"	18"	
1-1/4"	RB-20HO	450-600		TDS-2-24	1/2"	24"	
1-3/8"	RB-22HO	450-600		STDS-2-9	SDS	9"	
1-1/2"	RB-24HO	350-500		STDS-2-12*	SDS	12"	
1-3/4"	RB-28HO	350-500		STDS-2-28	SDS	18"	
				STDS-2-24	SDS	24"	
2"	RB-32HO	350-500	3/4 - 10 FEMALE	TDS-3-9	1/2"	9"	3/4 - 10 MALE
				TDS-3-12*	1/2"	12"	
				TDS-3-18	1/2"	18"	
				TDS-3-24	1/2"	24"	
				STDS-3-9	SDS	9"	
2-1/2"	RB-40HO	350-500		STDS-3-12*	SDS	12"	
				STDS-3-18	SDS	18"	
				STDS-3-24	SDS	24"	

*Supplied with complete bit.

SAFETY NOTE: Follow power tool manufacturers' recommendations for bit capacity. The operator of this tool assumes sole responsibility for any adverse structural effects of cutting rebar. Consult structural engineers if you have any concerns.

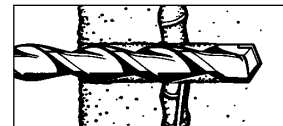
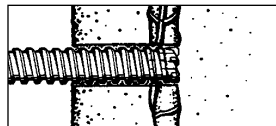
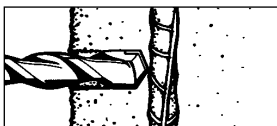
NOTICE: The Relton carbide-tipped rotary rebar cutter is designed for use in a standard 1/2" chuck/drill motor or SDS+ hammer motor provided the selector mechanism is kept in the **rotary-only position**. The Relton carbide-tipped rotary rebar cutter is intended for **rotary** drilling only; percussion (hammering action) will damage the tool.

EASY AS

1. When rebar is encountered while drilling with a rotary hammer and a carbide hammer bit, immediately stop the hammer and remove the bit from the hole (failure to stop could severely damage a carbide hammer bit – regardless of manufacturer's claim).

2. Mount a rotary rebar cutter in a standard 1/2" chuck/drill motor or SDS+ rotary hammer-motor (with the selector in the **rotary-only position**); insert the rotary rebar cutter into the hole and drill through the embedded rebar.

3. Remove the rotary rebar cutter after the rebar has been drilled completely through and finish drilling the hole with the rotary hammer and hammer bit.





METAL-CUTTING FLUIDS



All-Metal Cutting Fluid and Paste

- Greatly extended tool life.
- Super-fine machined finish in operation after operation.
- Anti-mist protection for a healthier work environment.
- No special labeling or reporting.
- Excels in tough materials.
- Contains no 1,1,1-trichloroethane or other ozone-depleting chemicals.



NEW RAPID TAP

PART NUMBER	DESCRIPTION	CASE QUANTITY
04Z-NRT	4 Ounce Cans	24
PNT-NRT	Pint Cans	12
01G-NRT	1 Gallon Cans	4
05G-NRT	5 Gallon Pail	1
55G-NRT	55 Gallon Drum	

NEW RAPID TAP PASTE

PART NUMBER	DESCRIPTION	CASE QUANTITY
08Z-NRTP	8 Ounce Jar	12



Aluminum-Cutting Fluid

- Eases all operations on aluminum: milling, broaching, drilling, threading, tapping, reaming, sawing, etc.
- Contains anti-mist component for a healthier work environment.
- Contains a scientific blend of chemicals that attach themselves to aluminum surfaces, forming an extreme-pressure boundary lubricant between tool and work surface.



PART NUMBER	DESCRIPTION	CASE QUANTITY
04Z-A9	4 Ounce Cans	24
PNT-A9	Pint Cans	12
01G-A9	1 Gallon Bottles	4
05G-A9	5 Gallon Pail	1
55G-A9	55 Gallon Drum	



METAL-CUTTING FLUIDS

OPTION 1[®]

Metal-Cutting Fluid*



- Option 1 leaves no oily residue. Water-based.
- No 1,1,1- trichloroethane or other ozone-depleting chemicals.
- Cleans up with clean dry cloth or water.
- Great for use in computer clean rooms, hospitals or when a weld operation follows machining operations.

PART NUMBER	DESCRIPTION	CASE QUANTITY
04Z-OP	4 Ounce Bottles	24
PNT-OP	Pint Bottles	12
01G-OP	1 Gallon Bottles	4
05G-OP	5 Gallon Pail	1
55G-OP	55 Gallon Drum	

*Not for use on metals that are water reactive, such as magnesium.

SEMI-SYNTHETIC BAND-SAW FLUID

REL SAW[™]

BAND-SAW FLUID CONCENTRATE



- Improves blade life.
- Stable over a wide variety of water conditions.
- Promotes cleaner-running machines compared to soluble oils.
- Reduces machine wear.
- Long emulsion life.
- Contains rust and corrosion inhibitors.
- Fortified with boundary lubricants.

PART NUMBER	DESCRIPTION	CASE QUANTITY
01G-RS	1 Gallon Bottles	4
05G-RS	5 Gallon Pail	1
55G-RS	55 Gallon Drum	

EMPTY SPRAY BOTTLES

Spray bottles may be used in the application of:



- | | | |
|----------------------|---------------|-----------------|
| New Rapid Tap | TCO-14 | Option-1 |
| A-9 | TCO-16 | Air-FLO |

PART NUMBER	DESCRIPTION	CASE QUANTITY
EB-12	32 Ounce Trigger-Spray Bottle	12





LUBRICATING STICK WAX

**STICK-KUT™
LUBRICATING
STICK WAX**



- Safe and effective lubricant for grinding wheels, sanding belts and saw blades.
- Eliminates heat build up and belt loading.
- Extends wheel life.
- Provides smooth, cool cutting.
- Reduces loading, stops binding, and prevents burring.

PART NUMBER	DESCRIPTION	CASE QUANTITY
15-SK	15 oz. Stick	12

CUTTING OILS

**TCO-14™
Dark
Thread-Cutting Oil**

- Ready to cut clean, smooth threads on all pipe materials.
- Extreme-pressure additive for anti-weld characteristics.
- Excellent protection of tools and machined parts against corrosion.
- Contains anti-mist component for a healthier work environment.

PART NUMBER	DESCRIPTION	CASE QUANTITY
01G-TCO14	1 Gallon Bottles	4
05G-TCO14	5 Gallon Pail	1
55G-TCO14	55 Gallon Drum	



**TCO-16™
Light
Thread-Cutting Oil**

- Operationally interchangeable with TCO-14 (Dark).

PART NUMBER	DESCRIPTION	CASE QUANTITY
01G-TCO16	1 Gallon Bottles	4
05G-TCO16	5 Gallon Pail	1
55G-TCO16	55 Gallon Drum	





LUBRICATING OILS

Air-FLO[®]
AIR TOOL OIL



For piston-driven and rotary air tools

AIR-FLO Air Tool Oil incorporates both the latest technology and finest materials to produce a premium air-tool oil. Manufactured from solvent-refined, hydro-treated paraffinic base stocks, AIR-FLO is fortified with additives to provide anti-wear, extreme-pressure, oxidation-resistance, anti-rust and foam-protection qualities.

- Superior oxidation stability.
- Resistance to formation of gums, sludges, and deposits.
- Anti-wear fortified for extended life, lower maintenance.
- Protection against rust and corrosion.
- Excellent seal compatibility.
- Metal-wetting properties.
- Dirt particles held in suspension.
- Contaminants flushing.
- 10 wt. non-detergent.

PART NUMBER	DESCRIPTION	CASE QUANTITY
04Z-AF	4 Ounce Bottles	24
PNT-AF	Pint Bottles	12
01G-AF	1 Gallon Bottles	4
55G-AF	55 Gallon Drum	
WINTER GRADE FORMULA (Pour point -45°)		
QRT-AFW	Quart Bottles	12

REL-AIR[™]
Compressor Oil



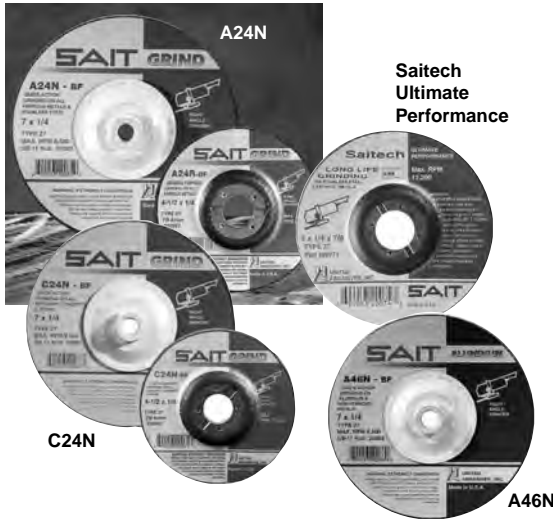
For use with: Sliding vane, screw, centrifugal and reciprocating air compressors.

REL-AIR Compressor Oil incorporates both the latest technology and finest materials to produce premium non-detergent compressor oil. Compounded from high-quality, solventrefined, low-carbon, naphthenic stocks, REL-AIR is fortified with oxidation and corrosion inhibitors and is completely ashless.

- Base stock selected to minimize carbon deposits.
- Remains stable over long periods of time.
- Minimizes rust or corrosion.
- Viscosity selected to meet many compressor manufacturers' requirements.
- Reduces sludge.
- Eliminates chatter.

PART NUMBER	DESCRIPTION	CASE QUANTITY
QRT-RA	Quart Bottles	12
01G-RA	1 Gallon Bottles	4

Grinding 1/4" Type 27 Depressed Center Wheels



Saitch Ultimate Performance

A24N - Fast Grinding

- Aluminum oxide grain.
- Soft bond for **fast stock removal**.
- METAL** Ferrous Metals (iron, steel, welds, etc.)
- STAINLESS** Low grade stainless steel.

A46N - Aluminum

- Aluminum oxide grain.
- **Soft bond for aggressive removal of material without loading.**
- Outlasts competition by as much as 40%.
- METAL** Non-ferrous metals (aluminum, copper, brass, etc.)

A24R - Long Life

- Aluminum oxide grain.
- Our most popular wheel.
- For general purpose grinding.
- **Longer life** for fewer wheel changes.
- METAL** Ferrous Metals (iron, steel, welds, etc.)

C24N - Concrete

- Silicon carbide grain.
- Soft bond for **fast stock removal**.
- CONCRETE** Masonry, concrete, stone.
- METAL** Cast iron and other ferrous metals.

A Dia.	Size B Width	C Bore	Max. RPM	Grades Available Part Number				
				A24N	A24R	A46N	C24N	Saitch
3	3/16	3/8	18,000	20001	-	-	-	20101
3	1/4	3/8	18,000	20002	20005	-	-	20102
4	3/16	3/8	13,500	20010	-	-	-	20103
4	1/4	3/8	13,500	20012	20019	-	-	20112
4	1/4	5/8	13,500	20015	20013	20018	20017	20014
4-1/2	1/4	7/8	13,300	20060	20063	20062	20061	20064
4-1/2	1/4	5/8-11	13,300	20160	20163	20162	20161	20164
7	1/4	7/8	8,500	20081	20080	20083	20082	20084
7	1/4	5/8-11	8,500	20085	20086	20088	20087	20089
9	1/4	7/8	6,600	20091	20090	20093	20092	20094
9	1/4	5/8-11	6,600	20095	20096	20098	20097	20099

Saitch Ultimate Performance™

- Combines fast stock removal with long life.
- STAINLESS** Stainless steel and other high tensile alloys
- METAL** Ferrous metals (iron, steel, welds, etc.)

Specialty Cutting Wheels Type 27 3/32" Depressed Center Wheels



Saitch Ultimate Performance

A24R - General Purpose

- Aluminum oxide grain.
- For general purpose, low cost cutting only.
- Combines **fast cutting and long life**.
- METAL** Ferrous metals (iron, steel, welds, etc.)

Saitch Ultimate Performance™

- Combines **fast cutting with extremely long life** for tough cutting applications.
- Ideal for foundry applications (gates, risers).
- STAINLESS** Stainless steel, high tensile alloys.
- METAL** Ferrous metals (iron, steel, welds, etc.)

A Dia.	Size B Width	C Bore	Max. RPM	Part Number	
				Saitch	A24R
4-1/2	3/32	7/8	13,300	22064	22020
4-1/2	3/32	5/8-11	13,300	22069	22120
7	3/32	7/8	8,500	22084	22056
7	3/32	5/8-11	8,500	22089	22057
9	3/32	7/8	6,600	22094	22066
9	3/32	5/8-11	6,600	22099	22067

Cutting Wheels Type 27 1/8" Depressed Center Wheels



C24R

C24R - Concrete

- Silicon carbide grain.
- **General purpose cutting, hard bond for long life.**
- CONCRETE** Masonry, concrete, stone.
- METAL** Cast iron and other ferrous metals.

A Dia.	Size B Width	C Bore	Max. RPM	Part Number
				Saitch
7	1/8	7/8	8,500	22050
7	1/8	5/8-11	8,500	22051
9	1/8	7/8	6,600	22060
9	1/8	5/8-11	6,600	22061

**Cutting / Grinding Type 27
1/8" Depressed Center Wheels**



Pipeline

- Aluminum oxide grain.
- For the pipeline industry.
- **Designed and manufactured to perform both cutting and light grinding.**
- Long life.

METAL Ferrous Metals (steel, cast iron, etc.)

A Dia.	Size B Width	C Bore	Max. RPM	Part Number
4	1/8	5/8	13,500	22015
4-1/2	1/8	7/8	13,300	22030
7	1/8	5/8-11	8,500	22052
9	1/8	7/8	6,600	22065
9	1/8	5/8-11	6,600	22062

**Grinding Wheels Type 28
1/4" Depressed Center Wheels**



A24N - Fast Grinding

- Aluminum oxide grain.
- Soft bond for **fast stock removal.**

METAL Ferrous metals (iron, steel, welds, etc.)

STAINLESS Low-grade stainless steel.

C24N - Concrete

- Silicon carbide grain.
- Soft bond for **fast stock removal.**

CONCRETE Masonry, concrete, stone, brick.

A Dia.	Size B Width	C Bore	Max. RPM	Part Number A24N	Part Number C24N
7	1/4	5/8-11	8,500	21004	21006
9	1/4	7/8	6,600	21011	21012
9	1/4	5/8-11	6,600	21014	21016

**Cutting Type 27 / Type 1
.045 Depressed Center Wheels**



A60S - General Purpose

- Thin .045 width.
- Special aluminum oxide grain
- Hard bond for extremely long life.

METAL Ferrous metals (iron, steel, welds, etc.)

A46N - Aluminum

- Aluminum oxide grain.
- Thin .045 width
- **Soft bond for aggressive cutting without loading.**

METAL Ferrous metals (iron, steel, welds, etc.)

STAINLESS Stainless steel.

A Dia.	Size B Width	C Bore	Max. RPM	Type 27		Type 1	
				A60S	A46N	A60S	A46N
4	.045	5/8	19,000	22011	22340	23099	23304
4-1/2	.045	7/8	13,300	22021	22345	23101	23314
5	.045	7/8	12,200	22071	22350	23103	23315
6	.045	7/8	10,200	22047	22360	23106	23316
7	.045	7/8	8,500	22053	23370	23107	23317

**Cutting Type 1
Chop Saw Wheels**



Iron Worker™

- Aluminum oxide grain.
- **Fast cutting.**
- Excellent for use on angle iron, channel iron, heavy rebar and other ferrous metals.

METAL Structural metal applications.

A Dia.	Size B Width	C Bore	Max. RPM	Part Number A24N
12	3/32	1	5,100	24031
14	3/32	1	4,400	24051

**Cutting Type 1
Portable Saw Cut-Off Wheels**



A24R - General Purpose

- Aluminum oxide grain.
- Provides consistent performance with **long life**.

METAL Ferrous Metals (steel, angle iron, rebar.)

A30S - Long Life

- Special aluminum oxide grain.
- **Fast, non-binding cutting.**

METAL Ferrous metals.
STAINLESS Stainless steel, high tensile alloys.

Brute™

- Long life.
- Extremely hard bond for **cutting metals that present a very sharp edge to the wheel.**

METAL Thin metal, sheet metal, decking, other ferrous metals.

Ductile™

- Combination aluminum oxide and silicon carbide formulation.

METAL Ductile™ pipe (very hard steel casing enclosing a cement lining), water mains, etc.

CONCRETE Combination metal/concrete, cast iron, hard metals, concrete coated steel, etc.

A Dia.	Size B Width	C Bore	Max. RPM	A24R	Part Number A30S	Brute	Ductile
12	1/8	1	6,300	23410	23430	23412	23415
12	1/8	20mm	6,300	23420	23432	23422	23425
14	1/8	1	5,400	23450	23440	23452	23453
14	1/8	20mm	5,460	23455	23441	23457	23458
16	1/8	1	4,800	23459	-	-	23480
16	1/8	20mm	4,800	23470	-	-	23478

**Cutting Type 1
Portable Saw Cut-Off Wheels**



C24R - Concrete

- Silicon carbide grain.
- **Long life.**

CONCRETE Stone, brick, soft aggregate, masonry, concrete.

Big M.A.C. - Very Long Life

- Special silicon carbide grain.
- **Superior cutting action.**

CONCRETE Masonry, Asphalt, Concrete.

A Dia.	Size B Width	C Bore	Max. RPM	Part Number M.A.C.	C24R
12	1/8	1	6,300	23460	23413
12	1/8	20mm	6,300	23462	23423
14*	1/8	1	5,400	23463	23451
14	1/8	20mm	6,300	23464	23456

*With Pinhole.

**Cutting Type 1
Stationary Cut-off Wheels**



A24N - Fast Cutting

- Aluminum oxide grain.
- General purpose.
- Soft bond for **fast stock removal.**

METAL Ferrous metals (iron, cast iron, etc.)

STAINLESS Low grade stainless steel.

C24R - Concrete

- Silicon carbide grain.
- General purpose, **long life.**
- Square cutting.

CONCRETE Masonry, concrete, stone, brick.

A24R - Long Life

- Aluminum oxide grain.
- General purpose, **long life.**

METAL Ferrous metals (iron, steel, angle iron, etc.)

A Dia.	Size B Width	C Bore	Max. RPM	Part Number A24R	A24R	C24R
10	1/8	5/8	6,100	24001	24000	24003
10	1/8	1	6,100	-	24004	24007
14*	1/8	1	4,400	-	24040	24043
16*	5/32	1	3,800	24071	24070	24073
18	3/16	1	3,400	24081	24080	24083
20	3/16	1	3,000	24091	24090	-

*With Pinhole on the C24R.

Cutting

**Type 1
Street Saw Wheels**



C16

- Silicon carbide grain.
 - **Fast, free cutting.**
- CONCRETE** Green concrete, asphalt.

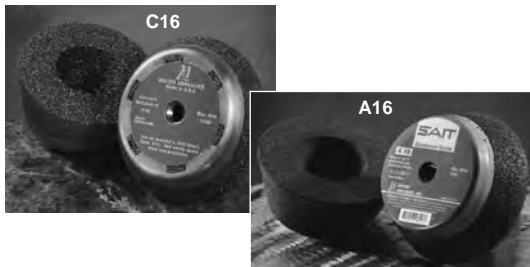
C24R

- Silicon carbide grain.
 - General purpose.
 - **Long life.**
- CONCRETE** Masonry, concrete, brick.

A Dia.	Size B Width	C Bore	Max. RPM	Part Number	
				A24R	A30R
14	3/16	1	4,400	24061	24060
14	1/4	1	4,400	24066	24065

Grinding

**Type 11
Cup Stones**



C16 - Concrete

- Silicon carbide grain.
 - Coarse grit for **tough grinding applications.**
 - Excellent for cleaning castings, mold marks and removing flashing.
- CONCRETE** Masonry, concrete, stone.

A16

- Aluminum oxide grain.
 - Coarse grit wheel for **tough grinding applications.**
 - Excellent for cleaning castings, mold marks and removing flashing.
- METAL** Ferrous metals.

A Dia.	A' Dia.	Size B Width	C Bore	Max. RPM	Part Number	
					C16	A16
4	3	2	5/8-11	9,050	26001	26000
5	4	2	5/8-11	7,250	26011	26010
6	4-3/4	2	5/8-11	6,050	26021	26020

A = bottom diameter. A' = top diameter.

Grinding

Hand/Floor Rubs



- Removes form marks.
 - Configurations available.
- Plain** - For cleaning castings and dressing bench grinding wheels.
Fluted - For extra shearing action.
Handle - For extra comfort and working overhead.
Scored - Breaks into two 4 x 2 x 2 floor rubs.

CONCRETE Concrete.

Type	Length	Size Width	Height	Description	Grade	Part Number
HR202	4	2	2	Plain	C24R	25010
HR252	6	3	1	Handle	C24R	25040

Grinding

Bench Wheels



A

- Aluminum oxide grain.
 - General purpose.
 - **For sharpening tools and light stock removal.**
- METAL** Ferrous metals (carbon steel, steel, iron, forgings, etc).

A Dia.	Size B Width	C Bore	Max. RPM	Grades Available Part Numbers				
				A24	A36	A46	A60	A80
6	1/2	1	4,138	-	28003	-	28004	28005
6	3/4	1	4,138	-	28000	-	28001	28002
6	1	1	4,138	-	28006	-	28007	28008
7	3/4	1	3,600	-	28010	-	28011	28012
7	1	1	3,600	-	28013	-	28014	28015
8	3/4	1	3,600	-	28020	-	28021	28022
8	1	1	3,600	-	28023	-	28024	28025
10	1	1-1/4	2,483	-	28040	28043	28041	28042
10	1-1/2	1-1/4	2,483	-	28050	28053	28051	28052
12	2	1-1/2	2,069	28060	28063	28061	28062	-
14	2	1-1/2	1,773	28070	28073	28071	28072	-

Die Grinder

**Small Diameter
Flap Wheels**

Mat'l.	Size		Grit	Part Number	
	Dia.	Width		1/4	1/4-20
	1	3/4	60	70001	71000
	1	3/4	80	70002	71001
	1	3/4	120	70003	71002
	1	3/4	180	70004	71003
	1	3/4	240	70005	71004
	1	1	60	70010	71010
	1	1	80	70011	71011
	1	1	120	70012	71012
	1	1	180	70013	71013
	1	1	240	70014	71014
	1-1/2	1/2	40	70024	-
	1-1/2	1/2	60	70025	71020
	1-1/2	1/2	80	70026	71021
	1-1/2	1/2	120	70027	71022
	1-1/2	1/2	180	70028	71023
	1-1/2	1/2	240	70029	71024
	1-1/2	1	60	70040	71030
	1-1/2	1	80	70041	71031
	1-1/2	1	120	70042	71032
	1-1/2	1	180	70043	71033
	1-1/2	1	240	70044	71034
	2	1	40	70049	-
	2	1	60	70050	71040
	2	1	80	70051	71041
	2	1	120	70052	71042
	2	1	180	70053	71043
	2	1	240	70054	71044
	2-1/2	1/2	60	70060	71050
	2-1/2	1/2	80	70061	71051
	2-1/2	1/2	120	70062	71052
	2-1/2	1/2	180	70063	71053
	2-1/2	1/2	240	70064	71054
	2-1/2	1	40	70069	-
	2-1/2	1	60	70070	71055
	2-1/2	1	80	70071	71056
	2-1/2	1	120	70072	71057
	2-1/2	1	180	70073	71058
	2-1/2	1	240	70074	71059
	3	1/2	60	70080	71060
	3	1/2	80	70081	71061
	3	1/2	120	70082	71062
	3	1/2	180	70083	71063
	3	1/2	240	70084	71064
	3	3/4	60	70090	71070
	3	3/4	80	70091	71071
	3	3/4	120	70092	71072
	3	3/4	180	70093	71073
	3	3/4	240	70094	71074
	3	1	40	70099	-
	3	1	60	70100	71080
	3	1	80	70101	71081
	3	1	120	70102	71082
	3	1	180	70103	71083
	3	1	240	70104	71084
	3	2	40	70110	-
	3	2	60	70111	-
	3	2	80	70112	-
	3	2	120	70113	-
	2	1	60	74050	71160
	2	1	80	74051	71161
	2	1	120	74052	71162
	2-1/2	1	60	74060	71170
	2-1/2	1	80	74061	71171
	2-1/2	1	120	74062	71172
	3	1	60	74070	71180
	3	1	80	74071	71181
	3	1	120	74072	71182

2A

- Premium aluminum oxide grain.
 - **General purpose.**
 - Excellent for cleaning, deburring, polishing, blending.
- METAL** Ferrous and/or non-ferrous metals (iron, steel, aluminum, copper, etc.)
WOOD Wood, plastic, fiberglass, etc.



3A

- Premium aluminum oxide grain with grinding aid.
 - **Excellent for reducing heat build-up on heat sensitive materials.**
 - Excellent for cleaning, deburring, polishing, blending.
- METAL** Ferrous and/or non-ferrous metals.
STAINLESS Stainless steel, high tensile steel, titanium.



Pedestal Grinder Large Diameter Flap Wheels

Mat'l.	Size		Spindle	Grit	Part No.
	Dia.	Width			
	6	1	1	60	72000
	6	1	1	80	72001
	6	1	1	100	72002
	6	1	1	120	72003
	6	1-1/2	1	60	72020
	6	1-1/2	1	80	72021
	6	1-1/2	1	100	72022
	6	1-1/2	1	120	72023
	6	2	1	60	72030
	6	2	1	80	72031
	6	2	1	100	72032
	8	2	1	120	72033
	8	1	1	60	72040
	8	1	1	80	72041
	8	1	1	100	72042
	8	1	1	120	72043
	8	2	1	60	72050
	8	2	1	80	72051
	8	2	1	100	72052
	8	2	1	120	72053

Mat'l.	Size		Spindle	Grit	Part No.
	Dia.	Width			
	6	1	1	60	72005
	6	1	1	80	72006
	6	1	1	100	72007
	6	1	1	120	72008
	6	1-1/2	1	60	72025
	6	1-1/2	1	80	72026
	6	1-1/2	1	100	72027
	6	1-1/2	1	120	72028
	6	2	1	60	72035
	6	2	1	80	72036
	6	2	1	100	72037
	6	2	1	120	72038

**2A
General
purpose
aluminum
oxide**

**2A
Premium
aluminum
oxide**

**Hand Sanding
Sheets**

Aluminum Oxide (DA-F)

- Aluminum oxide grain on a flexible cloth backing.
 - Open coat structure prevents loading.
 - Water resistant.
 - Long life combined with excellent stock removal.
 - Excellent for woodworking applications.
- WOOD** Wood, plastic, fiberglass.
METAL Ferrous and/or non-ferrous materials (iron, steel, copper, etc.)
 • Available in F-weight - high flexibility.

Aluminum Oxide (AW-C & AW-D)

- Extremely long lasting.
 - Open coat structure prevents loading.
 - Use wet or dry.
- WOOD**, sealers, fillers
METAL Ferrous and/or non-ferrous metals.
 • Available in grits up to 1200 for ultra fine finishing
 • Available in weights:

“C”-medium weight, medium flexibility.
 “D”-heavy weight, low flexibility.

Garnet

- Natural garnet grain.
 - Open coat structure prevents loading.
 - Use dry only.
- WOOD** Soft woods.
 • Available in weights: “A”-light weight, high flexibility.
 “C”-medium weight, medium flexibility.
 “D”-heavy weight, low flexibility.



Aluminum Oxide Fiber Discs

2A

- Premium aluminum oxide grain.
- **General purpose.**
- Closed coat structure for more material removal and better finishing.

METAL Ferrous and/or non-ferrous.

WOOD Wood, fiberglass, etc.

Size	Grit	Bulk Part No.		Blue Line™ Part No.		SAIT-LOK™ Part No.	
		2A	3A	2A	3A	2A	3A
4 x 5/8	24	56024	-	50000	-	-	-
	36	56036	-	50001	-	-	-
	50	56050	-	50002	-	-	-
	60	56060	-	50003	-	-	-
	80	56080	-	50004	-	-	-
	100	56100	-	50005	-	-	-
4-1/2 x 7/8	120	56120	-	50006	-	-	-
	16	51022	-	50008	-	-	-
	24	51024	-	50010	-	50120	-
	36	51036	52890	50011	50060	50121	50148
	50	51050	52891	50012	50061	50122	50149
	60	51060	52892	50013	50062	50123	50150
5 x 7/8	80	51080	52893	50014	50063	50124	50151
	100	51100	52894	50015	50064	50125	50152
	120	51120	52895	50016	50065	50126	50153
	16	53016	-	50018	-	-	-
	24	53024	-	50020	-	50127	-
	36	53036	52810	50021	50040	50128	50154
7 x 7/8	50	53050	52811	50022	50041	50129	50155
	60	53060	52812	50023	50042	50130	50156
	80	53080	52813	50024	50043	50131	50157
	100	53100	52814	50025	50044	50132	50158
	120	53120	52815	50026	50045	50133	50159
	9-1/8 x 7/8	16	57016	-	50030	-	-
24		57024	-	50031	-	50134	-
36		57036	52836	50032	50070	50135	50160
50		57050	52850	50033	50071	50136	50161
60		57060	52860	50034	50072	50137	50162
80		57080	52880	50035	50073	50138	50163
7 x 7/8	100	57090	52100	50036	50074	50139	50164
	120	57120	52125	50037	50075	50140	50165
	16	58016	-	50080	-	-	-
	24	58024	-	50081	-	50141	-
	36	58036	-	50082	-	50142	-
	50	58050	-	0083	-	50143	-
9-1/8 x 7/8	60	58060	-	50084	-	50144	-
	80	58080	-	50085	-	50145	-
	100	58090	-	50086	-	50146	-
	120	58120	-	50087	-	50147	-

3A

- Premium aluminum oxide grain.
- **Special aluminum oxide grain to reduce heat build up and reduce loading.**
- Closed coat structure for more material removal and better finishing.

METAL Ferrous metals.

STAINLESS Stainless steel, high tensile steel, titanium, aluminum.



Handy & Industrial Shop Rolls

Industrial Rolls - EA-F

- Aluminum oxide grain.
- Premium quality EA-F material for very high flexibility.
- High tensile strength, extra durable backing.
- Long life.
- **Primarily for machine applications.**

METAL Ferrous and/or non-ferrous. (iron, aluminum, copper, normal and high tensile steel)

WOOD Wood, fiberglass, etc.

Handy Rolls - DA-F

- Aluminum oxide grain.
- High quality DA-F material for high flexibility.
- Medium tensile strength.
- **Primarily for hand applications.**

METAL Ferrous and/or non-ferrous. (iron, aluminum, copper, normal and high tensile steel)

WOOD Wood, fiberglass, etc.

Packaging:
50 yd. length,
1/box.



Size	Width	Grit	EA-F Part No.	DA-F Part No.	Size	Width	Grit	EA-F Part No.	DA-F Part No.
1"	1"	40	80415	80405	1-1/2"	1-1/2"	150	81516	81506
		50	80515	80505			180	81816	81806
		60	80615	80605			220	82216	82206
		80	80815	80805			240	82416	82406
		100	81015	81005			320	83216	83206
		120	81215	81205			400	83416	83406
		150	81515	81505			40	80430	80420
		180	81815	81805			50	80530	80520
		220	82215	82205			60	80630	80620
		240	82415	82405			80	80830	80820
1-1/2"	1-1/2"	320	83215	83205	100	81030	81020		
		400	83415	83405	120	81230	81220		
		40	80416	80406	150	81530	81520		
		50	80516	80506	180	81830	81820		
		60	80616	80606	220	82230	82220		
		80	80816	80806	240	82430	82420		
		100	81016	81006	320	83230	83220		
		120	81216	81206	400	83430	83420		

Aluminum Oxide Belts

1A-X/2A-X

24-320 Grit Range
Closed Coat

Semi-friable(1A-X)/heat-treated(2A-X) aluminum oxide grain on a X-weight cotton backing. For general purpose grinding and finishing of ordinary and alloyed steels, ferrous and non-ferrous metals, cast iron and wood.

AO-X

24-180 Grit Range
Open Coat

Semi-friable aluminum oxide grain on a X-weight cotton backing. For general purpose, open coat grinding, polishing and finishing of materials that have the tendency to load. For use on non-ferrous metals, aluminum and wood.



Belts for portable sanders, file sanders, backstand sanders and benchstand sanders.

LA-X - Sait-Saver™

40-120 Grit Range
Closed Coat

Semi-friable aluminum oxide grain on a X-weight cotton backing. For low cost grinding and finishing of ordinary and alloyed steels, ferrous and non-ferrous metals, cast iron and wood. Used exclusively in Sait-Saver™.

High Performance Flap Discs



Saitlam™ (flat shape)

- Available in 2A aluminum oxide, 3A aluminum oxide with grinding aid and Z zirconium
- **Nylon 6/6 backing** - a non-scratching, high strength backing resistant to temperature extremes, common chemicals and solvents.
- Provides an even "finish ready" surface.
- Excellent for miter joints, corners and edges.

Mat'l.	Size			Part No.
	Dia.	Arbor	Grit	
General purpose aluminum oxide	4	5/8	40	73240
	4	5/8	60	73260
	4	5/8	80	73280
	4	5/8	120	73220
	4-1/2	7/8	40	73440
	4-1/2	7/8	60	73460
	4-1/2	7/8	80	73480
	4-1/2	7/8	120	73420
	6-1/2	7/8	36	73636
	6-1/2	7/8	50	73650
	6-1/2	7/8	60	73660
	6-1/2	7/8	80	73680
6-1/2	7/8	120	73620	

NOTE: 4" and 4-1/2" Saitlam™ must be used with nut.
6-1/2" must be used with backing pad and nut.

RPM's for Saitlam™	
4"	13,000
4-1/2"	11,000
6-1/2"	8,600

Packaging	
4"	10/box with nut
4-1/2"	10/box with nut
6-1/2"	10/box with backing pad and nut

Non-Woven Hand Pads

Brown

- Heavy-duty.
- **Excellent for removing heavy rust and cleaning welds.**

METAL Ferrous and/ or non-ferrous metals.

Maroon

- General purpose.
- For removing light rust.
- **Excellent for cleaning and brightening.**

METAL Ferrous and/ or non-ferrous metals.

Black

- For blending and finishing.
- **Excellent for paint removal.**

STAINLESS Stainless steel.

METAL Ferrous and/ or non-ferrous metals.

Green

- General cleaning.
- **Excellent for stripping paint and varnish.**

METAL Ferrous and/ or non-ferrous metals.

WOOD Paint, varnish.

Gray

- Ultra fine.
- For light finishing.
- **Excellent for sanding before/ between finish coats.**

METAL Non-ferrous metals.

WOOD Wood.

White

- Light duty.
- **For light cleaning and polishing.**

WOOD Fiberglass, vinyl, plastic, formica.

CONCRETE Ceramic.



Size	Grade	Color	Part Nos.	Pads	
				Part Nos.	Per Box
6 x 9	Heavy-Duty	Brown	77440		20
	General Purpose	Maroon	77447		20
	Stainless	Black	77446		20
	Stripper	Green	77496		20
	Ultra Fine	Gray	77448		20
	Light Duty	White	77486		20

Handle available for uniform finishing.



WIRE BRUSHES AND WIRE WHEELS



Crimped Wire, External Thread Cup Brushes



Ideal for general purpose use. Light to medium duty applications. Leaves superior finish.

Brush Dia.	Thread Size	Filament Dia.	Trim Length	MSFS	EDP Number	
					Steel	Stainless
3-1/2	5/8-11	.014	7/8	12,500	82249	82359
3-1/2	5/8-11	.020	7/8	12,500	82255	82365
4	5/8-11	.014	1-1/4	9,000	82510	-
4	5/8-11	.020	1-1/4	9,000	82511	82635
4	M14 x 2.0	.014	1-1/4	9,000	82512	-
4	M14 x 2.0	.020	1-1/4	9,000	82513	-
4	M14 x 2.0	.023	1-1/4	9,000	-	82636
5	5/8-11	.014	1-1/4	8,000	82514	-
5	5/8-11	.020	1-1/4	8,000	82515	82637
6	5/8-11	.014	1-3/8	6,000	82516	-
6	5/8-11	.020	1-3/8	6,000	82517	82638

Knot Wire, Single Row, Internal Thread Cup Brushes



Suitable for mounting on production equipment or angle grinders. Used for deburring and surface cleaning.

Brush Dia.	Thread Size	Filament Dia.	Trim Length	MSFS	EDP Number
					Steel
3-1/2	5/8-11	.014	1-3/8	7,000	82537
3-1/2	5/8-11	.020	1-3/8	7,000	82538
4	5/8-11	.014	1-1/2	7,000	82539
4	5/8-11	.023	1-1/2	7,000	82540
4	M14 x 2.0	.014	1-1/2	7,000	82541
4	M14 x 2.0	.023	1-1/2	7,000	82542
5	5/8-11	.014	1-1/2	7,000	82543
5	5/8-11	.023	1-1/2	7,000	82544
6	5/8-11	.014	1-5/8	6,000	82545
6	5/8-11	.023	1-5/8	6,000	82546

Knot Wire, Single Row, External Thread Cup Brushes



Knotted construction provides high-impact brushing. Heavy-duty brushing action for faster removal rates on tougher jobs.

Brush Dia.	Thread Size	Filament Dia.	Trim Length	MSFS	EDP Number		
					Steel	Stainless	Brass
3-1/2	5/8-11	.014	7/8	12,500	82231	82341	82368
3-1/2	5/8-11	.020	7/8	12,500	82232	82342	-
4	5/8-11	.014	1-1/4	9,000	82522	82647	-
4	5/8-11	.023	1-1/4	9,000	82523	82648	-
4	5/8-11	.035	1-1/4	9,000	82524	-	-
4	M14 x 2.0	.014	1-1/4	9,000	82525	82649	-
4	M14 x 2.0	.023	1-1/4	9,000	82526	82650	-
4	M14 x 2.0	.035	1-1/4	9,000	82527	-	-
5	5/8-11	.014	1-3/8	7,000	82528	82651	-
5	5/8-11	.023	1-3/8	7,000	82529	82652	-
6	5/8-11	.014	1-1/2	6,000	82530	82653	-
6	5/8-11	.023	1-1/2	6,000	82531	82654	-
6	5/8-11	.035	1-1/2	6,000	82532	-	-

Expansion Joint Cleaning Brush



Brush Dia.	Arbor Hole	Filament Dia.	Trim Length	Face Width	MSFS	EDP Number
						Steel
10	1	.028	2-1/4	3/8	4,500	82075
10	1	.035	2-1/4	3/8	4,500	82076
12	1	.028	3-1/4	3/8	4,500	82077
12	1	.035	3-1/4	3/8	4,500	82078

Long trim for joint penetration and finer wire for extended life. Used for removing road joint material. 3/8" drive pin hole.



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WIRE BRUSHES AND WIRE WHEELS



Crimped Wire Stem Mounted Wheels



Crimped brushes provide lighter brushing action and superior finish when cleaning, removing rust and paint, smoothing, descaling, cleaning fettling from cast seams, light deburring.

Brush Dia.	Shank Dia.	Filament Dia.	Trim Length	Face Width	MSFS	EDP Number		
						Steel	Stainless	Brass
1-1/2	1/4	.006	7/16	1/4	20,000	82890	82905	-
1-1/2	1/4	.008	7/16	1/4	20,000	82891	-	-
1-1/2	1/4	.012	7/16	1/4	20,000	82892	82906	-
2	1/4	.008	1/2	3/8	20,000	82893	82907	-
2	1/4	.012	1/2	3/8	20,000	82894	82908	-
2-1/2	1/4	.008	3/4	1/2	20,000	82895	82909	-
2-1/2	1/4	.012	3/4	1/2	20,000	-	82910	-
2-1/2	1/4	.014	3/4	1/2	20,000	82896	-	-
3	1/4	.006	1	5/8	20,000	82897	82911	-
3	1/4	.008	1	5/8	20,000	82898	82912	-
3	1/4	.012	1	5/8	20,000	82899	-	-
3	1/4	.014	1	5/8	20,000	82900	82913	82914
3	1/4	.020	1	5/8	20,000	82901	-	-

Standard Twist - Single Row Knot Wheels (Unthreaded)



Standard twist has open knots and is ideal when heavy-duty or severe cleaning is required. Especially recommended for weld cleaning, weld spatter removal, scale removal, cleaning, deburring and flash removal.

Snap-in Plastic Adapter for Single Row Knot Wheels Standard and Full Cable Twist.

Outside Dia.	Inside Dia.	EDP Number
1/2	3/8	84602
5/8	1/2	84603

Advance Knot Wheel Adapters for 8" diameter wheels and larger.

Arbor Hole (in.)	EDP Number
1-1/4 to 3/4	84612
1-1/4 to 7/8	84613
1-1/4 to 1	84614

Brush Dia.	Arbor Hole	Filament Dia.	Trim Length	Face Width	MSFS	EDP Number	
						Steel	Stainless
3	1/2-3/8	.012	3/4	7/16	25,000	81650	81800
3	1/2-3/8	.014	3/4	7/16	25,000	81651	81801
3	1/2-3/8	.020	3/4	7/16	25,000	81652	81802
4	1/2-3/8	.012	3/4	5/8	20,000	81656	81806
4	1/2-3/8	.014	3/4	5/8	20,000	81657	81807
4	1/2-3/8	.020	3/4	5/8	20,000	81658	81808
4	5/8-1/2	.012	3/4	5/8	20,000	81659	81809
4	5/8-1/2	.014	3/4	5/8	20,000	81660	81810
4	5/8-1/2	.020	3/4	5/8	20,000	81661	81811
6	5/8-1/2	.012	1-1/8	5/8	9,000	81665	81815
6	5/8-1/2	.014	1-1/8	5/8	9,000	81666	-
6	5/8-1/2	.016	1-1/8	5/8	9,000	81667	81816
6	5/8-1/2	.023	1-1/8	5/8	9,000	81668	-
7	5/8	.014	1-5/8	5/8	9,000	81694	-
8	3/4	.014	1-5/8	5/8	7,000	81698	-
8	5/8	.012	1-5/8	5/8	7,000	81702	81829
8	5/8	.014	1-5/8	5/8	7,000	81703	-
8	5/8	.016	1-5/8	5/8	7,000	81704	81830
8	5/8	.020	1-5/8	5/8	7,000	81705	-
8	5/8	.023	1-5/8	5/8	7,000	81706	-
8	1-1/4	.014	1-5/8	5/8	7,000	81708	-
8	1-1/4	.023	1-5/8	5/8	7,000	81711	-
10	3/4	.014	2-1/8	3/4	5,400	81723	-
10	1-1/4	.012	2-1/8	3/4	5,400	81727	-
10	1-1/4	.014	2-1/8	3/4	5,400	81728	-
10	1-1/4	.016	2-1/8	3/4	5,400	81729	-
12	1-1/4	.012	2	3/4	4,500	81752	-
12	1-1/4	.014	2	3/4	4,500	81753	-
12	1-1/4	.016	2	3/4	4,500	81754	-
12	1-1/4	.020	2	3/4	4,500	81755	-
12	2	.014	2	3/4	4,500	81763	81861
12	2	.023	2	3/4	4,500	81766	-
15	1-1/4	.016	3-1/2	3/4	3,600	81773	-
15	2	.016	3-1/2	7/8	3,600	81777	-
15	2	.023	3-1/2	7/8	3,600	81778	-



WIRE BRUSHES



Crimped Wire End Brushes



General purpose for working hard to reach places. For use on portable air and electric tools equipped with 1/4" collet. Used for rubber and plastic flash removal, paint and rust removal, die, mold and tool polishing.

Brush Dia.	Shank Dia.	Filament Dia.	Trim Length	MSFS	EDP Number	
					Steel	Stainless
1/2	1/4	.006	1	25,000	82962	82981
1/2	1/4	.008	1	25,000	82963	82982
1/2	1/4	.010	1	25,000	82964	82983
1/2	1/4	.014	1	25,000	82965	82984
1/2	1/4	.020	1	25,000	82966	82985
3/4	1/4	.006	1	22,000	82967	82986
3/4	1/4	.008	1	22,000	82968	82987
3/4	1/4	.010	1	22,000	82969	82988
3/4	1/4	.014	1	22,000	82970	82989
3/4	1/4	.020	1	22,000	82971	82990
1	1/4	.006	1	20,000	82972	82991
1	1/4	.008	1	20,000	82973	82992
1	1/4	.010	1	20,000	82974	82993
1	1/4	.014	1	20,000	82975	82994
1	1/4	.020	1	20,000	82976	82995

Mini Crimped Cups



2-3/4" for light duty application and surface cleaning, flat brushing, edge cleaning and flash removal. 3-1/2" for effective, fast, heavy-duty cleaning of large metal surfaces. Suitable for use on portable power tools to remove weld scale, paint, burrs and corrosion.

Brush Dia.	Arbor/Thread	Filament Dia.	Trim Length	MSFS	EDP Number	
					Steel	Stainless
2-3/4	5/8-11	.014	7/8	14,000	82243	82353
2-3/4	1/2-13	.014	7/8	14,000	82244	82354
2-3/4	3/8-24	.014	7/8	14,000	82245	82355
2-3/4	M10 x 1.50	.014	7/8	14,000	82246	82356
2-3/4	M10 x 1.25	.014	7/8	14,000	82247	82357
2-3/4	M14 x 2.0	.014	7/8	14,000	82248	82358
3-1/2	5/8-11	.014	7/8	12,500	82249	82359
3-1/2	5/8-11	.020	7/8	12,500	82255	82365
3-1/2	1/2-13	.014	7/8	12,500	82250	82360
3-1/2	3/8-24	.014	7/8	12,500	82251	82361
3-1/2	M10 x 1.50	.014	7/8	12,500	82252	82362
3-1/2	M10 x 1.25	.014	7/8	12,500	82253	82363
3-1/2	M14 x 2.0	.014	7/8	12,500	82254	82364

Mini Knot Cups



For use on hard-to-reach areas such as angles and corners, curved surfaces and pipe bevel cleaning. Weld cleaning, scale removal and heavy deburring.

Brush Dia.	Thread Size	Filament Dia.	Trim Length	MSFS	EDP Number		
					Steel	Stainless	Brass
2-3/4	5/8-11	.014	7/8	14,000	82219	82329	-
2-3/4	5/8-11	.020	7/8	14,000	82220	82330	-
2-3/4	1/2-13	.014	7/8	14,000	82221	82331	-
2-3/4	1/2-13	.020	7/8	14,000	82222	82332	-
2-3/4	3/8-24	.014	7/8	14,000	82223	82333	-
2-3/4	3/8-24	.020	7/8	14,000	82224	82334	-
2-3/4	M10 x 1.50	.014	7/8	14,000	82225	82335	-
2-3/4	M10 x 1.50	.020	7/8	14,000	82226	82336	-
2-3/4	M10 x 1.25	.014	7/8	14,000	82227	82337	-
2-3/4	M10 x 1.25	.020	7/8	14,000	82228	82338	-
2-3/4	M14 x 2.0	.014	7/8	14,000	82229	82339	-
2-3/4	M14 x 2.0	.020	7/8	14,000	82230	82340	-
3-1/2	5/8-11	.014	7/8	12,500	82231	82341	82368
3-1/2	5/8-11	.020	7/8	12,500	82232	82342	-
3-1/2	1/2-13	.014	7/8	12,500	82233	82343	-
3-1/2	1/2-13	.020	7/8	12,500	82234	82344	-
3-1/2	3/8-24	.014	7/8	12,500	82235	82345	-
3-1/2	3/8-24	.020	7/8	12,500	82236	82346	-
3-1/2	M10 x 1.50	.014	7/8	12,500	82237	82347	-
3-1/2	M10 x 1.50	.020	7/8	12,500	82238	82348	-
3-1/2	M10 x 1.25	.014	7/8	12,500	82239	82349	-
3-1/2	M10 x 1.25	.020	7/8	12,500	82240	82350	-
3-1/2	M14 x 2.0	.014	7/8	12,500	82241	82351	-
3-1/2	M14 x 2.0	.020	7/8	12,500	82242	82352	-





WIRE BRUSHES AND CUPS



Full Cable Twist Wheel Brushes



For cap pass weld cleaning and heavy build-up removal.

Brush Dia.	Thread Size	Filament Dia.	No. of Knots	Trim Length	Face Width	MSFS	EDP Number	
							Steel	Stainless
4	5/8-11	.014	22	3/4	3/8	20,000	82165	82295
4	5/8-11	.020	22	3/4	3/8	20,000	82166	82296
4	1/2-13	.014	22	3/4	3/8	20,000	82167	82297
4	1/2-13	.020	22	3/4	3/8	20,000	82168	82298
4	3/8-24	.014	22	3/4	3/8	20,000	82169	82299
4	3/8-24	.020	22	3/4	3/8	20,000	82170	82300
4	M10 x 1.25	.014	22	3/4	3/8	20,000	82171	82301
4	M10 x 1.25	.020	22	3/4	3/8	20,000	82172	82302
4	M10 x 1.50	.014	22	3/4	3/8	20,000	82173	82303
4	M10 x 1.50	.020	22	3/4	3/8	20,000	82174	82304
4	M14 x 2.0	.014	22	3/4	3/8	20,000	82175	82305
4	M14 x 2.0	.020	22	3/4	3/8	20,000	82176	82306

Stringer Bead Twist Knot Wheels



Narrow face for root and hot pass weld cleaning, to ensure a successful pass of the filler weld.

Brush Dia.	Bore/Thread Size	Filament Dia.	No. of Knots	Trim Length	Face Width	MSFS	EDP Number	
							Steel	Stainless
4	5/8-11	.020	32	3/4	3/16	20,000	82186	82307
4	1/2-13	.020	32	3/4	3/16	20,000	82187	82308
4	3/8-24	.020	32	3/4	3/16	20,000	82188	82309
4	M10 x 1.50	.020	32	3/4	3/16	20,000	82189	82310
4	M10 x 1.25	.020	32	3/4	3/16	20,000	82190	82311
4	M14 x 2.0	.020	32	3/4	3/16	20,000	82191	82312
4	5/8	.020	32	3/4	3/16	20,000	82192	82313
4	1/2	.020	32	3/4	3/16	20,000	82193	82314
4-7/8	5/8-11	.020	38	3/4	3/16	15,000	82479	82604
4-7/8	7/8	.020	48	3/4	3/16	15,000	82480	82605
4-7/8	M14 x 2.0	.020	38	3/4	3/16	15,000	82481	82606
4-7/8	5/8-11	.020	48	3/4	3/16	15,000	82483	82608
4-7/8	M14 x 2.0	.020	48	3/4	3/16	15,000	82484	82609
6	5/8-11	.020	40	1-1/8	3/16	12,500	82486	82611
6	5/8-11	.020	48	1-1/8	3/16	12,500	82487	82612
6	5/8-11	.020	56	1-1/8	3/16	12,500	82488	82613
6	5/8-11	.020	64	1-1/8	1/8	12,500	82489	82614
6-7/8	5/8-11	.020	56	1-1/8	3/16	9,000	82494	82619
6-7/8	5/8-11	.020	72	1-1/8	1/8	9,000	82495	82620

COMBITWIST® Double Row Cup Brushes - External Thread



For the most severe applications. Very aggressive, high impact brushing action. Optimal removal rates and service life.

Brush Dia.	Thread Size	Filament Dia.	Trim Length	MSFS	EDP Number	
					Steel	Stainless
4	5/8-11	.014	1-3/8	9,000	82552	-
4	5/8-11	.023	1-3/8	9,000	82553	82657
4	M14 x 2.0	.014	1-3/8	9,000	82554	-
4	M14 x 2.0	.023	1-3/8	9,000	82555	82658
6	5/8-11	.014	1-1/2	6,000	82556	-
6	5/8-11	.023	1-1/2	6,000	82557	82659
6	5/8-11	.035	1-1/2	6,000	82558	-



WIRE WHEEL BRUSHES



Crimped Wire Wheel Brushes – Narrow Face



Used for light to medium duty brushing action, these wheels are designed for individual use in confined areas or in assemblies mounted on a shaft. They are best suited for brushing uneven surfaces and areas inaccessible to wider brushes. Ideal for removal of light scale, dirt, rust, corrosion and light burs on non-ductile materials.

Style A



Keyed Arbor Adapters – Style A have built-in keyways to reduce all narrow face brushes manufactured to 1-1/4" arbor hole with dual keyways to common arbor hole sizes.

Arbor Hole Dia.	Included Keyways (#)*	EDP Number
1/2	1/8 x 3/32 (2)	84605
5/8	3/16 x 1/8 (2)	84606
3/4	3/16 x 1/8 (2)	84607
7/8	3/16 x 1/8 (2)	84608
1	1/4 x 5/32 (2)	84609

Plain Round Plastic Adapters

Outside Dia.	Inside Dia.	EDP Number
3/8	1/4	84600
1/2	3/8	84602
5/8	1/2	84603

Brush Dia.	Arbor Hole	Filament Dia.	Trim Length	Face Width	MSFS	Compatible Adapter	EDP Number		
							Steel	Stainless	Brass
3	1/2-3/8	.006	3/4	9/16	10,000	Plain Round	80000	80330	-
3	1/2-3/8	.008	3/4	9/16	10,000	Plain Round	80001	80331	-
3	1/2-3/8	.010	3/4	9/16	10,000	Plain Round	80002	80332	-
3	1/2-3/8	.014	3/4	9/16	10,000	Plain Round	80003	80333	-
4	1/2-3/8	.006	3/4	9/16	12,500	Plain Round	80008	80338	-
4	1/2-3/8	.008	3/4	9/16	12,500	Plain Round	80009	90339	-
4	1/2-3/8	.010	3/4	9/16	12,500	Plain Round	80010	80340	-
4	1/2-3/8	.012	3/4	9/16	12,500	Plain Round	80011	80341	-
4	1/2-3/8	.014	3/4	9/16	12,500	Plain Round	80012	80342	-
4	1/2-3/8	.020	3/4	9/16	12,500	Plain Round	80013	80343	-
4	5/8-1/2	.006	3/4	1/2	12,500	Plain Round	80014	80344	-
4	5/8-1/2	.008	3/4	1/2	12,500	Plain Round	80015	80345	-
4	5/8-1/2	.010	3/4	1/2	12,500	Plain Round	80016	80346	-
4	5/8-1/2	.012	3/4	1/2	12,500	Plain Round	80017	80347	-
4	5/8-1/2	.014	3/4	1/2	12,500	Plain Round	80018	80348	-
4	5/8-1/2	.020	3/4	1/2	12,500	Plain Round	80019	80349	-
5	5/8-1/2	.006	1-1/4	7/8	10,000	Plain Round	80026	80356	-
5	5/8-1/2	.008	1-1/4	7/8	10,000	Plain Round	80027	80357	-
5	5/8-1/2	.010	1-1/4	7/8	10,000	Plain Round	80028	80358	-
5	5/8-1/2	.012	1-1/4	7/8	10,000	Plain Round	80029	80359	-
5	5/8-1/2	.014	1-1/4	7/8	10,000	Plain Round	80030	80360	-
5	5/8-1/2	.020	1-1/4	7/8	10,000	Plain Round	80031	80361	-
6	5/8-1/2	.006	1-1/8	5/8	8,000	Plain Round	80038	80368	-
6	5/8-1/2	.008	1-1/8	5/8	8,000	Plain Round	80039	80369	80666
6	5/8-1/2	.010	1-1/8	5/8	8,000	Plain Round	80040	80370	-
6	5/8-1/2	.012	1-1/8	5/8	8,000	Plain Round	80041	80371	-
6	5/8-1/2	.014	1-1/8	5/8	8,000	Plain Round	80042	80372	80667
6	5/8-1/2	.020	1-1/8	5/8	8,000	Plain Round	80043	80373	-
6	1-1/4*	.006	1-1/8	3/4	8,000	Style A	80062	80392	-
6	1-1/4*	.008	1-1/8	3/4	8,000	Style A	80063	80393	-
6	1-1/4*	.010	1-1/8	3/4	8,000	Style A	80064	80394	-
6	1-1/4*	.012	1-1/8	3/4	8,000	Style A	80065	80395	-
6	1-1/4*	.014	1-1/8	3/4	8,000	Style A	80066	80396	-
6	1-1/4*	.020	1-1/8	3/4	8,000	Style A	80067	80397	-
7	5/8	.006	1-5/16	5/8	7,500	Plain Round	80122	80452	-
7	5/8	.008	1-5/16	5/8	7,500	Plain Round	80123	80453	-
7	5/8	.010	1-5/16	5/8	7,500	Plain Round	80124	80454	-
7	5/8	.012	1-5/16	5/8	7,500	Plain Round	80125	80455	-
7	5/8	.014	1-5/16	5/8	7,500	Plain Round	80126	80456	-
7	5/8	.020	1-5/16	5/8	7,500	Plain Round	80127	80457	-
8	5/8	.006	1-1/2	5/8	6,000	Plain Round	80158	80488	-
8	5/8	.008	1-1/2	5/8	6,000	Plain Round	80159	80489	-
8	5/8	.010	1-1/2	5/8	6,000	Plain Round	80160	80490	-
8	5/8	.012	1-1/2	5/8	6,000	Plain Round	80161	80491	-
8	5/8	.014	1-1/2	5/8	6,000	Plain Round	80162	80492	-
8	5/8	.020	1-1/2	5/8	6,000	Plain Round	80163	80493	-
8	1-1/4	.006	1-1/2	3/4	6,000	Style A	80164	80494	-
8	1-1/4	.008	1-1/2	3/4	6,000	Style A	80165	80495	80682
8	1-1/4	.010	1-1/2	3/4	6,000	Style A	80166	80496	-
8	1-1/4	.012	1-1/2	3/4	6,000	Style A	80167	80497	-
8	1-1/4	.014	1-1/2	3/4	6,000	Style A	80168	80498	80683
8	1-1/4	.020	1-1/2	3/4	6,000	Style A	80169	80499	-
8	5/8	.006	2-1/8	3/4	6,000	Plain Round	80188	80518	-
8	5/8	.008	2-1/8	3/4	6,000	Plain Round	80189	80519	-
8	5/8	.010	2-1/8	3/4	6,000	Plain Round	80190	80520	-
8	5/8	.012	2-1/8	3/4	6,000	Plain Round	80191	80521	-
8	5/8	.014	2-1/8	3/4	6,000	Plain Round	80192	80522	-
8	5/8	.020	2-1/8	3/4	6,000	Plain Round	80193	80523	-
8	1-1/4	.006	2-1/8	3/4	6,000	Style A	80194	80524	-
8	1-1/4	.008	2-1/8	3/4	6,000	Style A	80195	80525	-
8	1-1/4	.010	2-1/8	3/4	6,000	Style A	80196	80526	-
8	1-1/4	.012	2-1/8	3/4	6,000	Style A	80197	80527	-
8	1-1/4	.014	2-1/8	3/4	6,000	Style A	80198	80528	-
8	1-1/4	.020	2-1/8	3/4	6,000	Style A	80199	80529	-
10	1-1/4	.008	1-7/8	1	4,200	Style A	80284	80555	80692
10	1-1/4	.014	1-7/8	1	4,200	Style A	80228	80558	80693

* 1-1/4" Arbor Hole with 1/4 x 1/8 Keyways (2)





WIRE WHEEL BRUSHES



Crimped Wire Wheel Brushes

Medium Face



Medium Face brushes are designed for medium to heavy-duty use either individually or gang-mounted. As with all ADVANCE crimped wire wheels, the metal components and adapters are designed for a flush fit when gang-mounted. This design ensures a consistent seamless surface finish.



Wide Face, multiple section brushes for all-purpose portable or stationary brushing are designed for maximum productivity. Engineered for professional use, the wide face brushes feature precision balance, high quality tempered wire and dense wire fill for fast brushing action, superior surface finish and long service life. Available in a wide product range to fit every application, including refining metal surfaces, preparing rubber in vulcanizing, blending surfaces, and removing light burrs, paint and corrosion.

Brush Dia.	Arbor Hole	Filament Dia.	Trim Length	Face Width	MSFS	Compatible Adapter	EDP Number		
							Steel	Stainless	Brass
4-1/4	2*	.006	7/8	7/8	8,000	Style C	81100	81145	-
4-1/4	2*	.008	7/8	7/8	8,000	Style C	81101	81146	81190
4-1/4	2*	.012	7/8	7/8	8,000	Style C	81103	81148	-
4-1/4	2*	.014	7/8	7/8	8,000	Style C	81104	81149	81191
6	2*	.006	1-1/8	1-1/16	6,000	Style C	81112	81157	-
6	2*	.008	1-1/8	1-1/16	6,000	Style C	81113	81158	81194
6	2*	.010	1-1/8	1-1/16	6,000	Style C	81114	81159	-
6	2*	.012	1-1/8	1-1/16	6,000	Style C	81115	81160	-
6	2*	.014	1-1/8	1-1/16	6,000	Style C	81116	81161	81195
7	2*	.006	1-5/16	31/32	6,000	Style C	81118	81163	-
7	2*	.010	1-5/16	31/32	6,000	Style C	81120	81165	-
7	2*	.012	1-5/16	31/32	6,000	Style C	81121	81166	-
7	2*	.014	1-5/16	31/32	6,000	Style C	81122	81167	-
8	2**	.006	1-1/2	1-1/16	4,500	Style B	81124	81169	-
8	2**	.008	1-1/2	1-1/16	4,500	Style B	81125	81170	81198
8	2**	.010	1-1/2	1-1/16	4,500	Style B	81126	81171	-
8	2**	.012	1-1/2	1-1/16	4,500	Style B	81127	81172	-
8	2**	.014	1-1/2	1-1/16	4,500	Style B	81128	81173	81199
8	2**	.020	1-1/2	1-1/16	4,500	Style B	81129	81174	-
10	2**	.006	1-7/8	1-1/8	3,600	Style B	81130	81175	-
10	2**	.008	1-7/8	1-1/8	3,600	Style B	81131	81176	-
10	2**	.010	1-7/8	1-1/8	3,600	Style B	81132	81177	-
10	2**	.012	1-7/8	1-1/8	3,600	Style B	81133	81178	-
10	2**	.014	1-7/8	1-1/8	3,600	Style B	81134	81179	-
10	2**	.020	1-7/8	1-1/8	3,600	Style B	81135	81180	-
12	2**	.008	2-7/8	1-3/4	3,000	Style B	81136	81181	-
12	2**	.010	2-7/8	1-3/4	3,000	Style B	81137	81182	-
12	2**	.012	2-7/8	1-3/4	3,000	Style B	81138	81183	-
12	2**	.014	2-7/8	1-3/4	3,000	Style B	81139	81184	-
12	2**	.020	2-7/8	1-3/4	3,000	Style B	81140	81185	-
15	2**	.012	3-1/8	1-3/8	2,400	Style B	81142	81187	-
15	2**	.014	3-1/8	1-3/8	2,400	Style B	81143	81188	-



2" Keyed Arbor Adapters – Style B have built-in keyways to reduce all medium face and wide face brushes manufactured to 2" arbor hole with dual keyways to common arbor hole sizes. (Note: Tabs must be removed for use on 6" and 7" diameter brushes, or order style C without keyways.)

Arbor Hole Dia.	Included Keyways (#)	EDP Number
1/2	1/8 x 3/32 (2)	84620
5/8	3/16 x 1/8 (2)	84621
3/4	3/16 x 1/8 (2)	84622
7/8	3/16 x 1/8 (2)	84623
1	1/4 x 5/32 (2)	84624
1-1/4	1/4 x 5/32 (2)	84625

Style C – 2" Round Arbor Adapters reduce all adapter style brushes manufactured to 2" round arbor hole to common arbor hole sizes.

Wheel Arbor Hole	Shaft Size	EDP Number
2	1/2	84628
2	5/8	84629
2	3/4	84630
2	7/8	84631
2	1	84632
2	1-1/4	84633
2	1-1/2	84634

* 2" Round Arbor. Use with Adapter Style "C."
 ** 2" Arbor Hole with 1/2 x 1/4 Keyways (2).

Wide Face

Brush Dia.	Arbor Hole	Filament Dia.	Trim Length	Face Width	MSFS	Compatible Adapter	EDP Number		
							Steel	Stainless	Brass
4-1/4	2*	.006	7/8	1-1/8	8,000	Style C	81220	81264	-
4-1/4	2*	.010	7/8	1-1/8	8,000	Style C	81222	81266	-
4-1/4	2*	.012	7/8	1-1/8	8,000	Style C	81223	81267	-
4-1/4	2*	.014	7/8	1-1/8	8,000	Style C	81224	81268	-
6	2*	.006	1-1/8	1-1/8	6,000	Style C	81232	81276	-
6	2*	.008	1-1/8	1-1/8	6,000	Style C	81233	81277	-
6	2*	.010	1-1/8	1-1/8	6,000	Style C	81234	81278	-
6	2*	.012	1-1/8	1-1/8	6,000	Style C	81235	81279	-
6	2*	.014	1-1/8	1-1/8	6,000	Style C	81236	81280	81313
7	2*	.008	1-5/16	1-7/16	6,000	Style C	81239	81283	-
7	2*	.012	1-5/16	1-7/16	6,000	Style C	81241	81285	-
7	2*	.014	1-5/16	1-7/16	6,000	Style C	81242	81286	-
8	2**	.006	1-1/2	1-5/8	4,500	Style B	81244	81288	-
8	2**	.008	1-1/2	1-5/8	4,500	Style B	81245	81289	-
8	2**	.010	1-1/2	1-5/8	4,500	Style B	81246	81290	-
8	2**	.012	1-1/2	1-5/8	4,500	Style B	81247	81291	-
8	2**	.014	1-1/2	1-5/8	4,500	Style B	81248	81292	81317
8	2**	.020	1-1/2	1-5/8	4,500	Style B	81249	81293	-
10	2**	.010	1-7/8	2-1/8	3,600	Style B	81252	81296	-
10	2**	.012	1-7/8	2-1/8	3,600	Style B	81253	81297	-
10	2**	.014	1-7/8	2-1/8	3,600	Style B	81254	81298	-
10	2**	.020	1-7/8	2-1/8	3,600	Style B	81255	81299	-
12	2**	.012	2-7/8	2-3/8	3,000	Style B	81257	81301	-
12	2**	.014	2-7/8	2-3/8	3,000	Style B	81258	81302	-
12	2**	.020	2-7/8	2-3/8	3,000	Style B	81259	81303	-
15	2**	.008	3-1/8	3-1/8	2,400	Style B	81260	81304	-
15	2**	.012	3-1/8	3-1/8	2,400	Style B	81261	81305	-
15	2**	.014	3-1/8	3-1/8	2,400	Style B	81262	81306	-
15	2**	.020	3-1/8	3-1/8	2,400	Style B	81263	81307	-



BRAZED-CARBIDE HOLE SAWS

METAL-CUTTING HS SERIES



1" Drilling Depth Standard

Complete Saw includes:

- Hole saw cutter head
- Shank (HS-S4 or HS-S6)
- Pilot (High Speed Steel)
- Spring

Will cut:

Carbon Steel
Cast Iron
Stainless Steel
Aluminum
Hard Rubber
Titanium
Formica

WOOD/FIBERGLASS FHS SERIES



2" Drilling Depth Standard

Complete Saw includes:

- Hole saw cutter head
- Shank (HS-S4 or HS-S6)
- Pilot (High-Speed Steel)
- Spring

Will cut:

Wood / Fiberglass / Kevlar
Plexiglass
PVC / ABS Materials
Composites
Soft Plastic / Acrylic
 (Substitute Carbide Pilot)

TUB, TILE & SPA HST SERIES



2" Drilling Depth Standard

Complete Saw includes:

- Hole saw cutter head
- Shank (HS-S4 or HS-S6)
- Pilot (Carbide tipped)
- Spring

Will cut:

Spas and Hot Tubs
Ceramic Tile*
Marble* / Granite*
Gelcoat Fiberglass

*Because of the differing densities of these materials, the number of holes cut may vary. Slow drilling speeds are recommended, and in some cases, marble and granite may not be drillable with carbide tools.

INTERRUPTED-CUT STHS SERIES



2" Drilling Depth Standard

Complete Saw includes:

- Hole saw cutter head
- Shank (HS-S4 or HS-S6)
- Pilot (High Speed Steel)
- Spring

Will cut:

Pipe
Trench Duct
Cellular Metal
 -and-

all types of ferrous and non-ferrous metals where an "interrupted" cut may occur.

WOOD/FIBERGLASS IWHS SERIES



2" Drilling Depth Standard

Complete Saw includes:

- Hole saw cutter head
- Shank (HS-S4 or HS-S6)
- Pilot (High-Speed Steel)
- Spring

Will cut:

Wood / Fiberglass / Kevlar
Plexiglass
PVC / ABS Materials
Composites
Soft Plastic / Acrylic
 (Substitute Carbide Pilot)

HOLE SAW SHANK



CARBIDE PILOTS FOR HS SERIES



HARD PLASTIC/STUCCO ISHS SERIES



2" Drilling Depth Standard

Complete Saw includes:

- Hole saw cutter head
- Shank (HS-S4 or HS-S6)
- Pilot (Carbide tipped)
- Spring

Will cut:

Clay Pipe, Hardy Board
Dry Lath and Plaster/Stucco
Wood with Nails
Aluminum Siding
Hard or Composite Plastic

BRAZED-CARBIDE THIN-GAUGE HOLE CUTTERS



1/2" Shank Diameter

For Materials up to 1/4" Thick

Excellent for all materials:

- Sheet metal
- Stainless steel
- Thin plastics

Smooth, clean holes
Easy plug removal
Non-removable shank

**Call
 Wharton
 for
 Available
 Sizes**



SPECIALTY HOLE SAW PRODUCTS

Hole Saw Slug Removal Systems

Avoid the frustration of slugs or cores binding in your hole saws! Remove multiple layers of material – especially thin, hard-to-remove plastic, wood and metal slugs. Increase productivity with either a Holesaw Hook® or Spring Ejector system from RELTON – the industry leader in brazed-carbide, production hole saws. New, complete hole saws include a spring – designed for use on Relton hole saws. The Holesaw Hook® may be used on most manufacturers' hole saws (with cleanout slots).

HOLESAW HOOK®



Patent No. 5,904,454

Part No: HSH

FEATURES:

- Reverse-angled hooks designed to fit cleanout slots.
- Dual hooks pull evenly to prevent jamming.
- Polyvinyl-coated handle for secure gripping.
- Adjustable for holesaw diameters 1/2" to 2-1/2".
- Removes wood, plastic and metal slugs.
- Hole saw not included.



HOLE SAW SPRING EJECTOR SYSTEM

FEATURES:

- Spring compresses during drilling; slug "pops" out as soon as cut is finished, allowing "hands-free" operation with no down time.
- Hole saw not included.

PART NUMBER	FOR USE WITH		
	DIAMETER	DEPTH OF CUT	PILOT SIZE
ES-40	For all TG	1/4"	1/4"
ES-41	3/4" to 1-15/16"	1"	1/4"
ES-61	2" and above	1"	3/8"
ES-42	3/4" to 1-15/16"	2"	1/4"
ES-62	2" and above	2"	3/8"

PORCELAIN CUTTER KITS AND REPLACEMENT PARTS

3/8" Shank Diameter



Drill through porcelain and cast iron with pilot bit.

Drill through porcelain only with spring-loaded saw.

Drill through cast iron with finish saw.

For Installing:

- Reverse Osmosis Systems
- Hot-Water Dispensers
- Spa Jets in pre-existing bathtubs

Relton Porcelain Cutter Kits are designed with the Finish Saw 1/8" smaller in diameter than the Porcelain Saw. The **Finish Saw diameter** is used to determine which kit should be purchased.

Note: Kits are designed for porcelain over cast iron, NOT for solid Porcelain.



DESCRIPTION	7/8" DIAMETER FINISH HOLE SIZE PART NUMBER	1" DIAMETER FINISH HOLE SIZE PART NUMBER	1-1/4" DIAMETER FINISH HOLE SIZE PART NUMBER	1-3/4" DIAMETER FINISH HOLE SIZE PART NUMBER
Kit Complete	PC-14	PC-16	PC-20	PC-28
Porcelain Saw Complete*	P-14	P-16	P-20	P-28
Finish Hole Saw Complete	F-14	F-16	F-20	F-28
Finish Hole Saw Head Only	F-14HO	F-16HO	F-20HO	F-28HO
Pilot Drill	PD-42	PD-42	PD-42	PD-42
Spring-Loaded Shank	PS-1	PS-1	PS-2	PS-2
Shank - Finish Saw	S-12	S-34	S-34	S-34
Guide for Finish Saw	G-4	G-4	G-4	G-4

* Porcelain saw is sold complete only.

AT - Carbide Tipped Hole Saws

Specifically designed for sawing holes in abrasive materials such as fiberglass, particleboard, asbestos board, and formica.

- Tungsten carbide tooth tips offer the highest wear resistance possible and longer life cutting abrasive materials.
- Ground and set teeth to help cut materials that bi-metal saws will not cut.
- 3 teeth per inch creates wider gullet for better chip clearance and faster cutting.



ATCG - Tungsten Carbide Grit Hole Saws

The long-lasting choice for cutting holes in materials too hard or abrasive for standard bi-metal saws, or so thin they would strip bi-metal or chip carbide teeth. Ideal for cutting ceramics, fiberglass, hardwoods, cast iron, composites, etc.

- Super resistance to heat, wear and abrasion with shock resistant back. 1-1/2" cutting depth.
- Tungsten carbide grains are bonded to alloy backs with a gulleted, snag resistant edge.

AV - Master Cobalt® Bi-Metal Hole Saws

This premium line of professional quality hole saws features an M3 high-speed steel cutting edge, electron beam welded to a tough steel backer. Caps stand up to abuse and punishment, yet are lighter and easier to use than those of competitors. Positive rake tooth design provides better chip clearance as teeth cut into wood, plastic or any machinable metal. The 1-1/2" cutting depth cuts easily through 2 x 4's. A separate arbor is required.



- Backer, cutting edge and cap work together to provide faster, longer-lasting cutting action.
- Bi-metal design bonds M3 cutting edge to fatigue resistant backer.
- Positive rake teeth clear chips better for longer life and easier cutting.
- Teeth stay sharper and make smoother cuts.

BLADE TYPE

Master Cobalt® Bi-Metal AV Hole Saws

All types of machinable metal including stainless steel, wood, nail-embedded wood, plastic, fiberglass, drywall, fiberboard, composites. Standard 1-1/2" cutting depth cuts through 2 x 4's. Requires a separate arbor for operation.

Tungsten Carbide Tipped AT Hole Saws

Nail free wood, plastic, aluminum, fiberglass, drywall, fiberboard, plaster, acoustic tile, countertops. Coarser tooth pitch than bi-metal hole saws for very fast cutting in soft material. Not recommended for pipe. Standard 1-1/2" cutting depth. Requires separate arbor.

Tungsten Carbide Grit Edge ATCG Hole Saws

For use in very hard or abrasive material. Hardened steel, cast iron, brick, cinder block, ceramics, foamed glass, fiberglass, composites, computer flooring, cement, acoustic tile. Standard 1-1/2" cutting depth. Requires separate arbor.

Diameter					Diameter					Diameter				
In.	mm	AV	AT	ATCG	In.	mm	AV	AT	ATCG	In.	mm	AV	AT	ATCG
AV09-AV244 use the following arbors M24, M24K, M34, M44 or M44K					AV40-AV96 use the following arbors M45P, M46PS, M55P or M44K									
9/16	14	AV09	-	-	35	AV225	-	-	-	68	AV425	-	-	-
5/8	16	AV10	-	-	37	AV23	AT23	ATCG23	-	2-11/16	68.5	AV435	-	-
	16	AV105	AT105	-	38	AV24	AT24	ATCG24	-	2-3/4	70	AV44	AT44	ATCG44
11/16	17	AV11	AT11	-	40	AV25	AT25	ATCG25	-	2-7/8	73	AV46	AT46	ATCG46
3/4	19	AV12	AT12	ATCG12	40	AV255	-	-	-		75	AV475	-	-
	20	AV125	-	-	41	AV26	AT26	ATCG26	-	3	76	AV48	AT48	ATCG48
13/16	21	AV13	AT13	ATCG13	1-11/16	43	AV27	AT27	ATCG27	3-1/8	79	AV50	AT50	ATCG50
7/8	22	AV14	AT14	ATCG14	1-3/4	44	AV28	AT28	ATCG28	3-1/4	83	AV52	AT52	ATCG52
15/16	24	AV15	AT15	ATCG15	45	AV285	-	-	-	3-3/8	86	AV54	AT54	ATCG54
	25	AV155	-	-	1-13/16	46	AV29	AT29	ATCG29	3-1/2	89	AV56	AT56	ATCG56
1	25	AV16	AT16	ATCG16	1-7/8	48	AV30	AT30	ATCG30	3-5/8	92	AV58	AT58	ATCG58
1-1/16	27	AV17	AT17	ATCG17	50	AV315	-	-	-	3-3/4	95	AV60	AT60	ATCG60
1-1/8	29	AV18	AT18	ATCG18	2	AV32	AT32	ATCG32	-	3-7/8	98	AV62	AT62	ATCG62
	30	AV185	-	-	2-1/16	52	AV33	AT33	ATCG33		100	AV63	-	-
1-3/16	30	AV19	AT19	ATCG19	2-1/8	54	AV34	AT34	ATCG34	4	102	AV64	AT64	ATCG64
1-1/4	32	AV204	-	-	55	AV345	-	-	-	4-1/8	105	AV66	AT66	ATCG66
1-3/8	35	AV224	-	-	2-1/4	57	AV36	AT36	ATCG36	4-1/4	108	AV68	AT68	ATCG68
1-1/2	38	AV244	-	-	2-5/16	59	AV37	AT37	ATCG37	4-3/8	111	AV70	AT70	ATCG70
					2-3/8	60	AV38	AT38	ATCG38	4-1/2	114	AV72	AT72	ATCG72
					62	AV385	-	-	-	4-3/4	121	AV76	AT76	ATCG76
										5	127	AV80	AT80	ATCG80
										5-1/4	133	-	-	-
										5-1/2	140	AV88	AT88	ATCG88
										5-3/4	146	AV92	AT92	ATCG92
										6	152	AV96	AT96	ATCG96

*Metric sizes shown in gray are exact millimeter sizes. Metric sizes in black are approximate metric equivalents of exact inch sizes.

Master Cobalt® Bi-Metal Variable Pitch Hole Saw Kits

Master Electricians' Kit

AV08E / 171083 Entrance sizes to 4" Saws (1 each): 7/8", 1-1/8", 1-3/8", 1-3/4", 2", 2-1/2", 3", 3-5/8", 4-1/8", 4-1/2" Arbors (1 each): M24K,

Plumbers' Kit

AV04P / 171045 Contains pipe tap sizes for pipe through 2" Saws (1 each): 3/4", 7/8", 1-1/8", 1-1/2", 1-3/4", 2-1/4" Arbors (1 each): M44, M45P

Mechanics' Kit

AV05M / 171052 The 5 most popular hole saw sizes for construction, industrial and automotive jobs. Saws (1 each): 7/8", 1", 1-1/8", 1-1/4", 1-1/2" Arbor (1): M34

Industrial Kit

AV06I / 171069 Cover a broad range of common industrial plumbing and electrical jobs on pipe and conduit through 4". Saws (1 each): 3/4", 7/8", 1-1/8", 1-3/8", 1-1/2", 1-3/4", 2", 2-1/4", 2-1/2", 3", 3-1/4", 3-5/8", 3-3/4", 4-1/4", 4-1/2" Arbors (1 each): M24K, M44, M45P Extension (1): 12"

Locksmith Kit

AV02L / 171038 Designed for the professional locksmith, this kit contains sizes for installation of popular locks, deadbolts, etc. Saws (1 each): 7/8", 1", 1-1/4", 1-1/2", 1-3/4", 2-1/8" Arbor (1 each): M24, M45P

Electricians' Kit

AV02E / 171021 Entrance sizes to 2" Saws (1 each): 7/8", 1-1/8", 1-3/8", 1-3/4", 2", 2-1/2" Arbors (1 each): M44, M45P

Special Electricians Kit

AV09E / 171090 2-1/2", 3", 3-1/2", 4" pipe entrance sizes. Saws (1 each): 3", 3-5/8", 4-1/8", 4-1/2" Arbors (1): M45P

Maintenance Kit

AV100 / 171106 A handy general purpose kit for plumbing and electrical jobs on pipe and conduit through 2". Saws (1 each): 3/4", 7/8", 1-1/8", 1-3/8", 1-1/2", 1-3/4", 2", 2-1/4", 2-1/2" Arbors (1 each): M24K, M44, M45P Extension (1): 12"

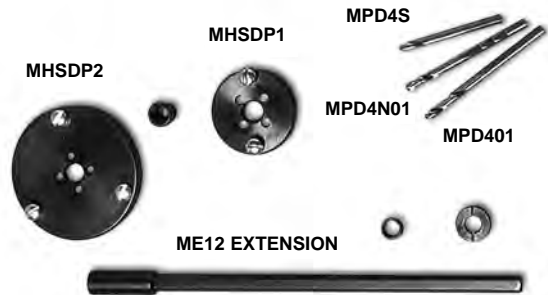
Utility Kit

AV03U / 171076 6 commonly used hole saws for general purpose use. Saws (1 each): 3/4", 7/8", 1-1/8", 1-1/2", 1-3/4", 2-1/2" Arbor (1): M34, M45P



PILOT DRILLS AND ACCESSORIES

Product No.	Description
MPD401	4-5/16" x 1/4" (110mm x 6.5mm) Pilot Drill, shank ground 3 sides, split point
MPD4N01	4" x 1/4" (102mm x 6.5mm) Pilot Drill, 3 notches for set screw
MPD4S01	3-1/16" x 1/4" (78mm x 6.5mm) Pilot Drill for M24, M34, M35PS arbors
TACPD4	4-5/16" x 1/4" (110mm x 6.5mm) Pilot Drill, Carded
TACPD4S	3-1/16" x 1/4" (78mm x 6.5mm) Pilot Drill, Carded
MPD4CT01	4" x 1/4" (102mm x 6.5mm) Carbide Tipped Pilot Drill
MPD4SCT01	3-1/4" x 1/4" (83mm x 6.5mm) Carbide Tipped Pilot Drill
TACPD325	3-1/4" x 1/4" (83mm x 6.5mm) Pilot Drill, Carded for M24PD, M25PD arbors
MES101	Ejector Spring, fits all 1/4" pilot drills
ME12	12" (305mm) Extension for shank of 7/16" (10.5mm) arbors
ME381	12" (305mm) Extension for shank of 3/8" (9.5mm) arbors
M44N01 Nut	Adapts arbors with 1/2 - 20 threads to fit hole saws with 5/8 - 18 threads
M44NH01	Hex Adapter Nut
MHSDP1	Hole Saw Drive Plate for AV44 - AV96
MHSDP2	Hole Saw Drive Plate for AV66 - AV96
MQC14	Fast-Adapt Quick Change Chuck 1/4"
MQC38	Fast-Adapt Quick Change Chuck 3/8" & 7/16" shank size - Morse Exclusive!



ARBORS

Heavy-duty, carbon steel arbors come complete with pilot drills.

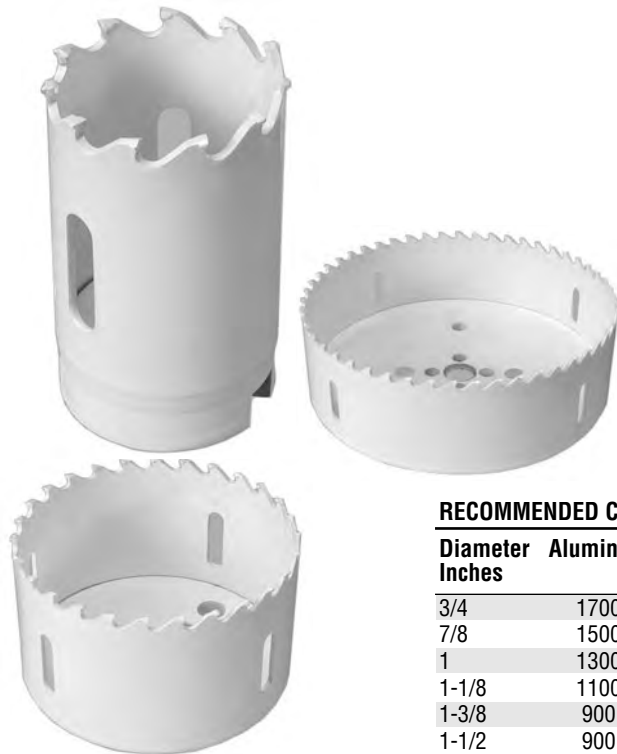
Product No.	Shank Size	Thread Size	Drill No.	Chuck Size	Fits Saws	Follow Through
M24K	1/4 Round	1/2 - 20	MPD401	1/4	*9/16" - 1-3/16"	3/4" - 1-1/2"
M24	1/4 Hex	1/2 - 20	MPD4S01	1/4	*9/16" - 1-3/16"	3/4" - 1-1/2"
M34	3/8 Hex	1/2 - 20	MPD4S01	3/8	*9/16" - 1-3/16"	3/4" - 1-1/2"
M44K	7/16 Hex	1/2 - 20	MPD401	1/2	9/16" - 6"	1-1/2" - 6"
M44	7/16 Hex	1/2 - 20	MPD401	1/2	*9/16" - 1-3/16"	3/4" - 1-1/2"
M35PS	3/8 Hex	5/8 - 18	MPD4S01	3/8	1-1/4" - 6"	1-1/2" - 6"
M45	7/16 Hex	5/8 - 18	MPD401	1/2	1-1/4" - 2-3/8"	1-1/4" - 2-3/8"
M45P	7/16 Hex	5/8 - 18	MPD401	1/2	1-1/4" - 6"	1-1/2" - 6"
M46PS	7/16 Hex	5/8 - 18	MPD4S01	1/2	1-1/4" - 6"	1-1/2" - 6"
M55P	5/8 Hex	5/8 - 18	MPD401	3/4	1-1/4" - 6"	1-1/2" - 6"
M34CT **	3/8 Hex	1/2 - 20	MPD4SCT01	3/8	3/4" - 1-3/16"	3/4" - 1-1/2"
M45PCT**	7/16 Hex	5/8 - 18	MPD4CT01	1/2	1-1/4" - 6"	1-1/2" - 6"
M24PD	1/4 Hex	1/2 - 20	TACPD325	1/4	*9/16" - 1-3/16"	3/4" - 1-1/2"
M25PD	1/4 Hex	5/8 - 18	TACPD325	1/4	1-1/4" - 6"	7/8" - 6"
SDS5/8QC	SDS	5/8 - 18	MPD4S01	SDS	1-1/4" - 6"	1-1/2" - 6"
SDS1/2QC	SDS	1/2 - 20	MPD4S01	SDS	*9/16" - 1-3/16"	3/4" - 1-1/2"



* Hole saws, AV204, AV224, AV244 require the use of one of the arbors marked with an asterisk.
 ** M34CT and M45PCT are carbide tipped for use with carbide tipped and carbide grit saws.

THE LENOX® ADVANTAGE™

- **Long tool life**
Heat resistant carbide teeth for long life in tile and stainless steel.
- **Added durability**
Thick backing plate resists damage and increases life.
- **Unique tooth configuration**
Engineered design provides ability to cut in stainless steel like no other.
- **Use standard arbor.**
- **Note:** We recommend the use of a carbide tipped pilot drill when cutting ceramic wall tile. Pilot drill 123CT fits the 1L, 2L, 4L or 7L arbors. Pilot drill 65CTPD fits the 5L and 6L arbors.



SPECIFICATIONS

Product Number	Diameter Inches	Pipe Tap Inches	Pipe Entrance Inches	Use Arbor Number
30211-11CT	11/16			1L or 4L
30212-12CT	3/4	1/2	3/8	1L or 4L
30214-14CT	7/8	3/4	1/2	1L or 4L
30216-16CT	1			1L or 4L
30218-18CT	1-1/8	1	3/4	1L or 4L
30220-20CT	1-1/4			2L
30222-22CT	1-3/8		1	2L
30224-24CT	1-1/2	1-1/4		2L or 7L
30226-26CT	1-5/8			2L or 7L
30228-28CT	1-3/4	1-1/2	1-1/4	2L or 7L
30232-32CT	2		1-1/2	2L or 7L
30234-34CT	2-1/8			2L or 7L
30236-36CT	2-1/4	2		2L or 7L
30238-38CT	2-3/8			2L or 7L
30240-40CT	2-1/2		2	2L or 7L
30241-41CT	2-9/16			2L or 7L
30242-42CT	2-5/8	2-1/2		2L or 7L
30243-43CT	2-11/16			2L or 7L
30248-48CT	3		2-1/2	2L or 7L
30252-52CT	3-1/4	3		2L or 7L
30254-54CT	3-3/8			2L or 7L
30256-56CT	3-1/2			2L or 7L
30258-58CT	3-5/8		3	2L or 7L
30260-60CT	3-3/4	3-1/2		2L or 7L
30264-64CT	4			2L or 7L
30266-66CT	4-1/8		3-1/2	2L or 7L
30268-68CT	4-1/4	4		2L or 7L
30272-72CT	4-1/2			2L or 7L
30276-76CT	4-3/4	4-1/2	4	2L or 7L
30280-80CT	5			2L or 7L
30288-88CT	5-1/2			2L or 7L
30296-96CT	6			2L or 7L
30297-123CT	Carbide Tipped Pilot Drill			1 per pack
30298-65CTPD	Carbide Tipped Pilot Drill			1 per pack

RECOMMENDED CARBIDE TIPPED HOLE SAW RPM

Diameter Inches	Aluminum	Plastic	Fiberglass	Ceramic Tile	Particle Board	Cast Iron	Formica	Computer Flooring
3/4	1700	3430	250	500	3430	410	210	550
7/8	1500	2940	210	430	2940	350	180	470
1	1300	2570	190	370	2570	310	150	410
1-1/8	1100	2290	170	330	2290	270	140	370
1-3/8	900	1870	140	270	1870	220	110	300
1-1/2	900	1710	120	250	1710	210	100	270
1-3/4	700	1470	110	210	1470	180	90	240
2	600	1290	90	190	1290	150	80	210
2-1/4	600	1140	80	170	1140	140	70	180
2-1/2	500	1030	70	150	1030	120	60	160
3	400	860	60	120	860	100	50	140
3-1/4	400	790	60	110	790	90	50	130
3-5/8	400	710	50	100	710	90	40	110
3-3/4	300	690	50	100	690	80	40	110
4-1/8	300	620	50	90	620	70	40	100
4-3/4	300	540	40	80	540	60	30	90
5	200	480	40	80	500	60	30	90
5-1/2	200	420	40	70	460	50	30	80
6	100	360	30	60	420	40	30	60

Suggested RPMs only.



Bi-Metal Hole Saw Kits



**26-PIECE
BIG DADDY™ 2000 KIT**
3/4", 7/8", 1", 1-1/8", 1-3/8", 1-1/2",
1-3/4", 2", 2-1/8", 2-1/4", 2-1/2",
2-11/16", 3", 3-1/4", 3-3/8", 3-5/8",
3-3/4", 4-1/8", 4-1/2", 4-3/4".
Arbors: 1L, 2L, 5L, two 4321 and
one 56PD pilot drills.
Product Number: 30804-2000G



**10-PIECE
PLUMBER'S KIT**
3/4", 7/8", 1-1/8", 1-1/2",
1-3/4", 2-1/4".
Arbors: 2L, 5L, one 4321 pilot drill.
Product Number: 30808-600P



**17-PIECE
PLUMBER'S KIT**
3/4", 7/8", 1-1/8", 1-1/2", 1-3/4",
2-1/4", 2-9/16", 3", 3-1/2", 4",
4-1/4", 4-1/2".
Arbors: 2L, 5L, two 4321 and
one 56PD pilot drills.
Product Number: 30801-1200P



**10-PIECE
ELECTRICIAN'S KIT**
7/8", 1-1/8", 1-3/8", 1-3/4",
2", 2-1/2".
Arbors: 2L, 5L. One 4321 pilot drill.
One arbor adapter.
Product Number: 30800-600L



**17-PIECE
ELECTRICIAN'S KIT**
3/4", 7/8", 1-1/8", 1-3/8", 1-3/4",
2", 2-1/2", 2-11/16", 3", 3-5/8",
4-1/8", 4-3/4".
Arbors: 2L, 5L, two 4321 and
one 56PD pilot drills.
Product Number: 30802-1200L



**10-PIECE
GENERAL PURPOSE KIT**
7/8", 1", 1-1/4", 1-3/8", 1-1/2",
1-3/4", 2-1/8".
Arbors: 5L, 6L one 56PD pilot drills.
Product Number: 30807-700G



**17-PIECE
GENERAL PURPOSE KIT**
5/8", 3/4", 7/8", 1", 1-1/8", 1-1/4",
1-3/8", 1-1/2", 1-3/4", 2", 2-1/2", 3".
Arbors: 1L, 2L, three 4321 pilot drills.
Product Number: 30820-1200G



**9-PIECE
GENERAL PURPOSE KIT**
2-1/8", 2-9/16", 3-1/4", 3-3/4", 4-3/4".
Arbor: 2L, three 4321 pilot drills.
Product Number: 30374-500G



**5-PIECE
GENERAL PURPOSE KIT**
2", 3", 3-3/8", 4-1/8".
Arbor: 2L, three 4321 pilot drills.
Product Number: 30370-400G



**7-PIECE
AUTOMOTIVE KIT**
3/4", 7/8", 1", 1-1/8", 1-1/4".
Arbor: 5L. One arbor adapter.
Product Number: 30805-500A



**9-PIECE
REFRIGERATION KIT**
5/8", 7/8", 1-1/8", 1-3/8",
1-5/8", 2-1/8".
Arbors: 5L, 6L. One 56PD pilot drill.
Product Number: 30830-600R

4012 HIGH TENSION FRAME



Specifications
Product Number
 20918-4012

Description
 High tension hand hacksaw frame

- **Comfortable grip** – Ergonomic design and larger space fit gloved hands.
- **Convenient storage** – Handle holds up to five 12" hacksaw blades for quick change outs.
- **Multi-purpose** – Mount at 45° for flush cutting; insert standard recip blade to use as a jab saw.
- **Fast, straight cuts** – Tensions up to 30,000 PSI.

2012 LIGHTWEIGHT, ALL METAL FRAME



Specifications
Product Number
 20919-2012

Description
 Heavy-duty aluminum handle hacksaw frame with 12" bi-metal blade.

- **Great value** – Affordable frame offers highest blade tension in its class.
- **Easy adjusting** – Uses wing nut to adjust tension quickly.

CLOSE QUARTER® SAW



Specifications
Product Number
 20908-908
 20906-906

Description
 Close Quarter® Saw
 Replacement blades
 6" x 1/4" x .014 x 32T

- **Fits into tight spots**
 Allows for cutting overhead or behind walls.

MASTER-BAND® Saw Blades

Maximum Performance for Portable Band Saws

- **Enhanced beam strength** – .023 thick material increases blade strength and reduces deflection and twist.
- **Shatter resistant** – Bi-metal blades bend and resist breaking and extend blade life.
- **Longer lasting** – LENOX® TUFF TOOTH™ design reinforces tooth for longer blade life.

TPI	Length (Inches)	Width (Inches)	Thickness (Inches)	Product Number	Cuts Material
10/14	44-7/8	1/2	.023	80114-38-EW-10/14	1/4" & larger
14	44-7/8	1/2	.023	80115-38-EW-14	3/16"– 3/8"
14/18	44-7/8	1/2	.023	80112-38-EW-14/18	1/8"– 5/16"
18	44-7/8	1/2	.023	80116-38-EW-18	3/32"– 1/4"
24	44-7/8	1/2	.023	80117-38-EW-24	up to 1/8"
8/12	44-7/8	1/2	.025	80143-385-EW-8/12	3/8"– 1/2"
10/14	44-7/8	1/2	.025	80144-385-EW-10/14	1/4" & larger
14	44-7/8	1/2	.025	80145-385-EW-14	3/16"– 3/8"
14/18	44-7/8	1/2	.025	80142-385-EW-14/18	1/8"– 5/16"
18	44-7/8	1/2	.025	82310-385-EW-18	3/32"– 1/4"
10/14	53-3/4	1/2	.023	80119-45-EW-10/14	1/4" & larger
14	53-3/4	1/2	.023	80120-45-EW-14	3/16"– 3/8"
14/18	53-3/4	1/2	.023	80123-45-EW-14/18	1/8"– 5/16"
18	53-3/4	1/2	.023	80121-45-EW-18	3/32"– 1/4"
24	53-3/4	1/2	.023	80122-45-EW-24	up to 1/8"
10/14	53-3/4	1/2	.025	80146-455-EW -10/14	1/4" & larger
14/18	53-3/4	1/2	.025	80147-455-EW-14/18	1/8"– 5/16"
6/10	54	1/2	.025	80148-54-EW-6/10	1/2" & larger
8/12	54	1/2	.025	80723-54-EW-8/12	3/8"– 1/2"
10/14	54	1/2	.025	80724-54-EW-10/14	1/4" & larger
14/18	54	1/2	.025	80141-54-EW-14/18	1/8"– 5/16"
18	54	1/2	.025	80150-54-EW-18	3/32"– 1/4"

Carbon Band Saw Blades

- **Hardened back blades**
- **Great for cutting mild steels**
 At slower speeds, due to a blade design that features both hardened teeth and a hardened back.

Hard Back Carbon Steel Blade














NEO-TYPE®

Specifications

Tooth Form Set Pattern	Standard Raker Set TPI	Wavy TPI		Hook Raker Set TPI			Applications
		24	3	4	6		
Width x Thickness Inches MM	6 8 10 14 18	24	3	4	6	Ferrous metals. Utility cutting of mild steels. For use on small cut-off saws and hand-fed applications.	
1/4 x .025 6.4 x 0.64	◆ ◆ ◆ ◆ ◆	◆	◆	◆	◆		
3/8 x .025 9.5 x 0.64	◆ ◆ ◆ ◆ ◆	◆	◆	◆	◆		
1/2 x .025 12.7 x 0.64	◆ ◆ ◆ ◆ ◆	◆	◆	◆	◆		
5/8 x .032 16 x 0.80	◆ ◆ ◆ ◆ ◆	◆	◆	◆	◆		
3/4 x .032 19 x 0.80	◆ ◆ ◆ ◆ ◆	◆	◆	◆	◆		
1 x .035 25.4 x 0.90	◆ ◆ ◆ ◆ ◆	◆	◆	◆	◆		

DESIGNED FOR ROUGH-IN WORK

SPECIFICATIONS

Product Number	Dia. In.	Entrance for Pipe & Rigid Conduit In.	Entrance for Tubing In.
 33100-LL100	1	1/2	7/8
 33112-LL112	1-1/8	1/2	1
 33125-LL125	1-1/4	3/4	1-1/8
 33137-LL137	1-3/8	1	1-1/4
 33150-LL150	1-1/2		1-3/8
 33175-LL175	1-3/4	1-1/4	1-1/2
 33200-LL200	2	1-1/2	1-7/8
 33212-LL212	2-1/8		2
 33225-LL225	2-1/4		2-1/8
 33256-LL256	2-9/16	2	2-1/2
 33300-LL300	3	2-1/2	2-7/8
 33362-LL362	3-5/8	3	3-1/2
 33462-LL462	4-5/8	4	4-1/2

The LENOX® Advantage™

- **Fast cutting**
Precision ground teeth and outside diameter threads maximize tool performance.
- **Increased Capabilities**
Extra long to cut through 4 x 4 with no extension required.
- **Re-sharpenable**
Easily re-sharpened with LENOX® Slim Taper File (32510-STF).

LENOX® LEADER® KITS



12-Piece, LENOX® LEADER® Bits Kit

Product No. 33400-33/400
One each of LENOX® LEADER® bits: 1-3/8", 1-1/2", 2-1/8", 2-9/16". Extension: 5-1/2". Five lead screws. Slim taper file. Hex wrench set. Plastic case.



16-Piece, LENOX® LEADER® Bits Kit

Product No. 33700-33/700
One each of LENOX® LEADER® bits: 1", 1-1/8", 1-1/4", 1-1/2", 1-3/4", 2-1/8", 2-9/16". Extensions: 5-1/2", 12". Five lead screws. Slim taper file. Hex wrench set. Plastic case.



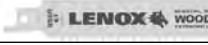
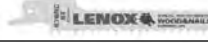


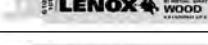
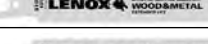
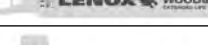

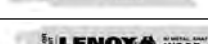

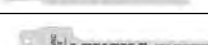
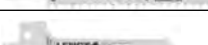

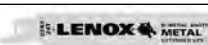
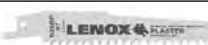



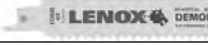

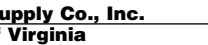
THE LENOX® ADVANTAGE™

Demolition Blades

- **Extreme versatility**
Designed to cut easily through the toughest materials. Cuts dimensional lumber, angle iron, fasteners and metal pipe—simultaneously.
- **Optimized performance**
Thicker (.062) and wider (7/8") blades minimize whipping for straighter and smoother cuts.
- **Shatter resistant**
Bi-metal blades bend and resist breaking and extend blade life.

Bi-Metal Blades

- **Shatter resistant**
Bi-metal blades bend and resist breaking and extend blade life.
- **Designed to attack**
Unique blade geometry positions the blade for optimum cutting performance.
- **Long lasting**
TUFF TOOTH™ design is reinforced to cut stronger and last longer.

5 Per Pk.	Blister Pk. 1 Per Card / 5 Cards Per Pk.	L x W x Thickness In./mm	Teeth Per In. / 25mm	SHAPE	RECOMMENDED USE
20572- 656R	20573- S656R	6 x 3/4 x .050 150 x 20 x 1.3	6		Rough work in wood, fast cutting, nail-embedded wood.
20585- 156R	20586- S156R	12 x 3/4 x .050 300 x 20 x 1.3	6		Rough work in wood, fast cutting, nail-embedded wood.
20582- 956R	20587- S956R	9 x 3/4 x .050 225 x 20 x 1.3	6		Rough work in wood, fast cutting, nail-embedded wood.
20556- 676RC	20557- S676RC	6 x 7/16 x .050 150 x 11 x 1.3	6		Wood contours and composition materials.
20560- 606R	20559- S606R	6 x 3/4 x .035 150 x 20 x .9	6		Wood, all composition materials.
20575- 634R	20574- S634R	6 x 3/4 x .050 150 x 20 x 1.3	4		Nail free woods, fast cutting.
20562- 610R	20561- S610R	6 x 3/4 x .035 150 x 20 x .9	10		Wood, compositions, plastic and non-ferrous metals.
20580- 810R	20581- S810R	8 x 3/4 x .050 200 x 20 x 1.3	10		Wood, compositions, plastic light non-ferrous metals and stainless steel.
20583- 110R	20584- S110R	12 x 3/4 x .050 300 x 20 x 1.3	10/14		All woods, plastic and light non-ferrous metals, stainless steel.
20520- 314RC	20519- S314RC	3-5/8 x 5/16 x .035 92 x 8 x .9	14		Contour cutting in wood < 3/4" / 20mm thick and in metal 3/32"-5/16" / 2.5-8mm.
20550- 414R	20551- S414R	4 x 3/4 x .035 100 x 20 x .9	14		Pipe, structural steel, stainless steel 3/32" - 1/4" / 2.5 - 6mm. Non-ferrous metal 3/32" - 3/8" / 2.5 - 10mm.
20564- 614R	20565- S614R	6 x 3/4 x .035 150 x 20 x .9	14		Pipe, structural steel, stainless steel 3/32" - 1/4" / 2.5 - 6mm. Non-ferrous metal 3/32" - 3/8" / 2.5 - 10mm.
20552- 418R	20553- S418R	4 x 3/4 x .035 100 x 20 x .9	18		Structural steel, pipe, conduit, stainless steel. Non-ferrous metal.
20566- 618R	20567- S618R	6 x 3/4 x .035 150 x 20 x .9	18		Structural steel, pipe, conduit, stainless steel. Non-ferrous metal.
20521- 318RC	20522- S318RC	3-5/8 x 5/16 x .035 92 x 8 x .9	18		Contours - metals under 1/8" / 3.2mm.
20554- 424R	20555- S424R	4 x 3/4 x .035 100 x 20 x .9	24		Metal & galvanized pipe 18-gauge and under.
20568- 624R	20569- S624R	6 x 3/4 x .035 150 x 20 x .9	24		Metal & galvanized pipe 18-gauge and under.
20570- 636RP	20571- S636RP	6 x 3/4 x .050 150 x 20 x 1.3	6		For plaster, plaster board and lath. Bi-directional cutting.
2 per Pack	20512- 6066R	6 x 7/8 x .063 150 x 22 x 1.6	6		Demolition work in nail-embedded wood.
2 per Pack	20598- 966R	9 x 7/8 x .062 225 x 22 x 1.6	6		Demolition work in nail-embedded wood.
2 per Pack	20597- 960R	9 x 7/8 x .062 225 x 22 x 1.6	10		Demolition work in wood and metal. Fire and rescue.
2 per Pack	20500- 106R	12 x 7/8 x .062 300 x 22 x 1.6	6		Demolition work in nail-embedded wood.
2 per Pack	20592- 650R	6 x 3/4 x .050 150 x 20 x 1.3	10/14		Demolition work in wood and metal. Fire and rescue.

HIGH PERFORMANCE ABRASIVE BLASTING SYSTEMS

PORTABLE ABRASIVE BLASTERS

- Designed to provide the industry's lowest pressure drop, resulting in higher productivity.
- Low maintenance design minimizes downtime.
- Low profile and ergonomic design make abrasive loading easier.
- Wheel clearance provides for greater stability when system is in use.
- Loading skid protects valves and piping, allows for easier handling and transport to the jobsite.
- Features Schmidt[®] normally closed, fail-safe valves and controls for greater safety and performance.
- 125 psi ASME code vessel with 150 psi systems available.
- Available: 1.5, 3.5, 6.5 and 10 cu. ft. sizes.



PACKAGE A

Portable blaster with pneumatic remote controls, ComboValve[®], MicroValve 55-ft. twinline control hose, deadman control and moisture separator.



PACKAGE B

Includes package "A" plus 50-ft. blast hose with coupling, nozzle holder and long venturi nozzle.



PACKAGE C

Includes package "B" plus OSHA approved Type CE respirator, 25-foot air supply hose kit and airline filter.



NOZZLES

WIN[™] Water Induction Nozzle

Application: Stripping delicate substrates, cleaning.

Fan Nozzle

Application: Stripping delicate substrates, cleaning.

ARMEX[®] Performance Nozzle (wet)

Application: Paint stripping.

ARMEX[®] Profile Performance Nozzle (wet)

Application: Paint stripping, corrosion removal.

NOVA 2000 ABRASIVE BLASTING HELMET

The Nova 2000 is engineered with U.V. stabilized and abrasion-resistant high-density polyethylene. This super-tough helmet shell meets penetration requirements of ANSI 289.1, while also offering premium comfort with its lightweight, multi-layered sound-deadening foam padding, Velcro-mounted for easy removal and cleaning. Helmet is NIOSH-approved.

ASTRO ABRASIVE BLASTING HELMET

The Astro's abrasion-resistant polyethylene helmet shell is reliable, curable and NIOSH-approved, with a high pressure control valve or low pressure constant flow valve. The replaceable cape cover band prevents abrasives from entering by sealing the top of the durable nylon cape.





*Pipe Fittings
Valves • Struts
Lock Nuts • Pipe Clamps • Pipe Supports
Angle Finders • Inclinometers
Plumb Bobs • Contour Markers
Pipe Brushes • Paste Flux
Test Plugs • Melting Furnaces
Pneumatic Plugs • Test Pumps
Deflection Gauges • Manhole Testers
Pipe Lifts/Dollies • Pipe Fabrication Stands
Welding Jacks/Clamps
Beveling Machines • Pipe/Tubbing Cutters
Roll Groovers • Power Drives
Vises • Drilling/Tapping Machines
Ratchet Shears/Scissors
Guillotine Pipe Cutters • Ratchet Wrenches/Sockets
Pipe Vises • Manual Pipe Threaders*

Plumbing/Mechanical **11**



*Copper Cutting/Prep Machines
Power Threaders • Cutting Oil
Die Heads • Pipe Stands
Portable Roll Groovers
Hole Cutting Tools • Tubing Cutters
Flaring Tools • Levers • Ratchet Benders
Line Locating Equipment • Pipe Inspection Equipment
Drain Cleaners*



PIPE FITTINGS

Reducing Elbow



90° Elbow



Reducing Tee



45° Elbow



Coupling



Squarehead Plugs
Cored



Solid



90° Street Elbow
Straight Reducing



Straight Tee



Reducer



Countersunk



150 lb. union



45° Street Elbow



Cross



Cap



Floor Flange



Hex Bushing



Steel Pipe Nipples
Standard, black
Standard, galvanized
Extra Strong, black or galvanized



Closed



Short or Long

*Wharton offers
a wide selection of
pipe fittings.*

Brass Ball Valves

- For control of air, water, oil and gas in hose or pipe lines.
- Rated to **600 PSI WOG**; **100 PSI Steam**.
- Forged brass bodies.
- Blow-out proof stems.
- Teflon® seats, seals and thrust washers.
- Chrome-plated brass balls and plated steel handles.
- Temperature range to **320°F**.



Size	Port	Part#
1/2"	Standard	BV50
3/4"	Standard	BV75
1"	Standard	BV100
1-1/4"	Standard	BV125
1-1/2"	Standard	BV150
2"	Standard	BV200

Also in stock 3" and 4" ball valves.

Brass Gate Valves

- Rated **200 PSI** non-shock cold water, oil or gas.
- Brass body.
- Female NPT threaded ends.
- Threaded bonnet.
- Integral seat.
- Adjustable packing nut.
- Non-rising stem.
- Solid wedge disc.
- Iron handwheel.
- 100% factory tested.



NPT Size	Part #
1/4"	BGV25
3/8"	BGV38
1/2"	BGV50
3/4"	BGV75
1"	BGV100
1-1/4"	BGV125
1-1/2"	BGV150
2"	BGV200
2-1/2"	BGV250
3"	BGV300
4"	BGV400

Horizontal Swing Check Valves

- Swing check valves are designed to prevent back flow in plumbing and liquid piping systems, while offering full flow performance with a minimum of turbulence or pressure.
- A positive seating disc allows flow only in one direction and a screw-in cap provides easy access for periodic cleaning.
- For horizontal or vertical use.
- Rated to **200 PSI WOG**.
- Brass body.
- Brass disc.
- Temperature range **-20° to 150°F**.



Size	Part #
1/2"	SWCV50
3/4"	SWCV75
1"	SWCV100
1-1/4"	SWCV125
1-1/2"	SWCV150
2"	SWCV200
3"	SWCV300

1-5/8" WIDE CHANNELS

SPECIFICATIONS

GENERAL

Multi-Strut channels are manufactured by a series of forming dies or rolls which progressively cold work the strip steel into the desired channel configuration. This method produces a cross section of uniform dimensions within a tolerance of plus or minus .015" on outside dimensions.

MATERIAL

Multi-Strut channels are produced from prime structural steel covering the following specifications:
 HOT DIP PRE-GALVANIZED STEELASTM 653
 HOT ROLLED STEELASTM 570

WELDING

Channel combinations of two or more elements are spot welded together to form various multiple combinations.

LENGTH INFORMATION

Multi-Strut channels are produced and stocked in 10- and 20-foot lengths. Other lengths are available upon request.

FINISHES

Multi-Strut channels are stocked in plain, pregalvanized and polyurethane green powder coated finish. Other finishes are available upon request.

LOADING DATA

- 1) For concentrated beam loads at center span, multiply the load shown in table by .5 and deflection by .8.
- 2) For fabricated channels, reduce the beam loads by the percentage as follows:
 - KO = 5%
 - RS = 10%
 - OS = 15%
 - OS3 = 30%

Channels:

1-5/8" Wide Channel - Pre-Galvanized.
 ASTM - A653 - Grade A - Zinc Coated Sheet by Hot Dip Process - Structural Quality.

13/16" Wide Channel and Closure.
 ASTM - A366 - Cold Rolled Carbon Sheet Commercial Quality.



13/16" WIDE CHANNELS

SPECIFICATIONS

GENERAL

Multi-Strut mini-channel is manufactured by a series of forming dies or rolls which progressively cold work the strip steel into the desired channel configuration. Multi-Strut mini-nuts are designed with specially formed teeth so as to grip the return lip of the mini-channel, assuring a secure lock.

MATERIAL

Multi-Strut mini-channel is produced from 19 gauge prime steel. Multi-Strut mini-nuts are manufactured from mild steel strip and are case hardened.

FINISH

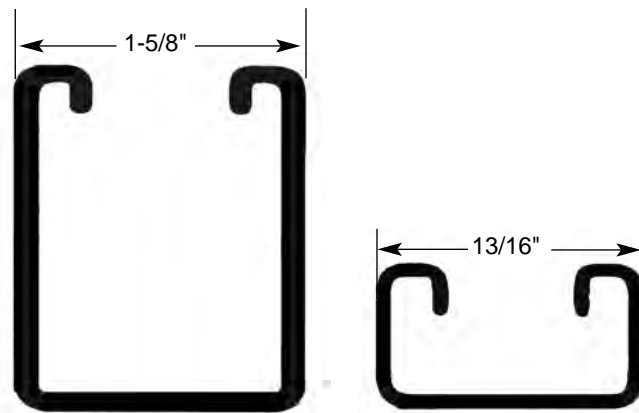
Multi-Strut mini-channel is stocked in both plain and pregalvanized finishes. Multi-Strut mini-nuts have an electro-galvanized finish. Other finishes are available upon request.

LENGTH

Multi-Strut mini-channel is stocked in 10 foot lengths.

WELDING

Multi-Strut back to back mini-channel is a combination of two pieces of channel welded together, with spotwelds spaced three inches on center throughout the length of the channel.



Other materials, lengths and specifications are available upon request.

Grip Lock Nuts

Finished in Electro-Galvanized

The case hardened carbon steel nuts are designed with special formed teeth in the parallel channel recesses. The nuts are made to grip the returned lip of the channel. The shearing action of the teeth assures a positive locking of the H-Strut channels to the fittings.

WITHOUT SPRING



SHORT SPRING



REGULAR SPRING



LONG SPRING



TOP SPRING NUT



Flat Plate

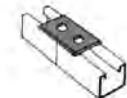
Finished in Electro-Galvanized

Fittings are manufactured from 1/4" thick carbon steel. All fittings are 1-5/8" wide and all holes are 9/16" in diameter, spaced 1-7/8" on centers and 13/16" from ends. All dimensions apply to all fittings except where noted.

SQUARE WASHER



TWO-HOLE
SPLICE PLATE



FOUR-HOLE
SPLICE PLATE



Threaded Fasteners

Finished in Electro-Galvanized

HEX HEAD CAP SCREWS

For use with Grip Lock Nuts to secure fittings to channels.



FLAT HEAD MACHINE SCREWS



ROUND HEAD MACHINE SCREWS



LOCK WASHERS



FLAT WASHERS



HEX NUTS



SQUARE NUTS



ROD COUPLERS



ALL-THREAD ROD



U BOLT



THREE-HOLE SPLICE PLATE



FLAT PLATE CONNECTOR



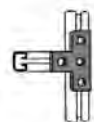
THREE-HOLE FLAT ANGLE PLATE



FOUR-HOLE CORNER JOINER PLATE



FOUR-HOLE TEE PLATE



CROSS PLATE

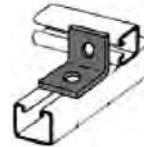


Angle Brackets

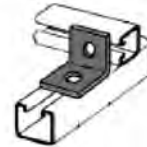
Finished in Electro-Galvanized

1/4" thick, 1-5/8" wide, holes 9/16" diameter, spaced 1-7/8" on center and 13/16" from end.

TWO-HOLE CORNER ANGLE



CONNECTION ANGLE



PIPE CLAMPS

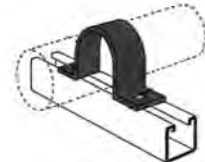
Finished in Electro-Galvanized

All clamps are 1-5/8" wide and all holes are 9/16" in diameter.

PARALLEL PIPE CLAMP



PIPE STRAPS



ONE-HOLE TUBING CLAMP



EMT CLAMPS RIGID CONDUIT CLAMPS UNIVERSAL CLAMPS



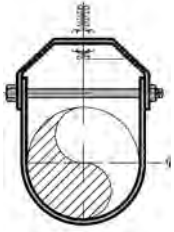
TUBING CLAMPS

Available in cooper plated.

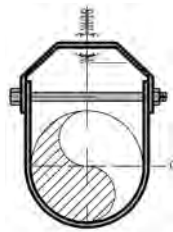


Other materials are available upon request.

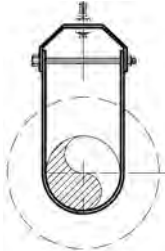
PIPE ATTACHMENTS



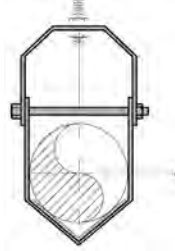
CLEVIS HANGER



CLEVIS HANGER FOR DUCTILE IRON PIPE



ELONGATED CLEVIS HANGER



VEE CLEVIS HANGER



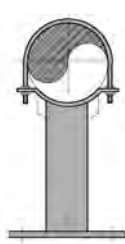
ADJUSTABLE SWIVEL RING



BAND HANGER



ADJUSTABLE FLOOR SUPPORT



FLOOR SUPPORT



PIPE SUPPORT



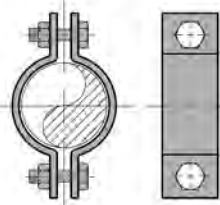
ADJUSTABLE PIPE SUPPORT



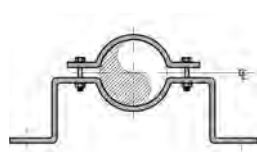
RETURN LINE OFFSET HOOK



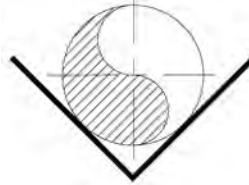
RETURN LINE HOOK



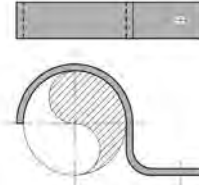
TWO-BOLT PIPE CLAMP



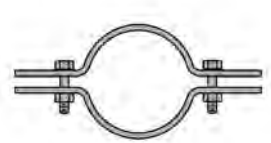
OFFSET PIPE CLAMP



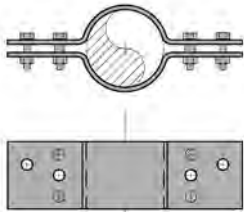
VEE TROUGH



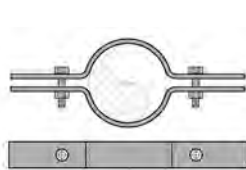
ONE-HOLE PIPE CLAMP



DUCTILE IRON PIPE CLAMP



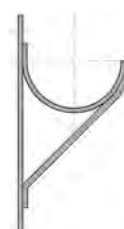
RISER CLAMP



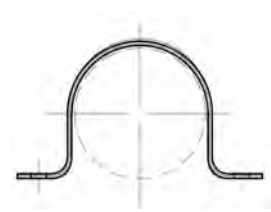
EXTENSION RISER CLAMP



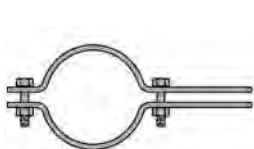
WIRE PIPE HOOK



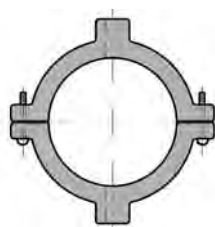
WALL PIPE SUPPORT



PIPE CLAMP



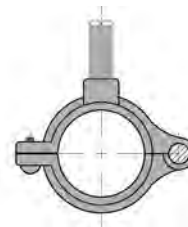
RISER CLAMP



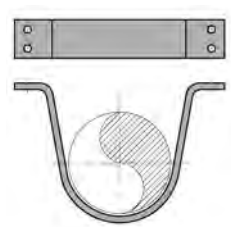
SPLIT RING HANGER DOUBLE TAPPING



HINGE HANGER

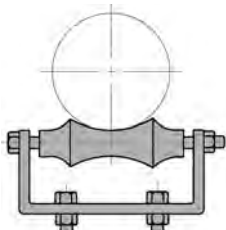


EXTENSION RING HANGER

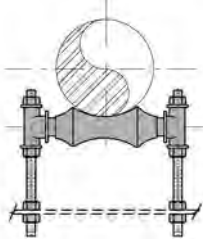


SHORT CLIP

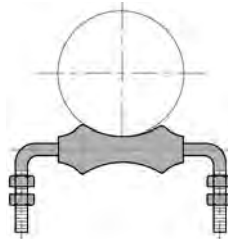
PIPE ROLLS



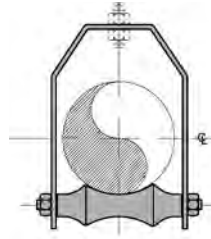
ROLLER CHAIR



**ADJUSTABLE
ROLL SUPPORT**



ROLLER SUPPORT



ROLL HANGER



PIPE ROLL

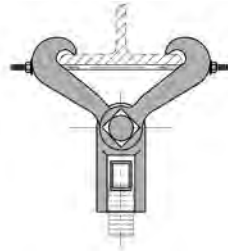
PIPE SHIELDS/ BEAM CLAMP



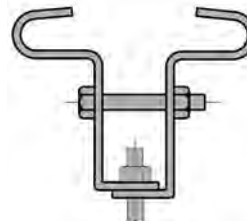
INSULATION SHIELD



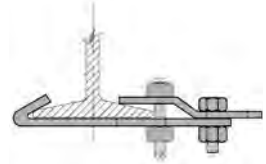
**IRON PIPE
INSULATION SHIELD**



STEEL BEAM CLAMP

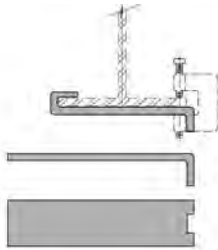


BEAM CLAMP



**ADJUSTABLE
SIDE BEAM CLAMP**

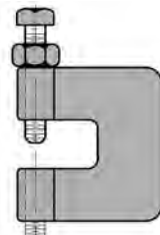
C-CLAMPS



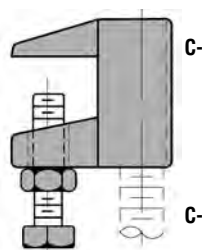
**C-CLAMP
RETAINING CLIP**



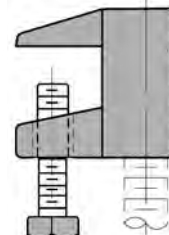
**C-CLAMP
WITH LOCKING NUT**



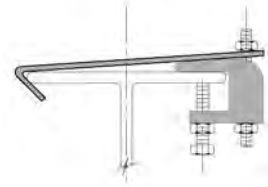
**C-CLAMP WITHOUT
LOCKING NUT**



**TOP BEAM CLAMP
WITH LOCKING NUT**

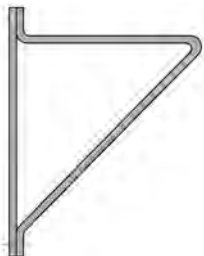


**TOP BEAM CLAMP
WITHOUT LOCKING NUT**

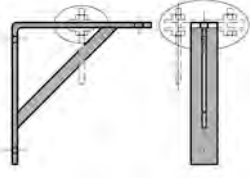


**TOP BEAM CLAMP
CLIP**

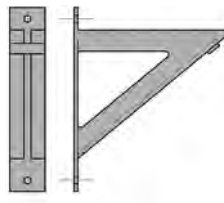
STRUCTURE ATTACHMENTS / RODS / FASTENERS



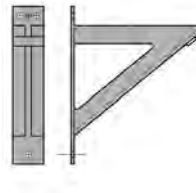
STEEL BRACKET



**LIGHT WELDED
STEEL BRACKET**



**MEDIUM WELDED
STEEL BRACKET**



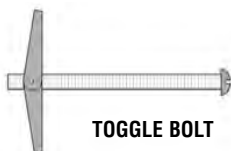
**HEAVY WELDED
STEEL BRACKET**



ANCHOR BOLT



EYE SOCKET



TOGGLE BOLT



MACHINE THREAD ROD



ALL-THREAD HANGER ROD

Angle Finders

Dasco Pro angle finders are molded of high impact plastic and allow the user to read any angle instantly and accurately from 0° to 90° in any quadrant. Not affected by magnet fields, cold or heat. Available with optional features such as magnetic base and V-groove sides for easy use on round surfaces.

Item #	Description	UPC No. 018371
AF100	Base and side V-grooved for easy use on round surfaces, 2-3/4" diameter dial	100007
AF100M	Magnetic base, V-grooved side, 2-3/4" diameter dial	100809
AF200-2VM	Magnetic base, plumb and level vial, V-grooved side, 2-3/4" diameter dial	102988
AF200M	Ideal plumb bob, magnetic base 2-3/4" diameter dial	200806
AF200VM	Magnetic base, 1 level vial, 2-3/4" diameter dial	202985
AF300	Base and side V-grooved for easy use on round surfaces, big 4" diameter dial	300001
AF300-2V	1 plumb, 1 level vial big 4" diameter dial	300803
AF700M	Magnetic base, V-grooved side big 4" diameter dial, notched back for metal ruler attachment	700009
AF700VM	Magnetic base, V-grooved side big 7" diameter dial, 1 level vial notched back	700801



AF100



AF200M



AF300



AF700M

Industrial Inclinometer

Dasco Pro industrial inclinometers are constructed of durable aluminum alloy designed for rugged use under all working conditions. Reads angles instantly and accurately to within 1/2 of 1 degree. Angle and grade chart shows angles in degrees and converts them to pitch per inch and pitch per foot.

Item #	Description	UPC No. 018371
I1100-2VM	1 level, 1 plumb vial, magnetic base, V-grooved sides and top, 3" diameter dial	110020



I1100-2VM

Fast and Accurate Plumb Bob Setters and Bobs



Plumb-Rite™ PZB-400

- Universal plumb bob setter with commercial grade 14 oz. bob.
- Setting pin for wood and drywall surfaces, strong magnet for steel frames.
- Adjustable hook ratchets to cinch onto beams or hook onto nails or studs.
- Braided nylon line extends and holds at lengths up to 14½ ft., retracts into case automatically.
- Internal “flush pin” for zero distance measurements with plumb line flush with surface.
- Unique plumb bob features a quick stabilizing cap that reduces bob wobble and spin.
- Bob also features embedded elastomer side bumpers and a thick tip guard.
- Adjustable for bobs weighing from 3.5 oz. to 35 oz.

Use Plumb-Rite bobs PQB600, PQB400, PQB300, and PQB200.

Plumb-Rite™ PZB-300

- Universal plumb bob setter with commercial grade 10 oz. bob.
- Setting pin for wood and drywall surfaces, strong magnet for steel frames.
- Ribbed eyelet to hook onto nails or studs.
- Braided nylon line extends and holds at lengths up to 10 ft., retracts into case automatically.
- Internal “flush pin” zero distance measurements with plumb line flush with surface.
- Unique plumb bob features a quick stabilizing cap that reduces bob wobble and spin.
- Bob also features embedded elastomer side bumpers and a thick tip guard.

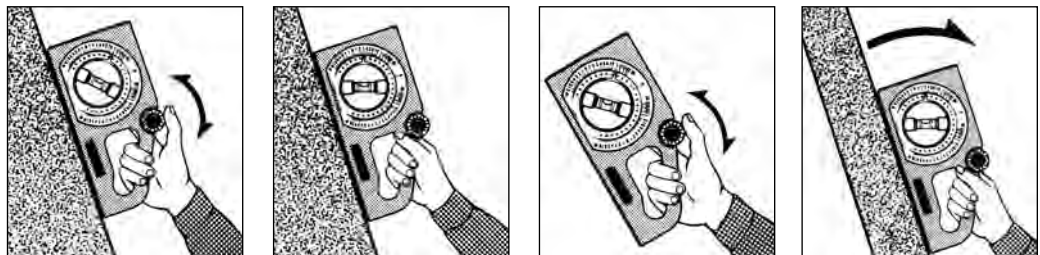
Use Plumb-Rite bobs PQB300.

Rotary Dual-Scale Angle Meters



Slant 100

- Quickly measure, verify or replicate surface angle or pitch.
- Simple, one-hand operation with large thumb screw positioned on handle.
- Big, easy-to-read scales rotate and align using a large bubble vial.
- Impact resistant, heavy gauge ABS case.
- Angle scale reads 0 to 130 degrees in 2-degree increments.
- With handy conversion charts and reference graphics.





Contour Marker®

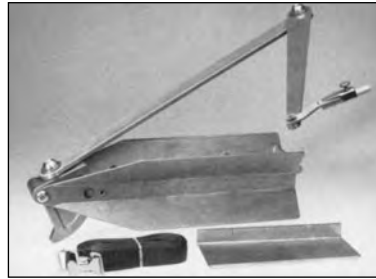


0721-0000

Curv-O-Mark® layout systems have earned a reputation for quality and consistency over a wide range of industries. Easy to use, made to use longer, there are Curv-O-Mark tools to help bring precision to most any layout task.

- Compact, time-saving tool used to lay out pipe and structural steel joints.
- Laterals at any angle, tees, wyes, crosses, elbows – any type or size of joint can be quickly and precisely laid out.
- No more complicated mathematical formulas.
- No more cut and try.
- No more needless material waste.
- Can be used to lay out pipe from 1-1/2 to 18" diameter, or structural steel members up to 18".
- Consists of an X-shaped frame, calibrated protractor and a triple-jointed marking arm and holder.
- Holder accepts a soapstone crayon (included), felt pen or pencil.
- Frame easily folds into compact tool that fits into pocket or carrying case.
- Can be used rightside up or upside down, depending on the direction of the line to be scribed.
- Protractor calibrated on both sides, one in degrees, the other in rise-inches-per-foot, to service any type of measurement need.
- Comes with a Structural Adaptor designed to simplify the layout of structural joints, including I-beams, angles, channels, square tubing and similar shapes.
- Optional Combination Adaptor Accessory allows the Marker to lay out joints on larger size pipe, as well as scribe compound angles with just one setting.
- Made from durable, lightweight aluminum.
- Requires minimal maintenance, only occasional oiling of the joints, to provide long service life.

Jumbo Contour Marker®



0721-0003

- Larger version of the Contour Marker.
- Developed for use in the layout of large diameter pipe, from 8 to 48".
- With Structural Adaptor, can be used in the layout of extremely large structural steel members up to 48" wide.
- Comes complete with a durable web strap that helps hold the unit in place during layout.
- Built-in adjustable dial bubble protractor ensures accurate center-line location.
- Soapstone crayon included.

Combination Adaptor Accessory



0721-0001 – Standard
0721-0004 – Jumbo

- Designed for use with Standard and Jumbo Contour Markers.
- Simplifies handling and increases layout capacity.
- Permits use of all four sides of the Contour Marker and permits marking on small diameter pipe, over nipples, old welds or on wrapped pipe.
- Can also provide layouts with compound angles using a single setting, or any degree of take-off on elbows and turns up to 90°.

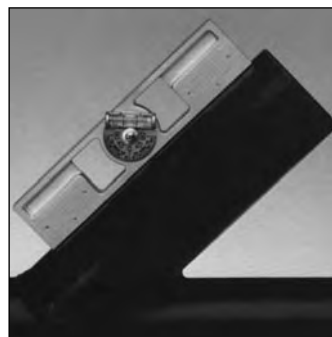
Centering Heads



0721-0005 – Standard
0721-0006 – Jumbo

- Aid in the setting of centerlines, establishing angles and marks for butt-ins, locating points inside pipes and tanks, laying out keyways and measuring declivity.
- Standard model used on pipe 1/2" diameter and larger.
- 4" Y-type head and is fitted with an adjustable dial bubble protractor (DSL) and a manually operated hardened centering pin.
- Jumbo model is for pipe 1" diameter and up.
- 8" Y-type head, and a DSL.
- Spring-loaded hardened centering pin eliminates the need for a hammer.

Pro-Mag Level



0721-0007

- Lightweight, easy to use tool for determining angles.
- Has two cast-in 25 lb. pull magnets that hold securely to any steel surface.
- Has a 360° adjustable DSL with two 90° quadrants graduated in 2-1/2° increments.
- Also cast-in are tables used to convert degree-of-angle to rise-in-inches-per-foot or millimeters-per-meter.
- Groove on the bottom edge permits use on a small pipe.
- 9" long, 2" high and 3/4" thick.
- Made from cast aluminum.
- Ideal for pipefitter, welder, jig builder or anyone who has to determine angles or do setup work.

#6100 Standard Fitting Brush



Single Stem
Single Spiral

- First choice in price and quality.
- Heavy gauge galvanized stem wire.
- Single stem, single spiral construction.
- Crimped high-carbon fill material.
- Brushes clearly marked with actual (O.D.) and nominal (I.D.) sizes.

Catalog No.	Nominal (I.D.)
61000	1/8"
61070	1/4"
61150	3/8"
61210	1/2"
61270	5/8"
61330	3/4"
61390	7/8"
61450	1"
61500	1-1/4"
61560	1-1/2"
61620	2"
61211	1/2"
61321	3/4"
61451	1"

#6200 Series Hand Tube Cleaning Brush



The first high impact (ABS) plastic tube cleaning brush ever made. Cleans and scores the outside diameter of tubing with minimal effort and makes for a better soldering joint.

Catalog No.	(I.D.)	(O.D.)
62501	1/2"	5/8"
62502	3/4"	7/8"
62510	1"	1-1/8"

Abrasive Clean-Up Mini-Strips



These pocket-size packs of ten (10) abrasive strips are ideal for small jobs.

Catalog No.	Description	Grit Size
70085	Yellow - Open Coat	120-AO
70065	Red - Closed Coat	120-AO
70160	Brown - Closed Coat	120-AO
70168	"Wet One"	120-AO
70120	Open Mesh	180-AO
70119	Open Mesh	180-AO
70000	Assortment	(1 ea. of Above)

Four-in-One Brush



Single Stem
Single Spiral

The only quality combination tube cleaning and fitting brush on the market. Made of high impact engineered plastic, designed for easy parts replacement. Ideal for every tool box. Available in high carbon steel for plumbing and stainless steel for refrigeration.

Carded

Catalog No.	Description
70260	1/2" x 3/4" (ID) 4-in-1 Brush

Bag

Catalog No.	Description
70264	1/2" x 3/4" (ID) 4-in-1 Brush
70269	1/2" x 3/4" (ID) Replacement Kit

Solder Paste Flux



Clean Fit Solder Paste Flux is a non-aggressive formula used to sweat copper and brass fittings. Not for electronic use unless so stated. The all-purpose formula stays stiff in hot weather and stays soft and sticky in cold weather.

Catalog No.	Description
70700	Solder Paste Flux - 2 oz. POP Display
70702	Solder Paste Flux - 8 oz. Tub
70705	Solder Paste Flux - 1 lb. Tub
71030	2 oz. Solder Paste Flux - Card
71031	2 oz. Solder Prep Kit - Bag (2 oz. Flux, Abrasive Cloth, Acid Brush)

Acid, Solder Paste and Flux, Adhesive Applicator Brushes



Quality, durable, coated tin paste, bright finished metal handle available in three (3) sizes, minimum 5-7/8" long, pure medium stiff, black, graded natural horsehair bristle for smooth even application. The handles are firmly clinched to the bristles to eliminate bristle fall-out.

Catalog No.	Description
71020	#2 Acid Brush 3/8" - 3 each Carded
71021	#2 Acid Brush 3/8" - 6 each Display Bag
71022	#1 Acid Brush 1/4" - 10 each Display Bag

WING NUT TEST PLUGS

The Series A Wing Nut Test Plugs are designed and developed for testing for leaks and for sealing off sections of pipelines generally made of cast iron, steel, vitrified clay, concrete, etc. These plugs come with a hollow stem which can be used as a fill or drain pipe. Turning the wing nut expands the rubber ring tightly against the inside of the pipe. Hand tightening is usually adequate in smaller sizes, but a wrench can be used on larger sizes to give a better seal.

LOW PRESSURE PLUG FOR WATER ONLY

Maximum test pressures are dependent upon the friction of the test plug rubber with the inside of the pipe.



CODE NO.	FITS INSIDE PIPE DIA. (IN INCHES)	UNEXPANDED OUTER DIAMETER (IN INCHES)	STEM CONNECTION	WEIGHT (IN LBS.)
A-005	1/2"	15/32"	1/16" NPT	0.3
A-007	3/4"	23/32"	1/8" NPT	0.4
A-010	1"	31/32"	3/8" NPT	0.5
A-012	1-1/4"	1-1/8"	3/8" NPT	1.0
A-015	1-1/2"	1-3/8"	3/8" NPT	1.0
A-020	2"	1-3/4"	1/2" NPT	1.6
A-025	2-1/2"	2-3/8"	1/2" NPT	1.8
A-030	3"	2-3/4"	1/2" NPT	2.1
A-035	3-1/2"	3-3/8"	1/2" NPT	2.3
A-040	4"	3-5/8"	1/2" NPT	2.6
A-050	5"	4-1/2"	1/2" NPT	3.7
A-060	6"	5-1/2"	1/2" NPT	5.4
A-070	7"	6-5/8"	1/2" NPT	10.5
A-080	8"	7-1/2"	1/2" NPT	11.0
A-100	10"	9-1/2"	1/2" NPT	16.8
A-120	12"	11-1/2"	1" NPT	31.0
A-130	13"	12-5/8"	1" NPT	45.0
A-140	14"	13-5/8"	1" NPT	47.0
A-150	15"	14-5/8"	1" NPT	55.0
A-160	16"	15-5/8"	1" NPT	62.0
A-170	17"	16-5/8"	1-1/4" NPT	70.0
A-180	18"	17-5/8"	1-1/4" NPT	75.0
A-190	19"	18-5/8"	1-1/4" NPT	80.0
A-200	20"	19-5/8"	1-1/4" NPT	89.0
A-210	21"	20-5/8"	1-1/4" NPT	102.0
A-220	22"	21-5/8"	1-1/4" NPT	113.0
A-240	24"	23-5/8"	1-1/4" NPT	136.0

NOTE: WE CAN DESIGN AND MANUFACTURE SPECIAL SIZE TEST PLUGS ON REQUEST.

PLUMBERS' MELTING FURNACES



A1-101



A2-201

PROPANE GAS OPERATED

- Both models made of gray iron casting.
- Fit all cylinders with 3-inch flanges.
- Work off direct propane cylinder pressure with instant lighting.
- Powerful wide-range flame.
- Melt 40 pounds of lead in 5 minutes and even greater amounts with larger wind shield shown below.
- Heavy gauge wind shield with heavy gray iron casting bottom.
- Accommodates 6- or 8-inch lead pots on standard models and 10-inch lead pots with Model A-101X wind shield.
- Shipping weight (either model): 11 pounds. If Model A-101X wind shield is substituted, weight is 13 pounds.

ACCESSORIES



**MODEL A1-101S
STAND WITH VALVE**

Used with either Model A1-101 or A2-201, this larger wind shield will accommodate a 10-inch lead pot for greater melting capacity.
Shipping weight: 5.5 pounds.



**MODEL A1-101X
HEAVY WIND SHIELD**

Used with Model A1-101 only. Stand converts to free-standing floor unit.
Shipping weight: 5 pounds.



CAST IRON LADLES

Code #	Diam.	Capacity
L-0202	3.0"	2.50 lbs.
L-0203	3.5"	3.00 lbs.
L-0204	4.0"	4.25 lbs.

STEEL LADLES

Code #	Diam.	Capacity
L-0202S	3.0"	2.50 lbs.
L-0203S	3.5"	3.00 lbs.
L-0204S	4.0"	4.25 lbs.

CAST IRON MELTING POTS

Code #	Diam.	Capacity
L-0306	6.0"	25 lbs.
L-0308	8.5"	50 lbs.
L-0310	10.0"	75 lbs.

Code #	Description
A1-101	Furnace
A1-101A	Base
A1-101-1	Windshield Assembly
A1-101-S	Stand with Valve
A1-101-X	Heavy Wind Shield
A2-201	Furnace





TEST BALL® PNEUMATIC PLUGS



Pneumatic Plugs

Single-Size Test-Ball® (3/4" through 6")

The most popular pipe plug for 50 years still gets the job done every time. Designed to test drain, vent and waste systems, this single-size Test-Ball® plug is a must for those involved in the installation and repair of residential, commercial and industrial piping systems. Made from long-lasting, natural rubber – molded with Cherne's trade-marked rib design – the single-size Test-Ball® plug is durable, tear-resistant, and works on any type of pipe, including out-of-round pipe.

Features:

- Much more flexible than traditional mechanical plugs.
- Easily fits test tees, sanitary tees, floor drains and roof vents.
- Includes a 12" removable zinc-plated steel chain for ease of replacement.
- Over-sized ring prevents accidental loss down a pipe.
- Can be used for head pressure testing or as a blocking plug for loc-pressure air testing.



Test tee



Closet bend



Sanitary tee



Floor drain



Roof vent

Part #	Size Usage Range			Maximum Allowable Back Pressure			Product Specifications			
	Nominal Size	Minimum Diameter	Maximum Diameter	Air Pressure PSI*	Head Pressure (Ft. of Head)	Required Inflation Pressure	Product Weight	Deflated Length	Deflated Diameter	Inflation Valve Thread Size
270008	3/4" - 1-1/4" (20-30mm)	.75" (19mm)	1.31" (33mm)	17 (1,2 bar)	40 (12 M)	45 (3,1 bar)	3.5 oz. (.1kg)	3.75" (95mm)	.73" (18.5mm)	Molded in valve with cap
270016	1-1/4" - 1-1/2" (30-40mm)	1.17" (30mm)	1.75" (44mm)	13 (0,9 bar)	30 (9.1 M)	40 (2,8 bar)	3.5 oz. (.1kg)	5.56" (141mm)	1.12" (33mm)	Molded in valve with cap
270024	2" (50mm)	1.9" (48mm)	2.25" (57mm)	13 (0,9 bar)	30 (9.1 M)	40 (2,8 bar)	3.5 oz. (.1kg)	3.34" (85mm)	1.78" (45mm)	Molded in valve with cap
270108	2-1/2" (65mm)	2.34" (59mm)	2.75" (70mm)	13 (0,9 bar)	30 (9.1 M)	35 (2,4 bar)	6.5 oz. (.2kg)	4.5" (114mm)	2.31" (59mm)	Molded in valve with cap
270032	3" (75mm)	2.77" (70mm)	3.25" (83mm)	13 (0,9 bar)	30 (9.1 M)	35 (2,4 bar)	6.5 oz. (.2kg)	5.18" (132mm)	2.64" (67mm)	Molded in valve with cap
270040	4" (100mm)	3.41" (87mm)	4.25" (108mm)	13 (0,9 bar)	30 (9.1 M)	30 (2,1 bar)	9 oz. (.25kg)	6.41" (163mm)	3.28" (83mm)	Molded in valve with cap
270059	5" (125mm)	4.6" (117mm)	5.25" (133mm)	13 (0,9 bar)	30 (9.1 M)	30 (2,1 bar)	1.3 lbs. (.6kg)	7.88" (200mm)	4.48" (114mm)	Molded in valve with cap
270067	6" (150mm)	5.44" (138mm)	6.25" (159mm)	13 (0,9 bar)	30 (9.1 M)	30 (2,1 bar)	1.9 lbs. (.85kg)	9.05" (230mm)	5.32" (135mm)	Molded in valve with cap

Extension/Inflation Hoses

(Well suited for plugs up to 15", 3/16" ID hose)



Part #	Description	Weight
274011	2' Extension hose	.25 lb. (.11kg)
274038	3' Extension hose	.5 lb. (.23kg)
274054	5' Extension hose	.75 lb. (.34kg)
274100	10' Extension hose	1.5 lbs. (.68kg)
274208	20' Extension hose	2.5 lbs. (1.14kg)
055816	Deflator with clamp (female replacement end)	.06 lb. (.03kg)
055808	Inflator with clamp (male replacement end)	.03 lb. (.01kg)



MUNI-BALL® PNEUMATIC PLUGS

Pneumatic Plugs Single-Size Muni-Ball®



Cherne's Muni-Ball® plugs are the most versatile pipe plugs on the market today. Made from durable, natural rubber, Muni-Ball® plugs feature a lightweight, rust-proof threaded aluminum bypass. Available attachments allow the plug to also be used as a Remo® (remote-placement) plug or as a front plug for a low-pressure air test.

Features:

- Plugs can be used for blocking sewer flow or conducting sewer air tests.
- Larger plugs come with an eyebolt for plug installation and removal.
- The multi-size design plug works in several pipe diameters.
- Remo® plug conversion and air testing conversion kits are available for most sizes.
- Muni-Ball® plugs 6" and larger come equipped with an eye bolt for raising and lowering while using a poly-lift line.
- Removable tire inflation valve (plugs 6" and larger) allows for repair or replacement with quick-disconnect fittings.

Part #	Size Usage Range			Maximum Allowable Back Pressure			Product Specifications					
	Nominal Size	Minimum Diameter	Maximum Diameter	Air Pressure PSI*	Head Pressure (Ft. of Head)	Required Inflation Pressure	Product Weight	Deflated Length	Deflated Diameter	Bypass Diam. (F NPT)	Inflation Valve Thread Size	Eye Bolt
262008	1-1/2" (40mm)	1.49" (38mm)	1.88" (48mm)	22 (1,5 bar)	50 (15 M)	40 (2,8 bar)	.3 lb. (.2kg)	3.8" (97mm)	1.4" (36mm)	1/8" Male bypass	Not removable	N/A
262010	2" (50mm)	1.88" (48mm)	2.25" (57mm)	22 (1,5 bar)	50 (15 M)	40 (2,8 bar)	.4 lb. (.3kg)	6" (152mm)	1.75" (44mm)	1/8" Male bypass	Not removable	N/A
262021	3" (75mm)	2.62" (67mm)	3.25" (83mm)	22 (1,5 bar)	50 (15 M)	40 (2,8 bar)	1.25 lbs. (.5kg)	8" (203mm)	2.5" (64mm)	3/4"	Not removable	N/A
262048	4" (100mm)	3.25" (83mm)	4.25" (108mm)	22 (1,5 bar)	50 (15 M)	40 (2,8 bar)	1.5 lbs. (.7kg)	8" (203mm)	3.13" (80mm)	3/4"	Not removable	1/4" (1)
262064	6" (150mm)	4.5" (114mm)	6.25" (159mm)	13 (0,9 bar)	30 (9.1 M)	35 (2,4 bar)	2 lbs. (1kg)	7" (178mm)	4.4" (112mm)	1-1/2"	1/8"	1/4" (1)
262080	8" (200mm)	7" (178mm)	8.25" (210mm)	13 (0,9 bar)	30 (9.1 M)	35 (2,4 bar)	5 lbs. (2.3kg)	10" (254mm)	6.71" (170mm)	3"	1/4"	1/4" (1)
262110	10" (250mm)	9" (229mm)	10.25" (260mm)	13 (0,9 bar)	30 (9.1 M)	35 (2,4 bar)	9 lbs. (4kg)	11.75" (298mm)	8.75" (222mm)	3"	1/4"	3/8" (1)
262129	12" (300mm)	10.5" (267mm)	12.25" (311mm)	13 (0,9 bar)	30 (9.1 M)	35 (2,4 bar)	13 lbs. (6kg)	13.75" (350mm)	10.25" (260mm)	3"	1/4"	3/8" (1)
262137	15" - 16" (375-400mm)	14" (356mm)	16.25" (413mm)	13 (0,9 bar)	30 (9.1 M)	35 (2,4 bar)	33 lbs. (15kg)	19.75" (502mm)	13.62" (346mm)	3"	1/4"	3/8" (2)
262188	18" (450mm)	17.5" (445mm)	19.85" (504mm)	13 (0,9 bar)	30 (9.1 M)	25 (1,7 bar)	79 lbs. (36kg)	24.75" (629mm)	16.9" (429mm)	4"	1/4"	1/2" (2)
262218	21" (525mm)	18.85" (479mm)	21.38" (543mm)	13 (0,9 bar)	30 (9.1 M)	25 (1,7 bar)	87 lbs. (39.2kg)	26" (660mm)	18.2" (462mm)	4"	1/4"	1/2" (2)
262242	24" (600mm)	21.95" (558mm)	24.9" (632mm)	13 (0,9 bar)	30 (9.1 M)	25 (1,7 bar)	125 lbs. (56.2kg)	28.75" (730mm)	21.19" (538mm)	4"	1/4"	1/2" (2)

*All Muni-Ball® plugs are suitable for air testing. Single-size Muni-Ball® plugs are not suitable for leak location testing.



Test Pumps

Part #	Description	Weight
273888	Econ-o-pump™ Test Pump – Solid wood handle, traditional thumb lock, 140 PSI high-pressure gauge w/ protective cover, all steel construction w/ cast iron base.	1 lb.
273958	Air-Max™ Test Pump – Durable steel barrel, large, textured steel base, 3' durable no-kink hose, reverse thumb lock.	3 lbs.
034588	Replacement hose and thumb lock.	6.4 oz.
273968	Air-Max™ Pro HV Test Pump – Larger barrel diameter - fewer strokes per inflation, contoured solid wood handle, forged steel construction for extra toughness, gauge with molded rubber cover, metal thumb lock, 3' hose w/ strain-relief.	6.25 lbs.
055728	Replacement hose and thumb lock.	8.2 oz.





DEFLECTION GAUGES

Deflection Gauges (Mandrels)

Deflection gauges (mandrels) are used to test flexible sewer pipe for out-of-roundness or deflection. This testing ensures that flexible pipe has been properly bedded and backfilled to give optimum performance. (Per ASTM Designation D2321)

They utilize a nine-arm design to ensure the pipe is tested accurately. This design also allows gravel and debris to easily pass through. Other gauges can get hung up – causing a deflection test to fail, even though the pipe is within tolerance. Meets ASTM requirements.

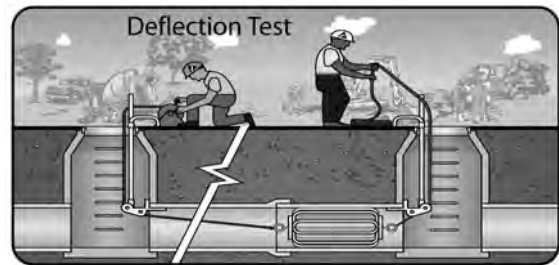
Features:

- Lightweight, corrosion-resistant.
- Field-verifiable without a proving ring.
- Assembles without tools.
- All sizes fit through standard 24" manhole.
- Fins for 4"-14" gauges have skid size equal to the nominal pipe size – gauge will meet regional codes and will not tip in the line.
- Nine-arm design ensures testing accuracy.
- Open design allows gravel and debris pass-through.



Part #	Nominal Size	Pipe	Deflection	Weight
Aluminum Fin Sets				
285688	6", 8", 10"	SDR 26	5%	18 lbs.
285005	6", 8", 10"	SDR 35	5%	18 lbs.
285013	6", 8", 10"	SDR 35	7.5%	18 lbs.
285698	8", 10", 12"	SDR 26	5%	19 lbs.
285021	8", 10", 12"	SDR 35	5%	19 lbs.
285048	8", 10", 12"	SDR 35	7.5%	19 lbs.
Mandrels for Aluminum Fin Sets				
285617	10" Mandrel (fits fins from 4"-15")			4 lbs.
285250	24" Mandrel (fits fins 18"-48")			11 lbs.

Nominal Size	Pipe	Average ID	Base ID	5% Deflection	7.5% Deflection
ASTM Specification D3034 (4"-15")					
4"	SDR 35	3.965"	3.895"	3.70"	3.60"
6"	SDR 26	5.764"	5.612"	5.33"	5.19"
6"	SDR 35	5.893"	5.742"	5.46"	5.31"
8"	SDR 26	7.715"	7.488"	7.11"	6.93"
8"	SDR 35	7.891"	7.665"	7.28"	7.09"
10"	SDR 26	9.644"	9.342"	8.87"	8.64"
10"	SDR 35	9.864"	9.563"	9.08"	8.84"
12"	SDR 26	11.480"	11.102"	10.55"	10.27"
12"	SDR 35	11.737"	11.361"	10.79"	10.51"
15"	SDR 26	14.053"	13.575"	12.90"	12.56"
15"	SDR 35	14.374"	13.898"	13.20"	12.86"
ASTM Specification F679 (18"-27")					
18"	SDR 26	17.177"	16.586"	15.76"	15.34"
18"	SDR 35	17.564"	16.976"	16.13"	15.70"
21"	SDR 26	20.249"	19.545"	18.57"	18.08"
21"	SDR 35	20.707"	20.004"	19.00"	18.50"
24"	SDR 26	23.296"	22.480"	21.36"	20.80"
24"	SDR 35	22.781"	21.964"	20.87"	20.32"
27"	SDR 26	25.674"	24.744"	23.51"	22.89"
27"	SDR 35	26.258"	25.327"	24.06"	23.43"
30"	SDR 26	29.306"	28.763"	27.32"	26.61"



Cherne's Fin Style Deflection Gauges are designed to be field verified by inspectors without the use of a proving ring. Simply place two fins end to end and measure the width. Add one inch to the mandrel and you have the outside dimension of the gauge. Using this method simplifies the inspector's job of verifying sizes on deflection gauges.

Nominal Size	Pipe	5% Aluminum	7.5% Aluminum	Product Weight
Deflection Gauge Part Numbers				
4"	SDR 26	n/a	n/a	n/a
4"	SDR 35	285056	285137	1-1/2 lbs.
6"	SDR 26	285638	n/a	2 lbs.
6"	SDR 35	285072	285153	2 lbs.
8"	SDR 26	285648	n/a	2-1/2 lbs.
8"	SDR 35	285080	285161	2-1/2 lbs.
10"	SDR 26	285658	n/a	3 lbs.
10"	SDR 35	285099	285188	3 lbs.
12"	SDR 26	285668	n/a	4 lbs.
12"	SDR 35	285102	285196	4 lbs.
15"	SDR 26	285678	n/a	5 lbs.
15"	SDR 35	285110	285218	5 lbs.
18"	SDR 35	285536	285560	8 lbs.
21"	SDR 35	285544	285579	10 lbs.
24"	SDR 35	285552	285587	11 lbs.
27"	SDR 35	285595	285609	12 lbs.



MANHOLE TESTERS

Air-Loc[®] Manhole Testers

Air-Loc[®] manhole testers provide the most efficient, accurate and cost-effective method of testing new, existing and rehabilitated manholes, per ASTM C 1244.

Vacuum testing identifies infiltration and exfiltration problems by creating a vacuum in a manhole and then monitoring a gauge for vacuum loss. Less expensive and faster than water testing, the Air-Loc[®] manhole testers' remote-inflation and monitoring system keeps users away from the "danger zone."



Air-Loc[®] Vacuum Pump Features:

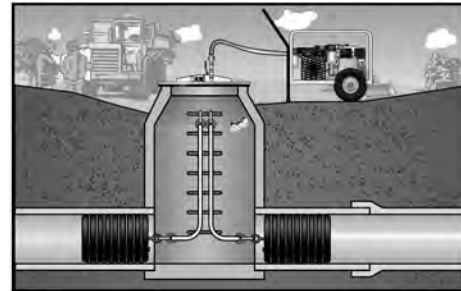
- Choose a Honda or Briggs & Stratton engine—each with low-oil shut-off to prevent engine failure.
- Heavy-duty frame with optional wheel kit.
- Unbreakable aluminum filter jars.
- Oil-free graphite vane pump for no-fuss lubrication.
- Draws 10" HG vacuum in about two minutes for a 15' deep manhole.

Bladder-Style Air-Loc[®] Head Assembly Features:

- Seals the inside diameter of the manhole.
- Supported by a durable aluminum brace.
- Push-pin rod design for easy depth adjustment.

Plate-Style Air-Loc[®] Head Assembly Features:

- Seals the surface of the manhole frame or cone.
- Seals a wide range of manhole diameters.
- Neoprene gasket for leak-free seal.



Air-Loc[®] Vacuum Generator Features:

- Converts standard air compressor into a vacuum source for testing manholes—draw a vacuum in minutes.
- Vacuum generator 450 delivers 14 CFM at 10" HG.
- Vacuum generator 600 delivers 42 CFM at 10" HG, meeting or exceeding the competition.

Part #	Description	Sealing Range	Product Weight
Air-Loc[®] Manhole Testers			
100008	24" Tester	20" - 24.3"	45 lbs. (20kg)
100028	26" Tester	21-1/2" - 26.3"	50 lbs. (23kg)
100048	30" Tester	25" - 30.3"	95 lbs. (43kg)
100068	32" Tester	27-1/2" - 32.8"	105 lbs. (48kg)
100088	36" Tester	31-1/2" - 36"	115 lbs. (52kg)
099708	32" Tester	18" - 30"	50 lbs. (23kg)
302023	38" Tester	18" - 36"	50 lbs. (23kg)
099718	44" Tester	18" - 42"	70 lbs. (32kg)

Part #	Description	Product Weight
Air-Loc[®] Manhole Testers: Bladder Style		
100018	24" Tester: Honda engine	242 lbs. (110kg)
100238	24" Tester: Briggs & Stratton engine	242 lbs. (110kg)
100138	26" Tester: Honda engine	257 lbs. (117kg)
100248	26" Tester: Briggs & Stratton engine	257 lbs. (117kg)
100148	30" Tester: Honda engine	274 lbs. (124kg)
100258	30" Tester: Briggs & Stratton engine	274 lbs. (124kg)
100158	36" Tester: Honda engine	294 lbs. (133kg)
100268	36" Tester: Briggs & Stratton engine	294 lbs. (133kg)

Part #	Description	Product Weight
Air-Loc[®] Manhole Tester Components		
278088	Gas vacuum pump: Honda engine	179 lbs. (81kg)
278168	Gas vacuum pump: B&S engine	175 lbs. (79kg)
098485	24" Replacement bladder	10 lbs. (4.5kg)
008404	26" Replacement bladder	11 lbs. (5kg)
099406	30" Replacement bladder	12 lbs. (5.4kg)
063541	36" Replacement bladder	14 lbs. (6kg)
032458	Optional wheel kit for vacuum pump	22 lbs. (10kg)
200458	Air-Loc [®] vacuum generator 450	2 lbs. (1kg)
200908	Air-Loc [®] vacuum generator 600	11 lbs. (5kg)

Part #	Description	Product Weight
Air-Loc[®] Manhole Testers: Plate style		
100168	32" Tester: Honda engine	225 lbs. (102kg)
100278	32" Tester: Briggs & Stratton engine	225 lbs. (102kg)
100178	38" Tester: Honda engine	224 lbs. (102kg)
100288	38" Tester: Briggs & Stratton engine	224 lbs. (102kg)
100188	44" Tester: Honda engine	252 lbs. (114kg)
100298	44" Tester: Briggs & Stratton engine	252 lbs. (114kg)





Roust-A-Bout

The lift that turns one man into a crew.

- Lifts 1,500 pounds (682kg).
- 15', 18' and 25' heights.
- Moves vertically and horizontally.
- Separate load and mast winches.
- 2-speed winch.
- Infinite load adjustment.
- Ideal for jobsite or shop.
- Mast and base separate quickly for EASY transport.

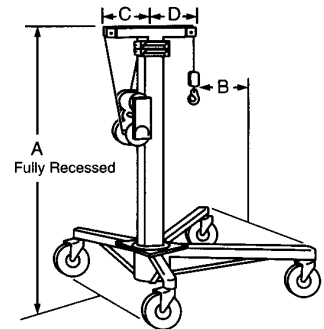


The Sumner Roust-A-Bout enables one man to lift and place loads in tight locations that would be impossible with other lifts. The flexible Roust-A-Bout not only makes the job possible . . . it can pay for itself in days by reducing job time.

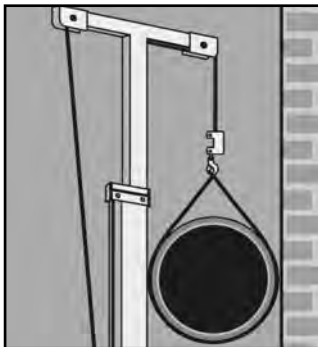
This dependable lift can raise a 1,500 lb. (682kg) load to heights up to 25 feet (7.6m) in minutes. In addition, the load can be moved vertically and horizontally at the same time. Wider loads (up to 1,000 lbs.) can be handled with the addition of Sumner's Tee Head Extension Bar. The Roust-A-Bout eliminates the need for many other tools such as come alongs, scaffolds, monorails and swing booms.



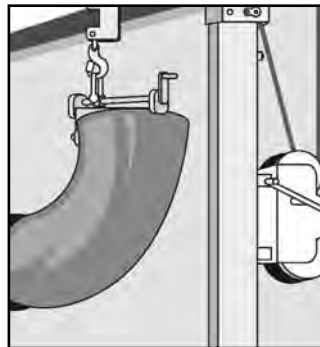
Mast and base sections separate quickly for ease of transportation and storage



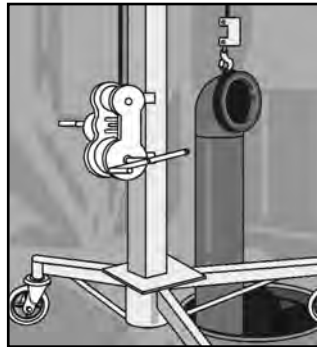
The Roust-A-Bout tackles the tough jobs.



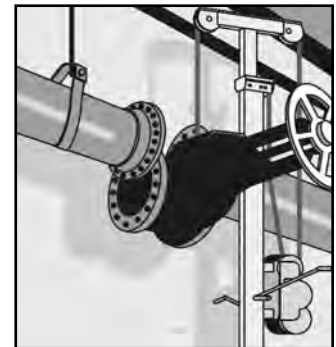
The Roust-A-Bout operates in tight areas that are inaccessible for other lifts.



Used in combination with Sumner's Adjust-A-Fit, the Roust-A-Bout can maneuver awkward objects for easy placement.



Loads can be lowered below floor level with the Roust-A-Bout's unique design.

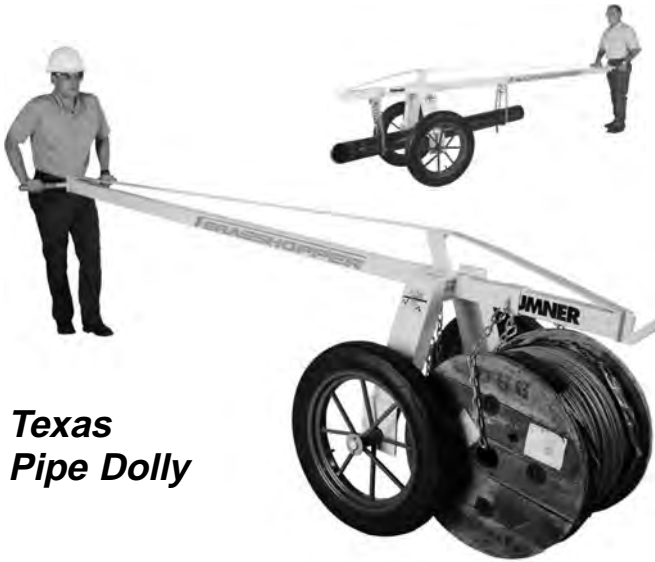


One man can position objects weighing 1,500 lb (680kg) with infinite accuracy up to 25 feet above!

Part No.	Description	Weight	A	B	C/D	Base	Max. Height
780300	R-100 Roust-A-Bout 15' Top Height	311 lbs. (140kg)	79" (200cm)	20" (50cm)	12" (30cm)	32 x 40" (80 x 100cm)	15' (4.6m)
780301	R-150 Roust-A-Bout 15' Top Height	311 lbs. (140kg)	79" (200cm)	20" (50cm)	12" (30cm)	40 x 40" (100 x 100cm)	15' (4.6m)
780302	R-180 Roust-A-Bout 18' Top Height	337 lbs. (153kg)	126" (320cm)	25" (63cm)	14.5" (36cm)	50 x 50" (125 x 125cm)	18' (5.5m)
780303	R-250 Roust-A-Bout 25' Top Height	381 lbs. (170kg)	119" (302cm)	30" (75cm)	17.5" (44cm)	60 x 60" (150 x 150cm)	25' (7.6m)

Load pulley shear pin (PN 780192) offers overload protection. Each Roust-A-Bout comes with a spare for quick, in-field resetting.

The Grasshopper



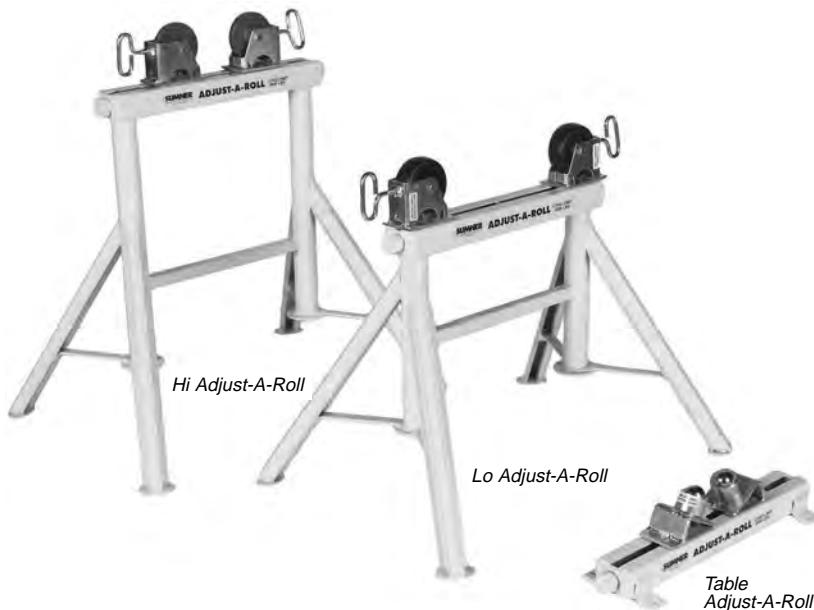
Texas Pipe Dolly

- Enables one man to lift 2,000 lb. (900Kg) unassisted!
- Special sliding chain block design accommodates long and short loads.
- Carries up to 20" diameter pipe, tool boxes, fittings and valves.
- Fits through 35" openings, is a versatile 12 feet long and weighs only 165 lbs.
- Sliding chain block accommodates long or short loads.
- Rugged high pressure tires and wheels allow for construction site mobility.
- Chains can be used to lock wheels for security.

Part #	Description	Dimensions							
		Height		Width		Length		Weight	
		In.	cm	In.	cm	Ft.	cm	Lb.	Kg
780351	ST-401 Grasshopper	40	102	35	89	12	366	155	70.0

Part #	Description	Load Capacity							
		Height		Width		Length		Weight	
		In.	cm	In.	cm	Ft.	cm	Lb.	Kg
780351	ST-401 Grasshopper	28	71	20	51	20	610	2000	900

Adjust-A-Roll



- 1/2" to 48" (1.2 – 120cm), or 2,000 Lb. (900Kg) pipe capacity.
- Roller adjustment from either side.
- Fast adjustment for easy pipe positioning.
- Clean and simple design avoids welder interference.
- Wheels trued for true pipe rotation.
- Bronze bearing to eliminate arcing.
- Break to lock loads for lay-out or fit-up.
- Handle large enough to work with gloved hand.
- Quick Change design increases roller stand utility.

Hi Adjust-A-Roll

Part #	Description	Weight	
		Lb.	Kg
780365	ST-601 with steel wheels	34	15.4
780366	ST-602 with ball transfer heads	33	15.1
780367	ST-602 with rubber wheels	33	15.1
780368	ST-604 with stainless steel wheels	33	15.1
780369	ST-605 with bar stock head	40	18.2
780399	Hi Adjust-A-Roll (base only)	24	10.9

Lo Adjust-A-Roll

Part #	Description	Weight	
		Lb.	Kg
780370	ST-701 with steel wheels	29	13.2
780371	ST-702 with ball transfer heads	31	14.1
780372	ST-702 with rubber wheels	31	14.1
780373	ST-704 with stainless steel wheels	31	14.1
780359	ST-705 with bar stock head	38	17.3
780405	Lo Adjust-A-Roll (base only)	12	5.5

Table Adjust-A-Roll

Part #	Description	Weight	
		Lb.	Kg
780360	ST-501 with steel wheels	20	9.0
780361	ST-502 with ball transfer heads	18	8.2
780362	ST-503 with rubber wheels	19	8.6
780363	ST-504 with stainless steel wheels	20	9.0
780364	ST-505 with bar stock head	26	11.8
780500	Table Adjust-A-Roll (base only)	12	5.5

Pipe Jacks

Standard features on all Sumner Jacks

- Quick action lockwasher for fast height positioning.
- Patented Fall Guard™ feature allows 1" (25mm) safety zone around lockwasher.
- 1½" (38mm) Acme fine adjustment thread– the largest in the industry.
- Large, convenient adjustment handle.
- Set screw for double margin of safety.
- Set screw can lock jack head to stand for transportation – no loose pieces.
- Jack independently load tested for quality assurance.
- CE rated.
- Backed by over 30 years of jack stand manufacturing experience.

Heavy-Duty

The first commercially produced Jack stand constructed of rugged 1" steel tubing, tested by independent labs for excessive loads.



Heavy-Duty – Hi Jack and Lo Jack

- 2,500 lb. (1135Kg) capacity.
- Strut tension plate for superior lateral support.
- 1" square tube base construction.
- Built for heavy use and abuse.

781050 – Hold-Down Device



Pro Jack

Most Economical Sumner Jack Stand



Heavy-Duty – Hi Jack

Part #	Description	Weight	
		Lb.	Kg
780375	ST-801 w/Vee-Head	23	10.4
780376	ST-802 w/Roller Head	26	11.8
780377	ST-803 w/Bar Stock Head	21	9.5
780378	ST-804 w/Stainless Steel Rollers	26	11.8
780379	ST-805 w/Stainless Steel Vee-Head	24	10.9
780580	ST-806 w/Ball Transfer Head	30	13.6
780381	ST-807 w/Rubber Wheels	25	11.3

Heavy-Duty – Lo Jack

Part #	Description	Weight	
		Lb.	Kg
780385	ST-901 w/Vee-Head	19	8.6
780386	ST-902 w/Roller Head	22	10.0
780387	ST-903 w/Bar Stock Head	18	8.2
780388	ST-904 w/Stainless Steel Rollers	22	10.0
780389	ST-905 w/Stainless Steel Vee-Head	20	9.1
780590	ST-906 w/Ball Transfer Head	26	11.8
780391	ST-907 w/Rubber Wheels	21	9.5

Fold-A-Jack



Pro Jack – Hi Jack

- Formed steel legs.
- 2,000 lb. (900Kg) capacity.
- Strut tension plate for superior lateral support.

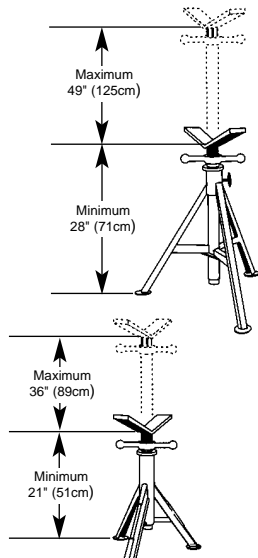
Fold-A-Jack – Hi Jack

- Folds up for storage ease.
- 1" square tube base construction.
- 2,000 lb. (900Kg) capacity.

Part #	Description	Weight	
		Lb.	Kg
780471	ST-871 w/Vee-Head	22	10.0
780472	ST-872 w/Roller Head	25	11.3
780473	ST-873 w/Bar Stock Head	17	7.7
780474	ST-874 w/Stainless Steel Rollers	25	11.3
780475	ST-875 w/Stainless Steel Vee-Head	23	10.4
780476	ST-876 w/Ball Transfer Head	28	12.7
780477	ST-877 w/Rubber Wheels	24	10.9

Part #	Description	Weight	
		Lb.	Kg
781300	ST-881 w/Vee-Head	25	11.3
781301	ST-882 w/Roller Head	28	12.7
781302	ST-883 w/Bar Stock Head	23	10.4
781303	ST-884 w/Stainless Steel Rollers	28	12.7
781304	ST-885 w/Stainless Steel Vee-Head	26	11.8
781305	ST-886 w/Ball Transfer Head	32	14.5
781306	ST-887 w/Rubber Wheels	27	12.2

Available in 2 heights to suit your welding needs

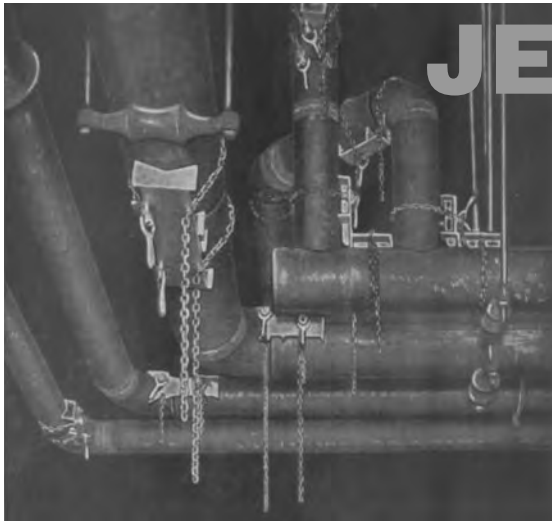


Sumner offers a choice of 5 head styles for every application:



Part #	Description	Capacity		Pipe Size	Application
		ProJack & Fold-A-Jack	Heavy-Duty Jack		
Standard Vee-Head					
780518	non-stainless steel	2,000 lb. (900kg)	2,500 lb. (1135kg)	1/8 - 36" (3 - 900mm)	general welding of pipe shapes, solids and rounds
780498	stainless steel				
Ball Transfer Head*					
780518	non-stainless steel	1,000 lb. (450kg)	1,000 lb. (450kg)	3/8 - 12" (10 - 300mm)	rotation of pipe or tubing in all directions
780551					
780274					
Steel Wheel Head					
780514	non-stainless steel	2,000 lb. (900kg)	2,000 lb. (900kg)	1 1/4 - 24" (3 - 900mm)	welding of pipe and rounds
780517	stainless steel				
Rubber Wheel Head					
780499	non-stainless steel	1,000 lb. (450kg)	1,000 lbs. (450kg)	1 1/2 - 24" (30 - 600mm)	non-marring surface, roll welding of pipes & rounds
Bar Stock Head					
780519	for Hi Jacks	2,000 lb. (900kg)	2,000 lb. (900kg)	1/8 - 10" (flat) (3 - 250mm)	welding of flats and shapes
780944	for Lo Jacks				

*Standard Vee-Head Ball Transfer Set part number 780551 (non-stainless steel) part number 780274 (stainless steel). Ball Transfer attachments slide over the standard vee-head. Offset design accommodates 3/8 - 12" (10-300mm) pipe sizes. 1,000 lb (450Kg) capacity.



JEWEL

pipe welding clamps

FOR THE PIPEFITTER

WELDING FLANGE CLAMP



- Takes all sizes from 1-1/2" to 16".
- Standard or extra heavy flanges.
- Fits any manufacturer's welding neck flange.
- Lines the face of your flange at a perfect right angle to your pipe and holds it there until it is tacked.
- Clamps at any point below the center of the pipe to line up bolt holes.

**NOTHING TO LEVEL!
NOTHING TO SQUARE!**

- Rigidly constructed and machined true.

No.*	Pipe Size	Weight
4A	2-1/2" - 8"	8 lbs.
4M	2-1/2" - 8"	15 lbs.
6A	8" - 16"	20 lbs.

*A - Aluminum M - Maleable

PIPE CLAMP



- Clamps any size from 1/2" to 16" pipe.
- Rigidly constructed.
- Resists strain, heat and abuse.
- It lines the pipe perfectly and holds it there before it is welded.
- When the pipefitter puts up pipe with Jewel Clamps, your welder does nothing but WELD.
- For use on both mains and risers. Keeps your lines where the fitter puts them. Lines up eccentric reducers.
- **On** in a minute — **Off** in 10 seconds.

No.*	Pipe Size	Weight
1A	1/2" - 8"	7 lbs.
1M	1/2" - 8"	12 lbs.
2A	8" - 16"	20 lbs.
2M	8" - 16"	38 lbs.

*A - Aluminum M - Maleable

ELBOW CLAMP



- Rigidly constructed.
- Resists strain, heat and abuse.
- A simple, light and easily operated clamp that lines up welding elbows from 2-1/2" to 8" at perfect right angles to the pipe and holds them there until they are tacked.
- For use on both mains and risers. Can be used on the bench, on the ground or up on the line.

No.*	Weight
5A Long Turn	7 lbs.
5M Long Turn	10 lbs.
9A Short Turn	7 lbs.
9M Short Turn	10 lbs.

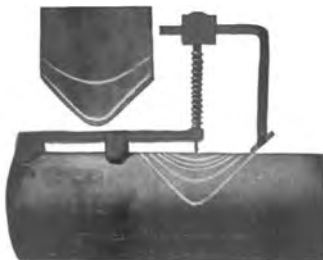
*A - Aluminum M - Maleable

NO. 10 ADJUSTABLE CLAMP



- Aligning clamp for welding fittings 2-1/2" to 8".
- For use on elbows, angles, reducers and straight pipe. Can be used on the bench, on the ground or up on the line.

PIPE MARKER



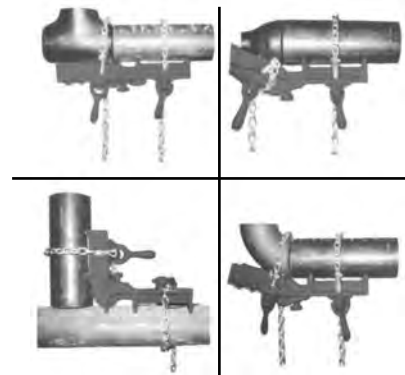
No.	Pipe Size	Weight
3	2-1/2" - 8"	5 lbs.
8	Up to 20"	7 lbs.

ANGLE CLAMP



No.*	Pipe Size	Weight
7A	1-1/2" - 12"	9 lbs.
7M	1-1/2" - 12"	12 lbs.

*A - Aluminum M - Maleable



No.	Weight
10	9 lbs.





General Pipe Clamps

The Standard Pipe Clamp features a lever and a cam for tightening the clamp around both ends of adjoining pipe.



The Hydraulic Pipe Clamp employs an eight-ton hydraulic jack for opening and closing the clamp. This feature is especially important when aligning 16"- to 60"-diameter pipe.



The Ratchet Clamp includes precision-cut Acme thread design for strength and easy operation, plus an enclosed mechanism to prevent mud and dirt contamination. This clamp works on 10"- to 60"-diameter pipe.



Model	Pipe Size
Standard	2" to 60"
Standard No Tack	3" to 60"
Hydraulic	16" to 60"
Hydraulic No Tack	16" to 60"
Ratchet	10" to 60"
Ratchet No Tack	14" to 60"

H&M Standard Beveling Machines



Each H&M machine is constructed of durable, lightweight, hard-anodized aluminum for easy transportation to any jobsite for cutting and beveling 2"- to 36"-diameter pipe precisely, quickly and economically, even under the toughest conditions.

Every ring gear and saddle are precisely machined and calibrated to ± .025 in concentricity and ± .015 in squareness.

The standard rear-mounted short saddle aids cutting and beveling in tight locations, while allowing precise back-beveling operations.

H&M's unique "split horseshoe" design permits easy placement over pipe sections. A quick-operating boomer assembly securely locks the machine to the pipe for an entire 360° rotation. No repositioning is ever needed! H&M's patented Cuboid Spacer System keeps the spacers on the machine to minimize downtime.

H&M Pipe Beveling Machines save weld prep time and money compared to hand cutting. With easy-to-follow manuals and a few minutes of instruction, any operator can easily make accurate cuts and bevels.

SPECIFICATIONS

Model No.	Standard Pipe Sizes				Net Weight		Shipping Weight		Shipping Dimensions	Cuboid Spacer		
	In. (mm)	In. (mm)	In. (mm)	In. (mm)	Lbs.	Kg	Lbs.	Kg		Manual	Motorized (Patented)	standard
No. 0	2" (60.32)	2.5" (73.02)	3" (88.90)	4" (144.30)	9.5	4.15	12	5.4	9 x 11 x 11	standard	optional	standard
No. 1	3" (88.90)	4" (114.30)	6" (168.27)	8" (219.07)	18	8.10	25	10.70	13 x 16 x 17	standard	optional	standard
No. 2	7" (193.67)	8" (219.07)	10" (273.05)	12" (323.85)	27	12.25	38	16.75	15 x 22 x 22	standard	optional	standard
No. 3	14" (355.60)	16" (406.40)	18" (457.20)	20" (508.00)	55	25.00	75	30.40	13 x 34 x 34	standard	optional	standard
No. 4	20" (508.00)	22" (558.80)	24" (609.60)	26" (660.40)	81	36.45	118	53.10	14 x 36 x 45	standard	optional	standard
No. 30	24" (609.60)	26" (660.40)	28" (711.20)	30" (762.00)	92	41.40	133	59.85	14 x 38 x 48	standard	optional	standard
No. 5	30" (762.00)	32" (812.80)	34" (863.60)	36" (914.40)	145	65.25	250	112.50	16 x 48 x 61	standard	optional	standard



Atlas WELDING ACCESSORIES, INC.

PIPE DOLLIES

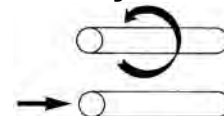
ADJUSTABLE PIPE DOLLIES



Designed for pipe welding work, Atlas pipe Dollies are adjustable (by changing wheel/axle locations) to take 3" to 30" pipe.

Atlas Pipe Dollies Move Pipe Two Ways:

- They rotate it.
- They move pipe longitudinally.



Universal Pipe Cutters (6"-48" or 150-1300mm)



These lightweight, easy-to-use Universal Pipe Cutters (UPC) are available to cut 6" - 48" (150-1300mm) outside diameter ductile iron, cast iron, clay, concrete, PVC or PE pipe. The cutters are pneumatic or hydraulic powered. The lower cost 616 uses the same motor as the 636 and the 648, but does not need connecting frames. The UPC616 is shipped in a steel toolbox with a three gallon, formed steel water tank. The UPC636 and UPC648 come in a steel toolbox with a seven gallon, stainless steel water tank and cart.

PNEUMATIC

Catalog No.	Item Code	Pipe Diameter		Weight*	
		Inches-Nom.	O.D. mm	lbs.	kg
UPC616A*	07512	6 - 16	150 - 450	89	40.5
UPC636A*	07510	6 - 36	150 - 1000	131	59.5
UPC648A*	07511	6 - 48	150 - 1300	138	62.7

Must order REQUIRED blades SEPARATELY.

BLADE SELECTION CHART*

Pipe Material	UPC 616A, 636A and 648A (PNEUMATIC)			
	4" BLADES cut up to 23/32 (18.3mm) wall thickness		6" BLADES cut up to 1-23/32" (43.7mm) wall thickness	
	6" (150mm) Pipe		8" - 48" (200-1300mm) Pipe	
	Catalog No.	Item Code	Catalog No.	Item Code
Cast Iron, Pit Cast, Ductile Iron, Clay, Concrete	UPDIA4C	97528	UPDIA6C	97524
PVC	UPCARB4	97510	UPCARB6	97514

*PE and Bevel blades available by special order. Minimum order applies.

WHY REED?

The Reed UPC is lightweight; cuts fast; requires only 12" (300mm) clearance around the pipe; provides a square cut virtually every time; and can be operated underwater. It is by far the safest, easiest and fastest power cutter to set up, operate and maintain. Very low operating cost.



UPC POWER REQUIREMENTS PNEUMATIC

Horsepower = 1.7 HP
Maximum RPM = 3675
Air Consumption = 50 cu. ft./min. (1.4 cu. m/min.)
Pressure = 90 PSI Maximum (6 BAR)
Shut-Off = 3/4" Ball Valve
Air Supply Fittings = 3/4" Dixon "Air King" Coupling

ACCESSORIES

Accessory	Item Code
Air-line Oil	97583
Arbor Locknut	97543
Arbor Wrench	97590
Chain Hooks	97546
Diamond Blade Sharpening Stone	97595
Filters for the FRL	40139
Hex Key Set	40156
Motor Grease, 2 oz.	97588
Release Pins	97545
Water Tank Hose System	97581
Wedges	97589

Hinged Cutters (1"-12" or 32-356mm)

Four wheels cut steel, stainless steel, cast and ductile iron with only 90° to 110° handle swing. Only 4" clearance required around pipe. Strong guide fingers insure perfect wheel alignment for square cuts. A closed 360° frame forces all energy into cutting the pipe for maximum efficiency. There is no shower of sparks in this cold cut. This is the only hinged cutter that tracks every time and the only one recommended for ductile iron, steel and stainless steel to Schedule 100. This tool is a Reed invention.



WHY REED?

Hinged cutters are a Reed invention! They are lighter, track better for square cuts, and require less clearance, yet provide better torque so the cut is made faster and with less effort. Can be used anywhere – in the ditch, underwater, in explosive atmospheres (cold cut), in noise-free zones, over head, in racks of pipes, etc.

REED
TRAINING
AVAILABLE

90° - 110°
SWING

4"
CLEARANCE

REED
EXCLUSIVE
SIZE

Cat. No.	Item Code	Pipe Capacity		Length		Weight	
		Inches-Nom.	Actual Ø mm	in.	mm	lbs.	kg
H21/2S*	03110	1 - 2½	32 - 76	17	419	7.2	3.3
H21/2I*	03112	1 - 2½	32 - 76	17	419	7.2	3.3
H21/2X*	03114	1 - 2½	32 - 76	17	419	7.2	3.3
H4S	03120	2 - 4	60 - 125	22	559	12.8	5.8
H4I	03122	2 - 4	60 - 125	22	559	12.8	5.8
H4X	03124	2 - 4	60 - 125	22	559	12.8	5.8
H6S	03130	4 - 6	114 - 182	28	711	19.4	8.8
H6I	03132	4 - 6	114 - 182	28	711	19.4	8.8
H6X	03134	4 - 6	114 - 182	28	711	19.4	8.8
H8S	03140	6 - 8	168 - 240	32	813	24.4	11.1
H8I	03142	6 - 8	168 - 240	32	813	24.4	11.1
H8X	03144	6 - 8	168 - 240	32	813	24.4	11.1
H8XX	03146	6 - 8	168 - 240	32	813	24.4	11.1
H12S	03150	8 - 12	219 - 356	34	864	34.9	15.9
H12I	03152	8 - 12	219 - 356	34	864	34.9	15.9
H12X	03154	8 - 12	219 - 356	34	864	34.9	15.9
H12XX	03156	8 - 12	219 - 356	34	864	34.9	15.9

*EXCLUSIVE

NOTE: S= includes cutter wheels for steel; I= includes cutter wheels for cast and ductile iron; X= includes cutter wheels for schedule 80 steel; XX= for schedule 100 steel. Wheels for same size cutters are interchangeable. Recommend only Reed cutter wheels be used with these hinged cutters. Reed wheels are made from high shock-resistant tool steel on computerized (CNC) machines and then precisely heat treated. This allows for a thinner profile yet stronger blade, so they:

- Cut easier and faster, especially stainless steel and ductile pipe.
- Last much longer.
- Allow for shorter cutter handle for work in tight spaces.
- Provide the best value.

Replacement Wheel Pins for RIDGID® brand Cutters: 3S, 4S, 6S, 44S, 466, 468, 472. Order Reed pin R34790 #93322 5/pk. to replace RIDGID® brand Pin No. 34790 (Old #F-14).

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Rotary™ Cutters (6"-36" or 159-915mm)

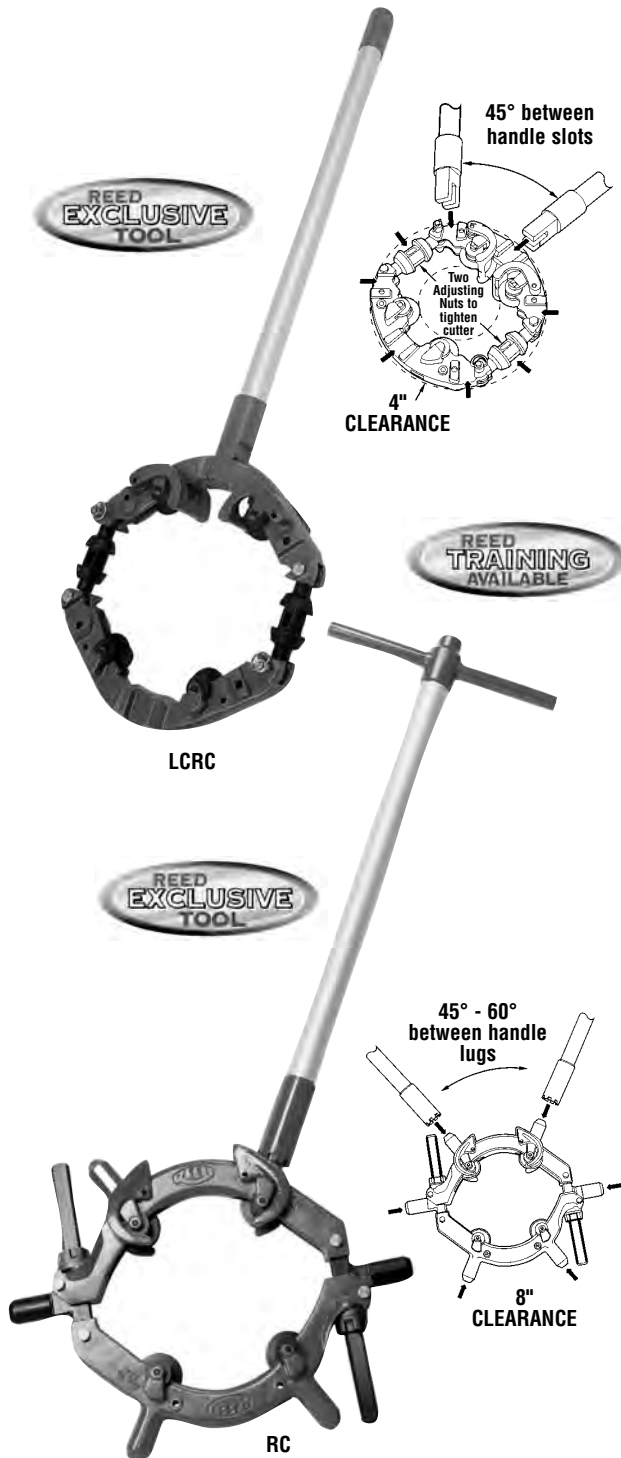
Cold cut large diameter steel, most stainless steel, ductile and cast iron pipe in close quarters. The low profile design of the **LCRC** models needs only 4" clearance for up to 16" pipe diameter, and only 8" clearance for pipe diameters above 16" on the **RC** models. Each cutter is supplied with a slip-on handle that is used to turn the cutter around the pipe in one direction. The handle is also used to tighten the cutter every 1/2 revolution.

Best manual cutters for ductile iron. With good leverage from long handle, pipe snaps off squarely before wheel penetrates halfway through pipe. Cutters have heavy-duty frames.

All sizes use the same cutter wheels: either RCS8-36 for steel and RC18-30 for ductile and cast iron. RCX wheels cut up to 25/32" wall thickness for steel pipe.

WHY REED?

Rotary™ cutters are a Reed invention! Reed Rotary™ cutters cut pipe safely, easily, quickly, and at a low cost. Provides a square cut and can be used anywhere – in the ditch, underwater, in explosive atmospheres (cold cut), in noise-free zones, over head, in racks of pipes, etc. Reed Rotary™ cutters last for decades.



Catalog No.	Item Code	Pipe Capacity			Length		Weight	
		Steel**	Cast Iron & Ductile	Actual Ø mm	in.	mm	lbs.	kg
		Inches-Nom.	Inches-Nom.					
LCRC8S*	03309	6 - 8		159 - 246	58	1473	41	18.6
LCRC8I*	03308		6 - 8	159 - 246	58	1473	41	18.6
LCRC12S	03313	10 - 14		266 - 358	61	1549	50	22.7
LCRC12I*	03312		10 - 12	266 - 358	61	1549	50	22.7
LCRC16S*	03317	16 - 18		368 - 462	66	1664	60	27.3
LCRC16I*	03316		14 - 16	368 - 462	66	1664	60	27.3
RC20S*	03240	20 - 22		476 - 572	106	2680	89	40.5
RC20I*	03242		18 - 20	476 - 572	106	2680	89	40.5
RC24S*	03250	24 - 26		584 - 660	111	2807	107	48.6
RC24I*	03252		22 - 24	584 - 660	111	2807	107	48.6
RC30S*†	03260	28 - 34		698 - 864	96	2438	283	128.6
RC30I*†	03262		30	698 - 864	96	2438	283	128.6
RC36S*†	03264	32 - 36		813 - 915	96	2438	295	134.1

* EXCLUSIVE

† Conversion kits available below.

** For heavy wall steel and stainless steel, order RCX cutter wheels (03550) and eight RC8-30XR rollers (93222).

NOTE: S= includes cutter wheels for steel; I= for cast and ductile iron. Wheels for same size cutters are interchangeable. Recommend only Reed cutter wheels be used with these cutters. Reed wheels are made from high shock-resistant tool steel on computerized (CNC) machines and then precisely heat treated. This allows for a thinner profile yet stronger blade, so they:

- Cut easier and faster, especially stainless steel and ductile pipe.
- Last much longer.
- Provide the best value.

† CONVERSION KITS

Cat. No.	Item Code	Converts
RC30CONV	03267	RC36 to RC30
RC36CONV	03268	RC30 to RC36



Portable Roll Groovers



RG6S



WHY REED?

Combines the compact RG6S/RG6CU design for long life with sealed, heavy-duty bearings and up to 6" capacity.

RG6EXT



RG6HDCOMBO



WHY REED?

RG26S/RG26CU models are angled rollers that keep the tool on the pipe and in-line. **Does not "walk off" pipe.** It uses heavy-duty bearings, hardened and ground shafts, and rollers mounted in a ductile iron housing for durability.



RG26S

Reed portable roll groovers are compact, durable tools for use at installation sites. The **RG6S** and **RG6CU** are designed to be powered by the RIDGID® brand 300 power drive. Unlike similar models, the RG6 has heavy-duty bearings and a steel body to withstand the punishment of severe grooving applications. Finger-adjust depth screw and gauge provide quick adjustment and accurate, repeatable groove depths. No bulky adjusting wrenches required. Sealed bearings for long life. The **RG26** is for grooving in-place pipe and pipe too short for powered groovers. It is easily carried and positioned with a convenient handle. Included ratcheting crank is used for feeding and turning. Reed extends its line of heavy-duty roll groovers with two models for copper tubing. Both the **RG6CU** and **RG26CU** models have new rollers and shafts to meet copper grooving specifications.

An extension kit for Reed RG6 groovers for steel or copper allows full 6" grooving with threading machines. Support arms and drive bars place the groover at the end of RIDGID® brand machines for full access grooving.

Catalog No.	Item Code	Pipe Material	Pipe Capacity		Weight	
			Inches - Nom.	mm	lbs.	kg
RG6S*	08500	Steel, SS, Al	1¼" - 6" Sch. 55 to 40	32 - 152	26.6	12.1
RG6CU	08502	Copper Tubing	2" - 6"	51 - 152	26.6	12.1
RG26S	08510	Steel, Al, PVC, SS	2" - 6" Sch. 5S to 10S 2" - 3" Sch. 40	51 - 152 51 - 76	20.0	9.1
RG26CU	08512	Copper Tubing	2" - 6"	51 - 152	20.0	9.1
RG6HDCOMBO	08508	Steel, Al, PVC, SS	1¼" - 6" Sch. 10 to 40	32 - 152	32.0	14.5

* Models manufactured 1/98 and later are equipped to groove PVC pipe also. See date of manufacture stamp near manufacturer's I.D. tag.

EXTENSION KIT

Catalog No.	Item Code	Description
RG6EXT	08504	Support Arms and Drive Bar Fits RIDGID® brand 300, 500, 535, 1224 and 1822



Wm. T. Spaeder Co., Inc. Erie, PA



RG26CU

Power Drives



701PD and OLBUCKET1

700PD

700V

Reed's **700PD** Power Drive is a portable, electric, heavy-duty power drive that threads pipe and conduit up to 2" (50mm) in diameter. 700PD is 1/2 horsepower, double insulated, turns at 28 RPM (no load) and uses a forward/reverse switch. It uses Reed R12+ Segmental dies and dropheads or RIDGID® brand 12R dies and dropheads. Also, the **700PD can be used to power tapping and drilling machines by adding Reed's #08430 Power Drive Adapter**. It is CSA approved for Canada and the United States.

700PD POWER DRIVE Ships with Free Safety Vise!

Catalog No.	Item Code	Capacity		Weight		Description
		Inches - Nom.	mm	lbs.	kg	
700PD	05270	1/8 - 2*	3 - 50	40.5	18.4	Power Drive & Vise, 115 Volt, 60 Hz
700PDSET	05272	1/2 - 2 NPT	12 - 50	67.0	30.5	700PD, Vise, 1/2 - 2" NPT Dropheads
700V	05275	1/8 - 2*	3 - 50	10.5	4.8	700PD Safety Vise Only
TMPDA	08430	-	-	4.0	1.8	Adapter for Tapping & Drilling Machines

*Order R12+ Dropheads separately. **NOTE:** 700PD works with RIDGID® brand die heads.

WHY REED?

Reed **700PD** comes with a FREE safety vise – 10% extra value over the competition! The vinyl-coated handle provides better electrical safety. The pigtail cord retainer extends cord life. Additionally, Reed uses a threaded cord retainer to better prevent retainer pull out. The neoprene sealed switch keeps dirt out which prolongs switch life.



701PD

701V

REED POWER DRIVE WEIGHTS/OVERALL LENGTH

Catalog No.	lbs.	kg	in.	mm
700PD	31.4	14.3	29	737
701PD	15.9	7.2	22	559
601PD	15.4	7.0	21	533

Reed **701PD** Power Drive automates the threading process for pipe 1/8" through 2" (3-50mm), right hand only. It is the lightest threading machine at 15.9 pounds available for the popular R12+ or 12R style dropheads. 701PD comes with a vise that clamps to the work to prevent throwing of the operator, and is equipped with a gearshift that backs the machine off the work twice as fast at 60 RPM. Gearing gives this compact tool plenty of torque to thread 2" pipe.

Reed **601PD** Power Drive weighs only 15.4 pounds, yet delivers plenty of torque for threading up to 1-1/4" pipe, right hand only. A safety vise is always included, as is a carrying case. No load forward speed is 25 RPM, with a fast reverse switch that allows 60 RPM backoff to speed jobs. An entire threading kit (#05244, #05245) weighs from 30 to 32 pounds, making the 601PD the easiest machine to get to gas pipe and other on-site "stairway" jobs.

WHY REED?

Reed **701PD** is 35% lighter, faster and safer. 701V safety vise is included and it holds the power unit firmly in both forward and reverse. 701PD has speeds of 25 RPM forward and 60 RPM reverse. Great for overhead work due to its light weight (15.9 lbs.) and FREE safety vise.



601V

601PD

701PD POWER DRIVE Ships with Free Safety Vise!

Catalog No.	Item Code	Capacity		Weight		Description
		In. - Nom.	mm	lbs.	kg	
701PD	05250	1/8 - 2**	3 - 50	23.5	10.7	Power Drive & Vise, 115 Volt
701PD W/BOX*	05251	1/8 - 2**	3 - 50	43.1	19.6	Power Drive & Vise with Box
701PDE	05252	1/8 - 2**	3 - 50	23.5	10.7	Power Drive & Vise, 230 Volt
701PDSET2 W/BOX*	05253	1/2 - 2	12 - 50	69.7	31.7	701PD, Vise, Box and 1/2" - 2" Dropheads
701PDSET2	05254	1/2 - 2	12 - 50	50.1	22.8	701PD, Vise, 1/2" - 2" Dropheads
701V	05255	1/8 - 2**	3 - 50	7.5	3.4	701PD Safety Vise Only
701BOX	95252	-	-	19.6	8.9	Box for 701PD Models and Dropheads

**Order R12+ Dropheads separately.

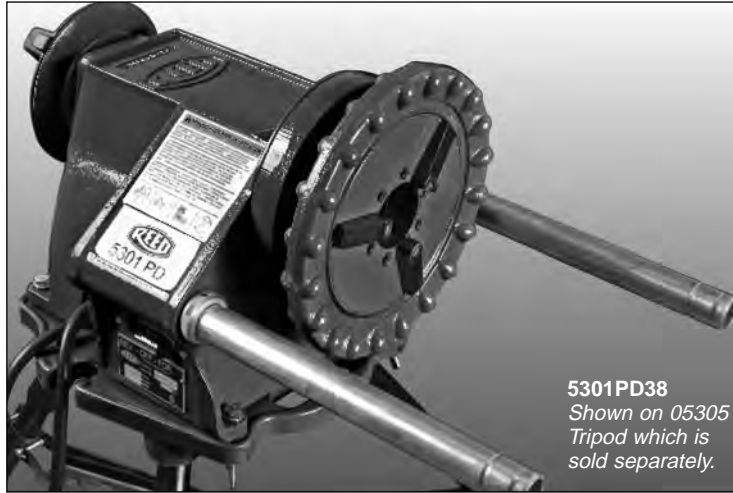
601PD POWER DRIVE Ships with Free Safety Vise!

Catalog No.	Item Code	Capacity		Weight		Description
		In. - Nom.	mm	lbs.	kg	
601PD	05240	1/4 - 1-1/4*	6 - 32	25.0	11.4	Power Drive & Vise, 115 Volt with Box
601V	05242	1/4 - 1-1/4*	6 - 32	5.7	2.6	601PD Safety Vise Only
601PDKIT1	05244	1/2 - 1	12 - 25	30.0	13.6	601PD, Vise, 1/2" - 1" NPT Dropheads
601PDKIT1-1/4	05245	1/2 - 1-1/4	12 - 32	32.0	14.5	601PD, Vise, 1/2" - 1-1/4" NPT Dropheads

*Order R11 Enclosed Dropheads separately.

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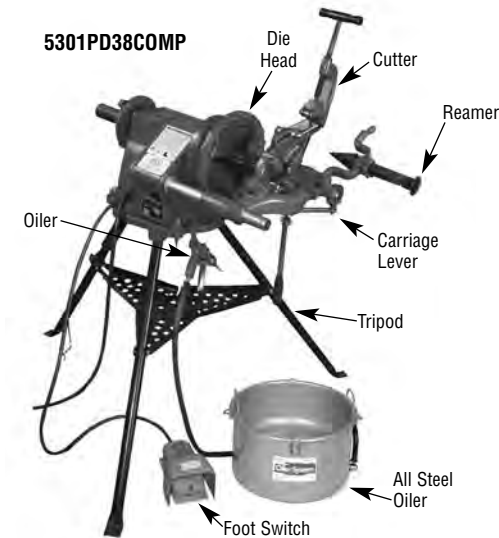
5301PD Power Drive



Reed's **5301PD** Power Drive rotates the pipe while cutting, threading or reaming operations are performed on up to 2" diameter pipe and conduit. Reed offers both a basic 5301PD machine with foot pedal and the 5301PD Complete including a tripod, transporter, carriage, reamer, pipe cutter, universal die head, universal dies, oiler and cutting oil. 5301PD is 115 volt.



- Works for up to 2" pipe and conduit.
- Rotates the pipe for cutting, threading and reaming operations.
- Users mostly threading 1-1/2" - 2" pipe prefer 38 RPM models.
- Compatible for power roll grooving.
- Approved to the latest US and CSA Canadian standards.
- Majority of parts are interchangeable with competitor's power drives.



Catalog No.	Item Code	Capacity		Weight		Description
		In. - Nom.	mm	lbs.	kg	
5301PD38	05301	1/8 - 2 Pipe 1/4 - 2 Bolt	3 - 50 Pipe 6 - 50 Bolt	93.0	43.0	5301PD @ 38 RPM with Foot Switch only 115 volt
5301PD57	05302	1/8 - 2 Pipe 1/4 - 2 Bolt	3 - 50 Pipe 6 - 50 Bolt	93.0	43.0	5301PD @ 57 RPM with Foot Switch only 115 volt
5301PD38COMP	05303	1/8 - 2 Pipe 1/4 - 2 Bolt	3 - 50 Pipe 6 - 50 Bolt	208.0	95.0	5301PD @ 38 RPM Complete with Foot Switch, Tripod, Carriage with Lever, Pipe Cutter, R811 Universal Diehead, Set 1/2" - 3/4" Universal HSS Dies, Set 1" - 2" Universal HSS Dies, Transporter, Oiler, Thread Cutting Oil (1 gallon)
5301PD57COMP	05303	1/8 - 2 Pipe 1/4 - 2 Bolt	3 - 50 Pipe 6 - 50 Bolt	208.0	95.0	5301PD @ 57 RPM Complete with Foot Switch, Tripod, Carriage with Lever, Pipe Cutter, R811 Universal Diehead, Set 1/2" - 3/4" Universal HSS Dies, Set 1" - 2" Universal HSS Dies, Transporter, Oiler, Thread Cutting Oil (1 gallon)

WHY REED?

Flat top of housing is ideal for placing tools. Power Drive includes long-lasting high speed steel (HSS) dies, not alloy dies. All steel oiler, not plastic, included with Complete Power Drives.

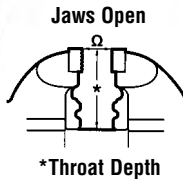
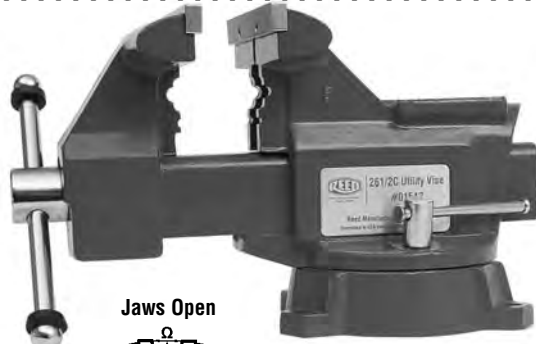
ACCESSORIES

Catalog No.	Item Code	Description
5301PDTP	05305	5301PD Tripod
TRANSP	05306	Transporter
CARRIAGE	05307	Carriage with Lever
5301PDR	05308	5301PD Reamer
5301PDPC	05309	5301PD Pipe Cutter 1/8" - 2"
R811	05380	Universal Die Head
UHN1/2-3/4	05815	1/2" - 3/4" HSS Universal Dies
UHN1-2	05820	1" - 2" HSS Universal Dies
OLBUCKT1	06150	Oiler with 1 Gallon Dark Cutting Oil



TRANSPORTER
with 5301PD
on board.

Utility Workshop Vises (Swivel Base)

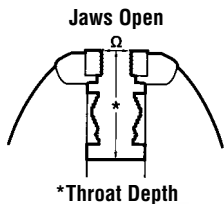


Heavy-duty design strengthens this ideal utility workshop vise. Cast vises with pipe jaws, anvil and horn feature a swivel base with positive locking in addition to replaceable, hardened steel, serrated jaw facings.

Catalog No.	Item Code	Throat Depth*		Jaw Width		Jaws Open Ω		Weight	
		in.	mm	in.	mm	in.	mm	lbs.	kg
241/2C	01522	2-1/2	64	4-1/2	115	4	102	18.0	8.2
251/2C	01532	3	76	5-1/2	140	5	127	27.0	12.3
261/2C	01542	3-3/8	86	6-1/2	165	6	152	41.0	18.6
26B	01545	4-3/16	120	6	150	6	152	60.0	27.3

* See illustration

Mid-Line Vises



A vise of strength and price between the Machinist vise and Utility vise. Design features a straight line pull through bar and body and machined work surface. The main screw and nut are totally enclosed to keep out dirt and eliminate wear. Vise has replaceable steel vise facings and pipe jaws, along with two swivel base side clamps.

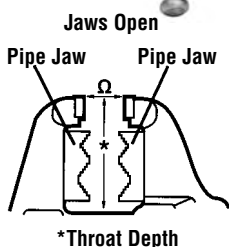
Cat. No.	Item Code	Throat Depth*		Jaw Width		Jaws Open Ω		Pipe Capacity	Weight	
		in.	mm	in.	mm	in.	mm	in. nom.	lbs.	kg
704	01385	3.45	88	4	102	4.5	114	1/2 - 2	36.0	16.4
705	01387	3.75	95	5	127	5.5	140	1/4 - 2-1/2	47.0	21.4
706	01389	4.10	104	6	152	5.7	146	1/4 - 2-1/2	61.0	27.7

* See illustration

WHY REED?

American vises have enclosed screw assembly for all-weather protection. Jaw facing and pipe jaws are replaceable. Positive locking system.

Combination Bench and Pipe Vises (Swivel Base)



Designed to provide decades of service, these cast vises carry Reed's lifetime warranty. Hardened steel pipe jaws made of heat-treated hardened steel are reversible and replaceable, and jaw facings are replaceable, too. Vises are designed with maximum throat depth for greater clamping action to hold large parts. Forged steel, geared lock bolt on swivel base maintains positive lock to avoid slippage under heavy pressure.

Cat. No.	Item Code	Throat Depth*		Jaw Width		Jaws Open Ω		Pipe Capacity	Weight	
		in.	mm	in.	mm	in.	mm	in. nom.	lbs.	kg
1CA	01350	4	102	3-1/2	89	4	102	1/8 - 2-1/2	35.0	15.9
2CA	01360	5-3/8	137	4-1/2	114	5	127	1/8 - 3-1/2	60.0	27.3
3CA	01370	6-1/4	159	5	127	6	152	1/8 - 4-1/2	95.0	43.2
4CA	01380	7-1/8	181	6	152	10	254	1/8 - 6	157.0	71.4

Meets Federal Specifications GGG-V-410a Type IV Table III Fig. 4.

* See illustration

WHY REED?

Only Reed has backed up its bench vises with a Lifetime Warranty for over 100 years.



Machinists' Vises

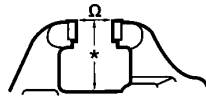


Stationary Base



Inset: Swivel Base

Jaws Open



*Throat Depth

WHY REED?
These American machinists' vises are the strongest made.

Designed to provide decades of service, these cast vises carry Reed's lifetime warranty. Malleable or ductile iron bar, body and base with a machined work surface. Replaceable hardened tool steel facings. Lubricated thrust bearing to reduce wear. Swivel base features positive locking. Both stationary and swivel base models are available. A swivel base can be retrofitted to stationary base models.

STATIONARY BASE

Catalog No.	Item Code	Throat Depth*		Jaw Width		Jaws Open ^Ω		Weight	
		in.	mm	in.	mm	in.	mm	lbs.	kg
303N	01410	3	76	3	76	4	102	19.5	8.9
304N	01430	3-5/8	92	4	102	6	152	37.0	16.8
305N	01450	4-1/4	108	5	127	8	203	63.0	28.6
306N	01460	4-3/8	111	6	152	10	254	92.0	41.8

SWIVEL BASE

303S	01412	3	76	3	76	4	102	25.0	11.4
304S	01432	3-5/8	92	4	102	6	152	46.0	20.9
305S	01452	4-1/4	108	5	127	8	203	74.5	33.9
306S	01462	4-3/8	111	6	152	10	254	107.0	48.6

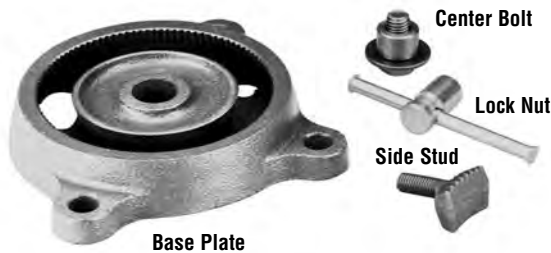
Meets Federal Specifications GGG-V-410a Type VI Class 2 Table 1.

*See illustration

Vise Accessories

SWIVEL BASE KITS

Any Reed Machinists' Vise **stationary base** may be converted to a **swivel base** vise by adding the proper base kit. Kits include base plate, lock nut, side stud and center bolt.



Base Plate

Center Bolt

Lock Nut

Side Stud

Catalog No.	Item Code	Converts	Weight	
			lbs.	kg
303K	01490	303N to 303S	7.0	3.2
304K	01492	304N to 304S	12.0	5.5
305K	01494	305N to 305S	18.0	8.2
306K	01495	306N to 306S	20.0	9.1

MAGNETIC VISE JAW CAPS

Vise Jaw Caps are a convenient way of protecting a work piece while it is being held in a vise. The smooth surface of the vise cap provides protection from the rough, serrated vise jaw and prevents damage to the object being restrained. The universal size magnetic vise jaw caps are easier to take off and on compared to traditional brass caps.

Catalog No.	Item Code	Jaw Cap Description	Length	
			in.	mm
MVCR45	01600	Rubber Faced	4.5	114.0
MVCR55	01605	Rubber Faced	5.5	140.0
MVCR65	01610	Rubber Faced	6.5	165.0
MVCA45	01615	Aluminum Faced	4.5	114.0
MVCA55	01620	Aluminum Faced	5.5	140.0
MVCA65	01625	Aluminum Faced	6.5	165.0



WHY REED?
Universal jaw facings fit simply by bending back the "ears."



BRASS VISE JAW CAPS

Protect fine work in vises with serrated jaw facings. Convert any Reed vise jaw facing to smooth surface with proper size brass caps. Caps available for 3"-6" jaw width.

Cat. No.	VC3	VC3½	VC4	VC4½	VC5	VC6
Jaw Width	3"/76mm	3½"/89mm	4"/102mm	4½"/114mm	5"/127mm	6"/152mm
Item Code	01550	01560	01570	01575	01580	01590
Weight	0.5 lbs. (0.2kg)	0.8 lbs. (0.4kg)	1.0 lbs. (0.5kg)	1.4 lbs. (0.6kg)	1.8 lbs. (0.8kg)	2.7 lbs. (1.2kg)



✓ WHY REED?

Reed's Tapping Machine is a better value than the competition and is made in the USA. Reed's TM1100 ships with the necessary parts, including the corp insertion tools. Plus, by ordering the saddles and drill taps separately, one only needs to purchase the right sizes for the job. Additionally, the Tapping Machine can be converted to a drilling machine for up to 2" saddle taps, thus saving money over the purchase of a separate machine.†

*Spec sheet / Conversion chart available #01071

✓ WHY REED?

Performs fast with six cutting edges for clean threads and less leaks. Has a sharper point for easiest starting.



AWWA
Approved!

DT75P



✓ WHY REED?

The unique three flute design bores into the pipe with less effort than other drill tap designs and insures that the coupon and cuttings are retained.



✓ WHY REED?

Food grade compound that does not contaminate water.



Direct Tapping Machine

The TM1100 tapping machine is used to drill and tap water mains while under pressure, then to install 3/4" or 1" corporation stops in a 2-step operation. It covers a range of 4" - 48" cast or ductile iron and C-900 PVC with the use of saddles and chain extensions. Anodized and epoxy-painted aluminum frames provide a lightweight yet sturdy machine for tough in-ditch applications. The swing valve allows easy changeout from drill tap to corporation without main shutdown. Friction style boring bar lock allows faster start with minimal adjustment. Use Reed DT series drill taps. Interchangeable parts include Mueller®, RIDGID®, Footage® and Talbot/Salser® drill taps and Mueller® saddles and gaskets.

Catalog No.	Item Code	Size Inches	Pipe Diameter		Weight	
			Inches	Actual Ø mm	lbs.	kg
TM1100	09300	3/4 - 1	4 - 48	100 - 1300	101.8*	46.3*

*Including box and accessories. TM100 unit alone weighs 40.4 lbs./21kg.

† CONVERSION KITS

Catalog No.	Item Code	Converts
CDTM1CONV	08406	TM1100 to CDTM1100
CDTM2CONV	08416	TM1100 to CDTM2100

Accessories

DRILL TAPS

Catalog No.	Item Code	Drill Size Inches	Thread	Pipe Material	Weight	
					lbs.	kg
DT75	04390	3/4	CC	Cast/Ductile	1.1	0.5
DT100	04391	1	CC	Cast/Ductile	1.3	0.6
DT75P	04396	3/4	CC	C900 PVC	1.0	0.5
DT100P	04397	1	CC	C900 PVC	1.4	0.6

Reed drill taps fit all Reed; Mueller® B-100, B101, A-2 and 1-D; RIDGID®/Footage®; plus the Romac®/Transmate® B1 tapping machines.

TAPPING SADDLES

Catalog No.	Item Code	Description
TS4	98442	4" Saddle
TS6	98439	6" Saddle
TS8	98440	8" Saddle
TS10	98441	10" Saddle
TS12	98438	12" Saddle
TS16	98443	16" Saddle
TS18	98444	18" Saddle
TS20	98445	20" Saddle
TS24	98446	24" Saddle
TS36	98447	36" Saddle
TS42	98448	42" Saddle
TS48	98449	48" Saddle

TAPPING COMPOUND

Catalog No.	Item Code	Description
TMTC	98425	16 oz. (.45kg) resealable can

RIDGID® is a registered trademark of RIDGID, Inc. and is used with permission from the Ridge Tool Company.



DM2100

[†]Spec sheet / Conversion chart available #01071

WHY REED?

Heavy-duty machine that is compact and lightweight to make up to 2" saddle taps. Reed offers many different versions of the made in the USA drilling machine to meet individual customer needs.

D Series Drill Bits



PVC Shell Cutter



Carbide-Tipped Hole Saws



HDHS1438



Hole Saw Adapter

Drilling Machines[†]

Drilling machines cut or drill through the pipe wall via the corporation stop inserted into the service saddle while under pressure. They use Reed D series drills or hole saws. The **DMBASE** machine consists of the base unit which allows the customer to purchase separately individual corp adapters, drill or hole saw adapters, along with necessary drills or hole saws. With shell cutters and necessary adapters, these units can also be used on C-900 PVC pipe. **DM2100110** is for use with Mueller[®] 110 compression corporation stops. **DM2100CCNPT** is a combination of 3/4" and 1" AWWA CC thread and 1-1/2" and 2" NPT thread adapters.

Catalog No.	Item Code	Size Inches	Weight**	
			lbs.	kg
DM1100	09302	3/4 - 1	53.0	24.1
DM1100NPT	09305	3/4 - 1 NPT Corps	53.0	24.1
DM1100BSPT	09307	1/2 - 1	53.0	24.1
DM2100	09312	3/4 - 2	55.5	25.2
DM2100NPT*	09315	3/4 - 2 NPT Corps	55.5	25.2
DM2100BSPT	09308	3/4 - 2	55.5	25.2
DM2100110	09317	3/4 - 2 110 Compression	55.5	25.2
DM2100CCNPT	09318	3/4 - 1 AWWA 1-1/2 - 2 NPT	55.5	25.2
DM2100B	09301	Base Only	49.5	22.5
DM2100UNIVERSAL	09321	3/4" - 2" AWWA & NPT	16.8	7.6

*Note: Additional boring bar needed for 2" iron body gate valves.

**Drilling Machine unit alone weighs 13.2 lbs./6.0kg.

Accessories

D SERIES DRILL BITS

Drill bits are designed for use with Reed drilling machines and Mueller[®] E5/D5 only; both of which use saddles. These spiral drills are made from strong, high speed steel, are heat treated for longer life, are black oxide coated for corrosion resistance, and are much easier cutting than other drills as the spiral motion clears chips away from cut. Recommended for cast iron and ductile iron, including cement-lined ductile iron.

Catalog No.	Item Code	Drill Size (in.)	Nom. Corp. Size (in.)*	Weight	
				lbs.	kg
D438	04379	7/16	1/2" NPT & AWWA	0.2	0.1
D688	04380	11/16	3/4" NPT & AWWA	0.3	0.1
D875	04381	7/8	1" NPT	0.5	0.2
D938	04382	15/16	1" AWWA	0.6	0.3

PVC SHELL CUTTERS

Shells cut through service saddles on PVC only. For use with Reed's DMPVC and Drilling Machines. They also fit Ford[®] and Mueller D[®] and PL-2 machines.

Catalog No.	Item Code	Shell Size (in.)	Nom. Corp. Size (in.)	Weight	
				lbs.	kg
PL688	04385	11/16	3/4" NPT & AWWA*	0.2	0.1
PL875	04386	7/8	1" NPT & AWWA*	0.2	0.1
PL1438	04387	1-7/16	1-1/2" NPT & AWWA	0.5	0.2
PL1750	04392	1-3/4	2" NPT & AWWA	0.7	0.3

CARBIDE-TIPPED HOLE SAWS

Carbide-tipped hole saws are used with a hole saw adapter for Reed DM2000 and Ford #77[®] machines. Black oxide coated for corrosion resistance. Recommended for cast iron and ductile iron, including cement-lined ductile iron.

Catalog No.	Item Code	Hole Saw Size (in.)	Nom. Corp. Size (in.)	Weight	
				lbs.	kg
HS1438	04370	1-7/16	1-1/2" NPT & AWWA	0.2	0.1
HS1750	04371	1-3/4	2" NPT	0.2	0.1
HS1875	04372	1-7/8	2" AWWA	0.3	0.1

*Check manufacturer's fitting specifications for proper hole diameter.

HEAVY-DUTY CARBIDE-TIPPED HOLE SAWS

For use with Reed DM2000 Drilling Machines, these saws provide more taps into mains than standard hole saws. Thicker walls, bigger carbides and high-temperature brazing are the heavy-duty features that help withstand many cuts. These hole saws also have a large slot for easy coupon removal. Heavy-duty hole saws are the best choice for cutting cast iron and ductile iron pipe, including cement-lined ductile iron.

Catalog No.	Item Code	Hole Saw Size (in.)	Nom. Corp. Size (in.)	Weight**	
				lbs.	kg
HDHS1438	04354	1-7/16	1-1/2" NPT & AWWA	0.8	0.4
HDHS1750	04355	1-3/4	2" NPT	1.0	0.5
HDHS1875	04356	1-7/8	2" AWWA	1.0	0.5

**Estimated

HOLE SAW ADAPTER*

Item Code	Description
08413	Hole saw adapter for carbide-tipped and heavy-duty carbide-tipped hole saws

*Included with a Reed drilling machine purchase.



WHY REED?

One combination machine assembles as a drilling machine or a direct tapping machine. Offers 25% cost savings versus the purchase of two separate machines and is made in USA.



Combination Drilling / Tapping Machines*

Reed's combination drilling and tapping machines are easier to use, save operating time, and are a better value than any other machine. The CDTM Machines are tapping machines with the necessary components for conversion to drilling machines. The **CDTM1100** is a TM1100 with components for converting to a DM1100. The **CDTM2100** is a TM1100 with components for converting to a DM2100. It utilizes Reed DT series drill taps and Reed D series drill bits, hole saws and PVC shell cutters. These items must be purchased separately.

Catalog No.	Item Code	Size (Inches)	Pipe Diameter		Weight**	
			Inches	Actual Ø mm	lbs.	kg
CDTM1100	09304	3/4 - 1 Tap & Drill	4 - 48 Tap	100 - 1200	114.0	52.0
CDTM2100	09314	3/4 - 1 Tap / 2 Drill	4 - 48 Tap	100 - 1200	116.0	53.0
DM1100	09302	3/4 - 1	n/a		58.2	26.5
DM2100	09312	3/4 - 2	n/a		60.9	27.7
DMBASE	09301	n/a	n/a		35.0	15.9
TM1100	09300	3/4 - 1	4 - 48 Tap	100 - 1200	102.0	46.0

*Spec sheet / Conversion chart available #01071

**Including box

700PD with Power Drive Adapter

Add power to your drilling and tapping, and save hours of hand-cranking. With this option, the Reed 700PD Power Drive comes with a free adapter for the 13/16" boring bar common on popular drilling and tapping machines. Reed 700PDTMPDA will turn the boring bar and operator manually turns the star feed on the tapping/drilling machine. It fits Reed's TM1000, DM1000 or DM2000 series and also the Mueller® B-100, B-101, A-2 or A-3.

Reed recommends the use of a Ground Fault Interrupter, such as the 700PDGFI (#05277) listed below.

Catalog No.	Item Code	Weight		Description
		lbs.	kg	
TMPDA	08430	4.0	1.8	Adapter only
700PDTMPDA	05276	34.0	15.5	700PD and TMPDA adapter

ACCESSORY

Cat. No.	Item Code	Description
700PDGFI	05277	Ground Fault Interrupter



PVC Drilling Machines*

The PVC drilling machine is used to cut through the PVC pipe wall via the corporation stop inserted into the service saddle while under pressure. The **DMPVC** tool consists of the base unit and corp adapters in a carrying case. It utilizes Reed PVC shell cutters which are sold separately. The **DMPVCBASE** machine consists of the base unit, allowing the customer to purchase individual corp adapters and the necessary shell cutters for either 3/4" or 1" corporation size. **DMPVC COMPLETE** ships in a plastic toolbox and includes the DMPVC base along with corp adapters and PVC shell cutters for both 3/4" and 1" drilling projects. NPT to CC thread converters, and a 7/16" socket wrench complete the set.

Catalog No.	Item Code	Size Inches	Weight	
			lbs.	kg
DMPVC	04402	3/4 - 1	8.4	3.8
DMPVCBASE	04401	3/4 - 1	3.7	1.7
DMPVC COMPLETE	04404	3/4 - 1	11.0	5.0

*Spec sheet available #01071

ACCESSORY - PVC SHELL CUTTERS

Shells cut through service saddles on PVC only. For use with Reed's DMPVC and Drilling Machines. They also fit Mueller D® and PL-2 machines.

Catalog No.	Item Code	Shell Size (in.)	Nom. Corp. Size (in.)	Weight	
				lbs.	kg
PL688	04385	11/16	3/4" NPT & AWWA*	0.2	0.1
PL875	04386	7/8	1" NPT & AWWA*	0.2	0.1

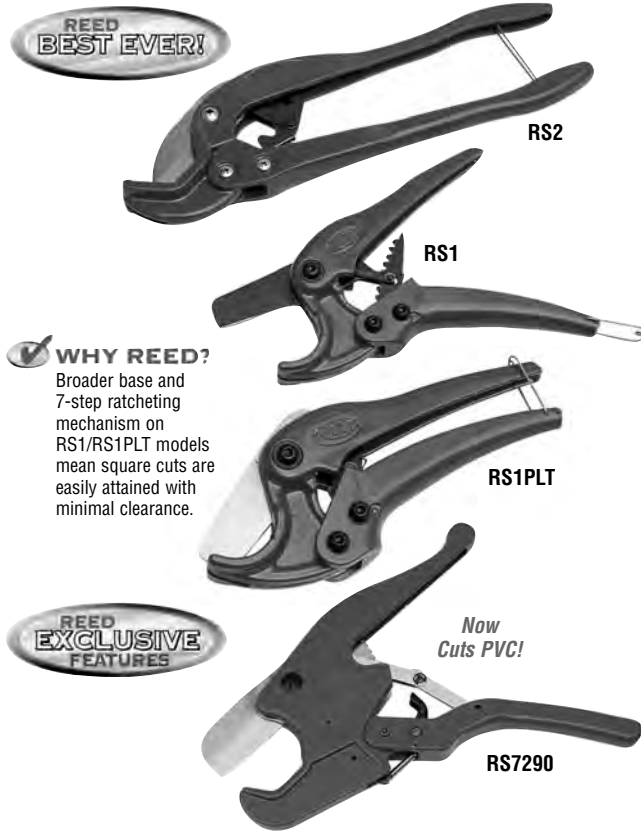
*Check manufacturer's fitting specifications for proper hole diameter.



WHY REED?

Specifically designed for PVC, these cutters easily bore through even the heaviest wall pipe and retain the coupon and most cuttings.

Ratchet Shears



WHY REED?
Broader base and 7-step ratcheting mechanism on RS1/RS1PLT models mean square cuts are easily attained with minimal clearance.

Ratchet shears are ideal for cutting PVC, PE, PP, PEX and ABS pipe. One-hand models **RS1** and **RS1PLT** offer a 7-step ratchet mechanism for best mechanical advantage and smoothest operation. RS1PLT has a corrosion-resistant, plated steel blade. The **RS2** features 2" capacity, extra wide, v-style jaws for easy alignment and long handles for leverage on tough-to-cut pipe. RS7290 one-hand style, 2" capacity shears cut PE and PVC pipe used in gas, water, plumbing and industrial applications, as do the other ratchet shears. All ratchet shears' blades can be easily sharpened or replaced.

Catalog No.	Item Code	Capacity		Length		Weight	
		Actual Inches	Actual Ø mm	in.	mm	lbs.	kg
RS1	04176	1.7	42	8.3	210	0.8	0.4
RS1PLT	04175	1.7	42	8.3	210	0.8	0.4
RS2	04177	2.4	63	17.0	440	2.8	1.3
RS7290	04182	2.4	63	13.25	337	2.4	1.1

REPLACEMENT BLADES

Catalog No.	Item Code	Description
RS1B	94175	RS1 Blade
RS1BPLT	94180	RS1PLT Plated Blade
RS2B	94176	RS2 Blade
RS42B	94190	RS42 Blade
RS7290B	94555	Blade fits Reed RS7290 and Wheeler® 7290

WHEELER REX® REPLACEMENT BLADES

Catalog No.	Item Code	Description
RS7290B	94555	For Wheeler Rex® 7290 2" Shears
RSB5300	94560	For Wheeler Rex® 5290 1-1/2" Shears

Scissor Shears



Scissor shears squeeze together for fast cutting of thin wall and small diameter PE, rubber or nylon tubing. Rotate shears around tubing while squeezing handles together for best cut. Teflon®-coated replacement blades for **SC1** and **SC125**. Tougher stainless steel blades (SC1BSS) are better for cutting PVC. Knockout pin included with each new blade. Replacement blades available.

Catalog No.	Item Code	Capacity		Length		Weight	
		Actual Inches	Actual Ø mm	in.	mm	lbs.	kg
SC1SS	04169	1.3	32	8.0	203	0.3	0.1
SC1	04174	1.3	32	8.3	210	0.3	0.1
SC125	04178	1.7	42	8.3	210	0.3	0.1
SC1SL	04272	1.3	32	8.0	203	0.3	0.1
SC125SL	04273	1.7	42	8.3	210	0.3	0.1

REPLACEMENT BLADES

Catalog No.	Item Code	Description
SC1B	94170	SC1 Blade fits SC1, SC1SS
SC1BSS	94187	SC1 Stainless Steel Blade fits SC1, SC1SS
SC125B	94169	SC125 Blade fits SC125

Guillotine Pipe Cutters

FOR PE PIPE THICKER THAN SDR17

These robust tools are designed to cut PE pipe thicker than SDR17 within 1/8" (3mm) of square on up to 12" (315mm) medium and high density pipe so that no facing is needed for electrofusion and only minimal facing for butt fusion joints. Its durable, Teflon®-coated blade makes many square cuts with no chips to clog valves and small openings. Blades easy to sharpen or replace.

FOR PE PIPE SDR17 AND THINNER

Exclusive to Reed, this innovative tool, HPC8TN, is designed specifically to cut without deforming or crushing thin wall pipe, yet retains all the advantages of Reed's standard Guillotine Cutter. The thin wall cutter works by simply rocking the tool on its built-in wheels around the firmly anchored PE pipe, thus effectively slicing the wall of the pipe without crushing it. HPC8TN requires 30°-60° swing and up to 6" clearance around pipe to get the cut started. Once the wall has been breached, the remainder of the cut is made in the normal way. Blades can be sharpened or replaced.



WHY REED?
Tapered blade makes straighter cuts and lasts longer because it's not prone to breakage like pointed blades. Safer than abrasive saws because no PE chip residue remains in the pipe that may later clog valves.



WHY REED?
Straight blade allows for easier slicing through pipe wall and provides a square cut.



Catalog No.	Item Code	Capacity		Length		Weight	
		Inches-Nom.	Actual Ø mm	in.	mm	lbs.	kg
HPC4	04604	2 - 4	63 - 125	19	482	15.6	7.1
HPC8	04608	3 - 8	90 - 225	30	750	25.0	15.9
HPC12	04612	4 - 12	125 - 350	51	1295	100.0	45.5
HPC8TN*	04618	3 - 8	90 - 225	30	750	34.5	15.7

*EXCLUSIVE

REPLACEMENT BLADES

Catalog No.	Item Code	Description
HPC4B	40329	HPC4 Blade
HPC8B	40027	HPC8 Blade
HPC8TNB	94137	HPC8TN Blade
HPC12B	94903	HPC12 Blade

CONVERSION KITS

Convert tool in approximately five minutes.

Catalog No.	Item Code	Converts
HPCKIT1	94141	HPC8TN to HPC8
HPCKIT2	94142	HPC8 to HPC8TN

WHY REED?

Only Reed offers a universal PE pipe solution using guillotines and yielding cost savings.

NOTE:
#04619 PEGR Grounding Accessory Available

Mechanical Hot Tapping Machines

Hot tap using the DM3MECH Mechanical Hot Tapping Machine. With the right hole saw, cut or drill into copper, steel or plastic pipe for up to 4" values. DM3MECH contains the drilling machine, along with 7/16" Hex Arbor, 1/4" Drill Bit, 7 Hole Saws, hex wrench and toolbox. DM3MECHB is the drilling machine with toolbox only - no extras. These machines require a 1/2" drill motor, valves and fittings which are all sold separately.



Catalog No.	Item Code	Value Size	Weight	
			lbs.	kg
DM3MECH	08350	3/4" - 4"	12.0	5.5
DM3MECHB	08351	3/4" - 4" Toolbox only (No hole saws or arbors)	10.0	4.5



WHY REED?

L564 features a "quick release" button along with an adjustable handle for hard-to-reach spots.



WHY REED?

The Reed Thru-Bolt ratchet handles and sockets substantially reduce the time required to tighten or remove nuts so assembly time and cost are cut considerably.

Ratchet Wrenches and Sockets

Reed Thru-Bolt™ ratchet wrenches are designed for tightening or loosening nuts on long, threaded bolts of service saddles, repair clamps, flanges, mechanical couplings, etc. Individual handles are available, made with traditional malleable iron or lower cost steel stampings. Individual sockets are available, as well as whole sets, and fit all wrench handles listed.

THRU-BOLT™ UTILITY SETS*

Catalog No.	Item Code	Handle	Sockets	Weight	
				lbs.	kg
L511	02284	L500	7/8", 15/16", 1-1/8", 1-1/4" and corp.	6.8	3.1
L514	02286	L564	3/4", 7/8", 15/16", 1-1/16", 1-1/8", 1-1/4" with adjustable angle handle	9.5	4.3
L515	02285	L500	3/4", 7/8", 15/16", 1-1/16", 1-1/8", 1-1/4" and corp.	8.9	4.0

THRU-BOLT™ METRIC UTILITY SETS*

Catalog No.	Item Code	Handle	Sockets	Weight	
				lbs.	kg
L511M	02243	L500	22mm, 24mm, 27mm, 30mm, 32mm	6.8	3.1
L514M	02245	L564	19mm, 22mm, 24mm, 27mm, 30mm, 32mm with adjustable angle handle	9.5	4.3
L515M	02246	L500	17mm, 19mm, 22mm, 24mm, 27mm, 30mm, 32mm	8.9	4.0

*Sets include steel storage case

RATCHET WRENCH HANDLES

Catalog No.	Item Code	Type		Handle Length		Weight	
		Handle	Socket Retention	in.	mm	lbs.	kg
L50	02258	Cast	Retaining Ring	11	280	1.5	0.7
L51	02259	Cast	Retaining Ring	13	330	1.7	0.8
L500	02260	Cast	Quick Release	13	330	1.7	0.8
L150	02261	Stamped	Retaining Ring	11	280	1.4	0.6
L151	02262	Stamped	Retaining Ring	13	330	1.7	0.8
L564	02263	Adjustable	Quick Release	16	420	3.5	1.6

SQUARE DRIVE RATCHET WRENCHES

Catalog No.	Item Code	Type		Handle Length		Weight	
		Handle	Description	in.	mm	lbs.	kg
L16-7/8	02292	Cast	7/8" Female Drive	16.4	420	4.3	2.0
L16-1	02291	Cast	1" Female Drive	16.4	420	4.4	2.0
RWR13/16	40383	Cast	13/16" Female Drive	19.5	495	5.2	2.4

INDIVIDUAL HEX SOCKETS (INCHES)

Cat. No.	L10	L12	L14	L15	L16	L17	L18	L20	L25
Item Code	02264	02265	02266	02267	02268	02269	02270	02271	02272
Hex Size	5/8"	3/4"	7/8"	15/16"	1"	1-1/16"	1-1/8"	1-1/4"	Corp.

*MegaLug® coupling bolts

Dual Socket Ratchet Wrenches

Reed offers four dual socket ratchet wrench combinations. L1817 incorporates the popular 1-1/8" and 1-1/16" sockets into one handy tool. Gas utilities/contractors and waterworks should especially like the L1817 which is used for bolted gas couplings and most full circle repair clamps, in addition to water service couplings, flange bolts and service saddles. LHM2275 (3/4" & 7/8" sockets) has red sockets to identify this tool as suitable for Hymax™ reducer couplings. Reed's other dual socket ratchet wrenches are the L2017 (1-1/4" & 1-1/16" sockets) and the L1815 (1-1/8" & 15/16" sockets). Of rugged construction, each wrench also offers a handy switch on the head for safe action reversal. Thru-bolt sockets work by letting the bolt pass completely through the socket and arm head so nuts can be worked on any threaded length. Thru-bolt sockets replace the need for separate regular and deep sockets. These wrenches are made in USA.



Catalog No.	Item Code	Sockets	Application	Handle Length		Weight	
				in.	mm	lbs.	kg
L2017	02251	1-1/4" & 1-1/16"	Mechanical joints and restraints, repair clamps, service saddles	13	330	2.4	1.1
LHM2275	02225	3/4" & 7/8" (19mm & 22mm)	Hymax(tm) Reducer Couplings	13	330	2.2	1.0

590 AND 591 WHEELER MANUAL PIPE CUTTER

All models cut 1-1/2"-6" (38-150mm) Std. Wt., 1-1/2"-5" (125mm) XH Soil Pipe, 1-1/2"-6" (150mm) No-Hub® in addition to the sizes and materials listed by each model.



590/591

590-6	4"-6" (100mm-150mm) Tile	23 lbs. (10.5kg)
590-8	4"-8" (100mm-200mm) Tile	25 lbs. (11.5kg)
590-10	4"-10" (100mm-250mm) Tile	27 lbs. (12.5kg)
590-12	4"-12" (100mm-300mm) Tile	27 lbs. (12.5kg)
590-15	4"-15" (100mm-375mm) Tile	28 lbs. (13kg)
591-6	1-1/2"-6" (38-150mm) No-Hub and Tile	24 lbs. (11kg)
591-8	1-1/2"-6" (38-150mm) No-Hub and 8" Tile	25 lbs. (11.5kg)

490 AND 491 WHEELER RATCHET PIPE CUTTER

All models cut 1-1/2"-6" (38-150mm) Std. Wt., 1-1/2"-5" (125mm) XH Soil Pipe, 1-1/2"-6" (150mm) No-Hub® in addition to the sizes and materials listed by each model.



490

490-6	4"-6" (100mm-150mm) Tile	18 lbs. (8.5kg)
490-8	8" (200mm) No-Hub® and 4"-8" (100mm-200mm) Tile	19 lbs. (9kg)
490-10	8" (200mm) No-Hub® and 4"-10" (100mm-250mm) Tile	20 lbs. (9.5kg)
490-12	8" (200mm) No-Hub® and 4"-12" (100mm-300mm) Tile	22 lbs. (10kg)
490-15	8" (200mm) No-Hub® and 4"-15" (100mm-375mm) Tile	23 lbs. (10.5kg)
491-6	1-1/2"-6" (38-150mm) No-Hub and Tile	18 lbs. (8.5kg)
491-8	1-1/2"-8" (38-200mm) No-Hub and Tile	19 lbs. (9kg)
6519	1/2" Square Male/Female Drive	2 lbs. (.9kg)
700669	Replacement Drive Screw and Adjusting Block Assembly	



32900

INTERNAL PIPE CUTTER (CAPITOL STYLE CUTTER)

Cuts Cast Iron from the inside out!!

Designed to eliminate the difficulty plumbers have in setting toilet bowls, urinals and similar fixtures due to the shortness of the closet horn. Make cuts where nothing else can!

32900	3" Cast Iron	14 lbs. (6kg)
42900	4" Cast Iron	16 lbs. (7kg)

Replacement Cutter Wheels:

700201	Cutter wheel for CI for 32900/42900
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WHEELER-REX HYDRAULIC CUTTERS — Wheeler-Rex Hydraulic Cutters are the solution to cutting larger diameter Cast Iron, Tile and Concrete Pipe. Like the hand operated "snap" cutters, hydraulic cutters are not rotated around pipe. Their remotely operated hydraulic pumps provide the required power. A 2"-3" minimum clearance is all that is needed to wrap cutter chain around pipe. Complete with pump, hose and case.

2990 WHEELER PIPE CUTTER

All models cut 2"-6" (50-150mm) ASA Class 22 CI Water Main, and 2"-6" (50-150mm) Service Wt. or XH Soil Pipe in addition to the sizes and materials listed by each model.



2990

2990-6	2"-6" (50-150mm) STD and XH Soil Pipe, and Tile	85 lbs. (39kg)
2990-8	2"-8" (50-200mm) STD, 2"-8" XH Soil Pipe; and Tile	87 lbs. (40kg)
2990-10	2"-10" (50-250mm) STD, 2"-8" XH Soil Pipe; and 10" Tile	89 lbs. (41kg)
2990-12	2"-10" (50-300mm) STD, 2"-8" XH Soil Pipe; and 12" Tile	92 lbs. (42kg)
2990-15	2"-10" (50-375mm) STD, 2"-8" XH Soil Pipe; and 15" Tile	94 lbs. (43kg)

More hydraulic pipe cutters on next page.



PIPE CUTTERS/PULLERS, VISE STAND AND SHUT-OFF TOOLS



3890

3890 WHEELER HEAVY-DUTY HYDRAULIC PIPE CUTTER

All models cut 4"-12" (100-300mm) ASA Class 22 CI Water Main, 4"-10" (100-250mm) ASA Class 26 CI Water Main, in addition to the sizes and materials listed by each model.

- 3890-12** 4"-12" (100-300mm) STD; XH Soil Pipe; Tile and Concrete.....157 lbs. (72kg)
- 3890-15** 4"-15" (100-375mm) STD; XH Soil Pipe; Tile and Concrete.....163 lbs. (74kg)
- 3890-18** 4"-18" (100-450mm) STD; XH Soil Pipe; Tile and Concrete.....170 lbs. (77kg)
- 3890-24** 4"-24" (100-600mm) STD; XH Soil Pipe; Tile and Concrete.....178 lbs. (80kg)



5590

5590 WHEELER SUPER HYDRAULIC PIPE CUTTER

All models cut 6"-18" (150-450mm) ASA Class 26 CI Water Main, in addition to the following sizes and materials listed by each model.

- 5590-18** 6"-18" (150-450mm) ASA Class 22 Water Main;
Tile and Concrete200 lbs. (91kg)
- 5590-20** 6"-20" (150-500mm) Class 22 Water Main;
Tile and Concrete213 lbs. (97kg)
- 5590-24** 6"-20" (150-500mm) Class 22 Water Main;
6"-24" (150-600mm) Tile and Concrete230 lbs. (105kg)
- 5590-36** 6"-20" (150-500mm) Class 22 Water Main;
6"-36" (150-900mm) Tile and Concrete269 lbs. (122kg)



4160

4160 WHEELER-REX TRIPOD VISE STAND

For 1/8"- 6" pipe capacity. Lightweight and portable with a large top working area. It features a built-in chain vise, pipe bending slots, pipe rest, ceiling brace screw and hardened replaceable jaws. The lower tray folds for extra convenience.

Shipping Weight53 lbs. (24kg.)

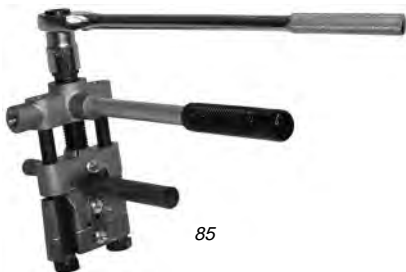


4012

PIPE PULLER

For joining all types of gasketed pipe; plastic, cast iron, clay, and concrete. Comes with two 12 ft. long anchor chains. Also pulls fittings, valves, and couplings into place. Lightweight yet rugged, this tool operates on a basic lever action and is used easily by one man.

- 4012** Pipe Capacity: 4" to 14" (100-350mm) Diameter
Shipping Weight34 lbs. (15.5kg)



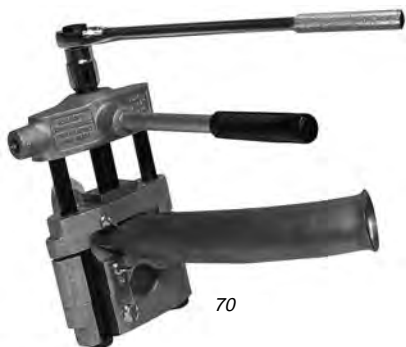
85

SHUT-OFF TOOLS FOR SOFT COPPER PIPE

Our shut-off tools are invaluable for maintenance and installation of soft copper service lines where they can shut-off, hold, and restore flow quickly and easily. They are handy for quick repairs with their swing-out design. Complete with socket, ratchet, holding clamp and carrying case.

New and Improved — with Grease Fitting

- 85** Capacity: 3/4" (20mm) through 1" (25mm) soft copper tubing
Includes: Ratchet, carrying case and #62 clamp.
Shipping Weight.....12 lbs. (5.5kg)
- 86** Capacity: 1/2" (12mm) through 1" (25mm) soft copper tubing
Includes: Ratchet, carrying case and #62 clamp.
Shipping Weight.....13 lbs. (5.9kg)
- 70** Capacity: 1 1/4" (30mm) through 2" (50mm) soft copper tubing
Includes: Ratchet, carrying case and #72 clamp.
Shipping Weight.....18 lbs. (8.2kg)



70

Heavy-Duty Pipe Wrenches

RIDGID Pipe Wrenches are world-renowned for their unsurpassed toughness and serviceability. The original heavy-duty pipe wrench has earned the confidence of pipe professionals for over 80 years because it does the job right the first time, every time. RIDGID Pipe Wrenches are also available in a wide variety of purpose-built configurations, and are available with cast aluminum handles that offer an average 40% weight reduction.



Straight Pipe Wrench

- Sturdy, cast-iron housing and I-beam handle with full floating forged hook jaw, featuring self-cleaning threads with replaceable hook and heel jaws.
- Heavy-duty pipe wrenches comply with federal specifications GGG-N65IE, Type II, Class A.

Catalog No.	Model No.	Description	Nom. Size		Pipe Capacity		Weight		Std. Pack
			in.	mm	in.	mm	lb.	kg	
31000	6	Straight Pipe Wrench	6	150	3/4	20	1/2	0.2	6
31005	8	Straight Pipe Wrench	8	200	1	25	3/4	0.3	6
31010	10	Straight Pipe Wrench	10	250	1-1/2	40	1-3/4	0.8	6
31015	12	Straight Pipe Wrench	12	300	2	50	2-3/4	1.2	6
31020	14	Straight Pipe Wrench	14	350	2	50	3-1/2	1.6	6
31025	18	Straight Pipe Wrench	18	450	2-1/2	65	5-3/4	2.6	6
31030	24	Straight Pipe Wrench	24	600	3	80	9-3/4	4.4	6
31035	36	Straight Pipe Wrench	36	900	5	125	19	8.7	1
31040	48	Straight Pipe Wrench	48	1200	6	150	34-1/4	15.6	1
31045	60	Straight Pipe Wrench	60	1500	8	200	51-1/4	23.3	1

End Pipe Wrench

- Assures a fast and easy grip for pipe working in restricted spaces or close to a wall.
- Provides a faster, easier way to get a grip and long handle swing.
- Ideal for pipe work close to a wall, in tight quarters or in closely-spaced parallel lines.



Catalog No.	Model No.	Description	Nom. Size		Pipe Capacity		Weight		Std. Pack
			in.	mm	in.	mm	lb.	kg	
31050	E-6	End Pipe Wrench	6	150	3/4	20	1/2	0.2	6
31055	E-8	End Pipe Wrench	8	200	1	25	3/4	0.3	6
31060	E-10	End Pipe Wrench	10	250	1-1/2	40	1-3/4	0.8	6
31065	E-12	End Pipe Wrench	12	300	2	50	2-3/4	1.2	6
31070	E-14	End Pipe Wrench	14	350	2	50	3-1/2	1.6	6
31075	E-18	End Pipe Wrench	18	450	2-1/2	65	5-3/4	2.6	6
31080	E-24	End Pipe Wrench	24	600	3	80	9-3/4	4.4	6
31085	E-36	End Pipe Wrench	36	900	5	125	19	8.7	1



Rapwrench®

- A deeper and broader hook jaw housing provides a smooth, flat surface that is ideal for occasional use as a hammer.
- Offers all of the same outstanding qualities found in all RIDGID heavy-duty wrenches.

Catalog No.	Model No.	Description	Nom. Size		Pipe Capacity		Weight		Std. Pack
			in.	mm	in.	mm	lb.	kg	
31395	10	Rapwrench	10	250	1-1/2	40	2	0.9	6

Aluminum Pipe Wrenches

- Nearly 40% lighter than comparable cast-iron wrenches.
- Jaws and all other parts identical to RIDGID Heavy-Duty Wrenches.



Aluminum Straight Pipe Wrench

- Professional strength in lightweight aluminum.
- Offers the same durability and ease-of-use found in all RIDGID heavy-duty wrenches.

Catalog No.	Model No.	Description	Nom. Size		Pipe Capacity		Weight		Std. Pack
			in.	mm	in.	mm	lb.	kg	
31090	810	Aluminum Straight Pipe Wrench	10	250	1-1/2	40	1	0.4	6
47057	812	Aluminum Straight Pipe Wrench	12	300	2	50	2-1/2	1.1	6
31095	814	Aluminum Straight Pipe Wrench	14	350	2	50	2-1/2	1.1	6
31100	818	Aluminum Straight Pipe Wrench	18	450	2-1/2	65	3-3/4	1.7	6
31105	824	Aluminum Straight Pipe Wrench	24	600	3	80	6	2.7	6
31110	836	Aluminum Straight Pipe Wrench	36	900	5	125	11	5.0	1
31115	848	Aluminum Straight Pipe Wrench	48	1200	6	150	18-1/2	8.4	1

Aluminum Offset Pipe Wrench

- Features a jaw opening parallel to the handle and a narrower hook jaw head.
- Provides easy entry into tight spots.



Catalog No.	Model No.	Description	Nom. Size		Pipe Capacity		Weight		Std. Pack
			in.	mm	in.	mm	lb.	kg	
31120	14	Aluminum Offset Pipe Wrench	14	350	2	50	2	0.9	6
31125	18	Aluminum Offset Pipe Wrench	18	450	2-1/2	65	3-1/2	1.6	6
31130	24	Aluminum Offset Pipe Wrench	24	600	3	80	6	2.7	6

Chain Wrenches



- A double jaw gives fast, ratchet-like action in either direction.
- The heavy-duty model has replaceable alloy steel jaws.
- The light-duty model has a one-piece forged alloy steel handle and jaw. Ideal for use in close quarters.

Catalog No.	Model No.	Description	Rated Pipe Capacity		Actual O.D. Capacity		Chain Length		Weight		Std. Pack
			in.	mm	in.	mm	in.	mm	lb.	kg	
31310	C-12	Light Duty Chain Wrench	2	50	4	100	15-3/4	390	1-3/4	0.8	1
31315	C-14	Heavy-Duty Chain Wrench	2	50	5	125	18-1/2	460	2-3/4	1.2	1
31320	C-18	Heavy-Duty Chain Wrench	2-1/2	60	5	125	20-1/4	500	6	2.7	1
31325	C-24	Heavy-Duty Chain Wrench	3	75	5	125	20-1/4	500	8-1/4	3.7	1
31330	C-36	Heavy-Duty Chain Wrench	4-1/2	110	7-1/2	185	29	725	15-3/4	7.1	1

Spud Wrench

Spud Wrench

- 12" Spud Wrench features narrow jaws to fit into tight places.
- Smooth, toothless jaws ideal for square or rectangular stock.



Catalog No.	Model No.	Description	Length		Capacity		Weight		Std. Pack
			in.	mm	in.	mm	lb.	kg	
31400	-	Spud Wrench	12	300	3/8 - 2-5/8	10-67	2-1/2	1.1	1

Internal Wrench



Internal Wrench

- Holds closet spuds and bath, basin and sink strainers through 2". Use to install or extract 1" through 2" nipples.
- Jaws expand by eccentric action and are reversible for various sizes.

Catalog No.	Model No.	Description	Length		Capacity		Weight		Std. Pack
			in.	mm	in.	mm	lb.	kg	
31405	342	Internal Wrench	4-1/2	113	1-2	25-50	1-5/8	0.7	1

Basin Wrenches

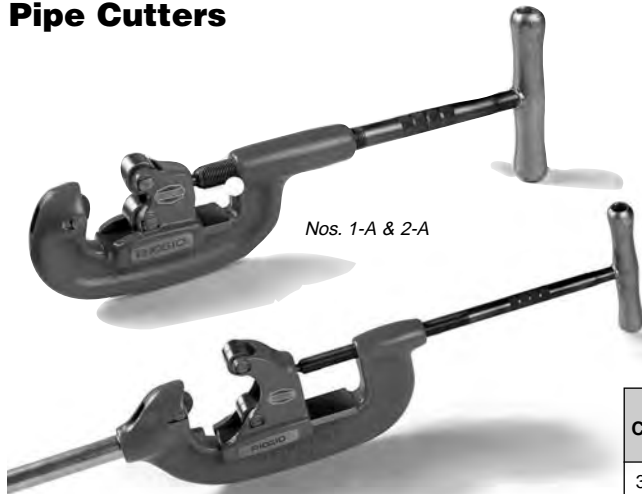


Basin Wrenches

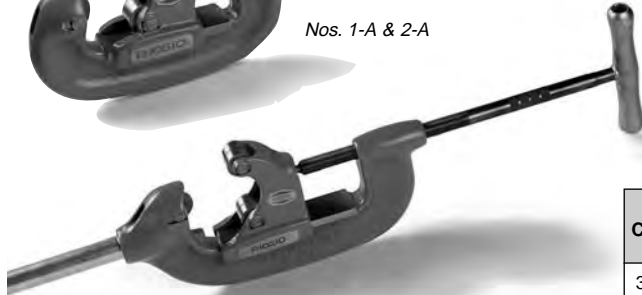
- Spring-loaded jaws of forged alloy steel provide fast, one-hand ratcheting.
- Tension plug holds head in any position up to 90° angle.
- Telescopic shanks on Nos. 1017 and 1019 quickly adjust for lengths from 10" to 17".

Catalog No.	Model No.	Description	Length		Capacity		Weight		Std. Pack
			in.	mm	in.	mm	lb.	kg	
31170	1010	Basin Wrench	10	250	3/8-1-1/4	10-30	1-3/4	0.8	1
31175	1017	Telescoping Basin Wrench	10-17	250-425	3/8-1-1/4	10-30	2	0.9	1
31180	1019	Telescoping Basin Wrench	10-17	250-425	1-1/4-2-1/2	30-60	2	0.9	1

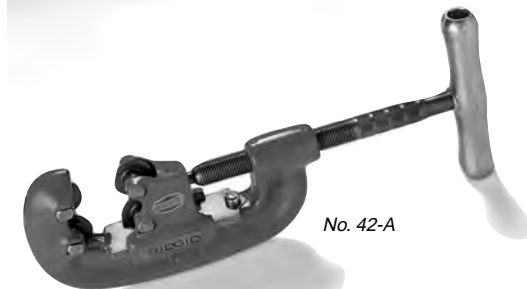
Pipe Cutters



Nos. 1-A & 2-A



Nos. 3-S, 4-S & 6-S



No. 42-A



No. 44-S



No. 44-S

Heavy-Duty Pipe Cutters

- Fast, clean pipe cutting by hand or power.
- Extra-long shank protects adjustment threads, while an extra-large handle is provided for quick, easy adjustment.
- Can be converted to 3-wheel cutter by replacing rollers with cutter wheel, or the 2A and 4S can be ordered as 3-wheel model for use in areas where a complete turn is not possible.

Catalog No.	Model No.	Pipe Cutter Description	Pipe Capacity Nominal Size		Weight	
			in.	mm	lb.	kg
32810	1-A	Heavy-Duty	1/8-1-1/4	3-32	6-1/2	3.0
32820	2-A	Heavy-Duty	1/8-2	3-50	7	3.2
32825	2-A	2-A 3-Wheel Heavy-Duty	1/8-2	3-50	7	3.2
32830	3-S	Heavy-Duty	1-3	25-75	15	6.9
32840	4-S	Heavy-Duty	2-4	50-100	18	8.2
32845	4-S	4-S 3-Wheel Heavy-Duty	2-4	50-100	18	8.2
32850	6-S	Heavy-Duty	4-6	100-150	22	10.0

4-Wheel Pipe Cutters

- Designed for work in areas where a complete turn is impossible.
- No. 42-A has a short handle for use in areas where only a 130° turn can be made.
- Second handle on No. 44-S makes two-man leverage possible on large pipe sizes.
- Both equipped with four heavy-duty wheels.

Catalog No.	Model No.	Pipe Cutter Description	Pipe Capacity Nominal Size		Weight	
			in.	mm	lb.	kg
32870	42-A	Heavy-Duty 4-Wheel	3/4-2	20-50	6-3/4	3.1
32880	44-S	Heavy-Duty 4-Wheel	2-1/2-4	60-100	20	9.1

Wide-Roll Pipe Cutter

- Featuring extra-wide rolls, this cutter is especially designed for use with power drives.
- The wide rolls provide for true tracking and cleaner cuts.

Catalog No.	Model No.	Pipe Cutter Description	Pipe Capacity Nominal Size		Weight	
			in.	mm	lb.	kg
32895	202	Heavy-Duty Wide Rolls	1/8-2	3-50	8	3.5

Soil Pipe Cutters



No. 226



No. 206



No. 246



No. 228



No. 276

No. 226 In-Place Soil Pipe Cutter

- Compact, lightweight tool designed to cut hub and no-hub soil pipe in tight quarters.
- Only 17" long, the Model 226 is perfect for cutting cast iron, concrete and clay pipe where space is limited.
- Especially suited for against-the-wall and other tight quarter applications.
- From its compact design to its unique chain latching mechanism, every feature has been engineered for maximum productivity.

No. 206 Soil Pipe Cutter

- Cuts 1½"-6" No Hub® soil pipe.
- Lighter weight and closer spacing of cutter wheels, together with simple ratcheting action, give smooth cut on lighter wall pipe.
- Ratchet-action handle parallel to pipe allows for application in trenches of minimum width.
- Complete with hand guard to protect operator's knuckles when cutting.

No. 246 Soil Pipe Cutter

- Cuts 1½"-6" clay, cast-iron, cement pipe and 4" class 22 water main.
- Ratchet-action handle parallel to pipe allows for application in minimum width trenches.
- Complete with hand guard to protect operator's knuckles when cutting.

No. 228 Soil Pipe Assembly Tool

- Handles all 1½" through 8" gasketed soil pipe without extra, loose attachments.
- Easy assembly of Ys, tees, elbows, and straight lengths from any angle.
- Slim, compact design lets one man assemble even large sizes quickly and easily.
- Removal of handle facilitates vertical and overhead pipe assembly.

No. 276 Soil Pipe Cutter

- Provides one stroke cutting of 1½"-6" service weight, No Hub soil pipe, clay and cement pipe. Makes repeated cuts quickly.
- Expand capacity up to 8" service weight soil pipe by ordering Catalog No. 33665 Chain Extension Assembly.

Tool Capacity

Type of Pipe	Pipe Size in Inches	
	Standard Cap. w/ Chain Ext.	Maximum Cap. w/ Chain Ext.
Clay Pipe	1½"-6"	1½"-8"
No Hub Cast Iron	1½"-6"	1½"-8"
Service Weight Cast Iron	1½"-6"	1½"-8"
Concrete Pipe	4"-6"	4"-6"
Extra Heavy Soil Pipe	2"-5"	2"-5"

Catalog No.	Model No.	Description	Capacity		Weight		Std. Pack	Replmt. Chain Cat #
			in.	mm	lb.	kg		
68650	206	Soil Pipe Cutter - No Hub	1½-6	50-150	18	8.2	1	33670
69982	226	In-Place Soil Pipe Cutter	1½-6	50-150	18	8.2	1	33670
32900	246	Soil Pipe Cutter	1½-6	50-150	25	11.3	1	34575
74207	276	Soil Pipe Cutter	1½-6	50-150	23	51.0	1	33670
31410	902	Torque Wrench for No Hub Cast-Iron Soil Pipe Coupling	-	-	½	0.2	1	-
14988	904	Torque Wrench for No Hub® Cast-Iron Soil Pipe Couplings	-	-	½	0.2	1	-
32905	228	Soil Pipe Assembly Tool	1½-8	50-200	22¾	10.3	1	-
33665	206/226/276	Chain Extension Assy.	-	-	1	.45	1	-
34570	246	Chain Extension Assy.	-	-	1	.45	1	-



No. 902

No. 902 Torque Wrench

- Preset to eliminate guesswork in No Hub soil pipe installations.
- Assures proper coupling tightness for strong, leak-free joints.
- The 5/16" drive tightens with a fast ratchet action until the wrench clicks for accurate 60 inch-pounds torque.

No. 904 Torque Wrench

- The 3/8" drive tightens with a fast ratchet action until the wrench clicks for accurate 80 inch-pounds torque.

Pipe Vises



425 Portable Tristand Chain Vise



460 Portable Tristand Yoke Vise



Top Screw Stand Chain Vise



Top Screw Stand Bench Vise

Portable Tristand® Vises

- Integral legs and tray fold in for easy carrying and setup. Large vise base overhangs front legs for clear tool swing.
- Complete with slots for hanging tools, pipe rest, three-pipe benders and ceiling brace screw.
- Model 460 features a larger work surface for increased pipe capacity, 6" diameter, rear support and receding ceiling brace screw.
- Model 425 features "quick grab," self-locking latch and carrying handle for ease of transport.

Cat. No.	Model No.	Description	Pipe Capacity		Weight		Std. Pack
			in.	mm	lb.	kg	
40130	40-A	Portable Tristand Yoke Vise	1/8 - 2½	3-60	48½	22.0	1
74915	40-A*	Portable Tristand Yoke Vise Export	1/8 - 2½	3-60	48½	22.0	1
16703	425	Portable Tristand Chain Vise	1/8 - 2½	3-60	32	14.5	1
72037	460	Portable Tristand Chain Vise**	1/8 - 6	3-150	47	21.0	1
72042	460E	Portable Tristand Chain Vise Export**	1/8 - 6	3-150	47	21.0	1

*Export Models require assembly.

**Jaw for Plastic Pipe, Catalog No. 41280 available; order separately.

Stand Chain Vise

- Handy, portable stand chain vise.
- Sturdy cast-iron frame.
- Equipped with pipe rest, pipe bender and tool tray. Legs and connecting pipe not furnished.

Cat. No.	Model No.	Description	Pipe Capacity		Weight		Std. Pack
			in.	mm	lb.	kg	
40165	560	Top Screw Stand Chain Vise	1/8-5	3-125	25¾	11.7	1

Bench Chain Vises

- Crank handle is anchored to base.
- Rugged cast-iron base has handy pipe rest and bender. Capacities of 1/8" through 8".
- Two models available for plastic pipe. Toothless jaws are neoprene-coated to prevent scoring of pipe.

Cat. No.	Model No.	Description	Pipe Capacity		Weight		Std. Pack
			in.	mm	lb.	kg	
40185	BC210	Top Screw Bench Chain Vise	1/8-2½	3-60	25¾	11.7	1
40195	BC410	Top Screw Bench Chain Vise	1/8-4	3-100	7¾	3.5	1
40190	BC210P*	Top Screw Bench Chain Vise	½-2-7/8	15-70	14¾	6.7	1
40200	BC410P*	Top Screw Bench Chain Vise	½-4½	15-110	7½	3.4	1
40205	BC510	Top Screw Bench Chain Vise	1/8-5	3-125	14½	6.6	1
40210	BC610	Top Screw Bench Chain Vise	¼-6	6-150	15	6.8	1
40215	BC810	Top Screw Bench Chain Vise	½-8	15-200	24¾	11.1	1
40175	BC2A	Bottom Screw Bench Chain Vise	1/8-2	3-50	38	17.3	1
40180	BC4A	Bottom Screw Bench Chain Vise	1/8-4	3-100	5¾	2.6	1

*For Plastic Pipe and Tube.

Pipe Vises



Bench Yoke Vise

Bench Yoke Vises

- Yoke and base made of strong, dependable iron. Hardened alloy steel jaws and convenient pipe rest and bender.

Catalog No.	Model No.	Description	Pipe Capacity		Weight		Std. Pack
			in.	mm	lb.	kg	
40080	21	Bench Yoke Vise	1/8-2	3-50	8¾	4.0	1
40085	22	Bench Yoke Vise	1/8-2½	3-60	13	5.9	1
40090	23	Bench Yoke Vise	1/8-3	3-75	19¾	9.0	1
40100	25	Bench Yoke Vise	1/8-4	3-100	27¾	12.6	1
40110	27	Bench Yoke Vise	1/8-6	3-150	65	29.6	1



Portable Chain and Yoke Vise

Portable Chain and Yoke Vises

- Light, strong, portable post chain vise fits any shape or kind of post.
- Model 640 features a tray for oil can, plus a handy pipe bender.
- The portable yoke vise easily attaches to plank, workbench or post.

Catalog No.	Model No.	Description	Pipe Capacity		Weight		Std. Pack
			in.	mm	lb.	kg	
40125	39	Portable Kit Yoke Vise	1/8-2½	3-60	15½	7.0	1
40170	640	Top Screw Post Chain Vise	1/8-5	3-125	23½	10.7	1

Straight Pipe Welding Vise



Angle Pipe Welding Vise



Elbow Pipe Welding Vise



Flange Pipe Welding Vise



Pipe Welding Vises

- Made of durable performance-proven material and designed to resist strain, heat and warpage during tacking.
- Machined swivel nuts and pins, together with special chain screws, give smooth and trouble-free assembling of the vise onto pipe.

Catalog No.	Model No.	Description	Pipe Capacity		Weight		Std. Pack
			in.	mm	lb.	kg	
40220	461	Straight Pipe Welding Vise	½-8	15-200	15½	7.0	1
40225	462	Angle Pipe Welding Vise	½-12	15-300	18-3/8	8.4	1
40230	463	Elbow Pipe Welding Vise	2½-8	60-200	14	6.4	1
40235	464	Flange Pipe Welding Vise	2½-8	60-200	17¼	7.8	1

Manual Ratchet Threaders

All matched Threader/Sets include Die Heads, Ratchet Assembly, Ratchet Handle and Alloy Dies. All Threader Sets use same 12-R Dies in Die Head.

Exposed Ratchet Threader Sets

- No. OO-R: Capacity 1/8"-1"
- No. 12-R: Capacity 1/8"-2"



Enclosed Ratchet Threader Sets

- No. 11-R: Capacity 1/8"-1 1/4"



No. 11-R

Exposed Ratchet Threader Sets

Model No.	Capacity		Catalog Number			Weight	
	in.	mm	NPT	BSPT	NPSM	lbs.	kg
OO-R	1/2-1	12-25	36345	65175	36380	10	4.5
OO-R	3/8-1	10-25	36355	-	-	11 1/4	5.1
OO-R	1/8-1	3-25	36375	-	-	13 3/4	6.2
12-R	1/2-1 1/4	12-32	36480	-	-	23 3/4	10.8
12-R	1/2-2	12-50	36475	65255	36510	34 3/4	15.8
12-R	1/8-2	3-50	36505	65285	-	45 1/2	20.7

Enclosed Ratchet Threader Sets

Model No.	Capacity		Catalog Number				Weight	
	in.	mm	NPT	BSPT	NPSM	BSPP	lbs.	kg
11-R	1/2-1 1/4	12-32	36390	65135	-	-	16	7.3

Ratchet and Handle Only

- Ratchet knob indicates forward and reverse. Die heads snap in from both sides and lock in place.

	Model No.				
Ratchet and Handle Only	OO-R	11-R	111-R	12-R	OO-RB
Catalog No.	38540	37777	38550	38555	38540



Three-Way Pipe Threaders

- Each model cuts three thread sizes and uses 12-R ratchet threader dies.

Model No.	Capacity		RH Alloy	RH High Speed	RH High Speed for Stainless Steel	Weight	
	in.	mm				lb.	kg
31-A NPT	1/2, 3/4, 1	12, 20, 25	36540	36550	36555	10	4.6
31-A BSPT	1/2, 3/4, 1	12, 20, 25	65320	-	-	10	4.6
31-A NPSM	1/2, 3/4, 1	12, 20, 25	36560	-	-	10	4.6

Hand-Held Power Threaders

Model 700 Power Drive

- Heavy-duty hand-held power drive.
- Features reversible 115V or 230V Universal motor.
- Capacity 1/8"-2" (3mm-50mm) pipe. Designed for RIDGID No. 12R die heads. Other RIDGID die heads (OOR, OORB, 11R) using adapters, threading 2½" through 6" (62mm-150mm) with 141/161 geared threaders.
- CSA approved.
- Approved to UL standards (NRTLCL).

Technical Specifications

Motor: Universal, ½ HP, 115V or 230V 25-60 Hz.

Switch: Double-throw reversible.

Gear Head: All-spur gear reduction. Spring-loaded adapter pawl.
Hardened steel spindle gear.

Body: Cast aluminum.

Spindle Speed: 32 RPM (no load).

Capacity: 1/8"-2" Pipe (30mm-50mm)
¼"-1" (6mm-25mm) Bolt (using OO-RB)

Weight: 25 lbs. (11kg) Power Drive only.

Length: 28¼" (71.7cm).



Catalog No.	Model No.	Description	Pipe Threading Capacity		Rod Threading Capacity		Maximum Geared Threader Capacity		Weight	
			in.	mm	in.	mm	in.	mm	lb.	kg
41935	700	115V 25-60 Hz Only	1/8-2	3-50	¼-1	6-25	6	150	31	14
41940	700	230V 25-60 Hz Only	1/8-2	3-50	¼-1	6-25	6	150	31	14



No. 775 Support Arm



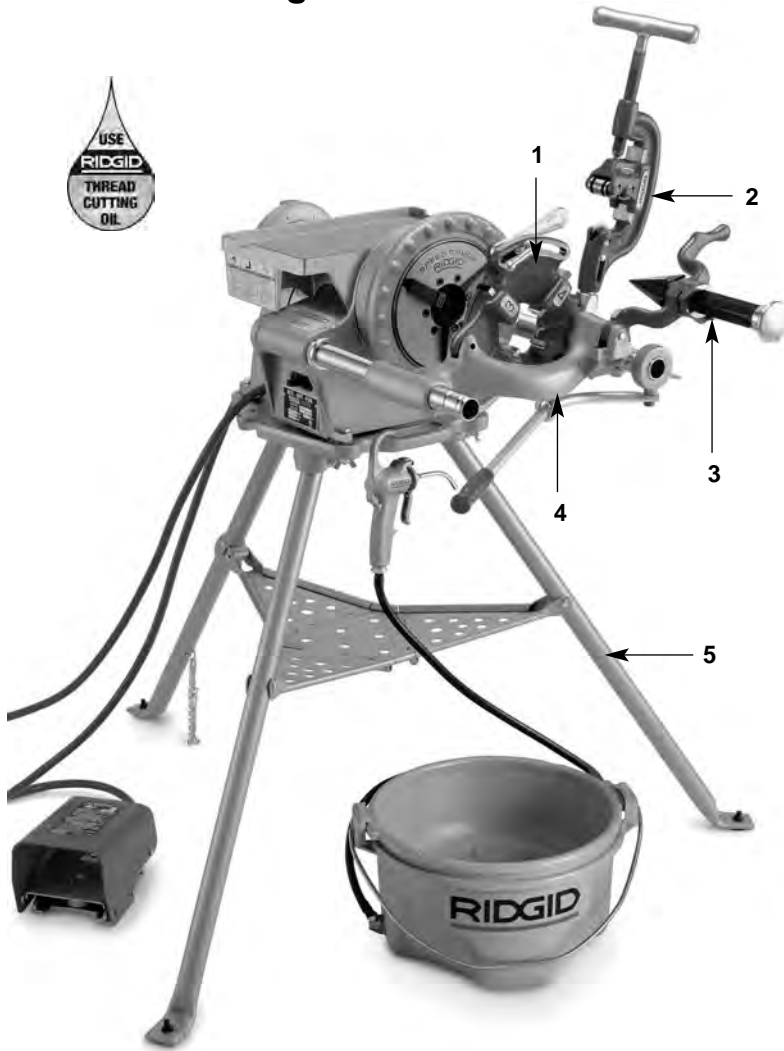
Optional Carrying Case



Use the 700 Support Arm to help resist torques developed when threading pipe greater than 1" in diameter.

Catalog No.	Model No.	Accessories Description	Weight	
			lb.	kg
42600	770	Adapter for OO-R and OO-RB	3-3/8	2
42605	771	Adapter for O-R	3-3/8	2
42610	772	Adapter for 11-R	3½	2
42615	773	Adapter for 111-R	3	1
42620	774	Square Drive Adapter - 15/16"	5½	2
42625	775	Support Arm for No. 700	11	5
42950	B-171-X	Metal Carrying Case for No. 700 and Accessories	29	13
10883	418	Oiler w/1 Gal. Nu-Clear Thread Cutting Oil	20½	9.4
41620	-	Gearhead Motor Grease	1	0.5

Power Threading Machine



Model 300 Complete

Convert your 300 Power Drive into a portable threading machine. Add these accessories for enhanced field performance.

- 1 – Die heads and dies for use with 300 Power Drive with 311 carriage.
- 2 – No. 360 Cutter: Capacity: 1/8"-2" (3mm-50mm) pipe, 1/4"-7/8" (6mm-22mm) rod with F-3 wheel, 5/16"-1" (8mm-25mm) with E-1032 cutter wheel.
- 3 – No. 341 Reamer: Positive-locking, 5-flute cone, right-hand 1/8"-2" (3mm-50mm). Special E863 RH/LH combination reamer cone available.
- 4 – No. 311 Carriage with lever.
- 5 – No. 1206 Stand or Transporter.
 - No. 1452 Clip-On Tool Tray.
 - No. 418 Oiler.
 - No. 819 Nipple Chuck.
 - No. 32 Transporter.

Add a No. 304 retrofit kit to convert the 300 power drive to automatic oiling:

- Gear head assembly with oil pump.
- Oil pan assembly.
- Oil spout.
- Support bar.
- Necessary connectors.
- One gallon of Nu-Clear thread cutting oil.



No. 32 Transporter



1452 Tray

Catalog No.	Model No.	Accessories Description	Weight	
			lb.	kg
42360	1206	Stand for 300 Power Drive	31	14.1
83540	1206	Stand for 300 Power Drive Export	31	14.1
42575	32	Transporter (for Power Drives and Tri-stand Vises)	14¼	6.5
68815	311	Carriage with No. 312 Lever	15	6.8
42385	312	Carriage Feed Lever	3	1.4
10883	418	Oiler with 1 gallon of Nu-Clear Thread Cutting Oil	20½	9.4
42365	341	Reamer for No. 311 Carriage with Lever	7	3.2
42370	360	Cutter for No. 311 Carriage	8½	3.9
97065	811A	Universal Q.O. Die Head Only, Right-Hand Only	12½	5.7
97075	815A	Self-Opening Die Head Only, Right-Hand Only	13½	6.1
51005	819	Nipple Chuck Complete, ½"-2" (12mm-50mm)	10½	4.8
42380	1452	Clip-On Tool Tray	6	2.7
97345	304	Retrofit Kit (38 rpm)	37¾	17.1
97350	304	Retrofit Kit (57 rpm)	37¾	17.1
97365	-	Jaw Inserts for Coated Pipe	½	0.2
46660	E-863	LH/RH Reamer Cone	7	3.2
41620	-	Gearhead Motor Grease	1	0.5

Model 535 Threading Machine

Capacities

- **Pipe:** 1/8"-2" (3mm-50mm) 2½"-4" (62mm-100mm), 4"-6" (100mm-150mm) with 141 and 161 geared threaders
- **Bolt:** ¼"-2" (6mm-50mm)

The Model 535 maintains the ruggedness of the industry workhorse while adding the features that make the threading operation more productive. A large chip tray and oil reservoir make the 535 ideal for longer uninterrupted threading. The 535 features a high clearance carriage that makes the threading operation easier and a generous top cover area that is ideal for keeping tools and work related materials handy. The 535 is designed around maximum uptime with the upgrades that matter most to the pipe working professional. Users also benefit from the part commonality between the 535, the 535A Automatic and other RIDGID equipment.

Features

- Large 1.75 gallon oil tray.
- 100% larger chip tray.
- Generous top cover for keeping tools and fittings handy.
- High clearance carriage.
- Speed chuck with rocker-action jaws centers and grips work piece instantly.
- Can be used with geared threaders Models 141 and 161.
- Uses Model 816/817 semi-automatic, Model 815A self-opening or Model 811A quick-opening die heads.
- Length gauge for quick, accurate cut-off.
- CSA Approved.
- Approved to UL standards (NRTLCL).



Technical Specifications

- Motor: ½ HP, single-phase, 115V, 25-60 Hz, 15 Amp reversible universal motor.
- Switches: FOR/OFF/REV and Integral safety foot switch.
- Chuck: Speed Chuck™ with replaceable rocker-action jaw inserts (3).
- Rear Centering Device: Cam-action, turns with chuck.
- Cutters: Self-centering, full-floating.
Two models available:
 - One (1) Standard. No. 820 Wheel-Type Cutter, pipe capacity 1/8"-2" (3mm-50mm), bolt capacity ¼"-1" (6mm-25mm).
 - Two (2) Optional. No. 821 Blade-Type cutter, pipe capacity ½"-2" (12mm-50mm).
- Spindle Speed: 36 RPM standard (no load), 54 RPM model also available.
- Reamer: 5-flute cone, RH, 1/8"-2" (3mm-50mm).
- Oil Pump: Self-priming gerotor oil pump.
RH/LH combination reamer available.

Standard Equipment

Model No. 535 threading machine with foot switch:

- One (1) - No. 811A universal quick opening die head.
- One (1) - No. 341 reamer.
- One (1) - No. 820 cutter.
- One (1) set ½" - ¾" universal alloy dies.
- One (1) set 1" - 2" universal alloy dies.
- One (1) gallon premium oil.
- Four (4) hex wrenches.
- One (1) spare E-1032 cutter wheel.

Model 535 Standard Machines

Catalog No.	Model No.	Description 115V 25-60 Hz	Cutter Model	RPM	Volt	Weight	
						lb.	kg
93287	535	½"-2" NPT	820	36	115V	260	117.9
96497	535	Machine Only	820	36	115V	245	111.1
96502	535	½"-2" NPT	820	54	115V	260	117.9
230V 25-60 Hz							
96507	535	½"-2" NPT	820	36	230V	260	117.9



Model 535 International Standard Machines

Catalog No.	Model No.	Description 115V 25-60 Hz Models	Cutter Model	RPM	Volt	Weight	
						lb.	kg
96512	535	½"-2" BSPT	820	36	230V	256	116.6

Machines Listed as ½"-2" include Standard Equipment. Machine Only includes Standard Equipment less all Die Heads and Dies. All machines have 25-60 Hz Universal ½ HP single-phase motors.

Note: NPT Dies are for NPT Die Heads only. BSPT Dies are for BSPT Die Heads only.

Please use Catalog Item Nos. when ordering. Use High Speed Dies for machines of 54 or more RPM.

Accessories

- Die Heads and Dies
- Die Head Racks
- Stands – Three Models Available
- Thread Cutting Oil
- Nipple Chuck

Model 535 Machine Accessories

Catalog No.	Model No.	Description	Weight	
			lb.	kg
42365	341	Reamer	6¾	3.1
42390	820	Wheel-Type Cutter	8½	3.9
42395	821	Blade-Type Cutter	13¾	6.2
97365	-	Jaw Inserts for Coated Pipe	½	0.2
92457	100A	Universal Leg & Tray Stand*	75	34.5
92462	150A	Universal Wheel & Tray Stand*	103	46.7
92467	200A	Universal Wheel & Cabinet Stand*	104	74.5
58007	-	Machine stand adaptor bracket for 535s built before 1996*	17	7.7
96517	MJ-1	535M Left Hand Threading Kit	3½	1.6
42415	768	Drive Link Assembly for 141	2½	1.1
16723	4135	Drive Link Assembly for High Clearance Carriage for 141	12	5.5
42405	844	Drive Bar for 141	5¾	2.6
51005	819	Nipple Chuck Complete ½"-2"	10½	4.8
84537	816	1/8"-¾" Semi-Automatic Die Head	13	5.9
84532	817	1"-2" Semi-Automatic Die Head	13	5.9
41620	-	Gearhead Motor Grease	1	0.5

*To attach a pre 1996 Model 535 to a Model 100A, 150A, or 200A Stand a #58007 Adaptor Kit must be used.

Steel Cabinet Features

- 17-gauge steel walls and welded construction.
- Two (2) internal and one external storage shelves.
- Oversized bi-fold door with steel clasp.
- Cut-outs for power cord and foot switch storage.
- Two (2) drain plugs for easy cleaning.

Machine Stands



No. 100A



No. 150A



No. 200A with Steel Cabinet



Nos. 141/161 Geared Threaders

- 141 threads 2½", 3", 3½", 4" pipe with one set of dies.
- 161 threads 4", 4½", 5", 6" pipe with one set of dies.
- Jaw clutch prevents jamming.
- Simple adjustment for tapered or straight threads.
- Cam-type workholder sets instantly.
- Fully enclosed gearing.
- Right-hand only.

Catalog No.	Model No.	Description	Capacity		Weight	
			in.	mm	lb.	kg
36620	141	NPT with 1 Set High-Speed Dies	2½-4	62-100	93	42.3
65380	141	BSPT with 1 Set High-Speed Dies	2½-4	62-100	93	42.3
36630	161	NPT with 1 Set High-Speed Dies	4-6	100-150	158	71.8
39380	D-1440	Ratchet and Handle	—	—	9½	4.3
96725	—	Metal Carrying Case for 141 Geared Threaders	—	—	17	7.7
41620	—	Gearhead Motor Grease	—	—	1	0.5

Thread Cutting Oil

- Cools threads and pipe during operation.
- Speeds metal removal.
- Improves thread quality.

RIDGID thread cutting oils are free of chlorine and other halogens, PCBs and heavy metals. Complete material safety data sheet available.

Dark Oil – Traditional mineral oil with low odor and anti-mist formulation.
Nu-Clear® Oil – Clear mineral oil with low odor and anti-mist formulation. Special low temperature properties maintain workable viscosity to -20°F.
Extreme Performance Oil – High performance mineral oil formulated to produce superior quality threads on stainless steel and black pipe.



Container Size		Catalog No.			Containers Per Case	Weight per Case	
U.S.	Metric	Nu-Clear	Dark	Extreme Performance		lb.	kg
1 Qt.*	0.94 L	41565	41590	74007	12	22	10.0
1 Gal.	3.78 L	70835	70830	74012	6	50	22.7
5 Gals.	18.90 L	41575	41600	74047	1	42	19.1
55-Gal. Drum	207.90 L	41585	41610	76767	1	465	211.0
16 oz.**	0.38 L	—	—	22088	12	12	5.4

*Flip-top included with every quart bottle. **Aerosol can.

No. 418 Oiler

The new Model 418 hand-held oiler is sturdier than ever before. The 418's pump assembly and heavy-duty reservoir are designed to increase productivity.

Pump Assembly

- 50% more oil per stroke than other hand-held oilers for longer die life.
- An ergonomic 2-finger trigger design that reduces user fatigue.
- Die cast heavy-duty body with swivel nozzle with no exposed parts for longer life.

Heavy-Duty Reservoir

- The 418 oiler features a patent pending fastenerless twist and lock drip pan that easily locks in place.
- The new material withstands abrasion, is lighter than metal, and does not rust.
- The new reservoir will not crack or leak.
- New material is so strong that under normal use, no dents will form on impact or shape changes will occur over time. As a result, the drip pan will fit squarely on the reservoir time after time.
- Integral molded body eliminates leaks at the hose-reservoir connection.
- Convenient anti-slip grip design with integral hook for easy hanging.



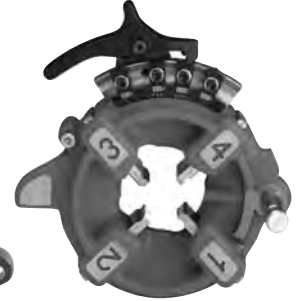
Catalog No.	Model No.	Description	Weight	
			lb.	kg
10883	418	Hand operated oiler complete. Includes 1 gallon thread cutting oil, reservoir with removeable chip tray and 54" hose.	20.50	9.4
72342	402	Hand operated oiler with attachment for 1-gallon and 5-gallon containers and 54" hose.	2.50	1.2
72332	#4	Hand operated oiler only.	1.25	0.5
72327	#4	Hand operated oiler with 54" hose and hose fittings.	2.25	1.0



No. 815A
Self-Opening
Die Head



No. 532
Bolt Die Head



No. 816/817
Semi-Automatic
Die Head



No. 811A
Quick-Opening
Die Head



Mono
Die Head

Optional Die Heads for Models 535-535A

Catalog No.	Model No.	Die Head Description	How Opened	Thread Direction	Oil Thru Head	Dies Used	Pipe Cap.	Bolt Cap.	Used On	Weight	
										lb.	kg
Machine NPT Die Head											
97065	811A	Universal	Q.O.	RH	Yes	Univ.	1/8"-2"	1/4"-2"	*	12½	5.7
97075	815A	Universal	S.O.	RH	Yes	Univ.	1/8"-2"	1/4"-2"	*	13	5.9
84537	816	Universal	S.A.	RH	Yes	Univ.	1/8"-3/4"	—	*	13	5.9
84532	817	Universal	S.A.	RH	Yes	Univ.	1"-2"	—	*	13	5.9
23282	842	Universal	Q.O.	LH	Yes	Univ.	1/8"-2"	—	*	12½	5.7
10491	555	555	Q.O.	RH	Yes	Dual/Bolt	1/8"-3/4"	—	*	8	3.6
Machine BSPT Die Heads											
97070	811A	British Universal	Q.O.	RH	Yes	Univ.	1/8"-2"	1/4"-2"	*	12½	5.7
97080	815A	British Universal	S.O.	RH	Yes	Univ.	1/8"-2"	1/4"-2"	*	13	5.9
23297	856	British Universal	S.O.	LH	Yes	Univ.	1/8"-2"	—	*	12½	5.7
Machine Bolt Die Heads											
97045	531	Bolt	Q.O.	RH/LH	Yes	500B	—	1/4"-1"	*	7½	3.4
97050	532	Bolt	Q.O.	RH/LH	Yes	500B	—	1-1/8" - 2"	*	9	4.1
Machine Mono Die Heads											
42047	500A	Mono	Q.O.	RH	Yes	Mono	1/8"	—	*	6½	3.1
42052	500A	Mono	Q.O.	RH	Yes	Mono	1/4"	—	*	7	3.2
42057	500A	Mono	Q.O.	RH	Yes	Mono	3/8"	—	*	7	3.2
42062	500A	Mono	Q.O.	RH	Yes	Mono	1/2"	—	*	7¼	3.3
42067	500A	Mono	Q.O.	RH	Yes	Mono	3/4"	—	*	7¼	3.3
42072	500A	Mono	Q.O.	RH	Yes	Mono	1"	—	*	8	3.6
42077	500A	Mono	Q.O.	RH	Yes	Mono	1¼"	—	*	8	3.6
42082	500A	Mono	Q.O.	RH	Yes	Mono	1½"	—	*	8½	3.9
42087	500A	Mono	Q.O.	RH	Yes	Mono	2"	—	*	8½	3.9

* 535-535A-1822 Machines and 300 and 300-A w/carriage.

Q.O. = Quick-Opening – Manually flip throwout lever to retract dies when thread length is cut.

S.A. = Semi Automatic (Dies retract automatically on depressing handle)

S.O. = Self-Opening – Trigger foot automatically retracts dies when thread length is cut.

No. 811A Die Head replaces the No. 811 and No. 841 Die Heads.

No. 815A Die Head replaces the No. 815 and No. 845 Die Heads.

No. 500A Die Heads replace the No. 500 Mono Die Heads.

No. 555 Die Head replaces No. 515.

Note: British Die Heads use British Dies only.

Note: 531 and 532 Die Heads replace 500B Die Head.

Individual Machine Die Heads do not include dies.



Die Head Racks For All Machine Die Heads

Catalog No.	Model No.	Description	Weight	
			lb.	kg
42485	4U	4 Heads	8½	3.9
42490	6U	6 Heads	12½	5.7

Die Head Differences

- Self-Opening – Manual release for user-specified thread lengths.
- Quick-Opening – Automatic release for repeatable number of threads.
- Bolt – Specially for bolt threader.
- Mono – Dedicated to a specific size of thread.
- Semi-Automatic – Can be quickly adjusted from size to size with manual release.

Pipe Stands

A full range of heavy-duty adjustable pipe stands are available in varying configurations with capacity from 1/8"-36" (3mm-900mm); suitable for use with threading machines, roll groovers, etc.



Adjustable Stand
With Steel Rollers



V Head
Pipe Stand



Adjustable
Pipe
Supports



Roller Head
Pipe Stand



Conveyor Head
Pipe Stand



Support Stand
For Roller Groover



Large Diameter
Pipe Stand



Ball Transfer Head

Catalog No.	Model No.	Description	Height Adjustment Low – High		Max. Pipe Capacity		Max. Weight Capacity		Weight	
			in.	cm	in.	mm	lb.	kg	lb.	kg
56657	VJ-98	V Head Low Pipe Stand	20-38	51-96	12	300	2500	1136	21	9.5
56662	VJ-99	V Head High Pipe Stand	28-52	71-132	12	300	2500	1136	23	10.4
37997	BTH-9	Ball Transfer Head F/VJ	–	–	12	300	1000	454.5	5	2.3
56667	RJ-98	Roller Head Low Pipe Stand	23-41	59-104	12	300	2500	1136	24	10.9
56672	RJ-99	Roller Head High Pipe Stand	32-55	82-140	12	300	2500	1136	27	12.3
56682	CJ-99	Conveyor Head High Stand	29-44	74-112	12	300	2500	1136	19	8.6
42505	46	Adjustable Pipe Support	23-33	59-84	6	152	2500	1136	23	10.4
42510	92	Adjustable Pipe Support	32-41	81-104	6	152	2500	1136	28	12.7
83380	965	Support Stand for Groovers	26-42	66-107	12	300	2500	1136	29	13.2
64642	AR99	Adj. Roller Stand w/Steel Wheels	34	86	36	900	2500	1136	30	13.6
96372	RJ-624	Large Diameter Pipe Stand	16-31	41-79	24	610	4500	2041	167	75.7

915 Manual Roll Groover

The new RIDGID 915 Roll Groover is a manual roll groover for in-place field applications. The 915 requires only 3½" of clearance to travel around a pipe and a minimum of 2¾" of exposed pipe for grooving. With the appropriate roll sets, the 915 can groove from 1¼" to 12" pipe, the widest range in its class! The 915's cast-in handle allows for easy transport or chaining the groover down to prevent theft. The 915 is a must for service work crews.

Features

- Lightweight design – only 23 pounds.
- Easy roll set change out – up to 12" wide capacity range in one unit for service versatility.
- Cast-in carrying handle – easy to transport or lock up to prevent theft.
- Included ratchet – 90 degree bend-in handle makes grooving easier.
- Available customized tool box – holds 915 groover and all available roll sets.
- Easy to use depth setting gauge – helps make accurate grooves.

Specifications

- Capacity:
 - 1¼" - 12" Sch. 10 Steel and Stainless Steel Pipe.
 - 1¼" - 6" Sch. 40 Steel and Stainless Steel Pipe.
 - 2"-8" K, L, M, DWV Copper.
 - 1¼" - 6" Sch. 40 PVC.
 - 1½", 2½" - 3" Sch. 80 PVC.
- Operation: Feed screw with ½" ratchet wrench (Included).
- Weight: 23 lbs. (Including Ratchet).

Standard Equipment

- 915 Roll Groover with 2" - 6" Sch. 10 (2" - 3½" Sch. 40).
- Roll Set Ratchet Wrench.



Model 915



Accessories

Catalog No.	Model No.	Description	Weight	
			lb.	kg
88232	915	915 Roll Groover with 2" - 6" Sch. 10 (2" - 3½" Sch. 40) Roll Set	23	10.4
92437	–	Drive and Groove Roll Set for 1¼" - 1½" Sch. 10 or 40 Steel, Stainless Steel, PVC	2	0.9
92447	–	Drive and Groove Roll Set for 4" - 6" Sch. 40 Steel, Stainless Steel, PVC	4.2	1.9
92442	–	Drive and Groove Roll Set for 8" - 12" Sch. 10 Steel, Stainless Steel, PVC	4.2	1.9
92452	–	Drive and Groove Roll Set for 2" - 8" Copper Tube Type K, L, M and DWV	2	0.9
93497	–	915 Tool Box	21.5	9.7
76827	–	Metric Diameter Tape	0.3	0.1
76822	–	English Diameter Tape	0.3	0.1
93642	–	Drive and Groove Roll Set 2" - 6" Sch. 10 Steel, Stainless Steel, PVC, 2" - 3¼" Sch. 40 Steel		

Note: A Roll Groove Set consists of a Groove Roll and a Drive Roll.
Copper Roll Groove Set includes Black Reaction Arm and one Copper Stabilizer Pad.



Power-Driven 916 Roll Groover

The RIDGID Model 916 Roll Groover is the most durable and efficient lightweight portable unit available. Built with a solid, durable cast-iron housing, it withstands heavy usage, yet is light enough for easy transportation. The 916 features a patented single stroke feed mechanism that allows for accurate operation quickly and effortlessly.

Features

- Specifically designed for field service roll grooving applications.
- Quick and easy mount to RIDGID Nos. 300 Power Drive, 535 or 1822 Threading Machines.
- Cam-type feed actuation – translates into minimum operator effort to form roll grooves.
- Durable cast-iron housing withstands extensive field use.
- Depth adjustment screw separate from feed mechanism allows for consistent groove depth.
- Lightweight, only 33 lbs., allows for easy transport and storage.
- Integral feed handle is part of overall unit. No extra tools required.
- Optional Roll Sets for: Copper 2"-6" (Types K, L, M, DWV) 1" Sch. 10, 40 steel pipe.
- Optional 1¼"-1½" and 2"-6" AWWA Roll Sets.
- Easy serviceability – drive and groove rolls are easy to change.



Specifications

- Capacity:
 - 1¼"-6" Sch. 10 steel, stainless steel, PVC
 - 1¼"-3" Sch. 40 steel, stainless steel, PVC
 - 2"-6" Copper (type K, L, M, DWV) optional
- Weight: 33 lbs. (15kg).

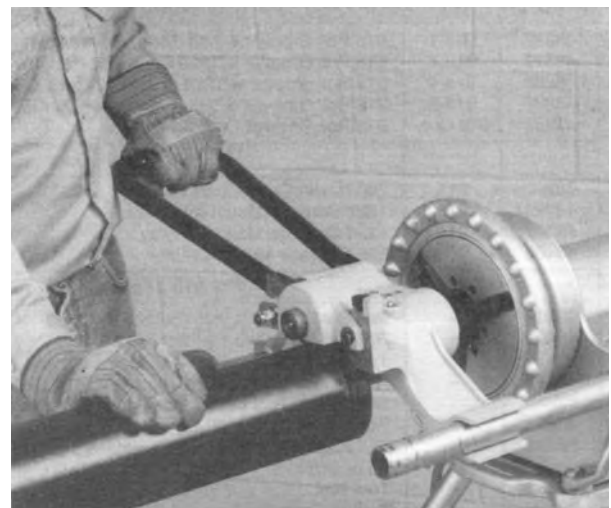
Standard Equipment

- One (1) 1¼"-6" Roll Groove Set for steel (1¼"-6" schedule 10, 1¼"-3" schedule 40).

Ordering Information

Catalog No.	Model No.	Description	Weight	
			lb.	kg
45007	916	Roll Groover for 300 Power Drive	33	15.0
46852	916	Roll Groover for Copper Tubing for 300 Power Drive	34	15.5
60382	916	Roll Groover for 535	33	15.0
48307	916	Roll Groover for 1822	33	15.0
Accessories				
45347	–	Roll Set for 1" Sch. 10, 40	6	2.6
45352	–	Roll Set for Copper (optional)	6	2.6
69667	–	Roll Set for 1¼"-1½" AWWA (optional)	6	2.6
69692	–	Roll Set for 2"-6" AWWA (optional)	6	2.6
67662	–	Adapter Bracket for 300 Compact	30	13.6
76822	–	English Diameter Tape	½	0.1
76827	–	Metric Diameter Tape	½	0.1

Note: A Roll Set consists of a Groove Roll and a Drive Roll.



Power Pipe Cutter

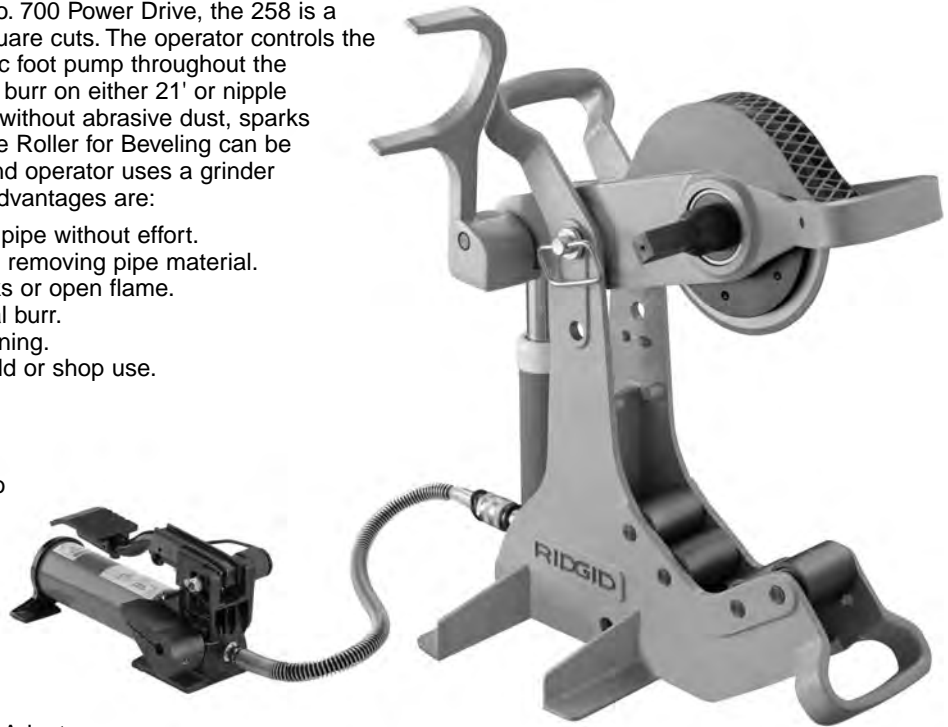
Model 258 – 2½" to 8" Diameter Pipe

The RIDGID Model 258 Power Pipe Cutter cuts 2½" to 8" schedule 10*/40 steel pipe, galvanized pipe, rigid conduit, etc., at the jobsite or in the shop. Powered by the RIDGID No. 700 Power Drive, the 258 is a displacement cutter that provides square cuts. The operator controls the feeding rate by pumping the hydraulic foot pump throughout the operation. A square cut with minimal burr on either 21' or nipple lengths of pipe is achieved quickly** without abrasive dust, sparks or open flame. Also, the RIDGID Pipe Roller for Beveling can be used to rotate the pipe while a second operator uses a grinder to bevel the pipe. Some of the 258 advantages are:

- Square cut 21' or nipple lengths of pipe without effort.
- Easily cuts by displacing instead of removing pipe material.
- No abrasive dust, dangerous sparks or open flame.
- Quickly cuts steel pipe with minimal burr.
- Great for cutting pipe for groove joining.
- Heavy-duty design is perfect for field or shop use.
- Adaptable for beveling.

Specifications

- Cutting Capacity: Model 258 2½" to 8" schedule.
- 10*/40 steel pipe.
- Model 700 Power Drive.
- Power Drive RPM: 33 (no load).
- Weight: 105 lbs. (excludes No. 700 Power Drive).



Model No. 258

Standard Equipment

- One (1) RIDGID 774 Square Drive Adapter.
- One (1) 8½" HD Cutter Wheel Assembly.
- One (1) Hydraulic Ram and Foot Pump.
- Two (2) 2½" to 12" Ball Transfer Pipe Supports.

*Use the thin cutter wheel for best results.

**Cutting time varies with pipe schedule and diameter.

Note: Models 258 and 258XL are not recommended to cut cast iron pipe.

For optimum wheel life always properly support the work piece with pipe supports.



Model 700 ready for mounting on Model 258 Unit.



Model 258 with Pipe Roller in use for beveling. Two operators are recommended for this operation.



Model 258 Pipe Cutter with No. 700 Power Drive in use for cutting.

Power Pipe Cutter

Model 258XL – 8"-12" Diameter Pipe

The RIDGID 258XL offers 8"-12" diameter pipe cutting capacity. Utilizing displacement type cutter wheel technology, the patented design enables larger diameter pipe to be cut to length. The 258XL also uses the RIDGID 700 Power Drive to rotate the heavy-duty cutter wheel. Now one person can easily square cut 12" schedule 40 pipe in minutes.

Specifications

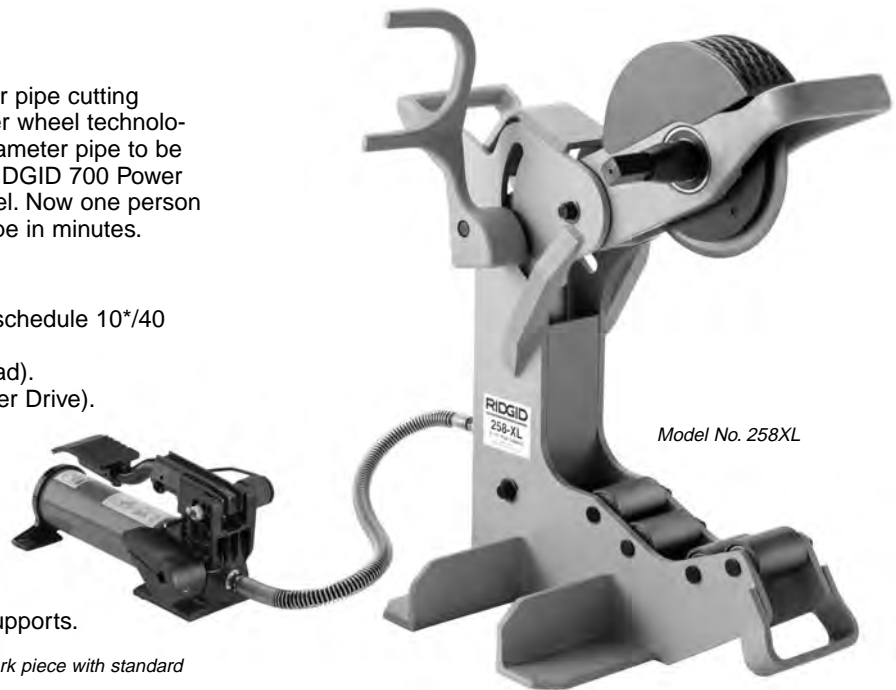
- Cutting Capacity: Model 258XL: 8"-12" schedule 10*/40 steel pipe.
- Model 700 Power Drive RPM: 33 (no load).
- Weight: 140 lbs. (excludes No. 700 Power Drive).

Standard Equipment

- One (1) RIDGID 774 Square Drive Adapter.
- One (1) 8½" H-D Cutter Wheel Assembly.
- One (1) Hydraulic Ram and Foot Pump.
- Two (2) 2½" to 12" Ball Transfer Pipe Supports.

**Use the thin cutting wheel for best results.*

Note: For optimum wheel life properly support the work piece with standard pipe supports.



Model No. 258XL



Pipe Support



Pipe Roller for Beveling
(Model 258 Only)



Transport Cart

Ordering Information

Catalog No.	Model No.	Description	Weight	
			lb.	kg
50767	258	2½"-8" Pipe Cutter	105	48
58227	258-XL	8"-12" Pipe Cutter	140	63

Note: 700 Power Drive not included.

Accessories

66687	–	8½" H-D Cutter Wheel Assembly (includes HD Cutter Wheel, hub w/pins, cover plate)	13	5.9
50812	E-258	8½" H-D Cutter Wheel only	2	1
58222	E258-T	8½" Thin Wall Cutter Wheel Only (PVC and Steel)	2	1
54397	–	Transport Cart	24	11
60002	258PS	Pipe Support 2½"-12"	7	3.1
60007	–	Replacement Ball Transfer Head Set	5½	2.5
61757	–	Pipe Roller for Beveling (for Model 258 only)	13	6



TOOLTIP
When using 258 and 258XL pipe cutters with long lengths of pipe, it is especially important to properly support the pipe to prevent cutter wheel damage. Extra pipe supports may be needed and the work area must be level.

Hole Cutting Tools

Model HC450

The RIDGID Model HC450 is engineered for continuous ¼" to 4¾" hole cutting in and up to 8" diameter steel unpressurized pipe. The built-in level ensures line up for multiple holes when branching lines using Mechanical T's, Vic-O-Lets or welded saddles. Dual-side feed handles and switches provide easier operation from any angle. In addition, the HC450's heavy-duty chuck accommodates 1/8" to 5/8" arbors. The HC450 is ideal for mechanical, industrial maintenance and fire protection contractors since it cuts holes into a wide variety of pipe materials. No off-the-shelf drill-based hole cutter compares in performance or durability to the rugged purposed-built Model 450:

- 13 AMP 1.2 HP worm-gear driven motor delivers unmatched hole cutting power for schedule 10, 40 and 80 pipe.
- Engineered for ¼" to 4¾" continuous dry or oiled hole cutting.
- Quickly mounts onto 1¼" to 8" diameter pipe.
- RPM maximizes holesaw life and does not spray lubricant or chips.
- Only 11½" high for low clearance jobs.
- Dual-side controls provide easy operation.
- GFCI and a built-in breaker for operator protection.
- Chuck accommodates 1/8" to 5/8" arbors.
- Two carrying handles ease mounting and alignment.
- Built-in level for multiple hole alignment.



Model HC450

Specifications

- Motor: Universal, 110V or 220V 25-60Hz 13 amp, 1.2 HP, UL/CSA listed.
- RPM: 110 (no load).
- Hole Cutting Capacity: up to 4¾".
- Chuck Size: 5/8".
- Pipe Diameter Mounting Range: 1¼" to 8".
- Weight: 42 Lbs.
- Height: 11½".
- Length: 17".
- Width: 17".

Standard Equipment

- One (1) Hole Cutting Tool.
- One (1) 5/8" Arbor only for Hole Saws.
- One (1) Chuck Key.

Ordering Information

Catalog No.	Model No.	Description	Weight	
			lb.	kg
57592	HC450	4¾" Hole Cutting Tool 110V	42.0	19.0
57597	HC450	4¾" Hole Cutting Tool 220V	42.0	19.0
57602	HC450-J	4¾" Hole Cutting Tool – Japan 100V	42.0	19.0

Note: The HC450 is not a hot tapping tool.

Accessories

84427	–	HC450 Carry Case	19.0	8.6
59502	R4	5/8" Arbor only for Hole Saws	.2	.1



Copper Cutting Prep Machines

Model 122 Capacity

Copper Tube: ½" - 2" (12mm - 60mm).
Copper Fittings: ½" - 2" (12mm - 60mm).

Model 122XL Capacity

Copper Tube: ½" - 4" (12mm - 120mm).
Copper Fittings: ½" - 4" (12mm - 120mm).

These machines are designed to cut, clean, ream* and debur ½" to 4" copper tubing and fittings quickly and professionally. Weighing only 50 pounds and 80 pounds respectively, and possessing a conveniently located carrying handle, the Models 122 and 122XL are ideal for transport directly to the jobsite. Rugged cast aluminum housing and powerful 1/3 HP induction motor assure long life.

Features

- Powerful, 1/3 HP induction motor drives rollers at 450 RPM (122), 300 RPM (122XL).
- Rugged O.D. Cleaning Brush cleans tubing quickly with minimal effort.
- Core Reamer easily removes turbulence-causing burrs.
- Cutting Handle adjusts to accommodate different tubing sizes.
- Cutter Wheel tested to over 10,000 cuts.
- Guide Rollers ensure a straight cut with no tracking.
- Large Carrying Handle for easy transport to the jobsite.
- Built-in ½"-Incremental Scale for quick, easy measuring.
- Fitting Brush Kit includes six brushes, storage rack and collet.
- CSA Approved.
- Approved to UL Standards (NRTLCL).

Technical Specifications

- Motor: 1/3 HP, 115V, 60Hz Induction Motor.
- Switch: Toggle On/Off.
- Cutter Wheel: Model 2191 HD Wheel (122).
- Cutter Wheel: Model 122 SS (122XL).
- Roller Speed: 450 RPM (122), 300 RPM (122XL).
- Reamer: Single Flute Cone, RH, ½" to 2" (122).
Single Flute Cone, RH, ½" to 4" (122XL).

Standard Equipment

Model 122

- One (1) O.D. Cleaning Brush.
- One (1) Core Reamer.
- One (1) Fitting Brush Storage Kit.

Model 122XL

- One (1) O.D. Cleaning Brush.
- One (1) O.D. Deburring Disk.
- One (1) Core Reamer.

*Reams up to 2" in diameter



Model 122



Model 122XL



The heavy-duty O.D. Cleaning Brush cleans the outside diameter of ½" or 2" copper tubing quickly and easily.



The Inner Reamer removes turbulence-causing burrs quickly and effortlessly.



The optional fitting brush attachments can be used to clean fittings fast.



The optional Debur Disk is used to grind the O.D. edge to help with tight fittings.

Ordering Information

Catalog No.	Model No.	Description	Weight	
			lb.	kg
93492	122	115V Copper Cutting/Prep Machine ½"-2"	50	22.68
10973	122XL	115V Copper Cutting/Prep Machine ½"-4"	83	37.65

Accessories

93717	-	½" Fitting Brush (3 Per Pack)	½	0.24
93722	-	¾" Fitting Brush (3 Per Pack)	½	0.26
93727	-	1" Fitting Brush (3 Per Pack)	¾	0.27
93732	-	1¼" Fitting Brush (3 Per Pack)	¾	0.29
93737	-	1½" Fitting Brush (3 Per Pack)	1¼	0.77
93742	-	2" Fitting Brush (3 Per Pack)	1¼	0.79
12638	-	2½" Fitting Brush (3 Per Pack)-122XL Only	1¼	0.79
12643	-	3"-4" Fitting Brush (3 Per Pack)-122XL Only	2	0.82
94682	-	O.D. Cleaning Brush	1	0.44
46105	-	O.D. Debur Disk	1¼	0.57
93747	-	Quick-Change Collet	2¼	0.95
93712	-	Fitting Brush Holder	6	2.63
93707	-	Fitting Brush Storage Kit	3	1.39
		Includes Mountable Storage Rack, Quick-Change Collet, Spare Cutter Wheel and Brushes (½", ¾", 1", 1¼", 1½", 2")		
36662	301A	Model 301A Foot Switch-120V	7½	3.39
33175	2191	Cutter Wheel for Copper	¼	0.01
33551	-	Cutter Wheel for Copper and Stainless Steel	¼	0.01
10343	-	Wheel Pin for 33551 Cutter Wheel	¼	0.01
42360	1206	1206 Stand	31	14.06

Tubing Cutters



No. 117



No. 118

Close Quarters Tubing Cutters

- Specifically designed for use in restricted spaces on small diameter, hard and soft copper, aluminum, brass and plastic tubing; rollers include grooves for close-to-flare cuts.
- Strong, lightweight slide and wheel housing, large knurled feed screw knob gives easy control of cutting pressure for clean cuts.
- The Model 117 and 118 include a self-feeding cutter wheel that automatically cuts after tightening the knob only once.
- The model 117 features a special knob for easier tightening of the feed screw.

Catalog No.	Model No.	Description	Std.	Capacity		Weight		Std.
			Wheel	in.	mm	lb.	kg	Pack
40617	101	Close Quarters Cutter*	E-3469	1/4 - 1-1/8	6-28	1/4	0.1	6
32975	103	Close Quarters Cutter	E-3469	1/8 - 5/8	3-16	1/6	0.1	6
32985	104	Close Quarters Cutter	E-3469	3/16 - 15/16	5-24	1/4	0.1	6
97787	117	Close Quarters Quick-Feed Cutter	E-3469	3/16 - 15/16	5-24	1/4	0.1	12
86127	118	Close Quarters Quick-Feed Cutter*	E-3469	1/4 - 1-1/8	6-28	1/4	0.1	12

*Models 101 and 118 include spare cutter wheel in knob.

X-CEL™ Means Speed

Many of our most popular tubing cutters now include several X-CEL features to make your job quicker and easier.

- X-CEL Knob – cut tubing more quickly and easily with our larger, more ergonomic designs.
- X-CEL Wheel Pin – change your cutter wheel quickly using our new ball detent design ... no tool needed ... no lost clips!
- Spare cutter wheels included for maximum uptime.



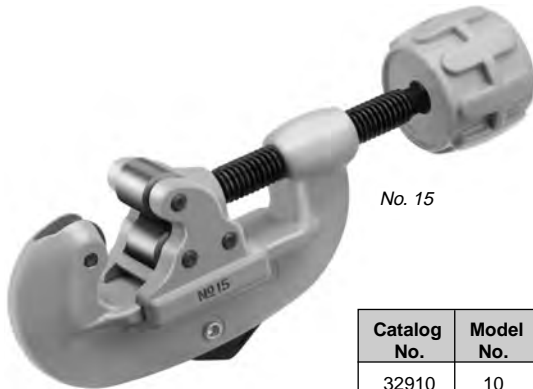
No. 150

Constant Swing Cutters with New X-CEL Features

- Telescoping feed screw design keeps the cutter at the same length regardless of tubing diameter – good for tight spaces.
- Enclosed feed screw to eliminate clogging and jamming, grooved rollers for close-to-flare cuts and a fold-away reamer.
- X-CEL Knob and X-CEL Pin for quicker cutting and wheel replacement.
- Made from high-strength zinc alloy.
- Spare cutter wheel included in the knob.
- Cuts copper, brass and aluminum tubing and thin-wall conduit.

Catalog No.	Model No.	Description	Std.	Capacity		Weight		Std.
			Wheel	in.	mm	lb.	kg	Pack
31622	150	Feed Cutter	E-3469	1/8 - 1-1/8	3-28	7/8	0.4	6
31627	150	Above w/H-D Wheel(s)	E-4546	1/8 - 1-1/8	3-28	7/8	0.4	6
66737	150-L	Constant Swing Cutter	E-3469	1/4 - 1-3/8	3-35	7/8	0.4	6
66742	150-LS	Above w/H-D Wheel(s)	E-4546	1/4 - 1-3/8	3-35	7/8	0.4	6

Tubing Cutters



No. 15

Tubing & Conduit Cutters with New X-CEL Features

- Clean, square cuts are easily made on copper, brass, aluminum and thin-wall conduit.
- Now includes X-CEL Knob for quicker cutting.
- Nos. 10, 15 and 20 feature a convenient fold-away reamer.
- No. 30 is rated for larger diameter steel and stainless steel tubing.
- No. 15-SI is especially designed for stainless steel tubing. Includes special roller bearings and cutter wheel to make stainless cutting easier.

Catalog No.	Model No.	Description	Std.	Capacity		Weight		Std. Pack
			Wheel	in.	mm	lb.	kg	
32910	10	Screw Feed Cutter	F-158	1/8 - 1	3-25	7/8	0.4	6
32915	10	Above w/H-D Wheel	E-1240	1/8 - 1	3-25	7/8	0.4	6
32920	15	Screw Feed Cutter	F-158	3/16 - 1-1/8	5-28	1-1/4	0.6	6
32925	15	Above w/H-D Wheel	E-1240	3/16 - 1-1/8	5-28	1-1/4	0.6	6
32930	20	Screw Feed Cutter	F-158	5/8 - 2-1/8	16-54	1-3/4	0.8	1
32935	20	Above w/H-D Wheel	E-1240	5/8 - 2-1/8	16-54	1-3/4	0.8	1
32940	30	Screw Feed Cutter	E-2558	1 - 3-1/8	25-79	3-1/2	1.6	1
32950	30	Above w/H-D Wheel	E-2191	1 - 3-1/8	25-79	3-1/2	1.6	1
97212	15-SI	Stainless Steel Cutter	E-1525	3/16 - 1-1/8	5-28	1-1/3	0.6	1



No. 152

Quick-Acting Tubing Cutters with New X-CEL Features

- Models 151-156 feature a quick-acting design, I-beam construction, hardened wear surfaces and thrust bearing slide assemblies for smooth operation.
- All Models now include an X-CEL Knob and X-CEL Pin for quicker cutting and wheel replacement.
- These cutters are available in models for plastic pipe or metallic tubing.
- Models 151 and 152 feature fold-away reamers.

Catalog No.	Model No.	Description	Std.	Capacity		Weight		Std. Pack
			Wheel	in.	mm	lb.	kg	
31632	151	Quick-Acting Cutter	E-3469	1/4 - 1-5/8	6-42	7/8	0.4	6
31637	151-P	Above w/Wheel for Plastic*	E-2155	1/8 - 1-1/4**	10-40**	7/8	0.4	6
31642	152	Quick-Acting Cutter	E-3469	1/4 - 2-5/8	6-66	1-7/8	0.9	1
31647	152-P	Above w/Wheel for Plastic*	E-2155	1/4 - 2**	10-63**	1-7/8	0.9	1
34572	152-P	Above w/Wheel for PVC	E-5272	1/4 - 2**	10-63**	1-7/8	0.9	1
36597	153	Quick-Acting Cutter	E-3469	1-1/4 - 3-1/2	32-90	2	0.9	1
36592	153-P	Above w/Wheel for Plastic*	E-2155	1 - 3**	25-75**	2	0.9	1
31652	154	Quick-Acting Cutter	E-2558	1-7/8 - 4-1/2	48-116	3	1.4	1
31657	154-P	Above w/Wheel for Plastic*	E-2156	1-1/2 - 4**	50-110**	3	1.4	1
31662	156	Quick-Acting Cutter	E-2558	4 - 6-5/8	100-170	4-1/8	1.9	1
31667	156-P	Above w/Wheel for Plastic*	E-2157	4 - 6**	110-160**	4-1/8	1.9	1

*Plastic models include spare cutting wheels for cutting copper.

**Nominal Plastic Pipe Size.

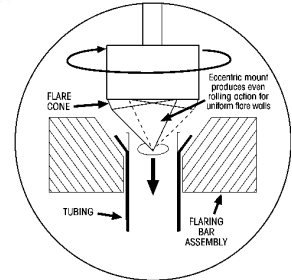
RIDGID Quick-Acting plastic cutter models are equipped to easily convert to cut copper or other metallic tubing.

- 1.) Remove spare copper cutting wheel from knob.
- 2.) Reverse knob position so that the "Cu" notation is visible inside the knob.
- 3.) Screw knob back on to handle.
- 4.) Using the X-CEL Wheel Pin, you can quickly replace the existing plastic cutting wheel with the copper cutting wheel. You're now ready to cut copper, aluminum and brass tubing.
- 5.) When you wish to revert to plastic cutting, follow the same instructions but make sure to reposition knob so that "PE" and "PVC" notations are visible inside knob.

Flaring Tools

No. 458R Ratchet Flaring Tool

- This precision tool provides smooth, uniform flares with minimum effort.
- The new ratcheting feed screw handle turns easily and requires less motion and effort than a standard handle.
- Hardened steel flaring cone, eccentrically mounted in needle bearings, produces rolling action for even metal flow, giving uniform flare walls without galling.



Catalog No.	Model No.	Description	Sizes (in.)	Weight		Std. Pack
				oz.	g	
83037	458R	45° SAE Flares	1/8, 3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 3/4	3½	1.6	1
41295	454-W	45° SAE-Nominal Water Tube	3/8, 1/2, 3/4, 1	6¼	2.8	1
41300	455	45° SAE Flares	1/2, 5/8, 3/4, 7/8, 1	6¾	3.1	1
41162	377	37° SAE Flares	3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 3/4	3½	1.6	1
41285	375	37° SAE Flares	1/2, 5/8, 3/4, 7/8, 1	6¾	3.1	1
Metric Model			Sizes (mm)			
50257	458MM	45° SAE Flares	4, 4.75, 6, 8, 10, 12, 15, 16	3½	1.6	1

All flaring tools listed are recommended for soft materials such as aluminum and soft copper. No. 454W, No. 455 and No. 375 will also flare steel, stainless steel, hard copper and brass. No. 458R, No. 458MM and No. 377 will flare steel, stainless steel, hard copper and brass thru wall thickness of .035 inches.

No. 345 Flaring Tool

- Model 345 is a precision designed tool for producing 45° flares in soft copper, brass, aluminum and mild steel (JIC and Bundy) tubing.
- A hardened, smooth cone provides fast, 45° flares either single or double lap.
- A single clamp screw provides for easy clamping and removal of tubing.



Catalog No.	Model No.	Description	Sizes (in.)	Weight		Std. Pack
				oz.	g	
23332	345	45° SAE Flares	3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8"	2¾	1.6	1
23337	345-DL	45° SAE- (double flares)	Above w/adapters for double lap flares; 3/16", 1/4", 5/16", 3/8", 7/16", 1/2" O.D. Tubing	3	1/3	1
24797	345/150	45° SAE Flares	No. 345 w/No. 150 Tubing Cutter and Cast Kit	3½	1.6	1
33927	345/150DL	45° SAE Flares	No. 345/DL w/No. 150 Tubing Cutter and Case Kit	3½	1.6	1
31597	-	-	3/16" Double Lap Adapter	-	-	-
31602	-	-	1/4" Double Lap Adapter	-	-	-
31607	-	-	5/16" Double Lap Adapter	-	-	-
31612	-	-	3/8" Double Lap Adapter	-	-	-
31617	-	-	1/2" Double Lap Adapter	-	-	-
Metric Model			Sizes (mm)			
23342	345M	45° SAE Flares	6, 8, 10, 12, 14, 15 and 16	2¾	1.2	1
24087	345M/150	45° SAE Flares	No. 345M w/No. 150 Tubing Cutter and Case Kit	3½	1.6	1
31502	-	-	Case Only	-	-	-

Hammer-Type Flaring Tool

- Made of high-grade, hardened steel, these tools have a long nose guide that centers tools for smooth, 45° uniform flares.

Catalog No.	Model No.	Water Tube Size		Weight		Std. Pack
		in.	mm	oz.	g	
41315	E-37	3/8	9	3/16	0.1	1
41320	E-45	1/2	12	1/4	0.1	1
41325	E-46	5/8	16	3/8	0.2	1
41330	E-47	3/4	19	1/2	0.2	1
41335	E-52	1	25	3/4	0.3	1
41340	E-61	1¼	31	1	0.5	1
41345	E-63	1½	37	1½	0.7	1
41350	E-64	2	50	2½	1.0	1



Lever Benders

300 Series Benders

- Designed to bend copper tubing to a maximum of 180°.
- Offset cushion grip handles and a 90° start angle, together with a specially engineered plastic shoe, combine to ease bending effort.
- 300 series lever benders form smooth bends to types K and L soft (annealed) copper tubing.

Catalog No.	Model No.	Description	Capacity		Weight	
			Tube Size (actual O.D.)	Bend Radius	lb.	kg
36962*	310	Lever Bender	5/8"	2-1/4"	6½	2.86
36972	312	Lever Bender	3/4"	2-7/8"	7	3.13
36942	310M	Lever Bender	10mm	42mm	4	1.81
36947	312M	Lever Bender	12mm	42mm	4	1.81
36952	314M	Lever Bender	14mm	56mm	6½	2.86
36957	315M	Lever Bender	15mm	56mm	6½	2.86
36962*	316M	Lever Bender	16mm	56mm	6½	2.86
36967	318M	Lever Bender	18mm	72mm	7	3.13

*This product is dual-purpose, being both inch and metric.



400 Series Instrument Benders

- Combine accuracy with easy operation.
- Offset cushion grip handles eliminate knuckle cracking when forming 180° bends. A 90° start angle and unique oil-absorbing shoe minimize bending effort while forming accurate bends in copper, steel and stainless steel tubing.

Catalog No.	Model No.	Description	Capacity		Weight	
			Tube Size (actual O.D.)	Bend Radius	lb.	kg
36117	403	Lever Bender	3/16"	5/8"	1½	0.68
36122	404	Lever Bender	1/4"	5/8"	1½	0.68
36092*	405	Lever Bender	5/16"	5/16"	2¾	1.18
36097	406	Lever Bender	3/8"	5/16"	2¾	1.18
36132	408	Lever Bender	1/2"	1½"	5½	2.45
36112	406M	Lever Bender	6mm	16mm	1½	0.68
36092*	408M	Lever Bender	8mm	24mm	2¾	1.18
36102	410M	Lever Bender	10mm	24mm	2¾	1.18
36127	412M	Lever Bender	12mm	38mm	5½	2.45

*This product is dual-purpose, being both inch and metric.



456 Tri-Bender

- Designed to easily bend three different sizes of soft tubing: 1/4", 5/16" and 3/8" with the same tool. Ideal for plumbing and HVAC applications.
- A 90° start angle minimizes effort required to form a bend. Handy reference marks indicate the angle for quick bends through 90°.

Catalog No.	Model No.	Capacity	Weight	
			lb.	kg
44852	456	1/4", 5/16", 3/8"	14	0.4



Ratchet Benders



Geared Ratchet Tube Benders

- High geared mechanical ratios, bend heavy-wall steel tube (up to 1/8" wall thickness), stainless steel tube (up to 3/32" wall thickness) and hard copper water tube (types K and L).
- Benders produce uniform bends up to 180° with no need to anneal tubing or use special temper grade tubing.
- Reduce bending effort to a minimum.

Catalog No.	Model No.	Radius to Center of Tube		Tube O.D.		Weight		Std. Pack
		in.	mm	in.	mm	lbs.	kg	
35170	358	3	76	5/8	16	7½	3.25	1
35175	368	3¾	95	3/4	19	13½	6.25	1
35180	378	3¾	95	7/8	22	13½	6.25	1

NaviTrack II Locator

NaviTrack II navigates you to the location of underground pipes quickly and easily. It tracks energized lines with ease.

NaviTrack II Locates

- SeeSnake In-Line Transmitters.
- Remote Transmitters (Sondes).
- Energized Metallic Lines.

Performance

- Approach the transmitter from any direction for faster, more accurate locates.
- Maximize the signal and the locate is complete.
- Verify the locate using the large mapping display.
- Depth measurement is continuous.
- Depths of greater than 15' can be read.

NaviTrack II provides unprecedented ease of use. Due to NaviTrack II's advanced technology, training time is greatly reduced. You can learn to locate with NaviTrack II in minutes.

Specifications

Weight.....5 lbs.
 Power Source4 C-cell batteries.
 Battery LifeApproximately 16 hours.

Standard Frequencies

Sonde512 Hz.
 Active Line Trace128 Hz, 1 kHz, 8kHz,
 33 kHz, 262 kHz.
 Passive AC Line Trace.....60 Hz, 50 Hz.

Additional Frequencies

Sonde.....16 Hz, 640 Hz, 850 Hz,
 8 kHz, 16 kHz, 33 kHz.
 Active Line Trace.....65 kHz, 200 kHz.

Standard Equipment

- Hard Plastic Carry Case.
- Surface Markers and Clip.
- Instructional DVD / Operator's Manual.
- 4 C-Cell batteries.

For users that locate both remote transmitters and energized lines on a regular bases. NaviTrack II is the fastest, easiest, most versatile locator.



Catalog No.	Description	Weight	
		lb.	kg
96967	NaviTrack II Locator	5	2.3
22388	NaviTrack II Carrying Case	9	4.0
12543	Marker Chips and Clip	-	-

Transmitters

NaviTrack Line Transmitter – 10 Watt

- For tracing buried cable, TV lines, phone lines and other metallic lines which can carry an electromagnetic signal.
- Fully variable 10 watts of power output.
- Two 25' coil connectors.
- Conductive ground rod.
- Inductive signal clamp (optional accessory).

Specifications

- 128 Hz, 1 kHz, 8 Hz, 33 kHz – 10 Watt output power.
- 200 kHz, 262 kHz – 1 Watt output power.
- Power Source: Eight D-Cell Batteries.
- Battery Life: Greater than 120 hours.



NaviTrack Brick – 5 Watt

- For tracing buried cable, TV lines, phone lines and other metallic lines which can carry an electromagnetic signal.
- Fully variable 5 watts of power output.
- Lightweight, easy to carry.
- Conductive ground rod.
- Two 10' connectors.

Specifications

- 1 kHz, 8 Hz, 33 kHz, 262 kHz.
- Power Source: Six C-Cell Batteries.
- Battery Life: Greater than 120 hours.



Catalog No.	Description	Weight	
		lb.	kg
14818	NaviTrack Line Transmitter - 10 Watt	9	4.0
20168	NaviTrack Line Transmitter - 5 Watt	2½	1.1
20503	Inductive Signal Clamp	2	0.9

SeekTech® SR-20

The world's first mapping display with Omni-Directional antennas lets you do more with greater certainty ...

All the information you need to locate underground utilities with ease and confidence!

The mapping display confirms a good locate signal and identifies distortion in congested areas using:

- **Target Line** – Guides the operator down the line and shows changes in direction.
- **Left-Right Guidance Arrows** – Points the operator to the target utility.
- **Proximity Signal and Signal Strength** – Helps the operator center the locator closer to the target for more confident locates.

Other features include:

- **Continual Depth** – Increase productivity by showing depth diagnosis of complex locates.
- **Sensitivity** – Customizes the SR-20 to locate within specified depth ranges.

Specifications

Active Line
 Trace Frequencies128Hz, 1kHz, 8kHz, 33kHz
 Passive Power Trace50Hz, 60Hz, <4kHz Broadband
 Passive Radio Trace4kHz-15kHz, 15kHz-36kHz
 Sonde Frequencies16Hz, 512Hz, 33kHz
 Weight3.9 lbs.
 Power Source.....4 C-Size Batteries



Combine the patent pending SR-20 with either the ST-305 or ST-510 Transmitter for your complete locating package.

ST-305 and ST-510 transmit signal onto a buried metallic line or cable in one of three ways:
 1.) Direct Connect using attached Clips 2.) Induction from the Transmitter Coils 3.) Induction from the optional Inductive Signal Clamp



ST-305

Specifications (ST-305):

Frequencies.....1kHz, 8kHz, 33kHz
 Output Power5 Watt, Variable
 Output2 freq. simultaneous
 Weight2.4 lbs.
 Max. Open Circuit Voltage240VAC 50/60Hz
 Power Source6-C Size Batteries

Specifications (ST-510):

Frequencies128Hz, 1kHz, 8kHz, 33kHz
 262kHz
 Output Power10 Watt, Variable
 Weight8.9 lbs.
 Max. Open Circuit Voltage240VAC 50/60Hz
 Power Source8-D Size Batteries



ST-510



Clamp

Ordering Information

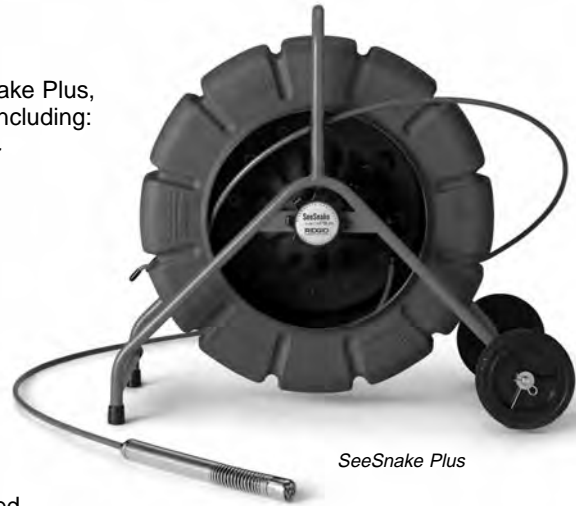
Catalog No.	Description	Weight	
		lb.	kg
21893	SeekTech SR-20 Line Locator	3.9	1.8
21898	SeekTech ST-305 Transmitter (5 watts)	2.4	1.1
21903	SeekTech ST-510 Transmitter (10 watts)	8.9	4.0
20973	SeekTech 4" Inductive Signal Clamp	1.8	0.8

Video Inspection Systems

SeeSnake Plus – 2" to 12" Lines

For the most reliable and rugged pipe inspection camera ... SeeSnake Plus, built tougher for unmatched durability, reliability and performance, including:

- 100% hardened stainless steel camera head spring assembly for increased durability.
- Inspects 2" lines and larger:
 - 2" 90s.
 - 8" P-Traps.
- Rugged, high-intensity lights for improved reliability.
- Flexible transmitter makes locating easier and is fully compatible with RIDGID NaviTrack II and NaviTrack Scout locators.
- Also available in an always upright, self-leveling option.
- Compatible with any SeeSnake monitor.
- The best choice if you plan on purchasing only one camera.



SeeSnake Plus

Mini-SeeSnake Plus – 1¼" to 6" Lines

At 25 pounds, the Mini-SeeSnake combines portability with a rugged camera used to inspect lines up to 200 feet. It is built tougher for unmatched durability, reliability and performance, including:

- 100% hardened stainless steel camera head for increased durability.
- Improved push cable and smaller camera head to push farther through tighter spots.
- Inspects 1¼" - 6" lines:
 - 1¼" 90s (black and white only).
 - 2" P-Traps.
- Rugged, high-intensity lights for improved reliability.
- Flexible transmitter makes locating easier and is fully compatible with RIDGID NaviTrack II and NaviTrack Scout.
- Choose Mini-SeeSnake when portability and maneuverability are crucial (multi-story buildings, roof tops, confined areas, etc.).



Mini-SeeSnake Plus

SeeSnake Plus Systems

Voltage	Description	Black & White		Color	
		Monitor + VCR	Monitor	Video Tool Case	Monitor +VCR
115V	200' Reel	69722	64232	90767	73182
	325' Reel	69732	64247	90772	73187
	200' Self-Leveling Reel	–	–	13948	13958
	325' Self-Leveling Reel	–	–	13968	13978
230V	200' Reel	69727	64562	90787	73192
	325' Reel	69737	64577	90792	73197
	200' Self-Leveling Reel	–	–	13953	13963
	325' Self-Leveling Reel	–	–	13973	13983

Mini-SeeSnake Plus Systems

115V	200' Mini Reel	69752	67247	90782	83652
230V	200' Mini Reel	69757	67277	90802	83657

Single Components

	Catalog No.		Description
	115V	230V	
SeeSnake Plus Reels	14038	14088	200' B&W Reel
	14043	14093	325' B&W Reel
	14053	14103	200' Color Reel
	14058	14108	325' Color Reel
	13988	13993	200' Self-Leveling Reel
	13998	14003	325' Self-Leveling Reel
Mini-SeeSnake Plus Reels	14048	14098	200' Mini B&W Reel
	14063	14113	200' Mini Color Reel
Control Units	69697	69702	B&W Monitor + VCR
	64217	64267	B&W Monitor
	90717	90722	Color Video Tool Case
	73172	73177	Color Monitor + VCR

SeeSnake Plus Accessories

Catalog No.	Description	Catalog No.
14028	Color Self-Leveling Camera Head – NTSC (115V)	–
14033	Color Self-Leveling Camera Head – PAL (230V)	–
14078	Color Camera Head – NTSC (115V)	14083
14128	Color Camera Head – PAL (230V)	14133
14068	B&W Camera Head – EIA (115V)	14073
14118	B&W Camera Head – CCIR (230V)	14123
15323	SeeSnake Flexible In-Line Transmitter	15828
64607	200' SeeSnake Push Cable Assembly	67327
64612	325' Standard SeeSnake Push Cable Assembly	–
73142	SeeSnake Cable CountIR	73142
12248	18" System Cable with Dubbing Block	12248
64627	SeeSnake Innerconnect Cord – 33'/10'	67307
64492	Extended Handle for Standard SS Reel	–
64497	SS 3" Centering Star Guides, Pkg. of 20	67312
–	B&W Mini Ball Guides, Pkg. of 10	88392
–	Color Mini Ball Guides, Pkg. of 6	97462
–	Mini Guide Hoop, Pkg. of 4	93392
64502	SS 6" Centering Star Guides, Pkg. of 10	–
97852	SS Ball Guides, Pkg. of 10	–
93387	SS Guide Hoop, Pkg. of 4	–
97832	SS 3" Roller Dolly	–
17563	Color Spanner Wrench	17558
17563	B&W Spanner Wrench	17553

Model K-39 Sink Machine

¾" to 2½" (19-64mm) Capacity

- Excellent for small line cleaning. Opens clogged lavatory, sink lines, urinals and tub/shower drains.
 - 5/16" cables best for ¾" to 1½" lines.
 - 3/8" cables best for 1¼" to 2½" lines.
- Available in 2 styles: Manual and AUTOFEED.
 - Both have slide action chuck for quick locking/releasing of cable.
 - Advanced two-way feed keeps hands off cable – advances and retrieves cable with push of a lever.
- Lightweight, easy-to-use, no set up required.
- Variable speed power unit rotates cable 0-450 RPM's.
- Two-piece twist lock canister with interchangeable inner drum.
 - Makes cable changeout simple; easy to match the right cable to the job.
 - Inner drum prevents water leaks and greatly reduces cable flip over.
 - Drums won't rust or dent – ever.
- Drum Capacity: 50' of 5/16" (15m/8mm) or 35' of 3/8" (11m/10mm).
- CSA approved.



K-39AF quickly opens clogged tub lines. Advance and retrieve cable without reversing motor.



The 3/8" cable in the K-39-5 and K-39-7 extends machine's capacity to 2½" drain lines.



K-39AF



K-39

Order Information

K-39AF Machine with Slide Action Chuck and AUTOFEED

K-39 Machine with Slide Action Chuck

Catalog No.		Model No.	Description	Weight		Model No.	Catalog No.	
115V	230V			lb.	kg		115V	230V
21888	n.a.	K-39AF	Machine with: – C-1IC, 5/16" x 25' Inner Core Cable w/Inner Drum.	11	5.0	K-39	68507	68097
23508	n.a.	K-39AF-1	Machine with: – C-1IC, 5/16" x 25' Inner Core Cable w/Inner Drum. – C-6429 Carrying Case	27	12.2	K-39-1	68062	68102
23513	n.a.	K-39AF-5	Machine with: – C-1IC, 5/16" x 25' Inner Core Cable w/Inner Drum. – C-6, 3/8" x 35' Cable w/Inner Drum. – T-250, Five-Piece Tool Set for 3/8" Cable. – C-6429 Carrying Case	34	15.4	K-39-5	68067	68107
23518	n.a.	K-39AF-7	Machine with: – C-1IC, 5/16" x 25' Inner Core Cable w/Inner Drum. – C-6, 3/8" x 35' Cable w/Inner Drum. – C-21, 5/16" x 50' Cable w/Inner Drum. – T-250, Five-Piece Tool Set for 3/8" Cable. – C-6429 Carrying Case	42	19.0	K-39-7	68072	68112
n.a.	n.a.	–	Cordless Machine with: – 12-BP Battery Packs – 12-BC Battery Charger – C-1, 5/16" x 25' Cable w/Inner Drum.	13	5.9	K-39B	68137	n.a.
23523	n.a.	K-39AF-1	Cordless Machine with: – Two 12-BP Battery Packs – 12-BC Battery Charger – C-1, 5/16" x 25' Cable w/Inner Drum. – C-6429 Carrying	29	13.2	K-39B-1	68142	n.a.

K-50 Sectional Machine

For ¾" to 4" (19-100mm) Drain Lines

- Compact, versatile, professional's machine. Capable of running three different size cables: 5/16", 3/8" and 5/8". The perfect, all-around sink, shower and floor drain machine. Weighs less than 40 lbs.
- Unique, easy-to-use, instant-acting cable clutch maximizes operator control:
 - Pull handle down and cable spins at 400 RPM.
 - Release handle, cable stops – instantly.
- Uses sections of 5/8" cable, cleans 1¼" to 4" lines up to 100 feet.
 - C-8 best for 1¼"-3" drains.
 - C-9 best for 2"-4" drains.
- Equipped with an A-17 adapter, runs up to 50 feet of 5/16" (15m/8mm) or 35 feet of 3/8" (11m/10mm) continuous length cable.
 - 5/16" best for ¾" to 1½" lines.
 - 3/8" best for 1¼" to 2" lines.
- Equipped with 1/6 HP motor; 115V Models CSA approved.
- Approved to UL Standards (NRTLCL).



Model K-50

Machine Options

Catalog No.		Model No.	Description	Weight	
115V	230V			lb.	kg
58920	76455	K-50	Machine Only	37	16.8
58960	76475	K-50-4	Machine, with: – A-30 Cable Kit	61	27.7
58980	76485	K-50-6	Machine, with: – A-17-A Adapter – A-30 Cable Kit	67	30.4
59000	76495	K-50-8	Machine, with: – A-17-A Adapter – A-17-B Adapter – A-30 Cable Kit	77	34.9
52972	—	K-50-9	Machine, with: – A-40 Cable Kit	74	33.6



A-30 Cable Kit, includes:

- Six Sections C-8, 7½" x 5/8" Cable (45 feet).
- A-10 Cable Carrier.
- T-201 Straight Auger.
- T-202 Bulb Auger.
- T-205 "C" Cutter.
- T-211 Spade Cutter.
- A-13 Coupling Pin Key.
- A-14-6 Rear Guide Hose.
- A-1 Left-Hand Mitt.

K-50-8 shown at right includes:

- K-50 Machine.
- A-17-A, Adapter includes:
 - 25' x 5/16", C-1 Bulb Auger Cable.
- A-17-B, Adapter includes:
 - 35' x 3/8", C-5 Bulb Auger Cable.



K-60 Sectional Machine

For 1¼" to 4" (32-100mm) Drain Lines

- A compact machine for institutional, commercial or residential cleaning. Also ideal for septic tank vacuum truck operators. Small enough to fit into cramped spaces, yet powerful enough to clear tough blockages.
- Ideal for roof-top vent stacks. Rear handle allows for easy transporting up ladders and onto roof tops.
- Unique, easy-to-use instant-acting cable clutch maximizes operator control.
 - Push handle down, cable spins at 600 RPM.
 - Release handle, cable stops instantly, no overrun to kink or damage cable.
- Simple adjustment knob allows unit to spin both 7/8" (22mm) and 5/8" (16mm) diameter cable. Adjusts in seconds.
 - 7/8" cable (C-10) cleans 2" to 4" lines through 150 feet.
 - 5/8" cable (C-7, C-8, C-9) cleans 1¼" to 4" lines through 125 feet.
- Remove only two bolts to access jaw set for cleaning or replacement. Removal of same bolts provides access to belt drive.
- Equipped with ½ HP motor.
- CSA approved.
- Approved to UL Standards (NRTLCL).



Model K-60SP

Machine Options

Catalog No.		Model No.	Description	Weight	
115V	230V			lb.	kg
66492	66512	K-60SP	Machine with A-1 Operator's Mitt, A-12 Pin Key, and A-60-12 Rear Guide Hose	41	18.6
66497	66517	K-60SP-SE	Machine with A-1 Operator's Mitt, A-12 Pin Key, and A-60-12 Rear Guide Hose, plus: A-61 Tool Kit A-62 Cable Kit	92	41.7



K-60SP-SE shown above includes:

- K-60SP Machine.
- A-1 Operator's Mitt.
- A-60-12 Rear Guide Hose.
- A-62 Cable Kit, includes:
 - A-8 Cable Carrier.
 - Five Sections of C-10, 7/8" Cable, Total 75 Feet.

A-61 Tool Kit, includes:

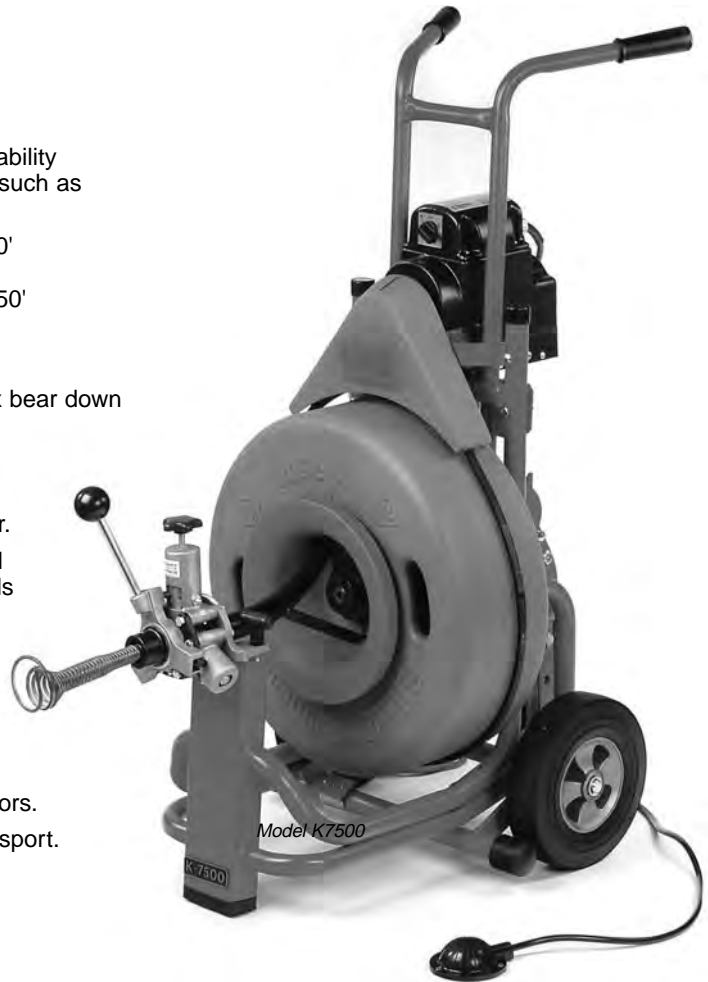
- T-101 Straight Auger.
- T-102 Funnel Auger.
- T-107 Spade Cutter.
- T-125 Retrieving Auger.
- T-150-1 Sharktooth Cutter.
- A-3 Tool Box.
- A-12 Pin Key.



K-7500 Drum Machine

For 3" to 10" (75-250mm) Lines

- The performance, cable control, durability and maneuverability demanded by professional users. Ideal for any tough job such as roots – up to 250'.
 - Recommend 5/8" cable for 3" to 6" drain lines up to 250' (75-150mm, 76m).
 - Recommend 3/4" cable for 4" to 10" drain lines up to 250' (100-250mm, 76m).
- Cable spins at 200 RPM.
- Powerful, yet quiet, 4/10 HP universal motor and gearbox bear down as cutter engages tough obstructions.
 - Provides audible and visual signals to operator.
- Inner-drum and ball bearing distributor arm work with motor/gearbox system to reduce chance of cable flip-over.
- Main and inner drums won't rust, split or dent – ever, and clean easily for professional appearance. Main drum holds up to 125' of 3/4" cable or 150' of 5/8" cable.
- Powerful AUTO FEED mechanism has grease fittings and an open design for easy maintenance; advances and retrieves cable up to 22" per minute.
- Patented two-position stair climber eases transport and loading – eliminates extra cost for loading wheels.
- Narrow profile allows machine to fit through bathroom doors.
- Handles adjust to desired height to ensure balanced transport.
- CSA approved.
- Approved to UL standards (NRTL).



Machine Options – Power Feed

Catalog No.		Model No.	Description	Weight	
115V	220-240V			lb.	kg
59562	61542	K-7500	Machine w/3/4" Pigtail and Standard Accessories.	140	68.2
61102	61522	K-7500	Machine w/5/8" Pigtail and Standard Accessories.	149	67.8
61112	–	K-7500 w/C-24	Machine, Standard Accessories, and 5/8" x 100' Inner Core Cable.	233	105.9
60062	–	K-7500 w/C-75	Machine, Standard Accessories, and 3/4" x 75' Inner Core Cable.	244	110.9
60052	–	K-7500 C-100	Machine, Standard Accessories, and 3/4" x 100' Inner Core Cable.	272	123.7
60057	–	K-7500 C-100HC	Machine, Standard Accessories, and 3/4" x 100' Hollow Core Cable.	249	113.2

Machine Options – Manual Feed

Catalog No.		Model No.	Description	Weight	
115V	220-240V			lb.	kg
59587	–	K-7500	Machine and Standard Accessories.	150	68.2
60067	–	K-7500 C-100	Machine, Standard Accessories, and 3/4" x 100' Inner Core Cable.	262	118.9
60072	–	K-7500 C-100HC	Machine, Standard Accessories, and 3/4" x 100' Hollow Core Cable.	239	108.4



Standard Accessories

- T406 Spear Blade.
- T407 Retrieving Auger.
- T411 2" Double Cutter.
- T-413 3" Double Cutter.
- T-414B 4" Double Cutter - (Blade only).
- T-416B 6" Double Cutter - (Blade only).
- T-408 Sawtooth Cutter.
- T-403 3" P-Trap Cutter.
- T-468 3/4" Flexible Leader.

Leather Gloves, Tool Box, Hex Key.

For 5/8" machine packages (Catalog Nos. 61102 and 61112), the T468 Leader is replaced with the T-458 Leader and the 6" Double Cutter Blade is eliminated.



Model K-1500B
(B-Frame)



Model K-1500A
(A-Frame)



K-1500 B W/C-11 shown above includes:

- K-1500 B Machine with A-1 Mitt, A-12 Pin Key and A-34-12 Rear Guide Hose.
- Seven Sections of 1¼" (C-11) Cable, Total 105 Feet.
- Two A-8 Cable Carriers.
- Nine-Piece Tool Set includes:
 - T-1 Straight Auger.
 - T-50-1 Sharktooth Cutter.
 - T-3 Funnel Auger.
 - A-2864 Hex Key.
 - T-6 Retrieving Auger.
 - A-3516 Hex Key.
 - T-8 Grease Cutter.
 - A-3 Tool Box.
 - T-13 Sawtooth Cutter.

K-1500 Sectional Machine

For

- The finest all-around sewer and drain cleaning machine. One man can easily clean the heaviest blockages – indoors or out. High-speed cleaning gets the job done faster ... better.
- Unique, easy-to-use, instant-acting cable clutch maximizes operator control:
 - Pull handle down, cable spins at constant 710 RPM.
 - Release handle, frees cable instantly, no overrun to loop or break cable.
- Wheels to the jobsite – sets up fast, cleans up fast.
- Low-profile "B" frame design will fit most crawl spaces, loads and unloads from truck easily. Upright "A" frame features cable carrier storage during transport, ideal for in-house applications.
- Equipped to run, easy-to-handle, 15-foot sections of 1¼" cable to clean 3" to 8" (32m-200mm) lines to 200 feet (61m).
- Easy clutch jaw change-out adapts K-1500 to run 15-foot sections of 7/8" (4.6/22mm) cable through 2" to 4" lines up to 175 feet (50-100mm, 53m).
- Equipped with ¾ HP motor; 115V Models.
- CSA approved.
- Approved to UL Standards (NRTLCL)

Machine Options – B Frame

Catalog No.			Model No.	Description	Weight	
115V-60Hz	230V-50Hz	240V-50Hz			lb.	kg
23697	27617	–	K-1500B	Machine with A-1 Mitt, A-12 Pin Key, and A-34-12 Rear Guide Hose	135	61.3
23717	27597	27637	K-1500B	Machine with A-1 Mitt, A-12 Pin Key, and A-34-12 Rear Guide Hose, Plus: – Seven Sections 1¼" (C-11) Cable, Total 105 Feet – Two A-8 Cable Carriers – Nine-Piece 1¼" Tool Set	256	116.1
23707	–	–	K-1500B	Machine with A-1 Mitt, A-12 Pin Key, and A-34-12 Rear Guide Hose, Plus: – Seven Sections 1¼" (C-14) Cable Total 105 Feet – Two A-8 Cable Carriers – Nine-Piece 1¼" Tool Set	256	116.1

Machine Options – A Frame

Catalog No.		Model No.	Description	Weight	
115V-60Hz	230V-50Hz			lb.	kg
23692	27612	K-1500A	Machine with A-1 Mitt, A-12 Pin Key, and Rear Guide Hose	135	61.3
23712	27592	K-1500A	Machine with A-1 Mitt, A-12 Pin Key, and A-34-12 Rear Guide Hose, Plus: – Seven Sections 1¼" (C-11) Cable, Total 105 Feet – Two A-8 Cable Carriers – Nine-Piece 1¼" Tool Set	256	116.1
23702	–	K-1500A	Machine with A-1 Mitt, A-12 Pin Key and A-34-12 Rear Guide Hose, Plus: – Seven Sections 1¼" (C-14) Cable, Total 105 Feet – Two A-8 Cable Carriers – Nine-Piece 1¼" Tool Set	256	116.1

KJ-3000 Water Jetter

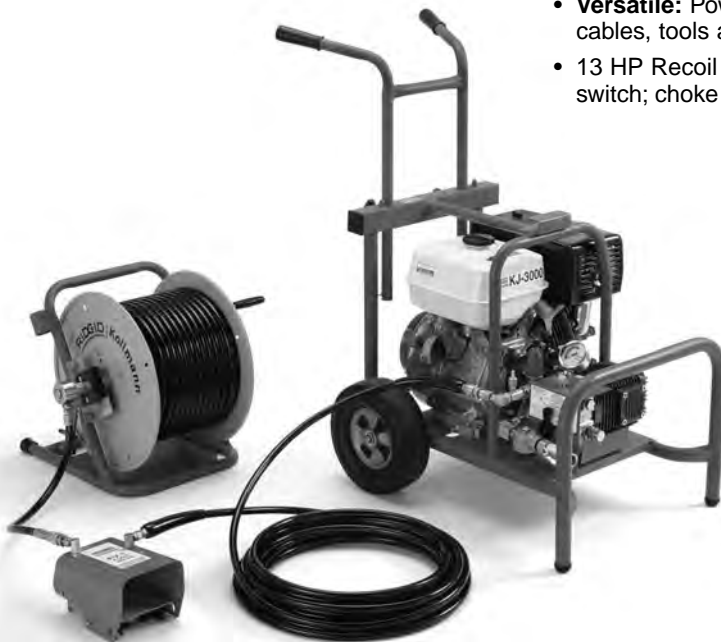
Jets 2" to 8" (50-200mm) Drain Lines



Model KJ-3000

The RIDGID KJ-3000 portable water jetter gives you 3000 psi actual working pressure to handle large commercial and industrial applications. This jetter propels a highly flexible and lightweight hose through 2" to 8" lines – blasting through sludge, soap, grease and sediment blockages. As you pull the hose back, it power scrubs the line, flushing debris away, restoring drain lines to their full, free-flowing capacity – all without the use of harmful chemicals.

- **Powerful:** Actual working pressure of 3000 psi and flow of 4.0 GPM for fast, effective cleaning of lines.
- **Lightweight Hose:** Hose with nylon braid provides significant weight reduction and increased flexibility – all without reducing strength. Allows the thrust to propel the hose further down the line.
- **Complete:** With the KJ-3000's removable hose reel, there is no need to purchase expensive portable hose reels. Standard packages come equipped to handle indoor and remote applications.
- **Convenient:** Completely remove the hose reel to ease loading onto service trucks. Simply rotate the hose reel forward to gain full access to the engine's gas tank and air filter.
- **Maneuverable:** In the heavy-duty 3000 psi jetter category, the RIDGID KJ-3000 is one of the most maneuverable jetters on the market. The unit, on its unique two-wheeled cart, easily fits through standard size doors and can negotiate tight turns with the greatest of ease.
- **Plus Action:** Activate the KJ-3000's pulse action to easily negotiate difficult bends and traps.
- **Quality and Dependability:** Triplex pump with corrosion-resistant, forged brass head. Gear reducer allows pump to run at slower (optional) speed. Reduced number of fittings, hoses and parts minimizes leaks and downtime – keeping you on the job.
- **Versatile:** Power wash package and chemical injector system cleans cables, tools and other heavily soiled equipment.
- 13 HP Recoil start gasoline engine starts easily. Features: ON/OFF switch; choke and throttle controls; easy access oil fill and dip stick.



KJ-3000 with hose reel removed



Root Ranger root cutting jetter nozzle now included with every KJ-3000.

KJ-3000 Water Jetter

Machine Options

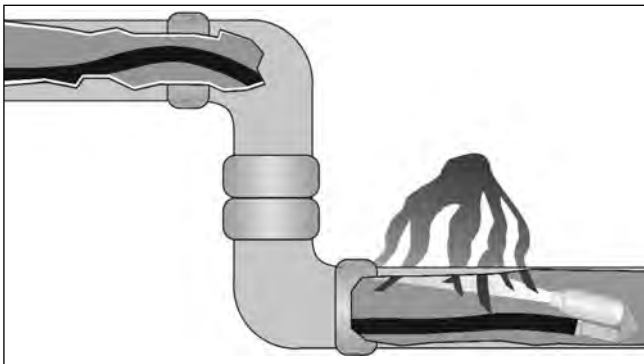
Catalog No.	Model No.	Description	Wt.
64882	KJ-3000	KJ-3000 Jetter with Pulse – H-91 and H-92 1/4" NPT Nozzles – RR3000 Root Cutting Nozzle – H-38 Hose Reel with 200' x 3/8" ID Jet Hose – 50' x 3/8" ID Jet/Wash Hose – Pressure Wash Package – FV-1 Foot Valve – Nozzle Cleaning Tool	215 lb. (97.5 kg) 160 lb. (72.6 kg) w/o Hose Reel
64892	KJ-3000-E	Above with: – Electric Start Engine (Battery not included)	225 lb. (102.1 kg) 170 lb. (77.1 kg) w/o Hose Reel

Jetter Nozzles and Hoses

Catalog No.	Model No.	Description	Hose I.D.	Hose I.D.
64802	H-81	Propulsion Nozzle	1/8" NPT	
64807	H-82	Penetrating Nozzle	Fits 1/4" Hose	
64812	H-84	Drop Head Nozzle		
82847	H-85	Spinning Nozzle		
64817	H-91	Propulsion Nozzle	1/4" NPT	
64822	H-92	Penetrating Nozzle	Fits 3/8" Hose	
82857	H-95	Spinning Nozzle		
16713	RR3000	Root Ranger Root Cutting Nozzle		
47592	H-1425	1/4" x 25' Trap Hose		3/16" 1/4"
47597	H-1435	1/4" x 35' Trap Hose	1/4" Trap Hose	3/16" 1/4"
47602	H-1450	1/4" x 50' Trap Hose	Orange	3/16" 1/4"
49272	H-1475	1/4" x 75' Trap Hose		3/16" 1/4"
49277	H-1400	1/4" x 100' Trap Hose		3/16" 1/4"
64732	H-1415	1/4" x 150' Trap Hose		3/16" 1/4"
64827	H-3835	3/8" ID x 35' Wash Hose		3/8" 5/8"
64832	H-3850	3/8" ID x 50' Jet/Wash Hose		3/8" 5/8"
64837	H-3810	3/8" ID x 100' Jet Hose	3/8" Jet Hose	3/8" 5/8"
64842	H-3815	3/8" ID x 150' Jet Hose	Black	3/8" 5/8"
64847	H-3820	3/8" ID x 200' Jet Hose		3/8" 5/8"
64852	H-3825	3/8" ID x 250' Jet Hose		3/8" 5/8"
64857	H-3830	3/8" ID x 300' Jet Hose		3/8" 5/8"

Jetter Accessories

Catalog No.	Model No.	Description
62882	H-5	Mini Hose Reel
64862	H-38	Hose Reel (Fits KJ-3000)
64902	H-38 WH	Hose Reel with 200' x 3/8" ID Hose (Fits KJ-3000)
64797	HW-30	Wash Wand, KJ-3000
48367	H-25	Winterizing Kit
48157	FV-1	Foot Valve
66732	HF-4	Quick Connect Hose (Reel to Foot Valve)
47542	H-21	Nozzle Cleaning Tool
67187	H-32	Jet Vac



Clear tough blockages and tree roots with Root Ranger 3000.

Jetter Nozzles

Model H-81 and H-91 Propulsion Nozzles

General-purpose nozzle features three reverse thrusters for maximum propulsion to jet long distances.



Model H-82 and H-92 Penetrating Nozzles

Additional forward pointing jet blasts a hole in solid ice or sludge blockages. Three reverse jets provide propulsion.



Model H-84 Drop Head Nozzle

Allows Jetter hose to negotiate difficult bends and traps. Three reverse thrusters provide propulsion.



Model H-85 and H-95 Spinning Nozzles

Spinning action cleans the entire interior of pipe surface. Three reverse jets provide propulsion.



Foot Pedal

The foot pedal's ON/OFF control gives you total control of the jetting action at the drain opening. It frees both hands to guide the jetting hose into the drain opening and around bends and traps.



Jet Vac

For use with all RIDGID water jetters:

The Jet Vac attaches to any portable water jetter to quickly move (vacuum) liquid and debris from flooded basements, sumps, swimming pools, construction sites, car wash pits, etc. This cost and time saving product will move up to 60 gallons of liquid per minute.



Jet Vac Unit



- Laser Levels
- Laser Rotary Levels
- Self-Leveling Levels
- Point-to-Point Alignment Level/Square
- Transits
- Aluminum/Fiberglass Rods
- Wood/Aluminum Tripods
- Magnetic Locators
- Measuring Wheels

Surveying 12



LASERMARK® LM1000 / LM2000 – AUTOMATIC SELF-LEVELING PENDULUM ROTARY LASER

- Plumb beams both up and down (LM1000 – up only).
For layout work and to transfer floor to ceiling plumb points.
- Scanning feature preset angles of 2°, 20°, 45° and 90° to increase beam visibility.
- Variable speed rotation for maximum visibility in any light condition. Anti-Drift System to signal operator when unit is moved out of position.
- Clock-wise and counter-clock-wise head positioning for fast and easy alignment in vertical/horizontal applications.
- Out of Level Audible Alarm (Speaker).
- No bubble required, wide self-leveling range of ±5°. For laydown jobs use Precise Leveling Vial.
- Low battery indicator – So you don't run out of power at the wrong time.
- Back lit leveling bubble for laydown/vertical jobs.
Pro Grade gravity driven stainless steel bearing pendulum.
- LM2000 has three 635nm beams-horizontal/vertical beam, plumb up and plumb down (LM1000 does not have down plumb beam).

Technical Specifications:

Laser Diode: LM1000– 635nm, LM2000– 635nm “High Power”.

Accuracy– Horizontal: LM1000– ±1/8" @ 100' (3mm @ 30m), LM2000– ±1/16" @ 100' (±1.5mm @ 30m).

Accuracy– Vertical: ±1/8" @ 100' (3mm @ 30m).

Range: LM1000– Up to 1000' (305m) Diameter with Detector.

LM2000– Up to 2000' (610m) Diameter with Detector.

Leveling Type: Pendulum Self-Leveling ±5°.

Environment: Water and dust proof, IP54.

Power: Ni-MH rechargeable battery pack with charger.

Warranty: 2 yr.



LASERMARK® MP5 – FIVE BEAM LASER LEVEL, SELF-LEVELING

Five highly focused self-leveling laser beams provide accuracy of 1/4-in at 100 feet. Tough on the jobsite.

Use to: Plumb and align: walls, doors, frames, stud beams, windows and skylights; level electrical outlets; stud and curtain wall plumbing, HVAC, plumbing, pipe installation, etc.; easily lay out right angles; establish diagonals and footings for decks, porches, and patios; grade determination; dry wall installation.

Technical Specifications:

Laser Diode: 635nm X 5.

Accuracy: ± 1/4" @ 100' (6mm @ 30m).

Accuracy-Down Plumb: ± 1/4" @ 50' (6mm @ 15m).

Range: Up to 100' (30m) depending on illumination.

Leveling Type: Gimbal, ball bearing hung compensator magnetically dampened.

Environment: Water and dust proof, IP54.

Power: Three (3) “AA” batteries (included).

Warranty: 1 yr.



LASERMARK® MP3 – THREE BEAM LASER LEVEL, SELF-LEVELING

- One push of a button and instantly transfer a point from floor to ceiling, plus a horizontally level reference point.
- Highly focused self-leveling laser beams provide accuracy of 1/4-in at 100 feet.
- Flashing “out-of-level” sensor eliminates rechecks and costly errors.
- Tough on the jobsite. Resists water, dirt and dust (IP54).
- Built-in magnets to quickly mount laser instrument to metal surfaces.
- Easy access battery compartment.
- 1/4-20 thread mounting base.

Technical Specifications:

Laser Diode: 635nm X 3.

Accuracy–Up Plumb, Level: ± 1/4" @ 100' (6mm @ 30m).

Accuracy-Down Plumb: ± 1/4" @ 50' (6mm @ 15m).

Range: Up to 100' (30m) depending on illumination .

Leveling Type: Gimbal, ball bearing hung compensator magnetically dampened.

Environment: Water and dust proof, IP54.

Power: Three (3) “AA” batteries (included).

Warranty: 1 yr.





LM800 SERIES – ELECTRONIC SELF-LEVELING DUAL SLOPE ROTARY LASER

LM800GR SINGLE-BEAM HORIZONTAL SELF-LEVELING ROTARY LASER

- Single-speed rotation with dual-slope capability up to $\pm 10\%$.
- Anti-Drift System to signal operator when unit is moved out of position.
- Battery Level Indicator— so you don't run out of power at the wrong time.
- Pro Grade Motorized Electronic Self-Leveling for speed and convenience.
- Heavy-Duty Glass enclosed beacon and sealed housing is water/dust-proof (IPX7) to ensure years of dependability. Warranty: 2 yr.

Technical Specifications:

Laser Diode: 650nm.

Accuracy– Horizontal: $\pm 1/16"$ @ 100' ($\pm 1.5\text{mm}$ @ 30m).

Range: Up to 2800' (850m) Diameter with Detector.

Leveling Type: Fully electronic Servo motor-driven horizontal and vertical self-leveling, $\pm 5^\circ$.

Grade/Slope: Dual Slope up to 10%.

Environment: Water and Dust Proof, IP-X7.

Power: Ni-MH rechargeable battery pack with charger.



LM800 DUAL-BEAM WITH SELF-LEVELING IN HORIZONTAL, VERTICAL AND PLUMB!

- Anti-Drift System to signal operator when unit is moved out of position .
- Variable speed rotation.
- Sweep Mode— present angles.
- CW and CCW Head Positioning for fast and easy alignment in vertical/horizontal applications.
- Battery Level Indicator— so you don't run out of power at the wrong time.
- Pro Grade Motorized Electronic Self-Leveling for speed and convenience.
- Heavy-Duty Glass enclosed beacon and sealed housing is water/dust-proof (IPX7) to ensure years of dependability. Warranty: 2 yr.

Technical Specifications:

Laser Diode: 635nm "Standard" .

Accuracy– Horizontal: $\pm 1/16"$ @ 100' ($\pm 1.5\text{mm}$ @ 30m).

Accuracy– Vertical: $\pm 1/8"$ @ 100' ($\pm 3\text{mm}$ @ 30m).

Range: Up to 2800' (850m) Diameter with Detector.

Leveling Type: Fully electronic Servo motor-driven horizontal and vertical self-leveling, $\pm 5^\circ$.

Grade/Slope: Dual Slope up to 10% .

Environment: Water and Dust Proof, IP-X7.

Power: Ni-MH rechargeable battery pack with charger.



LMH SERIES

ELECTRONIC SELF-LEVELING SINGLE-BEAM ROTARY LASER

The LMH Series Electronic Self-Leveling Rotary Lasers offer fast and simple leveling power to handle your toughest indoor/outdoor jobs with less manpower.

- Single Beam Offers 600 RPM Rotation for Optimal Use with Detector or Depth Sensor.
- Anti-Drift System to Signal Operator When Unit is Moved Out of Position Automatic/Manual Mode.
- No Bubble Required – Wide Self-Leveling Range of $\pm 5^\circ$ (1° per Second in Horizontal).
- Low Battery Indicator so you don't run out of power at the wrong time.
- Heavy-Duty glass enclosed beacon and durable sealed housing is water and dust.
- Resistant (IPX4) to ensure years of dependable operation. 2-year warranty.
- Pro Grade – Motorized, Electronic Horizontal Self-Leveling.

Technical Specifications:

Laser Diode: LMH and LMH-C– 650nm, LMH-GR– 635nm.

Accuracy– Horizontal: LMH-C– $\pm 3/32"$ @ 100' (2.5mm @ 30m), LMH, LMH-GR– $\pm 1/16"$ @ 100' ($\pm 1.5\text{mm}$ @ 30m).

Range: LMH, LMH-GR– Up to 2000' (610m) Diameter with Detector, LMH-C– Up to 1000' (305m) Diameter with Detector.

Leveling Type: Electronic Self-Leveling $\pm 5^\circ$ ($\pm 3^\circ$ LMH-C).

Grade/Slope: LMH-GR– Single Slope up to 10%.

Environment: Water and dust proof, IP54.

Power: Four (4) "D" Cell Alkaline batteries included.

AUTOMATIC LEVELS

PAL SERIES / SAL "N" SERIES AUTOMATIC LEVELS

- Magnetically-dampened, wire-hung compensator for optimum range and accuracy.
- Compensator lock protects instrument during transport or storage; also acts as a handy compensator checking tool.
- Large effective aperture and minimum focus of 1 foot (0.3m).
- Top-mounted optical peep-sight for quick reference.
- Large, easy-to-use precise focusing knob.
- Easy-to-read horizontal circle.
- Penta prism for easy bubble viewing.
- Sealed, dust-protected leveling screws.
- Water-resistant, sealed construction plus sunshade for use in various weather conditions.
- Fine motion knobs on left and right sides with friction-braked rotation, endless horizontal drive.
- 1:100 stadia for distance estimation.
- 5/8" x 11 threads to fit standard tripods.
- Available in 360 degrees or 400 gons; please specify.
- 5-year warranty.
- Includes hardshell carrying case with dual latches, plumb bob, Allen wrench, adjusting pin and instruction manual.

55-SAL20N 20X SAL Automatic Level
 55-SAL24N 24X SAL Automatic Level
 55-SAL28N 28X SAL Automatic Level
 55-SAL32N 32X SAL Automatic Level

55-PAL22 22X PAL Automatic Level
 55-PAL26 26X PAL Automatic Level



55-PAL22



55-SAL32N

ELECTRONIC SELF-LEVELING

LM700G ELECTRONIC HORIZONTAL/ VERTICAL SELF-LEVELING INTERIOR GREEN BEAM ROTARY LASER

The LM700G is equipped with an electronic self-leveling system that is fast, accurate and gives reliable control. This method of self-leveling is great where auto leveling in both horizontal and vertical or where grade is required.

Technical Specifications:

Laser Diode: 532nm.

Accuracy- Horizontal: ±1/8" @ 100' (±3mm @ 30m).

Accuracy- Vertical: ±1/8" @ 100' (±3mm @ 30m).

Range: Up to 330' (100m) Diameter- up to 660' (200m) with Detector.

Leveling Type: Fully electronic Servo motor-driven horizontal and vertical self-leveling, ±5°.

Grade/Slope: Manual.

Environment: Water and dust proof, IP54.

Power: Ni-MH rechargeable battery pack with charger for ±12 continuous hours.

Warranty: 2 yr.



57-LM700G-1

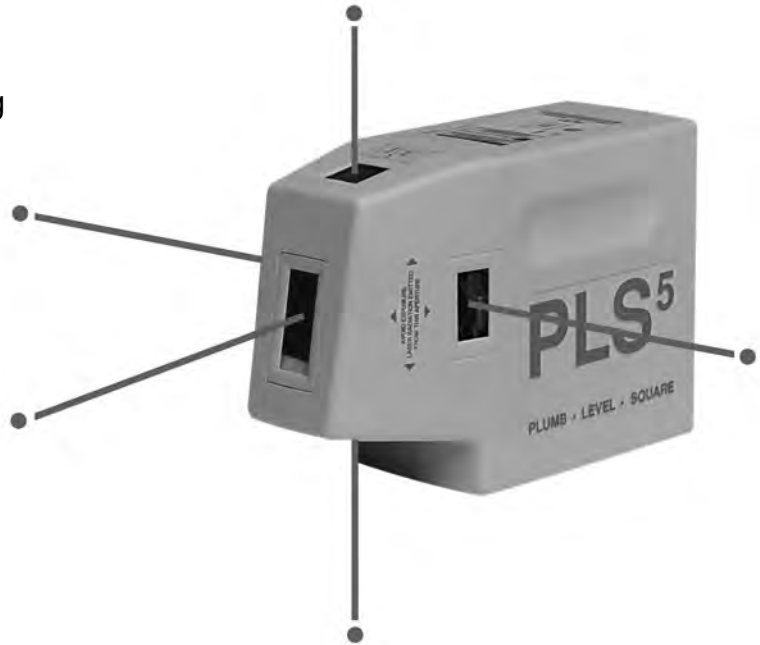


AUTOMATIC PLUM / LEVEL / SQUARE

PLS5 and PLS3

PROVIDE POINT-TO-POINT ALIGNMENT INFORMATION

Lay out reference points faster than traditional, labor intensive methods. No more 3-4-5. No more swinging plumb bobs. Plumb instantly from floor to ceiling or from 50 feet off the ground! Use PLS as your partner on the jobsite. Self-leveling: no time wasted with bubble vials. Turn it on and go to work. Take clear, stable reference points indoors and outdoors.



THE PLS5 SYSTEM INCLUDES:

- PLS5 Laser Unit
- Magnetic Wall Bracket
- Pendulum Target
- Floor Stand
- Compact Carrying Case
- Operating Manual
- 1-Year Warranty

THE PLS3 LASER TOOL INCLUDES:

- PLS3 Laser Unit
- Operating Manual
- Wall Bracket
- Carrying Pouch
- Floor Stand
- 1-Year Warranty



Compact, lightweight, durable and portable, PLS3 and PLS5 were designed by contractors for contractors.

PLS5 and PLS3 Specifications

	PLS5	PLS3
Working Range:	+/- 100 feet	+/- 100 feet
Accuracy (all beams):	<1/8" @ 100 feet	<1/4" @ 100 feet
Leveling:	Automatic	Automatic
Leveling range:	+/-8°	-6°
Power Supply:	3 AA batteries	3 AA batteries
Operating Time:	+ 30 hrs. continuous	+ 30 hrs. continuous
Dimensions:	2-1/2" x 6-1/2" x 4-1/4"	1-1/2" x 4-1/2" x 3-1/8"
Weight:	1.7 lbs. (.77kg)	12 oz. (.33kg)



OPTICAL LEVELS AND TRANSIT-LEVELS

LEVELS – Use for:

Determining grades and elevations, rough angle turning, laying out and leveling foundations, setting forms, leveling walls, setting lines, setting offset stakes.

TRANSIT-LEVELS –

In addition to the level, use for: Plumbing walls, setting slope, truing forms, aligning poles, fence posts .



20X ECONO LINE LEVEL AND TRANSIT-LEVEL

Fast setup – simple to use. Model 135 is designed strictly for leveling, and Model 136 is used for leveling, plumbing, or running vertical lines. Econo Line instruments have no circles or vertical arc. Units use 1/2 x 20 thread.

Working Range: 200 feet (61M)

Accuracy: 1/4 in. at 100 feet



54-190B

20X SPEED LINE LEVEL AND TRANSIT-LEVEL

For builders that require rough angle turning and fine tuning adjustments. These instruments have clamps and tangents that bring your instrument quickly on target. 15-minute horizontal circle on both models and 1° vertical arc on Model 200B allow the builder to set rough angles. Units use 1/2 x 20 thread.

Working Range: 200 feet (61M)

Accuracy: 1/4 in. at 100 feet

54-200B



54-300LP

20X MAGNUM LINE LEVEL AND TRANSIT-LEVEL WITH LASER PLUMMET

These units eliminate the need for a plumb bob and rechecks, for fast and easy setup over a point. Instrument features are similar to above, plus 5/8" x 11 tripod mounting thread, and three leveling screws. Model 300LP has a 1° vertical arc and two leveling vials.

Working Range: 250 feet (76M)

Accuracy: 1/8 in. at 100 feet (3mm at 30m)



54-300B

54-290B

20X MAGNUM LINE LEVEL AND TRANSIT-LEVEL

These units are for the serious builder or contractor who requires greater accuracy. These instruments are designed with a heavy-duty dome shaped head that holds a double ball bearing center, giving the user 5-minute readouts. Model 300B has a 1° vertical arc and two leveling vials. Units use a 3-1/2 x 8 thread.

Working Range: 250 feet (76M)

Accuracy: 1/8 in. at 100 feet (3mm at 30m)



56-SCT1

20X BUILDER'S TRANSIT

- Features a full transiting 20X telescope with exceptionally clear optics. The aluminum center mechanism is accurately machined and fitted.
- 5/8" x 11 threads and three leveling screws.
- Includes a hardshell case with instruction manual, rain cover, adjusting pin, two screwdrivers, lubricant, through compass, and diagonal eyepiece adapter with solar filter for both telescope and reader. One-year warranty.

Working Range: 250 feet (76M)

Accuracy: 1/16 in. at 100 feet (1.6mm at 30m)

TELESCOPING ALUMINUM RODS

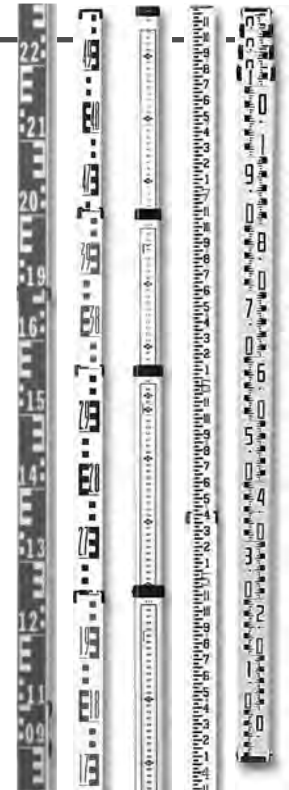
Made of a light and durable aluminum alloy, the anodized sections are imprinted with special weather resistant and corrosion resistant inks. Tight tolerances on extruded aluminum sections allow for smooth extension and prevent unnecessary clattering and sloppiness. The sectional joints are injection molded from a durable lightweight impact-resistant plastic. Rods are equipped with reliable and wear-resistant polycarbonate buttons that lock each section. Easy-to-read graduations and a special measuring scale on the backside permit users to read height at eye level.

06-808A	8', 3 Section, ft./10ths/100ths; 3 lbs. (1.4kg) net wt.
06-808C	8', 3 Section, ft./in./8ths; 3 lbs. (1.4kg) net wt.
06-808M	2.5m, 3 Section, metric "E"; 3 lbs. (1.4kg) net wt.
06-813	13', 4 Section, ft./10ths/100ths; 4 lbs. (1.8kg) net wt.
06-813C	13', 4 Section, ft./in./8ths; 4 lbs. (1.8kg) net wt.
06-816	16', 5 Section, ft./10ths/100ths; 4.5 lbs. (2kg) net wt.
06-816C	16', 5 Section, ft./in./8ths; 4.5 lbs. (2kg) net wt.
06-804M	4m, 4 Section, metric "E"; 4 lbs. (1.8kg) net wt.
06-8042MM	4m, 4 section, metric dm, cm, 2mm
06-805M	5m, 5 Section, metric "E"; 4.5 lbs. (2kg) net wt.
06-805MMM	5m, 5 Section, metric 1/2cm, mm, alternating yellow & white face; 4.5 lbs.(2kg) net wt.

Dual Face Telescoping Aluminum Rods

Dual face rods include all of the above features but are graduated on both sides; one side in metric, the other in feet and inches or feet and tenths.

06-805MC	16'/5m, 5 Section, metric "E" and ft./in./8ths
06-805MT	16'/5m, 5 Section, metric "E" and ft./10ths/100ths



FIBERGLASS LEVELING RODS

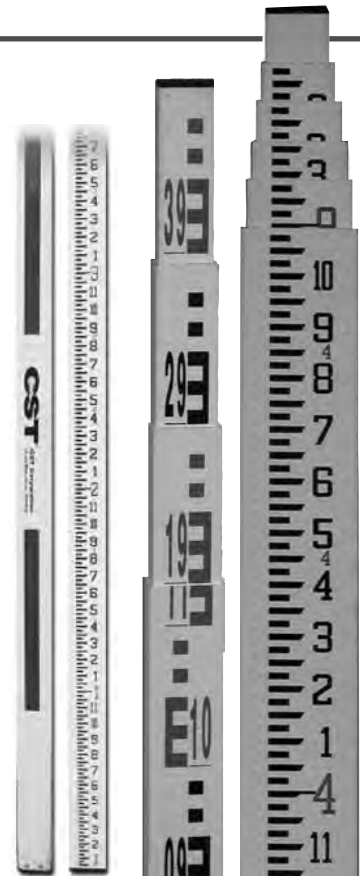
- Made from, corrosion-resistant and non-conductive fiberglass.
- Features abrasion-resistant coating with special reinforcement fiberglass ribs to stop breakage and add stability.
- Easy-to-read graduations and a special measuring scale on the backside permit users to read height at eye level.
- Reliable and long lasting spring loaded Delrin® buttons.
- Snug fitting telescoping sections minimize "side to side" and "front to back" play.
- Snap on "Rod level". (Optional)
- **FREE** heavy-duty carrying case is standard with all rods.

Rectangular-Shaped Leveling Rods

06-913	13-ft. Leveling Rod, 4 section-10ths
06-913C	13-ft. Leveling Rod, 4 section-inches
06-904M	4m Leveling Rod, 4 section-metric "E"
06-9042MM	4m Leveling Rod, 4 section-metric 2mm
06-916	16-ft. Leveling Rod, 5 section-10ths
06-916C	16-ft. Leveling Rod, 5 section-inches
06-905M	5m Leveling Rod, 5 section-metric "E"
06-905MMM	5m Leveling Rod, 5 section-metric 1/2cm,mm
06-925	25-ft. Leveling Rod, 6 section-10ths
06-925C	25-ft. Leveling Rod, 6 section-inches
06-907M	7.6m Leveling Rod, 6 section-metric "E"

Oval-Shaped Leveling Rods

06-725	25-ft. Leveling Rod, graduated feet/10ths
06-725C	25-ft. Leveling Rod, graduated feet/inches
06-716	16-ft. Leveling Rod, graduated feet/10ths
06-716C	16-ft. Leveling Rod, graduated feet/inches
06-707M	7.6m Leveling Rod, graduated metric
06-705M	5m Leveling Rod, graduated metric



HEAVY-DUTY WOOD TRIPODS

- Finest hardwoods available with die cast aluminum metal parts.
- Constructed with 1" diameter wood dowels.
- Hand hold hole in one leg and comes complete with a poly-webbing shoulder carrying strap.
- Expertly treated, finished and painted – wood parts are international yellow, hardware is international orange.
- All tripods come with a yellow ABS plastic cap. Wing nut type clamping.

60-WDW10HV 25" (64cm) open, 19" (48cm) closed, 5/8" x 11 thread, flat head; 12 lb. (5.5kg) net wt.
60-WDW20HV 72" (183cm) open, 42" (107cm) closed, 5/8" x 11 thread, flat head; 16 lb. (7.2kg) net wt.
60-WDW25HV 72" (183cm) open, 42" (107cm) closed, 3-1/2" x 8 thread, flat head; 16 lb. (7.2kg) net wt.
60-WDW30HV 97" (246cm) open, 59" (150cm) closed, 5/8" x 11 thread, flat head; 21 lb. (9.5kg) net wt.
60-WDW40HV 72" (183cm) open, 42" (107cm) closed, 5/8" x 11 thread, dome head; 16 lb. (7.2kg) net wt.



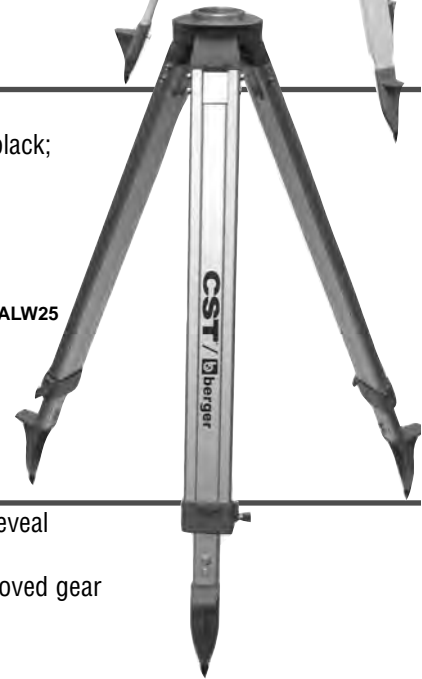
60-WDW20HV

HEAVY-DUTY ALUMINUM TRIPODS

- Tripods are the wide frame extension leg type.
- Heavy-duty hardware is brightly painted with your choice of international orange or black; extension legs and side struts are anodized silver.
- Interchangeable heads and come complete with a poly-webbing shoulder strap and replaceable hardened steel shoe points. Wing nut type clamping.

60-ALW10 25" (64cm) open, 19" (48cm) closed, 5/8" x 11 Stud, flat head; 9 lbs. (4.1kg) net wt.
60-ALW20 65" (165cm) open, 42" (107cm) closed, 5/8" x 11 stud, flat head; 13 lbs. (5.9kg) net wt.
60-ALW25 65" (165cm) open, 42" (107cm) closed, 3-1/2" x 8 stud, flat head; 13 lbs. (5.9kg) net wt.
60-ALW30 97" (246cm) open, 59" (150cm) closed, 5/8" x 11 stud, flat head; 14 lbs. (6.4kg) net wt.
60-ALW35 97" (246cm) open, 59" (150cm) closed, 3-1/2" x 8 stud, flat head; 14 lbs. (6.4kg) net wt.
60-ALW40 65" (165cm) open, 42" (107cm) closed, 5/8" x 11 stud, dome head; 13 lbs. (5.9kg) net wt.

60-ALW25



ELEVATOR TRIPODS

- Heavy-duty elevator tripods feature all-surface rubber feet; they can be retracted to reveal sharp metal points for use on uneven outdoor terrain.
- These wing nut clamping tripods have an adjustable range of 12" (305mm) and improved gear system for smooth continuous motion.
- Heavy-duty folding handle is made from aluminum and brass.
- Choose a 5/8 x 11 or 3-1/2" x 8 stud on a retractable head for azimuth use.

ALUMINUM

60-ALW10ELAZ 46" (117cm) open, 25" (64cm) closed, 5/8" x 11 thread; 13 lbs. (5.9kg) net wt.
60-ALW15ELAZ 46" (117cm) open, 25" (64cm) closed, 3-1/2" x 8 thread; 13 lbs. (5.9kg) net wt.
60-ALW20ELAZ 88" (224cm) open, 48" (122cm) closed, 5/8" x 11 thread; 15 lbs. (6.8kg) net wt.
60-ALW25ELAZ 88" (224cm) open, 48" (122cm) closed, 3-1/2" x 8 thread; 15 lbs. (6.8kg) net wt.
60-ALW30ELAZ 128" (325cm) open, 68" (173cm) closed, 5/8" x 11 thread; 21 lbs. (9.5kg) net wt.
60-ALW35ELAZ 128" (325cm) open, 68" (173cm) closed, 3-1/2" x 8 thread; 21 lbs. (9.5kg) net wt.
60-ALVQR20ELAZ Quick Release Version (no rubber feet): 66" (168cm) open, 40" (102cm) closed, 5/8" x 11 thread; 15 lbs. (6.8kg) net wt.

WOOD

60-WDW10ELAZ 47" (119cm) open, 26" (66cm) closed, 5/8" x 11 thread; 15 lbs. (6.8kg) net wt.
60-WDW15ELAZ 47" (119cm) open, 26" (66cm) closed, 3-1/2" x 8 thread; 16 lbs. (7.3kg) net wt.
60-WDW20ELAZ 94" (239cm) open, 49" (124cm) closed, 5/8" x 11 thread; 18 lbs. (8.2kg) net wt.
60-WDW25ELAZ 94" (239cm) open, 49" (124cm) closed, 3-1/2" x 8 thread; 18 lbs. (8.2kg) net wt.
60-WDW30ELAZ 128" (325cm) open, 68" (173cm) closed, 5/8" x 11 thread; 27 lbs. (12.2kg) net wt.
60-WDW35ELAZ 128" (325cm) open, 68" (173cm) closed, 3-1/2" x 8 thread; 27 lbs. (12.2kg) net wt.
60-WDF20ELAZ Wood/Fiberglass quick release version, 94" (239cm) open, 49" (124cm) closed, 5/8" x 11 thread; 18 lbs. (8.2kg) net wt.

60-ALV20 Aluminum Value Line Tripod with wing screw clamp, 5/8" x 11 thread, flat head
60-ALVQR20 Aluminum Value Line Tripod with quick clamp, 5/8" x 11 thread, flat head

60-WDV20 Wood, Wood/Fiberglass

Same features as above. The wood tripod has hardwood legs and dowels; the wood/fiberglass tripod has hardwood legs and fiberglass dowels. Net weight 12.5 lbs. (5.7kg).

60-WDW20ELAZ



MAGNA-TRAK® 100 SERIES MAGNETIC LOCATOR

Improved water resistance and mechanical life are provided by our new direct contact switching with the PC board. Enjoy enhanced functioning, reliability and maintenance for all CST locators.

Magna-Trak® 100 Magnetic Locator

- LCD indicator offers a digital bar graph display, in addition to a standard audio tone, to precisely identify the target object, especially in noisy, congested areas.
- Visual reminder when batteries are low.
- Waterproof bottom, push-button membrane pad operation with an ergonomic design.
- Easy battery access and outstanding battery life, and is backed by a five-year warranty.

19-550 Magna-Trak 100, soft case

19-551 Magna-Trak 100, hard case

Magna-Trak® 101 Magnetic Locator

- Quick-action, control knob operation to adjust sensitivity and volume.
- A streamlined version of the Magna-Trak 100 it features all the same components as the Magna-Trak 100, minus the LCD meter display and membrane switch. The operation of this locator is dependent upon only two rotary control knobs: sensitivity and volume.

19-555 Magna-Trak 101, soft case

19-556 Magna-Trak 101, hard case

Magna-Trak® 102 Magnetic Locator

- Same basic performance features as the Magna-Trak 100.
- Additional push-button “erase” feature, greater flexibility is achieved and performance is enhanced.
- No need to reduce the sensitivity; the Magna-Trak 102 always returns to perfect magnetic balance when the “erase” button is pressed.
- Includes a power line indicator feature. CAUTION: This feature is an aid only and is not intended for locating buried power lines.

19-557 Magna-Trak 102, soft case

19-558 Magna-Trak 102, hard case



MAGNA-TRAK® 200 SERIES MAGNETIC LOCATOR

Large LCD Display

- Digital readout and bar graph allow you to locate visually.
- Used with audio tone allows for pinpoint accuracy, even in congested search areas.
- Segmented battery level indicator means no power loss surprises.
- Indicator cautions when detecting a power line.

Erase Function (MT202 Only)

- Lets you block out interference from a magnetic disturbance (such as a nearby fence).

Membrane Switch

- Lets you adjust volume and sensitivity with the same hand that holds the locator.
- No mechanical controls – membrane is sealed from dust and moisture.

Magnetic Speaker

- Enhanced to produce a richer tone for easier locating.

Engineered Body

- Lightweight (only 3 lbs.).
- Water-resistant housing permits use in the rain.
- Ergonomic handle with textured grip.

19-200SC Magna-Trak 200 Magnetic Locator with Soft Carrying Case

19-200HC Magna-Trak 200 Magnetic Locator with Hard Carrying Case

19-202SC Magna-Trak 202 Magnetic Locator (Erase Feature) with Soft Carrying Case

19-202HC Magna-Trak 202 Magnetic Locator (Erase Feature) with Hard Carrying Case



MEASURE MASTER BY ROLATAPE

MM-12 SERIES

This precision molded one-foot circumference wheel is designed for measuring on a smooth, hard surface. The MM-12 features a 5-digit, push button reset counter and a retractable twist-and-lock handle.

FEATURES BENEFITS:

Lightweight and compact, fits in a briefcase; easy to carry. Wide, precision molded tire, stable grip on smooth and hard surfaces. Molded polycarbonate 5-digit counter, records to 10,000 feet or 1,000 meters with convenient push-button reset. Safety-Green color, easy to locate at home or at the jobsite. Telescoping handle compactibility.

MM-12 TWIN SERIES

This dual precision molded one-foot circumference wheel offers increased stability and accuracy when measuring on a smooth, hard surface. The MM-12 Twin features a 5-digit, push button reset counter and a retractable twist-and-lock handle.

FEATURES BENEFITS:

Dual wheel configuration, superb traction and stable control. Wide, precision molded tires, firm, stable grip on smooth, hard surfaces. Molded polycarbonate 5-digit counter, records to 10,000 feet or 1,000 meters with convenient push-button reset. Safety-Green color, easy to locate at home or at the jobsite. Brass axle bushings, free-spinning wheels for easy rolling and 3-piece telescoping handle compactibility.

MM-30 SERIES

A money saving workhorse is the best way to describe the MM-30. From appraising, landscaping and construction to fencing the MM-30 can easily handle the job. The MM-30 features a 5-digit, push button counter, a steel wheel and a convenient flip up stand.

FEATURES BENEFITS:

Silver powder coat steel wheel, lasting durability and good looks. Brass axle bushings, free-spinning wheel for easy rolling. Molded polycarbonate 5-digit counter, records to 10,000 feet or 1,000 meters with convenient push-button reset. Safety-Green color, high visibility means a safer work environment. 3-foot / 1-meter circumference, best all-around versatility. The unique Insert-and-Lock handle, means transport and storage is easy. Wheel stand keeps wheel upright when not in use.

MM415 Series

The 415 keeps you measuring accurately, down to the nearest inch, through the roughest conditions. Construction sites, geological field applications, engineering and trail-blazing all give the 415 a chance to shine.

FEATURES BENEFITS:

All steel construction, heavy-duty strength and durability. Solid steel disk wheel measures through brush without catching in spokes. Measurement units on disk circumference provides measurements in inches, tenths of feet or decimeter and centimeter. 5-digit steel counter records up to 100,000 feet or meters.

MEASURE MASTER II BY ROLATAPE

MM-II SERIES

Smooth out the dips and bumps in outdoor measuring with the Measure Master® II Spoked Series wheels. The 3-foot, 4-foot or 1-meter circumference wheels will accurately measure outdoor dimensions for general construction, fencing, paving, landscaping applications and more. Quality aluminum construction adds up to effective measuring and ease of use.

FEATURES BENEFITS:

All aluminum construction, lightweight and durable. 5-digit counter, records to 100,000 feet or meters with convenient reset knob. 3-foot, 4-foot and 1-meter circumference wheel, easier to measure accurately on uneven terrain. Wheel brake, transport to second site without losing existing measurement. Wheel stand, keeps wheel upright when not in use.

ROLATAPE® PROFESSIONAL SERIES

300 SERIES

Standards of versatility and portability are set by the Rolatape® 300 Series. Real estate, landscaping, municipal and construction measuring needs are handled with ease by the 300 Series. Professionals rely on the smooth rolling, accurate 300 Series to perform on pavement, dirt and rough surfaces. Transport and storage is easy with the unique, Insert-and-Lock handle.

FEATURES BENEFITS:

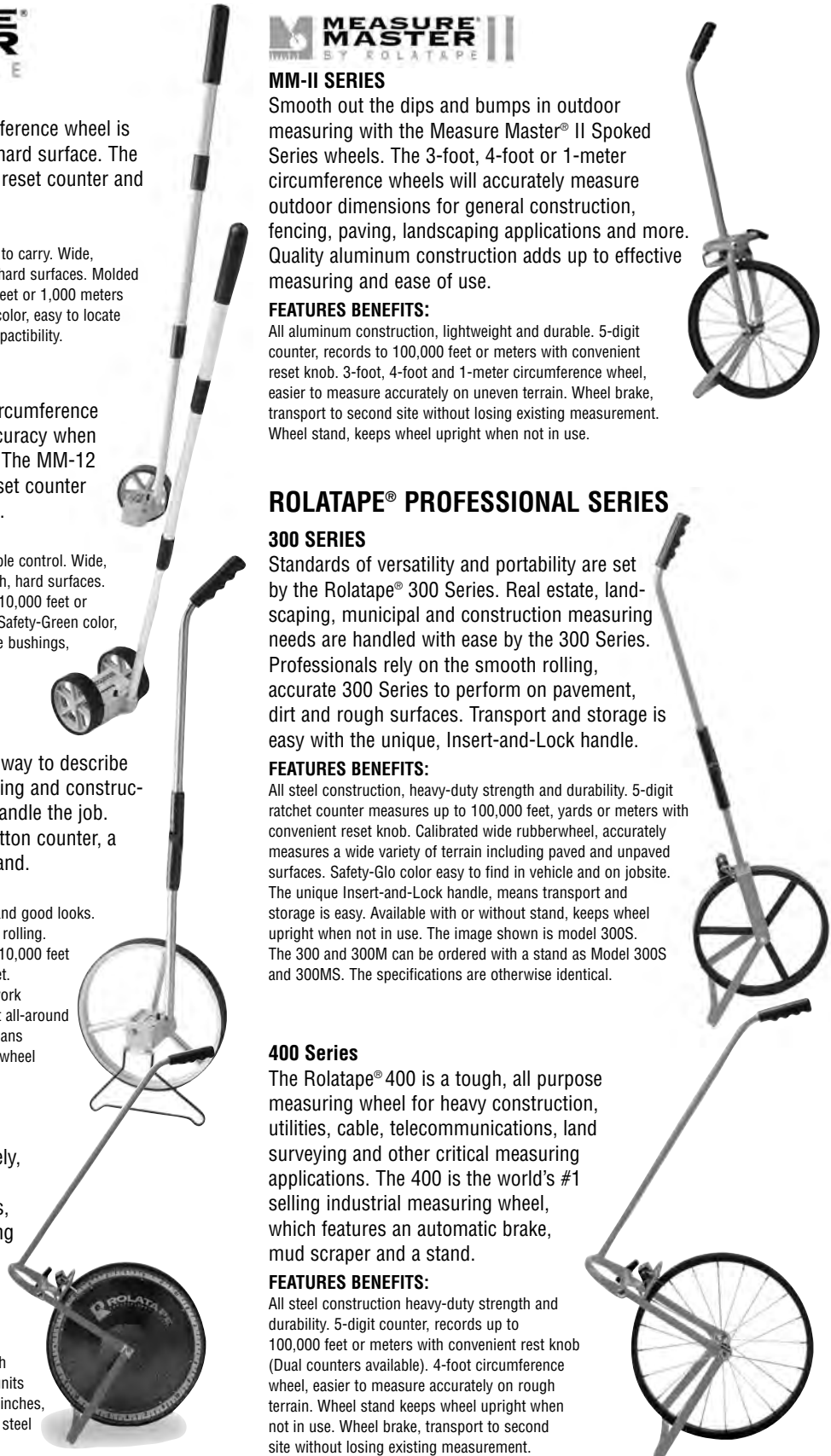
All steel construction, heavy-duty strength and durability. 5-digit ratchet counter measures up to 100,000 feet, yards or meters with convenient reset knob. Calibrated wide rubberwheel, accurately measures a wide variety of terrain including paved and unpaved surfaces. Safety-Glo color easy to find in vehicle and on jobsite. The unique Insert-and-Lock handle, means transport and storage is easy. Available with or without stand, keeps wheel upright when not in use. The image shown is model 300S. The 300 and 300M can be ordered with a stand as Model 300S and 300MS. The specifications are otherwise identical.

400 Series

The Rolatape® 400 is a tough, all purpose measuring wheel for heavy construction, utilities, cable, telecommunications, land surveying and other critical measuring applications. The 400 is the world's #1 selling industrial measuring wheel, which features an automatic brake, mud scraper and a stand.

FEATURES BENEFITS:

All steel construction heavy-duty strength and durability. 5-digit counter, records up to 100,000 feet or meters with convenient rest knob (Dual counters available). 4-foot circumference wheel, easier to measure accurately on rough terrain. Wheel stand keeps wheel upright when not in use. Wheel brake, transport to second site without losing existing measurement.





*Hex/Lag/Carriage/Anchor Bolts
Flat Head/Socket Head Screws
Shoulder/Button/Set Cup Screws
Common/Duplex Nails
Roofing Nails
Cut Masonry Nails
Box/Sinkers/Finish/Joist/Ring Shank Nails
Flooring/Fluted Masonry Nails
Anchor Bolts
Mechanical Anchors
Toggle Bolts
Drop-In/Wedge/Sleeve Anchors
Plastic/Nylon Nail Anchors
Lag/Expansion Shields
Hammer Drives • Machine Screw Anchors
Self-Drilling Anchors
Concrete Inserts
Self-Drilling/Masonry Screws
Drywall/Wood/Cement Board/Metal/Specialty Screws
Threaded Anchoring Systems
Phillips Screws • Slotted Bits
Bit Holders • Nutsetters*

Fasteners

13



*Powder/Gas Actuated Tools • Fasteners
Rivets • Hand Riveters
Thread Repair*

Available Hex Head Bolt Sizes:

Diameter	Lengths
1/4"	1/2" to 6"
5/16"	1/2" to 6"
3/8"	1/2" to 6"
7/16"	1/2" to 6"
1/2"	3/4" to 28"
9/16"	3/4" to 6"
5/8"	1" to 26"
3/4"	1" to 36"
7/8"	1-1/2" to 36"
1"	1-3/4" to 36"
1-1/8"	3" to 22"
1-1/4"	2-1/4" to 18"
1-3/8"	4" to 24"
1-1/2"	4" to 24"
1-3/4"	4-1/2" to 24"



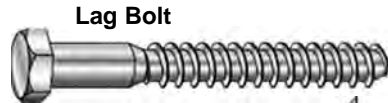
Hex Bolt

Bolt Size	THREADS PER INCH (TPI)	
	Coarse Thread UNC	Fine Thread UNF
#2	56	-
#3	48	-
#4	40	-
#5	40	-
#6	32	-
#8	32	-
#10	24	32
#12	24	-
1/4	20	28
5/16	18	24
3/8	16	24
7/16	14	20
1/2	13	20
9/16	12	18
5/8	11	18
3/4	10	16
7/8	9	14
1	8	12*
1-1/8	7	12
1-1/4	7	12
1-1/2	6	12

* 12 tpi is the UNF standard however 14tpi is far more common in actual use.

Bolts available in Grade 2, Grade 8, A325, Stainless Steel, Brass and Hot Dipped Galvanized.

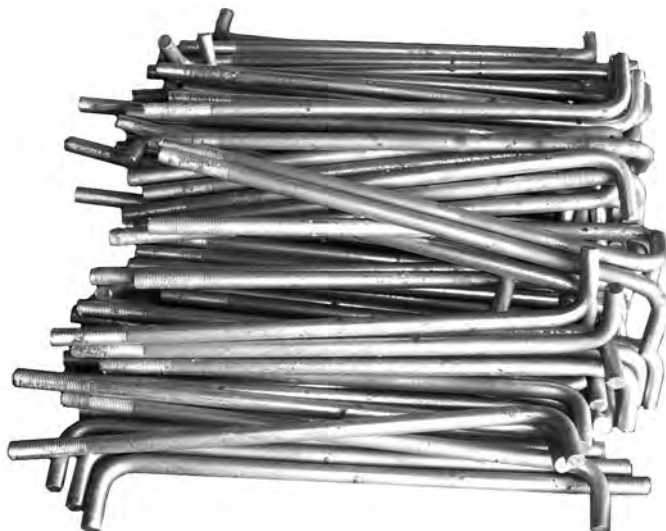
Other Bolts are available in stock -
Carriage Bolts
Lag Bolts
Tap Bolts



Lag Bolt



Carriage Bolt



Anchor Bolts

Available in a large array of sizes in plain steel and hot-dipped galvanized.

Diameters: 1/2", 5/8", 3/4" 7/8" 1" and 1-1/4"

Lengths: 6" to 36"

Hook: 1-1/2" to 6"

Thread: 1-1/2" to 8"

Custom sizes available. Just let Wharton know your needs.



SCREWS

BUTTON SOCKET CAP

Diameter	Length
0-80	Length 1/8 to 3/8"
1-72	Length 1/8 to 3/8"
2-56	Length 3/16 to 1/2"
3-48	Length 3/16 to 1/2"
4-40	Length 1/4 to 1/2"
6-32	Length 1/4 to 5/8"
8-32	Length 1/4 to 3/4"
8-36	Length 3/8 to 3/4"
10-24	Length 1/4 to 1"
10-32	Length 1/4 to 1"
1/4-20	Length 3/8 to 1"
1/4-28	Length 3/8 to 1"
5/16-18	Length 3/8 to 1"
5/16-24	Length 3/8 to 1"
3/8-16	Length 1/2 to 1-1/4"
3/8-24	Length 1/2 to 1"
1/2-13	Length 1 to 2"
5/8-11	Length 1 to 2"



SOCKET HEAD SHOULDER

Diameter	Length
1/4	Length 3/8 to 1-1/2"
5/16	Length 3/8 to 2"
3/8	Length 3/8 to 4"
1/2	Length 1/2 to 5"
5/8	Length 1-1/4 to 6"
3/4	Length 1-1/2 to 6"



SOCKET SET CUP POINT

Diameter	Length	Diameter	Length
0-80	Length 1/16 to 1/4"	1/4-28	Length 3/16 to 1-1/4"
1-72	Length 1/16 to 1/4"	5/16-18	Length 1/4 to 2"
2-56	Length 1/16 to 1/4"	5/16-24	Length 1/4 to 1-1/4"
3-48	Length 3/32 to 1/4"	3/8-16	Length 1/4 to 2-1/2"
4-40	Length 1/8 to 5/8"	3/8-24	Length 1/4 to 1-1/2"
4-48	Length 1/8 to 3/8"	7/16-14	Length 3/8 to 2"
5-40	Length 1/8 to 3/4"	7/16-20	Length 3/8 to 1/2"
5-44	Length 1/8 to 1/4"	1/2-13	Length 3/8 to 3"
6-32	Length 1/8 to 1"	1/2-20	Length 1/2 to 1"
6-40	Length 1/8 to 3/8"	5/8-11	Length 1/2 to 3"
8-32	Length 1/8 to 1"	5/8-18	Length 5/8 to 1"
8-36	Length 1/8 to 1/2"	3/4-10	Length 5/8 to 3"
10-24	Length 3/16 to 1-1/4"	7/8-9	Length 7/8 to 3"
10-32	Length 3/16 to 1-1/4"	1-8	Length 1 to 3"
1/4-20	Length 3/16 to 2"		



FLAT HEAD SOCKET CAP

Diameter	Length
0-80	Length 1/8 to 3/8"
1-72	Length 1/8 to 3/8"
2-56	Length 3/16 to 1/2"
3-48	Length 3/16 to 1/2"
4-40	Length 1/4 to 3/4"
5-40	Length 1/4 to 3/4"
6-32	Length 1/4 to 3/4"
8-32	Length 3/8 to 1"
10-24	Length 3/8 to 1-1/2"
10-32	Length 3/8 to 1-1/2"
1/4-20	Length 3/8 to 2"
1/4-28	Length 3/8 to 1-1/2"
5/16-18	Length 1/2 to 2-1/2"
5/16-24	Length 1/2 to 1-1/2"
3/8-16	Length 1/2 to 3"
3/8-24	Length 5/8 to 1-1/2"
7/16-14	Length 3/4 to 2"
1/2-13	Length 3/4 to 3"
1/2-20	Length 3/4 to 2"
5/8-11	Length 1-1/4 to 3"

SOCKET HEAD CAP

Diameter	Length	Diameter	Length
0-80	Length 1/8 to 3/8"	5/16-24	Length 1/2 to 2-1/2"
1-72	Length 1/8 to 3/8"	3/8-16	Length 1/2 to 6"
2-56	Length 3/16 to 1/2"	3/8-24	Length 1/2 to 3"
4-40	Length 1/4 to 3/4"	7/16-14	Length 1/2 to 4"
5-40	Length 1/4 to 3/4"	7/16-20	Length 1 to 2"
6-32	Length 1/4 to 1"	1/2-13	Length 1/2 to 8"
6-40	Length 1/4 to 3/4"	1/2-20	Length 1 to 3"
8-32	Length 1/4 to 1-1/2"	5/8-11	Length 1 to 8"
8-36	Length 3/8 to 3/4"	5/8-18	Length 1 to 2-1/2"
10-24	Length 3/8 to 2"	3/4-10	Length 1-1/4 to 8"
10-32	Length 3/8 to 2"	7/8-9	Length 2 to 8"
1/4-20	Length 3/8 to 4"	1-8	Length 2 to 8"
1/4-28	Length 3/8 to 2-1/4"	1-1/4-7*	Length 2-1/2 to 12"
5/16-18	Length 3/8 to 4"	1-1/2-6*	Length 3 to 12"



* Class Fit 2A.



Origin of PENNY-WISE nail lengths

There are two explanations for the English "penny" system of designating nails. One is that the eight penny, six penny, two penny nails, etc. were so-called originally because one hundred nails cost eight pence, six pence, two pence, etc. The other theory says that one thousand eight penny nails, for example, weighed eight pounds, one thousand four penny nails weighed four pounds, etc.

The "d" abbreviation for penny (8d) is of ancient origin and represents the first letter of Roman coin denarius. Within the building industry, those nails which are used with wood (such as wood siding nails, cedar shingle nails, etc.) are traditionally referred to by the "penny" designation; i.e., as 5d or 6d nails, etc. However, the nails for non-wood applications (asbestos, shingle nails, metal roofing nails, etc.) are primarily referred to by inches; i.e., as 1-1/2" or 2" nails, etc. In this catalog the penny designation is listed first for those nails which are usually referred to by that term.

There is no apparent system for correlating the various penny designations. They must be memorized individually.

Gauge	Size – Dec. Equ	Penny-Wise	Length
No. 5	.207	2d	1"
No. 5-1/2	.200	3d	1-1/4"
No. 6	.192	4d	1-1/2"
No. 6-1/2	.185	5d	1-3/4"
No. 7	.177	6d	2"
No. 7-1/2	.170	7d	2-1/4"
No. 8	.162	8d	2-1/2"
No. 8-1/2	.155	9d	2-3/4"
No. 9	.1483	10d	3"
No. 9-1/2	.142	12d	3-1/4"
No. 10	.135	16d	3-1/2"
No. 12-1/2	.099	20d	4"
No. 13	.0915	30d	4-1/2"
No. 13-1/2	.086	40d	5"
No. 14	.080	50d	5-1/2"
No. 14-1/2	.076	60d	6"
No. 15	.072		
No. 15-1/2	.067		
No. 16	.0625		
No. 16-1/2	.058		
No. 17	.054		
No. 17-1/2	.051		
No. 18	.0475		
No. 18-1/2	.0443		
No. 19	.0410		
No. 19-1/2	.0379		
No. 20	.0348		

Common Nails

Size	Length	Gauge	Diam. Head (In.)
3d	1-1/4"	No.14	13/64
4d	1-1/2"	No. 12-1/2	1/4
6d	2"	No. 11-1/2	17/64
8d	2-1/2"	No. 10-1/4	9/32
10d	3"	No. 9	5/16
12d	3-1/4"	No. 9	5/16
16d	3-1/2"	No. 8	11/32
20d	4"	No. 6	13/32
30d	4-1/2"	No. 5	7/16
40d	5"	No. 4	15/32
50d	5-1/2"	No. 3	1/2
60d	6"	No. 2	17/32



Flat head. Diamond point. The most popular group of nails. Common nails are used for general carpentry and framing projects. Available with a smooth shank or a ring shank which provides extra holding power.

Duplex Head Nails

Size	Overall Length	Gauge	Head
6d	2-7/64"	No. 11-1/2	3/16"
8d	2-5/8"	No. 10-1/4	15/64"
10d	3-3/16"	No. 9	1/4"
16d	3-3/16"	No. 8	9/32"
20d	3-1/2"	No. 6	9/32"



Double flat head. Diamond point. Smooth shank. The bottom head acts as a stop to make it easy to remove the nail and dismantle temporary structures. Used for scaffolds, framework and other temporary structures.

Roofing Nails

Length	Gauge	Head
3/4"	No. 11	7/16"
7/8"	No. 11	7/16"
1"	No. 11	7/16"
1-1/4"	No. 11	7/16"
1-1/2"	No. 11	7/16"
1-3/4"	No. 11	7/16"
2"	No. 11	7/16"



Large flat head. Barbed shank. Diamond point. Primarily used to fasten asphalt and fiberglass roofing to wood sheathing and old roofing. Barb shank gives the nail extra holding power.

Cut Masonry Nails

Size	Length
4d	1-1/2"
4-1/2d	1-5/8"
5d	1-3/4"
6d	2"
7d	2-1/4"
8d	2-1/2"
10d	3"
12d	3-1/4"
16d	3-1/2"



Hardened steel. Used to attach lumber to concrete and concrete block. The four sharp edges and sides prevent the nail from rotating and provides greater holding power. Also know as "cut nails."



GENERAL CONSTRUCTION



General Construction fasteners have **YELLOW** labels, and are used for common, everyday projects, including general construction.

Common Nail



For construction, carpentry and framing. Smooth, uncoated, larger shank provides greater strength.

Box Nail



For construction, carpentry and framing. Smooth, thin shank reduces wood splitting.

Sinkers



For construction, carpentry and framing. Vinyl-coated, smooth shank for easier nailing and firmer holding power.

Finish Nail



For trim and fine finishing work. Small, countersinking head for nail concealment.

Casing Nail



For trim and fine finishing work. Heavier gauge suitable for door jams and window mouldings.

Duplex Nail



For temporary construction where nail removal is required, such as concrete forming and scaffolding. Smooth, uncoated shank and double head ease removal.

Joist Hanger Nail



For attaching joist hangers to wood studs. Short, heavy gauge nail provides increased holding power without fully penetrating wood.

Ring Shank Pole Barn Nail



For load-bearing wooden structures where superior holding power is necessary, ring shank provides greater holding power.

Ring Shank Underlayment Nail



For laying plywood or composition subflooring over existing wood floors or floor joists. Uncoated, ringed shank for greater holding power.

Hard Cut Flooring Nail



For securing hardwood strip flooring to subfloor and to secure wood framing or furring strips to brick, block or concrete.

Screw Shank Flooring Nail



For securing hardwood strip flooring to subfloor.

Cut Masonry Nail



For securing wood framing or furring strips to brick, block or concrete.

Fluted Masonry Nail



For securing wood framing or furring strips to brick, block or concrete.

Metal Round Cap Masonry Nail



For attaching foam insulation to exterior surfaces. Fluted to penetrate masonry without cracks.

ROOFING AND SIDING



Roofing and Siding fasteners have **BLUE** labels and are designed primarily for roofing and siding.

Galvanized Roofing Nail



For applying roofing asphalt shingles, insulation board and felt-to-wood substrates. Large head and heavier shank gauge provide greater holding power. Electrogalvanized nail also used with vinyl siding.

**Large
Diameter
Tapcon
(LDT[™]) Anchors**

**Finished head,
Removable Anchor**



LDT
(3/8" & 1/2") (5/8" & 3/4")
Sawtooth[™]

*Uses standard drill bits—
no special drill bits to
purchase or lose!*

DESCRIPTION/SUGGESTED SPECIFICATIONS

**Self-threading Anchors—
SPECIFIED FOR ANCHORAGE INTO CONCRETE**



The LDT anchor is a high performance anchor that cuts its own threads into concrete.

Anchor bodies are made of hardened carbon steel and zinc plated.

The anchors shall have a finished hex washer head with anti-rotation serrations to prevent anchor back-out. The head of the anchor is stamped with a length identification code for easy inspection.

The anchor shall be installed with carbide tipped hammer drill bits made in accordance to ANSI B212.15-1994.

ADVANTAGES

SAVE TIME

EASILY INSTALLED

- Installs in less than half the time of wedge anchors or adhesive anchors.
- Simply drill a pilot hole and drive the LDT anchor by hand or impact.

EASILY REMOVED

- No torching or grinding required to remove anchors.

SAVE MONEY

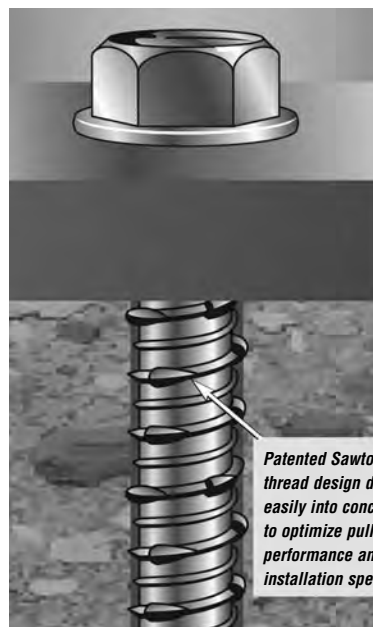
LOWER DRILL BIT COSTS

- Use standard ANSI bits instead of proprietary bits.
- Single piece design, no nut and washer to assemble.

USE STANDARD ANSI BITS

- No special proprietary bits to purchase or lose.
- Reduce chances for anchor failure due to incorrect bit usage.

**Sawtooth Threads[™], now available on
5/8" and 3/4"**



**IMPROVED PERFORMANCE IN
LARGE DIAMETER HOLES**

- Superior performance to wedge anchor.
- Higher loads in shallow embedments.
- Closer edge/spacing distance than mechanical anchors.
- More threads for better thread engagement and higher pullout resistance.
- Durable induction-hardened tip.

EASY INSTALLATION

- Easy 2-step installation, simply drill a pilot hole and drive.
- Installs in less than half the time of a wedge anchor.
- Efficient thread cutting.
- Use standard drill bit sizes.
- Single piece design—no nut and washer assembly.
- Easily removed.



Wedge-Bolt®

The Wedge-Bolt® anchor is a one-piece heavy-duty screw anchor with a finished hex head. It is easy to identify, removable and vibration-resistant.

HEAD STYLES

Hex Head

ANCHOR MATERIALS

Zinc Plated Carbon Steel

Mechanically Galvanized Carbon Steel

Type 410 Stainless Steel

ANCHOR SIZE RANGE (TYP.)

1/4" x 1-1/4" to 3/4" x 8"

WORKING LOAD

Under 400 lbs.

400 lbs. to 4000 lbs.

Over 4000 lbs.

SUITABLE BASE MATERIALS

Normal-weight Concrete

Structural Lightweight Concrete

Grouted Concrete Masonry

Brick Masonry

Carbon Steel Wedge-Bolt

Catalog Number	Size	Wedge Bit Diameter	Clearance Hole Diameter	Minimum Embedment	Thread Length	Box Qty.	Carton Qty.
7204	1/4" x 1-1/4"	1/4"	5/16"	1"	1-1/8"	100	500
7206	1/4" x 1-3/4"	1/4"	5/16"	1"	1-5/8"	100	500
7208	1/4" x 2-1/4"	1/4"	5/16"	1"	2"	100	500
7210	1/4" x 3"	1/4"	5/16"	1"	2-3/4"	100	500
7220	3/8" x 1-3/4"	3/8"	7/16"	1-1/2"	1-1/2"	50	250
7222	3/8" x 2-1/2"	3/8"	7/16"	1-1/2"	2-1/4"	50	250
7224	3/8" x 3"	3/8"	7/16"	1-1/2"	2-3/4"	50	250
7226	3/8" x 4"	3/8"	7/16"	1-1/2"	3-3/4"	50	250
7240	1/2" x 2"	1/2"	9/16"	1-3/4"	2-1/4"	50	200
7242	1/2" x 2-1/2"	1/2"	9/16"	1-3/4"	2-3/4"	50	200
7244	1/2" x 3"	1/2"	9/16"	1-3/4"	3-3/4"	50	150
7246	1/2" x 4"	1/2"	9/16"	1-3/4"	3-3/4"	50	150
7248	1/2" x 5"	1/2"	9/16"	1-3/4"	3-3/4"	25	100
7250	1/2" x 6"	1/2"	9/16"	1-3/4"	3-3/4"	25	75
7260	5/8" x 3"	5/8"	11/16"	2-1/2"	2-3/4"	25	100
7262	5/8" x 4"	5/8"	11/16"	2-1/2"	3-3/4"	25	100
7264	5/8" x 5"	5/8"	11/16"	2-1/2"	3-3/4"	25	75
7266	5/8" x 6"	5/8"	11/16"	2-1/2"	3-3/4"	25	75
7280	3/4" x 3"	3/4"	13/16"	2-1/2"	2-3/4"	20	60
7282	3/4" x 4"	3/4"	13/16"	3"	3-3/4"	20	60
7284	3/4" x 5"	3/4"	13/16"	3"	3-3/4"	20	60
7286	3/4" x 6"	3/4"	13/16"	3"	3-3/4"	20	60
7288	3/4" x 8"	3/4"	13/16"	3"	3-3/4"	10	40

Installation is recommended with the use of a Wedge-Bit.

410 Stainless Steel Wedge-Bolt

Catalog Number	Size	Wedge Bit Diameter	Clearance Hole Diameter	Minimum Embedment	Thread Length	Box Qty.	Carton Qty.
7701	1/4" x 1-3/4"	1/4"	5/16"	1"	1-5/8"	100	500
7705	3/8" x 2-1/2"	3/8"	7/16"	1-1/2"	2-1/4"	50	250
7706	3/8" x 3"	3/8"	7/16"	1-1/2"	2-3/4"	50	250
7710	1/2" x 3"	1/2"	9/16"	1-3/4"	3-3/4"	50	150
7711	1/2" x 4"	1/2"	9/16"	1-3/4"	3-3/4"	50	150
7715	5/8" x 4"	5/8"	11/16"	2-1/2"	3-3/4"	25	100
7722	3/4" x 6"	3/4"	13/16"	3"	3-3/4"	20	60

Installation is recommended with the use of a Wedge-Bit.

Carbon Steel Wedge-Bolt OT

Catalog Number	Size	Wedge Bit Diameter	Clearance Hole Diameter	Minimum Embedment	Thread Length	Box Qty.	Carton Qty.
7215	1/4" x 3"	1/4"	3/8"	1"	2-3/4"	100	500
7216	3/8" x 4"	3/8"	1/2"	1-1/2"	3-3/4"	50	250
7217	1/2" x 4"	1/2"	5/8"	1-3/4"	3-3/4"	50	150
7218	1/2" x 5"	1/2"	5/8"	1-3/4"	3-3/4"	25	100
7219	5/8" x 4"	5/8"	3/4"	2-1/2"	3-3/4"	25	100
7220	5/8" x 5"	5/8"	3/4"	2-1/2"	3-3/4"	25	75

Installation is recommended with the use of an ANSI bit.

Carbon Steel Hex Head Power-Bolt

Cat. No.	Anchor Size	Drill Dia.	Min. Embed.	Box Qty.	Carton Qty.	Wt./100
6900	1/4" x 1"	1/4"	7/8"	100	600	2
6902	1/4" x 1-3/4"	1/4"	1-1/4"	100	600	3
6906	1/4" x 3"	1/4"	1-1/4"	100	600	5
6907	5/16" x 1-3/4"	5/16"	1-1/2"	100	600	5
6908	5/16" x 2-1/2"	5/16"	1-1/2"	50	300	6
6909	5/16" x 3-1/2"	5/16"	1-1/2"	50	300	8
6910	3/8" x 2-1/4"	3/8"	2"	50	300	8
6911*	3/8" x 1-7/8"	3/8"	1-1/4"	100	600	6
6913	3/8" x 3"	3/8"	2"	50	300	11
6914	3/8" x 3-1/2"	3/8"	2"	50	300	12
6916	3/8" x 4"	3/8"	2"	50	300	14

(Continued)



Power-Bolt™

The Power-Bolt™ anchor is a heavy-duty sleeve style undercut anchor which is vibration resistant and removable. It is available with a finished hex head or flat head with a hex key insert and can be used in concrete, block, brick or stone

HEAD STYLES

Finished Hex Head / Flat Head

ANCHOR MATERIALS

Zinc Plated Carbon Steel

Type 304 Stainless Steel

ANCHOR SIZE RANGE (TYP.)

1/4" x 1" to 3/4" x 8-1/4"

WORKING LOAD

Under 400 lbs.

400 lbs. to 4000 lbs.

Over 4000 lbs.

SUITABLE BASE MATERIALS

Normal-weight Concrete

Structural Lightweight Concrete

Crouted Concrete Masonry

Hollow CMU

Brick Masonry

Stone



Power-Bolt™ (Continued)

The Power-Bolt™ anchor is a heavy-duty sleeve style undercut anchor which is vibration resistant and removable. It is available with a finished hex head or flat head with a hex key insert and can be used in concrete, block, brick or stone.

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Finished Hex Head / Flat Head

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Zinc Plated Carbon Steel

Type 304 Stainless Steel

ANCHOR SIZE RANGE (TYP.)

1/4" x 1" to 3/4" x 8-1/4"

WORKING LOAD

Under 400 lbs.

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Over 4000 lbs.

SUITABLE BASE MATERIALS

Normal-weight Concrete

Structural Lightweight Concrete

Grouted Concrete Masonry

Hollow CMU

Brick Masonry

Stone

Carbon Steel Hex Head Power-Bolt (Continued)

Cat. No.	Anchor Size	Drill Dia.	Min. Embed.	Box Qty.	Carton Qty.	Wt./100
6930	1/2" x 2-3/4"	1/2"	2-1/2"	50	200	16
6932	1/2" x 3-3/4"	1/2"	2-1/2"	25	150	21
6934	1/2" x 4-3/4"	1/2"	2-1/2"	25	150	26
6936	1/2" x 5-3/4"	1/2"	2-1/2"	25	150	32
6940	5/8" x 3"	5/8"	2-3/4"	20	120	28
6942	5/8" x 4"	5/8"	2-3/4"	15	90	40
6944	5/8" x 5"	5/8"	2-3/4"	15	90	47
6945	5/8" x 6"	5/8"	2-3/4"	15	90	57
6947	5/8" x 8-1/2"	5/8"	2-3/4"	10	40	77
6950	3/4" x 3-1/4"	3/4"	3"	15	90	47
6952	3/4" x 4-1/4"	3/4"	3"	10	60	58
6954	3/4" x 5-1/4"	3/4"	3"	10	60	70
6956	3/4" x 7-1/4"	3/4"	3"	10	40	105
6957	3/4" x 8-1/4"	3/4"	3"	10	40	110

The published length is measured from below the washer to the end of the anchor.

*This size does not have a compression ring.

Carbon Steel Flat Head Power-Bolt

Cat. No.	Anchor Size	Drill Dia.	Min. Embed.	Box Qty.	Carton Qty.	Wt./100
6981	3/8" x 3-3/4"	3/8"	2"	50	300	14
6982	3/8" x 5"	3/8"	2"	50	300	17
6983	3/8" x 6"	3/8"	2"	50	300	20
6984	1/2" x 5"	1/2"	2-1/2"	25	150	26
6987	5/8" x 5-1/2"	5/8"	2-3/4"	15	90	57

The published length is the overall length of the anchor.

The flat head Power-Bolt anchor has a hex key insert formed in the head of the bolt.

Each box contains an Allen wrench which matches the insert size.

Stainless Steel Hex Head Power-Bolt

Cat. No.	Anchor Size	Drill Dia.	Min. Embed.	Box Qty.	Carton Qty.	Wt./100
5900*	1/4" x 1"	1/4"	7/8"	100	600	2
5902	1/4" x 1-3/4"	1/4"	1-1/4"	100	600	3
5906	1/4" x 3"	1/4"	1-1/4"	100	600	5
5910	3/8" x 2-1/4"	3/8"	2"	50	300	10
5914	3/8" x 3-1/2"	3/8"	2"	50	300	12
5916	3/8" x 4"	3/8"	2"	50	300	14
5930	1/2" x 2-3/4"	1/2"	2-1/2"	50	200	16
5934	1/2" x 4-3/4"	1/2"	2-1/2"	25	150	26
5944	5/8" x 5"	5/8"	2-3/4"	15	90	47
5946	5/8" x 7"	5/8"	2-3/4"	15	60	67
5954	3/4" x 5-1/4"	3/4"	3"	15	60	70
5957	3/4" x 8-1/4"	3/4"	3"	10	40	110

The published length is measured from below the washer to the end of the anchor.

*This size does not have a compression ring.

Carbon Steel Power-Stud

Cat. No.	Anchor Size	Min. Embed.	Thread Length	Box Qty.	Carton Qty.	Wt./100
7400	1/4" x 1-3/4"	1-1/8"	3/4"	100	500	3
7402	1/4" x 2-1/4"	1-1/8"	1-1/4"	100	500	3-1/2
7404	1/4" x 3-1/4"	1-1/8"	2-1/4"	100	500	4-3/4
7410	3/8" x 2-1/4"	1-5/8"	1-1/4"	50	250	8-3/4
7412	3/8" x 2-3/4"	1-5/8"	1-5/8"	50	250	9-1/2
7413	3/8" x 3"	1-5/8"	1-7/8"	50	250	10-3/4
7414	3/8" x 3-1/2"	1-5/8"	2-3/8"	50	250	12
7415	3/8" x 3-3/4"	1-5/8"	2-5/8"	50	250	12-3/4
7416	3/8" x 5"	1-5/8"	3-7/8"	50	250	15-1/2
7417	3/8" x 7"	1-5/8"	5-7/8"	50	200	21
7420	1/2" x 2-3/4"	2-1/4"	1-3/8"	50	200	18
7422	1/2" x 3-3/4"	2-1/4"	2-3/8"	50	200	23
7423	1/2" x 4-1/2"	2-1/4"	3-1/8"	50	200	28
7424	1/2" x 5-1/2"	2-1/4"	4-1/8"	50	150	32
7426	1/2" x 7"	2-1/4"	5-5/8"	25	100	44

(Continued)



Power-Stud™

The Power-Stud™ anchor is a one-piece fully threaded, wedge style anchor available in carbon steel and stainless steel. Threaded, Rod Hanger and Tie-Wire versions are designed for use in solid concrete. The drill bit diameter needed for proper installation is the same as the anchor diameter.

HEAD STYLES

Threaded / Rod Hanger / Tie-Wire

ANCHOR MATERIALS

Zinc Plated Carbon Steel

Mechanically Galvanized Carbon Steel

Type 304 Stainless Steel

Type 316 Stainless Steel

ANCHOR SIZE RANGE (TYP.)

1/4" x 1-3/4" to 1-1/4" x 12"

WORKING LOAD

Under 400 lbs.

400 lbs. to 4000 lbs.

Over 4000 lbs.

SUITABLE BASE MATERIALS

Normal-weight Concrete

Structural Lightweight Concrete

Grouted Concrete Masonry



Power-Stud™ (Continued)

The Power-Stud™ anchor is a one-piece fully threaded, wedge style anchor available in carbon steel and stainless steel. Threaded, Rod Hanger and Tie-Wire versions are designed for use in solid concrete. The drill bit diameter needed for proper installation is the same as the anchor diameter.

HEAD STYLES

Threaded / Rod Hanger / Tie-Wire

ANCHOR MATERIALS

Zinc Plated Carbon Steel

Mechanically Galvanized Carbon Steel

Type 304 Stainless Steel

Type 316 Stainless Steel

ANCHOR SIZE RANGE (TYP.)

1/4" x 1-3/4" to 1-1/4" x 12"

WORKING LOAD

Under 400 lbs.

400 lbs. to 4000 lbs.

Over 4000 lbs.

SUITABLE BASE MATERIALS

Normal-weight Concrete

Structural Lightweight Concrete

Grouted Concrete Masonry

Carbon Steel Power-Stud (Continued)

Cat. No.	Anchor Size	Min. Embed.	Thread Length	Box Qty.	Carton Qty.	Wt./100
7427	1/2" x 8-1/2"	2-1/4"	7-1/8"	25	100	46
7430	5/8" x 3-1/2"	2-3/4"	2"	25	100	40
7432	5/8" x 4-1/2"	2-3/4"	3"	25	100	54
7433	5/8" x 5"	2-3/4"	3-1/2"	25	100	57
7434	5/8" x 6"	2-3/4"	4-1/2"	25	75	64
7436	5/8" x 7"	2-3/4"	5-1/2"	25	75	72
7438	5/8" x 8-1/2"	2-3/4"	7"	25	75	84
7439	5/8" x 10"	2-3/4"	8-1/2"	25	75	100
7440	3/4" x 4-1/4"	3-3/8"	2-3/8"	20	60	70
7441	3/4" x 4-3/4"	3-3/8"	2-7/8"	20	60	76
7442	3/4" x 5-1/2"	3-3/8"	3-5/8"	20	60	85
7444	3/4" x 6-1/4"	3-3/8"	4-3/8"	20	60	95
7446	3/4" x 7"	3-3/8"	5-1/8"	20	60	105
7448	3/4" x 8-1/2"	3-3/8"	6-5/8"	10	40	120
7449	3/4" x 10"	3-3/8"	8-1/8"	10	30	135
7451	3/4" x 12"	3-3/8"	10-1/8"	10	30	155
7450	7/8" x 6"	3-7/8"	2-3/4"	10	40	120
7452	7/8" x 8"	3-7/8"	4-3/4"	10	40	160
7454	7/8" x 10"	3-7/8"	6-3/4"	10	30	200
7461	1" x 6"	4-1/2"	2-3/8"	10	30	170
7463	1" x 9"	4-1/2"	5-3/8"	10	30	240
7465	1" x 12"	4-1/2"	8-3/8"	5	15	300
7473	1-1/4" x 9"	5-5/8"	4-3/4"	5	15	360
7475	1-1/4" x 12"	5-5/8"	7-3/4"	5	15	480

The published length is the overall length of the anchor. Allow for fixture thickness plus one anchor diameter for the nut and washer thickness when selecting a length.

Mechanically Galvanized Power-Stud

Cat. No.	Anchor Size	Min. Embed.	Thread Length	Box Qty.	Carton Qty.	Wt./100
7720	1/2" x 2-3/4"	2-1/4"	1-3/8"	50	200	18
7723	1/2" x 4-1/2"	2-1/4"	3-1/8"	50	200	30
7724	1/2" x 5-1/2"	2-1/4"	4-1/8"	50	150	34
7726	1/2" x 7"	2-1/4"	5-5/8"	25	100	34
7730	5/8" x 3-1/2"	2-3/4"	2"	25	100	40
7734	5/8" x 6"	2-3/4"	4-1/2"	25	75	64
7741	3/4" x 4-3/4"	3-3/8"	2-7/8"	20	60	76
7742	3/4" x 5-1/2"	3-3/8"	3-5/8"	20	60	85
7748	3/4" x 8-1/2"	3-3/8"	6-5/8"	10	40	120
7750	7/8" x 6"	3-7/8"	2-3/4"	10	40	120
7752	7/8" x 8"	3-7/8"	4-3/4"	10	40	160
7763	1" x 9"	4-1/2"	4-3/8"	10	30	240

The published length is the overall length of the anchor. Allow for fixture thickness plus one anchor diameter for the nut and washer thickness when selecting a length.

Rod Hanger Power-Stud

Cat. No.	Rod Size	Anchor Size	Drill Dia.	Min. Embed.	Thrd. Dpth.	Box Qty.	Ctn. Qty.	Wt./100
7806	3/8"	1/2" x 2-3/8"	1/2"	2-1/4"	9/16"	50	250	18
7808*	1/2"	5/8" x 2-1/2"	5/8"	2-3/4"	3/4"	25	125	40
7810*	5/8"	7/8" x 3-1/4"	7/8"	3-7/8"	15/16"	10	50	120

*Discontinued item once current stock is exhausted.

Tie-Wire Power-Stud

Cat. No.	Size	Tie-Wire Hole Size	Min. Embed.	Box Qty.	Carton Qty.	Wt./100
7409	1/4" x 2"	9/32"	1-1/8"	100	500	3-3/4"

Type 304 Stainless Steel Power-Stud

Cat. No.	Anchor Size	Min. Embed.	Thread Length	Box Qty.	Carton Qty.	Wt./100
7300	1/4" x 1-3/4"	1-1/8"	3/4"	100	500	3
7302	1/4" x 2-1/4"	1-1/8"	1-1/4"	100	500	3-1/2
7304	1/4" x 3-1/4"	1-1/8"	2-1/4"	100	500	4-3/4
7310	3/8" x 2-1/4"	1-5/8"	1-1/4"	50	250	8-3/4

(Continued)

Power-Stud™ (Continued)

The Power-Stud™ anchor is a one-piece fully threaded, wedge style anchor available in carbon steel and stainless steel. Threaded, Rod Hanger and Tie-Wire versions are designed for use in solid concrete. The drill bit diameter needed for proper installation is the same as the anchor diameter.

HEAD STYLES

Threaded / Rod Hanger / Tie-Wire

ANCHOR MATERIALS

Zinc Plated Carbon Steel

Mechanically Galvanized Carbon Steel

Type 304 Stainless Steel

Type 316 Stainless Steel

ANCHOR SIZE RANGE (TYP.)

1/4" x 1-3/4" to 1-1/4" x 12"

WORKING LOAD

Under 400 lbs.

400 lbs. to 4000 lbs.

Over 4000 lbs.

SUITABLE BASE MATERIALS

Normal-weight Concrete

Structural Lightweight Concrete

Grouted Concrete Masonry

Type 304 Stainless Steel Power-Stud (Continued)

Cat. No.	Anchor Size	Min. Embed.	Thread Length	Box Qty.	Carton Qty.	Wt./100
7312	3/8" x 2-3/4"	1-5/8"	1-5/8"	50	250	9-1/2
7313	3/8" x 3"	1-5/8"	1-7/8"	50	250	10-3/4
7314	3/8" x 3-1/2"	1-5/8"	2-3/8"	50	250	12
7315	3/8" x 3-3/4"	1-5/8"	2-5/8"	50	250	12-3/4
7316	3/8" x 5"	1-5/8"	3-1/8"	50	250	15-1/2
7320	1/2" x 2-3/4"	2-1/4"	1-3/8"	50	200	18
7322	1/2" x 3-3/4"	2-1/4"	2-3/8"	50	200	23
7323	1/2" x 4-1/2"	2-1/4"	3-1/8"	50	200	30
7324	1/2" x 5-1/2"	2-1/4"	4-1/8"	50	150	34
7326	1/2" x 7"	2-1/4"	5-5/8"	25	100	44
7330	5/8" x 3-1/2"	2-3/4"	2"	25	100	40
7332	5/8" x 4-1/2"	2-3/4"	3"	25	100	54
7333	5/8" x 5"	2-3/4"	3-1/2"	25	100	57
7334	5/8" x 6"	2-3/4"	4-1/2"	25	75	64
7336	5/8" x 7"	2-3/4"	5-1/2"	25	75	72
7338	5/8" x 8-1/2"	2-3/4"	7"	25	75	84
7340	3/4" x 4-1/4"	3-3/8"	2-3/8"	20	60	70
7341	3/4" x 4-3/4"	3-3/8"	2-7/8"	20	60	76
7342	3/4" x 5-1/2"	3-3/8"	3-5/8"	20	60	85
7344	3/4" x 6-1/4"	3-3/8"	4-3/8"	20	60	95
7346	3/4" x 7"	3-3/8"	5-1/8"	20	60	105
7348	3/4" x 8-1/2"	3-3/8"	6-5/8"	10	40	120
7349	3/4" x 10"	3-3/8"	8-1/8"	10	30	135
7352	7/8" x 8"	3-7/8"	4-3/4"	10	40	160
7361	1" x 6"	4-1/2"	2-3/8"	10	30	170
7363	1" x 9"	4-1/2"	5-3/8"	10	30	240
7365	1" x 12"	4-1/2"	8-3/8"	5	15	300

The published length is the overall length of the anchor. Allow for fixture thickness plus one anchor diameter for the nut and washer thickness when selecting a length.

Type 316 Stainless Steel Power-Stud

Cat. No.	Anchor Size	Min. Embed.	Thread Length	Box Qty.	Carton Qty.	Wt./100
7600	1/4" x 1-3/4"	1-1/8"	3/4"	100	500	3-1/4
7602	1/4" x 2-1/4"	1-1/8"	1-1/4"	100	500	3-3/4
7604	1/4" x 3-1/4"	1-1/8"	2-1/4"	100	500	5-1/4
7610	3/8" x 2-1/4"	1-5/8"	1-1/4"	50	250	8-3/4
7612	3/8" x 2-3/4"	1-5/8"	1-5/8"	50	250	10-1/2
7613	3/8" x 3"	1-5/8"	1-7/8"	50	250	11
7614	3/8" x 3-1/2"	1-5/8"	2-3/8"	50	250	12
7615	3/8" x 3-3/4"	1-5/8"	2-5/8"	50	250	13
7616	3/8" x 5"	1-5/8"	3-1/8"	50	250	17-1/4
7620	1/2" x 2-3/4"	2-1/4"	1-3/8"	50	200	18
7622	1/2" x 3-3/4"	2-1/4"	2-3/8"	50	200	24
7623	1/2" x 4-1/2"	2-1/4"	3-1/8"	50	200	30
7624	1/2" x 5-1/2"	2-1/4"	4-1/8"	50	150	34
7626	1/2" x 7"	2-1/4"	5-5/8"	25	100	44
7630	5/8" x 3-1/2"	2-3/4"	2"	25	100	40
7632	5/8" x 4-1/2"	2-3/4"	3"	25	100	54
7633	5/8" x 5"	2-3/4"	3-1/2"	25	100	57
7634	5/8" x 6"	2-3/4"	4-1/2"	25	75	64
7636	5/8" x 7"	2-3/4"	5-1/2"	25	75	72
7638	5/8" x 8-1/2"	2-3/4"	7"	25	75	84
7640	3/4" x 4-1/4"	3-3/8"	2-3/8"	20	60	70
7641	3/4" x 4-3/4"	3-3/8"	2-7/8"	20	60	76
7642	3/4" x 5-1/2"	3-3/8"	3-5/8"	20	60	85
7644	3/4" x 6-1/4"	3-3/8"	4-3/8"	20	60	95
7646	3/4" x 7"	3-3/8"	5-1/8"	20	60	105
7648	3/4" x 8-1/2"	3-3/8"	6-5/8"	10	40	120

The published length is the overall length of the anchor. Allow for fixture thickness plus one anchor diameter for the nut and washer thickness when selecting a length.



Lok-Bolt™

The Lok-Bolt™ anchor is a pre-assembled single unit sleeve anchor available in carbon steel and stainless steel which can be used in concrete, block, brick and stone.

Extension sleeves are added to create longer lengths.

HEAD STYLES

Hex Head / Acorn Nut / Round Head
Combo Flat Head / Threshold Flat Head
Rod Hanger / Tie-Wire

ANCHOR MATERIALS

Zinc Plated Carbon Steel (CS)
Type 304 Stainless Steel (SS)

ANCHOR SIZE RANGE (TYP.)

1/4" x 5/8" to 3/4" x 7-1/2"

WORKING LOAD

Under 400 lbs.
400 lbs. to 4000 lbs.

SUITABLE BASE MATERIALS

Normal-weight Concrete
Structural Lightweight Concrete
Grouted Concrete Masonry
Hollow Concrete Masonry

Hex Nut Lok-Bolt

Catalog Number		Size	Drill Diameter	Minimum Embed.	Std. Box	Std. Ctn.	Wt./100
CS	SS						
5005	–	5/16" x 1-1/2"	5/16"	1-3/8"	100	1000	4-1/4
5010	–	5/16" x 2-1/2"	5/16"	1-1/2"	100	500	5-3/4
5015	6152	3/8" x 1-7/8"	3/8"	1-5/8"	50	500	7
5020	6153	3/8" x 3"	3/8"	1-5/8"	50	500	10
5022	–	3/8" x 4"	3/8"	1-5/8"	50	500	16
5025	6156	1/2" x 2-1/4"	1/2"	2-1/8"	25	250	14
5030	6157	1/2" x 3"	1/2"	2-1/4"	25	250	17-1/4
5034	6160	1/2" x 4"	1/2"	2-1/4"	25	125	22
5033	–	1/2" x 5-1/4"	1/2"	2-1/4"	25	125	27
5032	–	1/2" x 6"	1/2"	2-1/4"	10	100	35
5035	–	5/8" x 2-1/4"	5/8"	2-1/8"	25	125	25-1/2
5038	–	5/8" x 3"	5/8"	2-3/4"	25	125	34
5040	6164	5/8" x 4-1/4"	5/8"	2-3/4"	10	100	41
5045	–	5/8" x 6"	5/8"	2-3/4"	10	100	49
5050	–	3/4" x 2-1/2"	3/4"	2-1/8"	10	100	46
5055	6168	3/4" x 4"	3/4"	3-3/8"	10	40	70
5060	–	3/4" x 5-3/4"	3/4"	3-3/8"	10	30	90
5065	–	3/4" x 7-1/2"	3/4"	3-3/8"	10	30	115

The published minimum length is measured from below the washer to the end of the anchor. Actual anchor lengths may be slightly longer.

Acorn Nut Lok-Bolt

Catalog Number		Size	Drill Diameter	Minimum Embed.	Std. Box	Std. Ctn.	Wt./100
CS	SS						
5125*	–	1/4" x 5/8"	1/4"	1/2"	100	1000	2
5150	6150	1/4" x 1-3/8"	1/4"	1-1/8"	100	1000	2-3/4
5175	–	1/4" x 2-1/4"	1/4"	1-1/8"	100	1000	3-1/4

The published minimum length is measured from below the washer to the end of the anchor. Actual anchor lengths may be slightly longer.

*This size does not have a compression ring.

Round Head Lok-Bolt

Catalog Number		Size	Drill Diameter	Minimum Embed.	Std. Box	Std. Ctn.	Wt./100
CS	SS						
5205*	–	1/4" x 1-1/8"	5/16"	1-3/8"	100	1000	4-1/4
5210	6180	1/4" x 2"	5/16"	1-1/2"	100	500	5-3/4
5215	–	1/4" x 2-3/4"	3/8"	1-5/8"	50	500	7
5220	–	1/4" x 3-3/4"	3/8"	1-5/8"	50	500	10
5225	–	5/16" x 2-3/8"	3/8"	1-5/8"	50	500	16
5230	–	5/16" x 3-3/8"	1/2"	2-1/8"	25	250	14
5235	–	3/8" x 2-1/2"	1/2"	2-1/4"	25	250	17-1/4
5240	–	3/8" x 3-3/4"	1/2"	2-1/4"	25	125	22

*This size does not have a compression ring.

Combo Flat Head Lok-Bolt

Catalog Number		Size	Drill Diameter	Minimum Embed.	Std. Box	Std. Ctn.	Wt./100
CS	SS						
5305	–	1/4" x 1-1/8"	1/4"	1"	100	1000	2
5310	6170	1/4" x 2"	1/4"	1-1/8"	100	1000	2-3/4
5315	6172	1/4" x 3"	1/4"	1-1/8"	100	1000	3-3/4
5320	–	1/4" x 4"	1/4"	1-1/8"	100	500	4-1/2
5325	–	1/4" x 5-1/4"	1/4"	1-1/8"	100	500	6-1/2
5330	–	5/16" x 2-1/2"	5/16"	1-1/2"	100	1000	4-1/2
5335	–	5/16" x 3-1/2"	5/16"	1-1/2"	100	500	6-1/4
5340	–	3/8" x 2-3/4"	3/8"	1-5/8"	50	500	7-1/2
5345	6174	3/8" x 4"	3/8"	1-5/8"	50	250	10-3/4
5350	6175	3/8" x 5"	3/8"	1-5/8"	50	250	14
5360	6176	3/8" x 6"	3/8"	1-5/8"	50	250	16

The published length is the minimum overall length of the anchor. Combo Flat Head Lok-Bolts do not have a compression ring.

(Continued)

Lok-Bolt™ (Continued)

The Lok-Bolt™ anchor is a pre-assembled single unit sleeve anchor available in carbon steel and stainless steel which can be used in concrete, block, brick and stone. Extension sleeves are added to create longer lengths.

HEAD STYLES

Hex Head / Acorn Nut / Round Head
Combo Flat Head / Threshold Flat Head
Rod Hanger / Tie-Wire

ANCHOR MATERIALS

Zinc Plated Carbon Steel (CS)
Type 304 Stainless Steel (SS)

ANCHOR SIZE RANGE (TYP.)

1/4" x 5/8" to 3/4" x 7-1/2"

WORKING LOAD

Under 400 lbs.
400 lbs. to 4000 lbs.

SUITABLE BASE MATERIALS

Normal-weight Concrete
Structural Lightweight Concrete
Grouted Concrete Masonry
Hollow Concrete Masonry



SPIKE®

The SPIKE® anchor is a patented, one-piece, tamper-proof vibration resistant anchor for use in concrete, block, brick or stone. Several head styles and anchor materials are available. The SPIKE® anchor is formed with an "s" shaped configuration at the working end of the anchor to create an expansion mechanism. Since the anchor is pre-expanded, there is no secondary tightening operation required which greatly reduces the overall cost of an anchor installation.

HEAD STYLES

Mushroom Head / Flat Head
Pipe / Tie-Wire / Forming

ANCHOR MATERIALS

Zinc Plated Carbon Steel
Type 316 Stainless Steel

ANCHOR SIZE RANGE (TYP.)

3/16" x 1" to 1/2" x 6-1/2"

WORKING LOAD

Under 400 lbs.
400 lbs. to 4000 lbs.

SUITABLE BASE MATERIALS

Normal-weight Concrete
Structural Lightweight Concrete
Hollow and Grouted CMU

Threshold Flat Head Lok-Bolt

Catalog Number	Drill Diameter	Minimum Embed.	Std. Box	Std. Ctn.	Wt./100
5505	1/4"	1-1/8"	100	1000	2-1/2

Threshold Flat Head Lok-Bolts do not have a compression ring.

Rod Hanger Lok-Bolt

Catalog Number	Drill Diameter	Minimum Embed.	Std. Box	Std. Ctn.	Wt./100
5810	5/16"	1-1/2"	50	250	5-1/2
5815	3/8"	1-5/8"	50	250	9
5825	1/2"	2-1/4"	25	125	21

Rod Hanger Lok-Bolts do not have a compression ring.

Tie-Wire Lok-Bolt

Catalog Number	Drill Diameter	Minimum Embed.	Std. Box	Std. Ctn.	Wt./100
5700	5/16"	1-1/2"	100	1000	5-1/4

Mushroom Head Carbon Steel Spike (Tamperproof)

Cat. No.	Anchor Size	Drill Dia.	Min. Embed.	Box Qty.	Carton Qty.	Wt./100
5502	3/16" x 1"	3/16"	7/8"	100	1000	1-1/4
5503	3/16" x 1-1/4"	3/16"	7/8"	100	1000	1-1/2
5504	3/16" x 1-1/2"	3/16"	1-1/4"	100	1000	1-3/4
5506	3/16" x 2"	3/16"	1-1/4"	100	1000	2
5508	3/16" x 2-1/2"	3/16"	1-1/4"	100	1000	2
5510	3/16" x 3"	3/16"	1-1/4"	100	1000	2-1/2
5511	3/16" x 3-1/2"	3/16"	1-1/4"	100	1000	3-1/2
5512	3/16" x 4"	3/16"	1-1/4"	100	500	4
5522	1/4" x 1"	1/4"	7/8"	100	1000	1-1/2
5523	1/4" x 1-1/4"	1/4"	1"	100	1000	2-1/4
5524	1/4" x 1-1/2"	1/4"	1-1/4"	100	1000	2-1/2
5526	1/4" x 2"	1/4"	1-1/4"	100	1000	3
5528	1/4" x 2-1/2"	1/4"	1-1/4"	100	1000	4
5530	1/4" x 3"	1/4"	1-1/4"	100	1000	4-1/2
5531	1/4" x 3-1/2"	1/4"	1-1/4"	100	1000	5
5532	1/4" x 4"	1/4"	1-1/4"	100	500	6
5546	3/8" x 2"	3/8"	1-3/4"	25	250	7-1/2
5548	3/8" x 2-1/2"	3/8"	1-3/4"	25	250	9
5550	3/8" x 3"	3/8"	1-3/4"	25	250	10
5551	3/8" x 3-1/2"	3/8"	1-3/4"	25	250	11
5552	3/8" x 4"	3/8"	1-3/4"	25	250	12
5554	3/8" x 5"	3/8"	1-3/4"	25	250	18
5556	3/8" x 6"	3/8"	1-3/4"	25	250	20
5569	1/2" x 2-3/4"	1/2"	2-1/2"	50	200	18
5571	1/2" x 3-1/2"	1/2"	2-1/2"	50	200	22
5572	1/2" x 4"	1/2"	2-1/2"	25	150	27
5574	1/2" x 5"	1/2"	2-1/2"	25	150	31
5577	1/2" x 6-1/2"	1/2"	2-1/2"	25	150	42

The published length is measured from below the head to the end of the anchor.

Flat Head Carbon Steel Spike (Tamperproof)

Cat. No.	Anchor Size	Drill Dia.	Min. Embed.	Box Qty.	Carton Qty.	Wt./100
5608	3/16" x 2-1/2"	3/16"	1-1/4"	100	1000	2
5610	3/16" x 3"	3/16"	1-1/4"	100	1000	2-1/2
5612	3/16" x 4"	3/16"	1-1/4"	100	500	4
5624	1/4" x 1-1/2"	1/4"	1-1/4"	100	1000	2-1/2
5626	1/4" x 2"	1/4"	1-1/4"	100	1000	3
5628	1/4" x 2-1/2"	1/4"	1-1/4"	100	1000	3-3/4
5630	1/4" x 3"	1/4"	1-1/4"	100	1000	4-1/2
5631	1/4" x 3-1/2"	1/4"	1-1/4"	100	1000	5
5632	1/4" x 4"	1/4"	1-1/4"	100	500	5-3/4

The published length is the overall length of the anchor.

(Continued)

SPIKE® (Continued)

The SPIKE® anchor is a patented, one-piece, tamper-proof vibration resistant anchor for use in concrete, block, brick or stone. Several head styles and anchor materials are available. The SPIKE® anchor is formed with an "s" shaped configuration at the working end of the anchor to create an expansion mechanism. Since the anchor is pre-expanded, there is no secondary tightening operation required which greatly reduces the overall cost of an anchor installation.

HEAD STYLES

Mushroom Head / Flat Head
Pipe / Tie-Wire / Forming

ANCHOR MATERIALS

Zinc Plated Carbon Steel
Type 316 Stainless Steel

ANCHOR SIZE RANGE (TYP.)

3/16" x 1" to 1/2" x 6-1/2"

WORKING LOAD

Under 400 lbs.
400 lbs. to 4000 lbs.

SUITABLE BASE MATERIALS

Normal-weight Concrete
Structural Lightweight Concrete
Hollow and Grouted CMU



Forming SPIKE®



Zamac Nailin®

The Zamac Nailin® is a tamper-proof nail drive anchor which has a body formed from Zamac alloy. Nails are available in carbon or stainless steel. The anchor can be used in concrete, block, brick or stone. This anchor is not recommended for applications overhead.

ANCHOR MATERIALS

Zamac Alloy with Carbon or Stainless
Steel Drive Nail

ANCHOR SIZE RANGE (TYP.)

3/16" x 7/8" to 1/4" x 2"

WORKING LOAD

Under 400 lbs.

SUITABLE BASE MATERIALS

Normal-weight Concrete
Hollow Concrete Masonry
Brick Masonry
Stone

Mushroom Head Type 316 Stainless Spike (Tamperproof)

Cat. No.	Anchor Size	Drill Dia.	Min. Embed.	Box Qty.	Carton Qty.	Wt./100
6602	3/16" x 1"	3/16"	7/8"	100	1000	1-1/4
6603	3/16" x 1-1/4"	3/16"	7/8"	100	1000	1-1/2
6693*	3/16" x 1-1/4"	3/16"	7/8"	100	1000	1-1/2
6604	3/16" x 1-1/2"	3/16"	1-1/4"	100	1000	1-3/4
6606	3/16" x 2"	3/16"	1-1/4"	100	1000	2
6608	3/16" x 2-1/2"	3/16"	1-1/4"	100	1000	2-1/4
6622	1/4" x 1"	1/4"	7/8"	100	1000	1-1/2
6623	1/4" x 1-1/4"	1/4"	1"	100	1000	2-1/4
6624	1/4" x 1-1/2"	1/4"	1-1/4"	100	1000	2-1/2
6626	1/4" x 2"	1/4"	1-1/4"	100	1000	3
6628	1/4" x 2-1/2"	1/4"	1-1/4"	100	1000	4
6630	1/4" x 3"	1/4"	1-1/4"	100	1000	4-1/2
6631	1/4" x 3-1/2"	1/4"	1-1/4"	100	1000	5
6632	1/4" x 4"	1/4"	1-1/4"	100	500	6
6646	3/8" x 2"	3/8"	1-3/4"	25	250	7-1/2
6648	3/8" x 2-1/2"	3/8"	1-3/4"	25	250	9
6650	3/8" x 3"	3/8"	1-3/4"	25	250	10
6652	3/8" x 4"	3/8"	1-3/4"	25	250	12
6654	3/8" x 5"	3/8"	1-3/4"	25	250	18
6656	3/8" x 6"	3/8"	1-3/4"	25	250	20
6669	1/2" x 2-3/4"	1/2"	2-1/2"	50	200	18
6671	1/2" x 3-1/2"	1/2"	2-1/2"	50	200	22
6672	1/2" x 4"	1/2"	2-1/2"	25	150	27
6674	1/2" x 5"	1/2"	2-1/2"	25	150	31
6677	1/2" x 6-1/2"	1/2"	2-1/2"	25	150	42

The published length is measured from below the head to the end of the anchor.

*Supplied with EPDM Sealing Washer.

Forming Spike

Cat. No.	Anchor Size	Drill Dia.	Min. Embed.	Box Qty.	Carton Qty.	Wt./100
3795	3/16" x 1-1/2"	3/16"	1-1/4"	100	1000	2-1/2
3796	3/16" x 2"	3/16"	1-1/4"	100	1000	3
3797	3/16" x 2-3/4"	3/16"	1-1/4"	100	1000	4
3794	1/4" x 2-3/4"	1/4"	1-1/4"	100	1000	5

Designed for concrete forming.

The published length is measured from below the head to the end of the anchor.

Pipe Spike

Cat. No.	Anchor Size	Drill Dia.	Min. Embed.	Box Qty.	Carton Qty.	Wt./100
3755	1/4"	3/16"	1-1/4"	100	1000	4
3758	3/8"	1/4"	1-3/4"	50	500	6

Designed for rod hanging.

Tie-Wire Spike

Catalog Number	Anchor Size	Drill Diameter	Minimum Embed.	Tie-Wire Hole Size	Box Quantity	Carton Quantity	Wt./100
3756	3/16"	3/16"	1-1/8"	3/16"	100	500	2
3759	1/4"	1/4"	1-1/8"	9/32"	100	500	2-1/2

Designed for suspended ceilings.

Mushroom Head Zamac Nailin with Carbon Steel Nail

Cat. No.	Anchor Size	Drill Diameter	Std. Box	Std. Carton	Wt./100
2802	3/16" x 7/8"	3/16"	100	500	3/4
2806	1/4" x 3/4"	1/4"	100	500	1-1/2
2808	1/4" x 1"	1/4"	100	500	1-3/4
2814	1/4" x 1-1/4"	1/4"	100	500	2-1/4
2820	1/4" x 1-1/2"	1/4"	100	500	2-1/2
2826	1/4" x 2"	1/4"	100	500	3

(Continued)

Zamac Nailin® (Continued)

The Zamac Nailin® is a tamper-proof nail drive anchor which has a body formed from Zamac alloy. Nails are available in carbon or stainless steel. The anchor can be used in concrete, block, brick or stone. This anchor is not recommended for applications overhead.



Nylon Nailin®

The Nylon Nailin® is a pin drive anchor with a body formed from engineered nylon and nails available in carbon and stainless steel. The anchor can be used in concrete, block or brick. This anchor is not recommended for applications overhead.

ANCHOR MATERIALS

Engineered Nylon with Carbon or Stainless Steel Drive Nail

ANCHOR SIZE RANGE (TYP.)

3/16" x 1" to 1/4" x 6"

WORKING LOAD

Under 400 lbs.

SUITABLE BASE MATERIALS

Normal-weight Concrete
Hollow Concrete Masonry
Brick Masonry
Stone



Tapper™

The Tapper™ Anchoring System is a family of screw anchors, specially designed drill bits and installation tools designed to meet the needs of most light to medium duty applications in concrete, block and brick. The Tapper™ concrete screw anchor is produced in either hex washer head or Phillips flat head styles from Perma-Seal™ coated or zinc plated carbon steel and Type 304 stainless steel. For heavy-duty applications, the 3/8" size is made in zinc plated carbon steel.

ANCHOR MATERIALS

Zinc Plated Carbon Steel
Perma-Seal Carbon Steel
Type 410 Stainless Steel
Type 304 Stainless Steel

ANCHOR SIZE RANGE (TYP.)

3/16" x 1-1/4" to 3/8" x 6"

WORKING LOAD

Under 400 lbs.
400 lbs. to 4000 lbs.

SUITABLE BASE MATERIALS

Normal-weight Concrete
Structural Lightweight Concrete
Grouted Concrete Masonry
Hollow Concrete Masonry
Solid Brick Masonry

Master Pack Mushroom Head Zamac Nailin with Carbon Steel Nail

Cat. No.	Anchor Size	Drill Diameter	Std. Box	Std. Carton	Wt./100
2803	3/16" x 7/8"	3/16"	—	1000	3/4
2807	1/4" x 3/4"	1/4"	—	1000	1-1/2
2809	1/4" x 1"	1/4"	—	1000	1-3/4
2815	1/4" x 1-1/4"	1/4"	—	1000	2-1/4
2821	1/4" x 1-1/2"	1/4"	—	1000	2-1/2
2827	1/4" x 2"	1/4"	—	1000	3

Flat Head Zamac Nailin with Carbon Steel Nail

Cat. No.	Anchor Size	Drill Diameter	Std. Box	Std. Carton	Wt./100
2836	1/4" x 1-1/2"	1/4"	100	500	2-1/2
2838	1/4" x 2"	1/4"	100	500	3

Mushroom Head Zamac Nailin with Stainless Steel Nail

Cat. No.	Anchor Size	Drill Diameter	Std. Box	Std. Carton	Wt./100
2858	1/4" x 1"	1/4"	100	500	1-3/4
2864	1/4" x 1-1/4"	1/4"	100	500	2-1/4
2870	1/4" x 1-1/2"	1/4"	100	500	2-1/2
2876	1/4" x 2"	1/4"	100	500	3

Round Head Nylon Nailin with Carbon Steel Nail

Cat. No.	Anchor Size	Drill Diameter	Std. Box	Std. Carton	Wt./100
2431	3/16" x 1"	3/16"	100	1000	1/2
2451	3/16" x 1-1/2"	3/16"	100	1000	3/4
2521	1/4" x 1"	1/4"	100	1000	3/4
2541	1/4" x 1-1/2"	1/4"	100	1000	1
2561	1/4" x 2"	1/4"	100	1000	1

Flat Head Nylon Nailin with Carbon Steel Nail

Cat. No.	Anchor Size	Drill Diameter	Std. Box	Std. Carton	Wt./100
2432	3/16" x 1"	3/16"	100	1000	1/2
2452	3/16" x 1-1/2"	3/16"	100	1000	3/4
2522	1/4" x 1"	1/4"	100	1000	3/4
2542	1/4" x 1-1/2"	1/4"	100	1000	1
2562	1/4" x 2"	1/4"	100	1000	1

Mushroom Head Nylon Nailin

Catalog Number	CS	SS	Anchor Size	Drill Diameter	Standard Box	Standard Carton	Wt./100
2433	—	—	3/16" x 1"	3/16"	100	1000	1/2
2513	—	—	1/4" x 3/4"	1/4"	100	1000	1/2
2523	2528	—	1/4" x 1"	1/4"	100	1000	3/4
2543	2548	—	1/4" x 1-1/2"	1/4"	100	1000	1
2563	—	—	1/4" x 2"	1/4"	100	1000	1
2573	—	—	1/4" x 3"	1/4"	100	1000	2-1/4
2583	—	—	1/4" x 4"	1/4"	100	1000	2-3/4
2593	—	—	1/4" x 6"	1/4"	100	400	4

Mushroom Head Bodies Only

Cat. No.	Anchor Size	Drill Diameter	Std. Box	Std. Carton	Wt./100
2574	1/4" x 3"	1/4"	2500	2500	1/2

Blue Perma-Seal Tapper

Catalog Number	HEX	PFH	Size	Box Qty	Carton Qty	Wt./100	Drill Bit Reference	Strait	SDS HEX
2700	2740	—	3/16" x 1-1/4"	100	500	3/4	2781	2793	
2702	2742	—	3/16" x 1-3/4"	100	500	1	2781	2793	
2704	2744	—	3/16" x 2-1/4"	100	500	1-1/4	2782	2793	
2706	2746	—	3/16" x 2-3/4"	100	500	1-1/2	2782	2793	
2708	2748	—	3/16" x 3-1/4"	100	500	1-3/4	2783	2794	
2710	2750	—	3/16" x 3-3/4"	100	500	2-1/4	2783	2794	
2712	2752	—	3/16" x 4"	100	500	2-1/2	2783	2794	
2720	2760	—	1/4" x 1-1/4"	100	500	1-1/2	2785	2796	
2722	2762	—	1/4" x 1-3/4"	100	500	1-3/4	2785	2796	

(Continued)

Tapper™ (Continued)

The Tapper™ Anchoring System is a family of screw anchors, specially designed drill bits and installation tools designed to meet the needs of most light to medium duty applications in concrete, block and brick. The Tapper™ concrete screw anchor is produced in either hex washer head or Phillips flat head styles from Perma-Seal™ coated or zinc plated carbon steel and Type 304 stainless steel. For heavy-duty applications, the 3/8" size is made in zinc plated carbon steel.

ANCHOR MATERIALS

Zinc Plated Carbon Steel
Perma-Seal Carbon Steel
Type 410 Stainless Steel
Type 304 Stainless Steel

ANCHOR SIZE RANGE (TYP.)

3/16" x 1-1/4" to 3/8" x 6"

WORKING LOAD

Under 400 lbs.
400 lbs. to 4000 lbs.

SUITABLE BASE MATERIALS

Normal-weight Concrete
Structural Lightweight Concrete
Grouted Concrete Masonry
Hollow Concrete Masonry
Solid Brick Masonry

Blue Perma-Seal Tapper (Continued)

Catalog Number	HEX	PFH	Size	Box Qty	Carton Qty	Wt./ 100	Drill Bit Reference	
							Straight	SDS HEX
2724		2764	1/4" x 2-1/4"	100	500	2	2786	2796
2726		2766	1/4" x 2-3/4"	100	500	2-3/4	2786	2796
2728		2768	1/4" x 3-1/4"	100	500	3-1/4	2787	2797
2730		2770	1/4" x 3-3/4"	100	500	3-3/4	2787	2797
2732		2772	1/4" x 4"	100	100	4-1/2	2787	2797
-		2774	1/4" x 5"	100	100	4-1/2	2788	-
-		2776	1/4" x 6"	100	100	5-1/2	2789	-

Blue Perma-Seal Tapper (Master Packaging)

Catalog Number	HEX	PFH	Size	Box Qty	Carton Qty	Wt./ 100	Drill Bit Reference	
							Straight	SDS HEX
9462		9476	3/16" x 1-1/4"	2000	2000	3/4	2781	2793
9463		9477	3/16" x 1-3/4"	2000	2000	1	2781	2793
9464		9478	3/16" x 2-1/4"	2000	2000	1-1/4	2782	2793
9465		9479	3/16" x 2-3/4"	2000	2000	1-1/2	2782	2793
9466		9480	3/16" x 3-1/4"	1000	1000	1-3/4	2783	2794
9467		9481	3/16" x 3-3/4"	1000	1000	2-1/4	2783	2794
9468		9482	3/16" x 4"	1000	1000	2-1/2	2783	2794
9469		9483	1/4" x 1-1/4"	2000	2000	1-1/2	2785	2796
9470		9484	1/4" x 1-3/4"	2000	2000	1-3/4	2785	2796
9471		9485	1/4" x 2-1/4"	1000	1000	2	2786	2796
9472		9486	1/4" x 2-3/4"	1000	1000	2-3/4	2786	2796
9473		9487	1/4" x 3-1/4"	1000	1000	3-1/4	2787	2797
9474		9488	1/4" x 3-3/4"	1000	1000	3-3/4	2787	2797
9475		9489	1/4" x 4"	1000	1000	4-1/2	2787	2797
-		9490	1/4" x 5"	1000	1000	4-1/2	2788	-
-		9491	1/4" x 6"	500	500	5-1/2	2789	-

Type 304 Stainless Steel Tapper

Catalog Number	HEX	PFH	Size	Box Qty	Carton Qty	Wt./ 100	Drill Bit Reference	
							Straight	SDS HEX
2880		2887	1/4" x 1-1/4"	100	500	1-1/2	2894	2790
2881		2888	1/4" x 1-3/4"	100	500	1-3/4	2894	2790
2882		2889	1/4" x 2-1/4"	100	500	2	2895	2790
2883		2890	1/4" x 2-3/4"	100	500	2-3/4	2895	2790

Type 410 Stainless Steel Tapper

Catalog Number	HEX	PFH	Size	Box Qty	Carton Qty	Wt./ 100	Drill Bit Reference	
							Straight	SDS HEX
4110		4118	1/4" x 1-1/4"	100	500	1-1/2	2785	2796
4112		4120	1/4" x 1-3/4"	100	500	1-3/4	2785	2796
4114		4123	1/4" x 2-1/4"	100	500	2	2786	2796
4116		4125	1/4" x 2-3/4"	100	500	2-3/4	2786	2796

White Perma-Seal Tapper

Catalog Number	HEX	PFH	Size	Box Qty	Carton Qty	Wt./ 100	Drill Bit Reference	
							Straight	SDS HEX
2400		2440	3/16" x 1-1/4"	100	500	3/4	2781	2793
2402		2442	3/16" x 1-3/4"	100	500	1	2781	2793
2404		2444	3/16" x 2-1/4"	100	500	1-1/4	2782	2793
2406		2446	3/16" x 2-3/4"	100	500	1-1/2	2782	2793
2408		2448	3/16" x 3-1/4"	100	500	1-3/4	2783	2794
2410		2450	3/16" x 3-3/4"	100	500	2-1/4	2783	2794
2412		2449	3/16" x 4"	100	500	2-1/2	2783	2794
2420		2460	1/4" x 1-1/4"	100	500	1-1/2	2785	2796
2422		2462	1/4" x 1-3/4"	100	500	1-3/4	2785	2796
2424		2464	1/4" x 2-1/4"	100	500	2	2786	2796
2426		2466	1/4" x 2-3/4"	100	500	2-3/4	2786	2796
2428		2468	1/4" x 3-1/4"	100	500	3-1/4	2787	2797
2430		2470	1/4" x 3-3/4"	100	500	3-3/4	2787	2797
2435		2472	1/4" x 4"	100	500	4-1/2	2787	2797

(Continued)

Tapper™ (Continued)

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ANCHOR MATERIALS

- Zinc Plated Carbon Steel
- Perma-Seal Carbon Steel
- Type 410 Stainless Steel
- Type 304 Stainless Steel

ANCHOR SIZE RANGE (TYP.)

3/16" x 1-1/4" to 3/8" x 6"

WORKING LOAD

Under 400 lbs.
400 lbs. to 4000 lbs.

SUITABLE BASE MATERIALS

- Normal-weight Concrete
- Structural Lightweight Concrete
- Grouted Concrete Masonry
- Hollow Concrete Masonry
- Solid Brick Masonry

White Perma-Seal Tapper (Master Packaging)

Catalog Number	HEX	PFH	Size	Box Qty.	Carton Qty.	Wt./ 100	Drill Bit Reference	
							Straight	SDS HEX
-	9191		3/16" x 1-1/4"	2000	2000	3/4	2781	2793
-	9192		3/16" x 1-3/4"	2000	2000	1	2781	2793
-	9193		3/16" x 2-1/4"	2000	2000	1-1/4	2782	2793
-	9194		3/16" x 2-3/4"	2000	2000	1-1/2	2782	2793
-	9195		3/16" x 3-1/4"	1000	1000	1-3/4	2783	2794
-	9196		3/16" x 3-3/4"	1000	1000	2-1/4	2783	2794
-	9197		3/16" x 4"	1000	1000	2-1/2	2783	2794
9923	9951		1/4" x 1-1/4"	2000	2000	1-1/2	2785	2796
9924	9952		1/4" x 1-3/4"	2000	2000	1-3/4	2785	2796
9925	9953		1/4" x 2-1/4"	1000	1000	2	2786	2796
9926	9954		1/4" x 2-3/4"	1000	1000	2-3/4	2786	2796
9927	9955		1/4" x 3-1/4"	1000	1000	3-1/4	2787	2797
9928	9956		1/4" x 3-3/4"	1000	1000	3-3/4	2787	2797
9929	9957		1/4" x 4"	1000	1000	4-1/2	2787	2797
-	9958		1/4" x 5"	1000	1000	4-1/2	2788	-
-	9959		1/4" x 6"	500	500	5-1/2	2789	-

White Perma-Seal Tapper Flange Hex Head & Trim Flat Head

Catalog Number	HEX	PFH	Size	Box Qty.	Carton Qty.	Wt./ 100	Drill Bit Reference	
							Straight	SDS HEX
8706	8710		1/4" x 1-3/4"	100	500	1-3/4	2785	2796
8707	8711		1/4" x 2-1/4"	100	500	2	2786	2796
8708	8712		1/4" x 2-3/4"	100	500	2-3/4	2786	2796
8709	8713		1/4" x 3-1/4"	100	500	3-1/4	2787	2797
-	8714		1/4" x 3-3/4"	100	500	3-3/4	2787	2797

Zinc Plated Carbon Steel Tapper

Catalog Number	HEX	PFH	Size	Box Qty.	Carton Qty.	Wt./ 100	Drill Bit Reference	
							Straight	SDS HEX
5826*	5830		1/4" x 1-1/4"	100	500	1-3/4	2785	2796
5827*	5831		1/4" x 1-3/4"	100	500	2-1/4	2785	2796
5828*	5832		1/4" x 2-1/4"	100	500	2-1/2	2786	2796
5829*	5833		1/4" x 2-3/4"	100	500	3	2786	2796
5804	-		3/8" x 2"	100	500	5-1/4	5860	5866
5806	5852		3/8" x 3"	100	500	8-1/4	5860	5866
5808	5854		3/8" x 4"	100	500	11-1/2	5861	5868
-	5856		3/8" x 5"	100	500	13	5862	5868
-	5858		3/8" x 6"	100	500	15-1/2	5863	5868

Silver Perma-Seal Tapper

Catalog Number	HEX	PFH	Size	Box Qty.	Carton Qty.	Wt./ 100	Drill Bit Reference	
							Straight	SDS HEX
2400	2498		3/16" x 1-1/4"	100	500	3/4	2781	2793
2402	2500		3/16" x 1-3/4"	100	500	1	2781	2793
2404	2501		3/16" x 2-1/4"	100	500	1-1/4	2782	2793
2406	2502		3/16" x 2-3/4"	100	500	1-1/2	2782	2793
2408	2503		3/16" x 3-1/4"	100	500	1-3/4	2783	2794
2410	2504		3/16" x 3-3/4"	100	500	2-1/4	2783	2794
2412	2505		3/16" x 4"	100	500	2-1/2	2783	2794
2486	2506		1/4" x 1-1/4"	100	500	1-1/2	2785	2796
2488	2507		1/4" x 1-3/4"	100	500	1-3/4	2785	2796
2490	2508		1/4" x 2-1/4"	100	500	2	2786	2796
2492	2509		1/4" x 2-3/4"	100	500	2-3/4	2786	2796
2494	2510		1/4" x 3-1/4"	100	500	3-1/4	2787	2797
2495	2511		1/4" x 3-3/4"	100	500	3-3/4	2787	2797
2496	2512		1/4" x 4"	100	500	4-1/2	2787	2797

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Tapper™ (Continued)

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ANCHOR MATERIALS

Zinc Plated Carbon Steel
Perma-Seal Carbon Steel
Type 410 Stainless Steel
Type 304 Stainless Steel

ANCHOR SIZE RANGE (TYP.)

3/16" x 1-1/4" to 3/8" x 6"

WORKING LOAD

Under 400 lbs.
400 lbs. to 4000 lbs.

SUITABLE BASE MATERIALS

Normal-weight Concrete
Structural Lightweight Concrete
Grouted Concrete Masonry
Hollow Concrete Masonry
Solid Brick Masonry



Steel Dropin™

The Steel Dropin is an all-steel, machine bolt anchor available in carbon steel and two types of stainless steel. It can be used in solid concrete, hard stone and solid block. A coil-thread version for forming applications is also available.

THREAD VERSION

UNC Coarse Thread
Coil Thread

ANCHOR MATERIALS

Zinc Plated Carbon Steel
Type 303 Stainless Steel
Type 316 Stainless Steel

ANCHOR SIZE RANGE (TYP.)

1/4" to 3/4" UNC Coarse Thread
1/2" and 3/4" Coil Thread

WORKING LOAD

Under 400 lbs.
400 lbs. to 4000 lbs.
Over 4000 lbs.

SUITABLE BASE MATERIALS

Normal-weight Concrete
Structural Lightweight Concrete

Silver Perma-Seal Tapper (Master Packaging)

Catalog Number	Anchor		Box Qty.	Carton Qty.	Wt./100	Drill Bit Reference	
	HEX	PFH				Size	Straight	SDS HEX
-	8757	3/16" x 1-1/4"	2000	2000	3/4	2781	2793
-	8758	3/16" x 1-3/4"	2000	2000	1	2781	2793
-	8759	3/16" x 2-1/4"	2000	2000	1-1/4	2782	2793
-	8760	3/16" x 2-3/4"	2000	2000	1-1/2	2782	2793
-	8761	3/16" x 3-1/4"	1000	1000	1-3/4	2783	2794
-	8762	3/16" x 3-3/4"	1000	1000	2-1/4	2783	2794
-	8763	3/16" x 4"	1000	1000	2-1/2	2783	2794
8750	8764	1/4" x 1-1/4"	2000	2000	1-1/2	2785	2796
8751	8765	1/4" x 1-3/4"	2000	2000	1-3/4	2785	2796
8752	8766	1/4" x 2-1/4"	1000	1000	2	2786	2796
8753	8767	1/4" x 2-3/4"	1000	1000	2-3/4	2786	2796
8754	8768	1/4" x 3-1/4"	1000	1000	3-1/4	2787	2797
8755	8769	1/4" x 3-3/4"	1000	1000	3-3/4	2787	2797
8756	8770	1/4" x 4"	1000	1000	4-1/2	2787	2797

Silver Perma-Seal Tapper Flange Hex Head & Trim Flat Head

Catalog Number	Anchor		Box Qty.	Carton Qty.	Wt./100	Drill Bit Reference	
	HEX	PFH				Size	Straight	SDS HEX
8715	8719	1/4" x 1-3/4"	100	500	1-3/4	2785	2796
8716	8720	1/4" x 2-1/4"	100	500	2	2786	2796
8717	8721	1/4" x 2-3/4"	100	500	2-3/4	2786	2796
8718	8722	1/4" x 3-1/4"	100	500	3-1/4	2787	2797
-	8723	1/4" x 3-3/4"	100	500	3-3/4	2787	2797

Bronze Perma-Seal Tapper Flange Hex Head & Trim Flat Head

Catalog Number	Anchor		Box Qty.	Carton Qty.	Wt./100	Drill Bit Reference	
	HEX	PFH				Size	Straight	SDS HEX
9977	9975	1/4" x 1-3/4"	100	500	1-3/4	2785	2796
9978	9976	1/4" x 2-1/4"	100	500	2	2786	2796

Carbon Steel Smooth Wall Dropin

Cat. No.	Anchor Size	Min. Hole Depth	Thread Depth	Box Qty.	Ctn. Qty.	Wt./100
6304	1/4"	1"	7/16"	100	1000	2
6306	3/8"	1-9/16"	5/8"	50	500	6
6308	1/2"	2"	13/16"	50	250	12
6320	5/8"	2-1/2"	1-3/16"	25	125	32
6312	3/4"	3-3/16"	1-3/8"	10	50	48

Carbon Steel Flanged Dropin (Lipped)

Cat. No.	Anchor Size	Min. Hole Depth	Thread Depth	Box Qty.	Ctn. Qty.	Wt./100
6324	1/4"	1"	7/16"	100	1000	2
6326	3/8"	1-9/16"	5/8"	50	500	6
6328	1/2"	2"	13/16"	50	250	12

Type 303 Stainless Steel Dropin

Cat. No.	Anchor Size	Min. Hole Depth	Thread Depth	Box Qty.	Ctn. Qty.	Wt./100
6204	1/4"	1"	7/16"	100	1000	2
6206	3/8"	1-9/16"	5/8"	50	500	6
6208	1/2"	2"	13/16"	50	250	12
6210	5/8"	2-1/2"	1-3/16"	25	125	32
6212	3/4"	3-3/16"	1-3/8"	10	50	48

Type 316 Stainless Steel Dropin

Cat. No.	Anchor Size	Min. Hole Depth	Thread Depth	Box Qty.	Ctn. Qty.	Wt./100
6224	1/4"	1"	7/16"	100	1000	2
6226	3/8"	1-9/16"	5/8"	50	500	6
6228	1/2"	2"	13/16"	50	250	12
6230	5/8"	2-1/2"	1-3/16"	25	125	32
6232	3/4"	3-3/16"	1-3/8"	10	50	48

Carbon Steel Coil Thread Dropin

Cat. No.	Anchor Size	Min. Hole Depth	Thread Depth	Box Qty.	Ctn. Qty.	Wt./100
6330	1/2"	2"	13/16"	50	250	12
6332	3/4"	3-3/16"	1-3/8"	10	50	48

Single™

The Single™ is a machine bolt anchor designed for use in concrete, and some block, brick and stone base materials. The anchor consists of a pre-assembled set of expansion shields and an expander cone formed from Zamac alloy.

THREAD VERSION

UNC Thread

ANCHOR MATERIALS

Zamac Alloy

ANCHOR SIZE RANGE (TYP.)

1/4" to 3/4"

WORKING LOAD

Under 400 lbs. / 400 lbs. to 4000 lbs.

Over 4000 lbs.

SUITABLE BASE MATERIALS

Normal-weight Concrete



Single Shell Expansion Anchor

Cat. No.	Anchor Dia.	Drill Diameter	Min. Hole Depth	Std. Box	Std. Ctn.	Wt./100
9650	1/4"	1/2"	1-3/8"	50	250	3-3/4
9655	5/16"	5/8"	1-5/8"	50	250	5-1/2
9665	3/8"	5/8"	1-5/8"	50	250	5-1/4
9675	1/2"	7/8"	2-1/2"	25	125	15-1/4
9685	5/8"	1"	2-3/4"	25	125	24
9695	3/4"	1-1/4"	2-7/8"	10	100	43

Double™

The Double™ is a dual expansion machine bolt anchor particularly suited for materials of questionable strength. It can be used in solid concrete and some block, brick and stone base materials.

THREAD VERSION

UNC Thread

ANCHOR MATERIALS

Zamac Alloy

ANCHOR SIZE RANGE (TYP.)

1/4" to 3/4"

WORKING LOAD

Under 400 lbs. / 400 lbs. to 4000 lbs.

Over 4000 lbs.

SUITABLE BASE MATERIALS

Normal-weight Concrete

Hollow Concrete Masonry

Brick Masonry



Double Shell Expansion Anchor

Catalog Number	Anchor Diameter	Drill Diameter	Overall Length	Minimum Hole Depth	Std. Box	Std. Ctn..	Wt./100.
9510	1/4"	1/2"	1-3/8"	1-1/4"	50	500	4
9515	5/16"	5/8"	1-5/8"	1-1/2"	50	500	7-1/2
9520	3/8"	3/4"	2"	1-3/4"	50	250	12-1/2
9525	1/2"	7/8"	2-1/2"	2-1/4"	25	250	18
9530	5/8"	1"	2-3/4"	2-1/2"	25	100	25-1/2
9535	3/4"	1-1/4"	3-15/16"	3-1/2"	10	50	54-1/2

Hollow-Set™ Dropin™

The Hollow-Set™ Dropin™ anchor is designed for anchoring in hollow base materials such as hollow concrete block, brick with weep holes and hollow core pre-cast concrete plank. It can also be used in solid base materials. Hollow masonry materials often have a minimum outer wall thickness of 1-1/2". During the drilling process, spalling on the back side of the wall often decreases the wall thickness available for anchoring to 1" or less. The design of the Hollow-Set™ Dropin overcomes this problem.

ANCHOR MATERIALS

Zamac Alloy Anchor Body

Carbon Steel Cone

Type 304 Stainless Steel Cone

ANCHOR SIZE RANGE (TYP.)

1/4" to 5/8"

WORKING LOAD

Under 400 lbs. / 400 lbs. to 4000 lbs.

SUITABLE BASE MATERIALS

Normal-weight Concrete

Precast Hollow Core Plank

Hollow Concrete and Brick Masonry



Hollow-Set Dropin with Carbon Steel Cone

Catalog Number	Anchor Diameter	Drill Diameter	Overall Length	Sleeve Length	Std. Box	Std. Ctn..	Wt./100.
9320	1/4"	3/8"	7/8"	5/8"	100	1000	1-3/4
9330	5/16"	5/8"	1-5/16"	15/16"	100	500	5-1/2
9340	3/8"	5/8"	1-5/16"	15/16"	100	500	5-1/2
9350	1/2"	3/4"	1-3/4"	1-1/4"	100	100	9-1/2
9360	5/8"	1"	2"	1-1/2"	100	100	21

Hollow-Set Dropin with Stainless Steel Cone

Catalog Number	Anchor Diameter	Drill Diameter	Overall Length	Sleeve Length	Std. Box	Std. Ctn..	Wt./100.
9420	1/4"	3/8"	7/8"	5/8"	100	1000	1-3/4
9440	3/8"	5/8"	1-5/16"	15/16"	100	500	5-1/2

Calk-In™

The Calk-In™ is a pre-assembled precision cast calking type machine bolt anchor which can be used in concrete, block, brick or stone. The anchor consists of an antimonial lead alloy calking sleeve and a Zamac alloy internally-threaded expander cone.



Calk-In

Cat. No.	Screw Size	Drill Diameter	Min. Hole Depth	Std. Box	Std. Ctn.	Wt./100
9200	#6-32	5/16"	1/2"	100	1000	1
9205	#8-32	5/16"	1/2"	100	1000	1
9210	#10-24	3/8"	5/8"	100	1000	1-3/4
9220	1/4-20	1/2"	7/8"	100	1000	4-1/2
9225	5/16-18	5/8"	1"	50	250	7-3/4
9230	3/8-16	3/4"	1-1/4"	50	250	14
9240	1/2-3	7/8"	1-1/2"	50	250	19
9245	5/8-11	1-1/8"	2"	50	50	39
9250	3/4-10	1-1/4"	2-1/4"	50	50	55

THREAD VERSION

UNC Thread

ANCHOR MATERIALS

Antimonial Lead Alloy body and Zamac Alloy cone

ANCHOR SIZE RANGE (TYP.)

#6 Screw to 3/4" diameter

WORKING LOAD

Under 400 lbs. / 400 lbs. to 4000 lbs.

SUITABLE BASE MATERIALS

Normal-weight Concrete
Hollow Concrete and Brick Masonry

Lag Shield™

The Lag Shield™ is a screw style anchor designed for use with lag bolts. It is suitable for use in concrete and the mortar joints of block or brick walls. Lag Shield™ anchors are formed from Zamac alloy. In harder masonry materials, short style Lag Shields are used to reduce drilling time. The long style version is used in soft or weak masonry to better develop strength.



Lag Shield Anchor

Catalog Number	Size	Drill Diameter	Length	Thread Length	Std. Box	Std. Ctn.	Wt./100
1051	1/4" Short	1/2"	1/2"	1"	50	500	3
1055	1/4" Long	1/2"	1"	1-1/2"	50	500	4
1101	5/16" Short	1/2"	3/4"	1-1/4"	50	500	3
1105	5/16" Long	1/2"	1"	1-3/4"	50	500	4-1/4
1151	3/8" Short	5/8"	1"	1-3/4"	50	500	6-3/4
1155	3/8" Long	5/8"	1-1/2"	2-1/2"	50	250	9-1/2
1201	1/2" Short	3/4"	1-1/8"	2"	50	500	9-1/4
1205	1/2" Long	3/4"	1-7/8"	3"	50	200	14-1/4
1251	5/8" Short	7/8"	1"	2"	25	125	13
1255	5/8" Long	7/8"	2-1/4"	3-1/2"	25	125	22
1301	3/4" Short	1"	1-1/8"	2"	25	125	16
1305	3/4" Long	1"	2-1/4"	3-1/2"	25	100	24-1/2

THREAD VERSION

UNC Thread

ANCHOR MATERIALS

Zamac Alloy

ANCHOR SIZE RANGE (TYP.)

1/4" to 3/4"

WORKING LOAD

Under 400 lbs. / 400 lbs. to 4000 lbs.

SUITABLE BASE MATERIALS

Normal-weight Concrete
Hollow Concrete and Brick Masonry

Bantam Plug™

The Bantam Plug™ anchor is a plastic anchor designed for use with lightweight fixtures with a sheet metal or wood screw. The anchor is recommended for light duty static applications where holding power is not a critical factor. It should not be used overhead.



Bantam Plug (Not packaged with screws)

Cat. No.	Anchor Size	Drill Diameter	Std. Box	Std. Ctn.	Master Ctn.	Wt./100
7559	#6-#8 x 3/4"	3/16"	100	1000	5000	1
7569	#8-#10 x 7/8"	3/16"	100	1000	5000	1-1/2
7579	#10-#12 x 1"	1/4"	100	1000	5000	3
7589	#14-#16 x 1-1/2"	5/16"	50	500	2500	6

ANCHOR MATERIALS

Engineered Plastic

ANCHOR SIZE RANGE (TYP.)

#6-8 x 3/4" to #14-16 x 1-1/2"

WORKING LOAD

Under 400 lbs.

SUITABLE BASE MATERIALS

Normal-weight Concrete
Hollow Concrete Masonry
Solid or Hollow Brick Masonry
Wallboard

Master Pack

Cat. No.	Kit No.	Anchor Size	Screw Size	Anchors & Screws	Std. Ctn.	Wt./100
8934	B-8	#8-#10	#8 x 1"	100	10	9-1/2
8936	B-10	#10-#12	#10 x 1"	100	10	12
8938	B-12	#10-#12	#12 x 1"	100	10	14

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Toggle Bolt

The Toggle Bolt is a spring wing type hollow wall anchor designed for use in block, wall-board and other hollow base materials. The Toggle Bolt is a two-part assembly consisting of a machine screw and a spring wing toggle. Sizes range from 1/8" x 2" to 1/2" x 6" with combo round, flat, mushroom, tie-wire or slotted hex head styles.

ANCHOR MATERIALS

Carbon Steel

SIZE RANGE (TYP.)

1/8" x 2" to 1/2" x 6"

WORKING LOAD

Under 400 lbs.

400 lbs. to 4000 lbs.

SUITABLE BASE MATERIALS

Hollow Block

Wallboard

Plaster

Mushroom Head and Slotted Hex Head

Catalog Number	Mush.	SHH	Size	Drill Dia.	Box Qty.	Carton Qty.	Wt./ 100
4023	4028		1/8" x 2"	3/8"	50	500	1-1/4
4033	4038		1/8" x 3"	3/8"	50	500	1-1/2
4043	-		1/8" x 4"	3/8"	50	500	2
4133	-		3/16" x 3"	1/2"	50	500	4
4143	-		3/16" x 4"	1/2"	50	500	5
4233	-		1/4" x 3"	5/8"	50	500	6-1/2
4 243	-		1/4" x 4"	5/8"	50	500	7-1/2

Round Head and Flat Head

Catalog Number	Round	Flat	Size	Drill Dia.	Box Qty.	Carton Qty.	Wt./ 100
4021	-		1/8" x 2"	3/8"	50	500	1-1/4
4031	4033		1/8" x 3"	3/8"	50	500	1-1/2
4041	4042		1/8" x 4"	3/8"	50	500	2
4021	-		3/16" x 2"	1/2"	50	500	3-1/4
4131	4132		3/16" x 3"	1/2"	50	500	4
4141	4142		3/16" x 4"	1/2"	50	500	5
4151	-		3/16" x 5"	1/2"	50	500	5-1/2
4161	-		3/16" x 6"	1/2"	50	500	6-1/4
4231	4232		1/4" x 3"	5/8"	50	500	6-1/2
4241	4242		1/4" x 4"	5/8"	50	500	7-1/2
4251	-		1/4" x 5"	5/8"	50	500	8-1/2
4261	-		1/4" x 6"	5/8"	50	500	9-1/2
4331	-		5/16" x 3"	7/8"	25	250	13
4341	-		5/16" x 4"	7/8"	25	250	14
4351	-		5/16" x 5"	7/8"	25	250	16
4361	-		5/16" x 6"	7/8"	25	250	18
4431	-		3/8" x 3"	7/8"	25	250	16
4441	-		3/8" x 4"	7/8"	25	250	18
4451	-		3/8" x 5"	7/8"	25	125	20
4461	-		3/8" x 6"	7/8"	25	125	23
4541	-		1/2" x 4"	1-1/4"	25	25	42
4561	-		1/2" x 6"	1-1/4"	25	25	50

Toggle Wings Only

Catalog Number	Size	Drill Dia.	Box Qty.	Carton Qty.	Wt./ 100
4000	1/8"	3/8"	100	500	1
4020	3/16"	1/2"	100	1000	2
4220	1/4"	5/8"	100	1000	3
4330	5/16"	7/8"	50	500	7
4430	3/8"	7/8"	50	500	7
4540	1/2"	1-1/4"	25	25	19

Tie-Wire Acoustical Toggle

Catalog Number	Size	Tie-Wire Hole Size	Drill Dia.	Box Qty.	Carton Qty.	Wt./ 100
4247	1/4" x 4"	7/32"	5/8"	100	100	9
4257	1/4" x 5"	7/32"	5/8"	100	100	12

To determine the minimum bolt length required for the standard toggle, add the thickness of the fixture, including any spacers or shims plus the thickness of the base material and the wing clearance. This will be the minimum bolt length required.

Poly-Toggle™

The Poly-Toggle™ is a screw actuated hollow wall anchor for use in paneling, wallboard and solid masonry available in 6 sizes to match the most common wall thicknesses. In solid base materials, the anchor can be used by removing the outer wings. The performance of this product depends on the integrity of the base material in which it is installed. The anchor is recommended for light duty static application where holding power is not a critical factor.

ANCHOR MATERIALS

Engineered Plastic

ANCHOR SIZE RANGE (TYP.)

#6 to #12

Wall Thickness from 1/8" to 1"

WORKING LOAD

Under 400 lbs.

SUITABLE BASE MATERIALS

Solid Base Materials

Wallboard

Hollow Concrete Masonry



Poly-Toggle

Catalog Number	Anchor Size	Wall Thickness	Screws	Std. Box	Std. Ctn.	Wt./100
2302	Mini	1/8"	–	100	1000	3
2303	Short	3/8"	–	100	1000	5
2304	Medium	1/2"	–	100	1000	5
2305	Long	5/8"	–	100	1000	6
2306	Extra Long	3/4"	–	100	1000	7
2307	Super Long	1"	–	100	1000	8
2324	Medium	1/2"	#10 x 1-1/4"	100	1000	15
2325	Long	5/8"	#10 x 1-1/2"	100	1000	18

Zip-It®

The Zip-It® anchor is a one-piece self drilling anchor designed for use in hollow gypsum wallboard for light duty loads. It is available in both engineered nylon and Zamac alloy for use with either No. 6 or No. 8 screws in 3/8" to 1" wallboard. The Zip-It® Jr. is formed from engineered nylon for use with No. 6 screws in 3/8" to 5/8" wallboard.

ANCHOR MATERIALS

Engineered Nylon or Zamac Alloy

ANCHOR SIZE RANGE (TYP.)

Use with #6 or #8 screws

WORKING LOAD

Under 400 lbs.

SUITABLE BASE MATERIALS

Wallboard



Nylon Zip-It

Cat. No.	Wall Thickness	Description	Std. Box	Std. Ctn.	Wt./100
2345	3/8" to 1"	Std. Box (No screws)	100	1000	1/2
2348	3/8" to 1"	Std. Box, #8 x 1" screws	100	1000	1-1/4
2355	3/8" to 1"	Master Carton (No screws)	–	5000	1/2

Zinc Zip-It

Cat. No.	Wall Thickness	Description	Std. Box	Std. Ctn.	Wt./100
2346	3/8" to 1"	Std. Box (No screws)	100	1000	2
2349	3/8" to 1"	Std. Box, #8 x 1" screws	100	1000	2-1/2
2356	3/8" to 1"	Master Carton (No screws)	–	5000	1-3/4

Zip-It Kits

Cat. No.	Material	Description	Std. Box	Std. Ctn.	Wt./100
2368	Nylon	50 Anchors, #8 x 1" Screws & #2 Phillips Driver Bit	1	10	7
2369	Zinc	50 Anchors, #8 x 1" Screws & #2 Phillips Driver Bit	1	10	13-1/4

Nylon Zip-It Jr.

Cat. No.	Wall Thickness	Description	Std. Box	Std. Ctn.	Wt./100
2350	3/8" to 5/8"	Std. Box (No screws)	100	1000	1/4
2351	3/8" to 5/8"	Std. Box, #6 x 1" screws	100	1000	3/4

Zinc Zip-It Jr.

Cat. No.	Wall Thickness	Description	Std. Box	Std. Ctn.	Wt./100
2362	3/8" to 5/8"	Std. Box (No screws)	100	1000	1
2364	3/8" to 5/8"	Std. Box, #6 x 1" screws	100	1000	3
2363	3/8" to 5/8"	Master Carton (No screws)	–	5000	1

Zip-It Jr. Kits

Cat. No.	Material	Description	Std. Box	Std. Ctn.	Wt./100
2367	Nylon	50 Anchors, #6 x 1" Screws & #2 Phillips Driver Bit	1	10	7
2361	Zinc	50 Anchors, #6 x 1" Screws & #2 Phillips Driver Bit	1	10	13-1/4

Note: To select the proper screw length required, determine the thickness of the fixture, including any spacers or shims and add 3/4".

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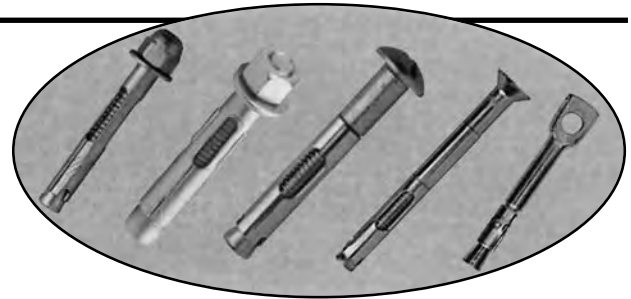
Suitable/Available
 May be suitable, Job site test recommended

TYPE	Base Material										Head Style				Working Load			Screw Size										
	Concrete	Lightweight concrete	Solid brick	Hollow brick	Solid block (grout filled)	Hollow block	Hollow core plank	Stone	Structural clay tile	Plywood	Structural Wood & Timber	Wainboard / Plaster	Finished (Hex) head	Round head	Countersunk (Flat head/oval head)	Mushroom head/pan head	Removable	Hammerproof	Under 400 lbs.	400 lbs. to 4000 lbs.	Over 4000 lbs.	No. 4 screw	No. 5 screw	No. 6 screw	No. 7 screw	No. 8 screw	No. 9 screw	No. 10 screw
Wedge-Bolt®	■	■	■	□	■	□	□	□				■	■	■	■	■	■	■	■	■								
Tilt Wall Wedge-Bolt®	■	■	□	□								■	■	■	■	■	■	■	■	■								
Wedge-Bolt® OT	■	■	■	□	■	□	□	□				■			■	■	■	■	■	■								
Vertigo™	■	■	□	□	□	□	■		■						■	■	□											
Power-Bolt™	■	■	■	□	■	□	□	■				■	■	■	■	■	■	■	■	■								
Power-Stud™	■	■		□			□										■	■	■									
Lok-Bolt™	■	■	■	□	■	□	■	□				■	■				■	■	□									
Set-Bolt™	■	□	□	□			□										■	■										
SPIKE®	■	□	□	□		□	□					■	■		■	■	■											
Pipe SPIKE®	■	□													■	■	■											
Forming SPIKE®	■	□	□	□			□								■	■	■											
Drive®	■	□	□	□			□					■	■			■	■	■										
Zamac Hammer-Screw®	■	■	■	□	■	□	□	□							■	■	■	■	■									
Zamac Nailin®	■	□	■	□	■	□	□	□							■	■	■											
Nylon Nailin®	■	□	■	□	□	□	□	□				■	■	■	■	■	■											
TAPPER™	■	□	■	■	□	■	□	□	□			■	■		■	■	■											
Mini Dropin™	■	■		□		■	□								■	■	■											
Steel Dropin™	■	■													■	■	■	■										
Single™	■	□	□	□			□								■	■	■	■										
Double™	■	□	□	□	□		□								■	■	■	■										
Hollow-Set™ Dropin™	■	■	■	■	■	■	■	□							■	■	■											
Calk-In™	■	□	■	□	□	□	□	□							■	■	■											
Lag Shield™	■	□	□	□	□	□	□	□							■	■	■											
Fiberplug™	■	□	■	□	□	□	□	□	□						■	■	■					■		■		■		■
Scru-Lead™	■	□	■	□	□	□	□	□							■	■						■	■	■	■	■	■	■
Bantam Plug™	■	□	■	□	□	□	□	□	□						■	■	■					■	■	■	■	■	■	■
Fluted Plastic Anchor	■	□	□	□	□	□	□	□	□						■	■					■	■	■	■	■	■	■	■
Toggle Bolt					■	■		□	□	■	■	■	■	■	■	■	■	■	■									
Polly™					■	□		□	■	■	■	■	■	■	■	■	■	■										
Pop-Toggle™	□	□	□	□	□	□	□	□	□	■	■				■	■						■	■	■	■	■	■	■
Strap-Toggle™					■	■		□	□	■					■	■												■
Poly-Toggle™	□	□	□	□	□	■	□	□	□	■					■	■						■	■	■	■	■	■	■
Zip-Toggle™										■		■			■	■							■	■	■	■	■	■
Zip-It®									□	■					■	■							■	■	■	■	■	■
Legs®										■					■	■							■	■	■	■	■	■
Wall Dog™	■	■	■	■	■	■	■	□						■	■							■	■	■	■	■	■	■
Bang-It™	■	■															■	■										
Wood-Knocker™	■	■							■								■	■										

Screw Size (continued)					Hole Diameter					Coating / Material					TYPE														
No. 12 screw	No. 14 screw	No. 16 screw	No. 18 screw	No. 20 screw	1/8"	3/16"	1/4"	5/16"	3/8"	1/2"	1/2" - 6 coil thread	5/8"	3/4"	3/4" - 4-1/2 coil thread		7/8"	1"	1-1/4"	Coated / plated carbon steel	Galvanized steel	Type 303/304 stainless steel	Type 316 stainless steel	Type 410 stainless steel	Zamac Alloy	Nylon / Plastic	Julie Fiber	Lead		
								■	■	■											■	■						Wedge-Bolt®	
																													Tilt Wall Wedge-Bolt®
								■	■	■																			Wedge-Bolt® OT
								■	■	■																			Vertigo™
								■	■	■																			Power-Bolt™
								■	■	■																			Power-Stud™
								■	■	■																			Lok-Bolt™
								■	■	■																			Set-Bolt™
								■	■	■																			SPIKE®
								■	■	■																			Pipe SPIKE®
								■	■	■																			Forming SPIKE®
								■	■	■																			Drive®
								■	■	■																			Zamac Hammer-Screw®
								■	■	■																			Zamac Nailin®
								■	■	■																			Nylon Nailin®
								■	■	■																			TAPPER™
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								■	■	■																			Mini Dropin™
								■	■	■																			Steel Dropin™
								■	■	■																			Single™
								■	■	■																			Double™
								■	■	■																			Hollow-Set™ Dropin™
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■	■	■	■	■				■	■	■																			Fluted Plastic Anchor
								■	■	■																			Toggle Bolt
								■	■	■																			Polly™
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								■	■	■																			Poly-Toggle™
								■	■	■																			Zip-Toggle™
								■	■	■																			Zip-It®
								■	■	■																			Legs®
								■	■	■																			Wall Dog™
								■	■	■																			Bang-It™
								■	■	■																			Wood-Knocker™

BOLT SLEEVE ANCHORS

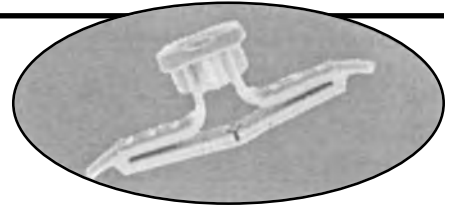
- Exact hole depth not required to set anchor.
- Required hole size equals sleeve diameter.
- Available in a variety of styles Acorn, Hex, Flat, Round and Rod Hanger.
- Anti-rotation sleeve slots provide for spin free anchor installation.
- Can be used in all masonry materials - solid or hollow.
- Also available in Stainless.



Product No.	Description	Anchor Size & Hole Dia.	Bolt Dia.	Length	Min. Depth in Hole	Fastens Material Up To	Pull Out	Shear
ACORN NUT								
NFC36040	1/4" x 1-3/8" Acorn Nut Sleeve Anchor	1/4"	3/16"	1-3/8"	1"	3/8"	1364	952
NFC36058	1/4" x 5/8" Acorn Nut Sleeve Anchor	1/4"	3/16"	5/8"	1/2"	1/8"	500	952
NFC36065	1/4" x 2-1/4" Acorn Nut Sleeve Anchor	1/4"	3/16"	2-1/4"	1"	1-1/4"	1364	952
HEX NUT								
NFC12075	5/8" x 2-1/4" Hex Nut Sleeve Anchor	5/8"	1/2"	2-1/4"	2"	1/4"	3404	5625
NFC12090	5/8" x 3" Hex Nut Sleeve Anchor	5/8"	1/2"	3"	2"	1"	3404	5625
NFC12110	5/8" x 4-1/4" Hex Nut Sleeve Anchor	5/8"	1/2"	4-1/4"	3-1/2"	1-3/4"	8392	10955
NFC12150	5/8" x 6" Hex Nut Sleeve Anchor	5/8"	1/2"	6"	3-1/2"	2-3/4"	8392	10955
NFC14045	5/16" x 1-1/2" Hex Nut Sleeve Anchor	5/16"	1/4"	1-1/2"	1"	1/2"	2522	1675
NFC14070	5/16" x 2-1/2" Hex Nut Sleeve Anchor	5/16"	1/4"	2-1/2"	1"	1-1/2"	2522	1675
NFC38065	1/2" x 2-1/4" Hex Nut Sleeve Anchor	1/2"	3/8"	2-1/4"	1-1/2"	3/4"	3008	5334
NFC38080	1/2" x 3" Hex Nut Sleeve Anchor	1/2"	3/8"	2-1/4"	1-1/2"	1-1/2"	3008	5344
NFC38115	1/2" x 4" Hex Nut Sleeve Anchor	1/2"	3/8"	3"	1-1/2"	2-1/2"	5625	7092
NFC38150	1/2" x 6" Hex Nut Sleeve Anchor	1/2"	3/8"	6"	1-1/2"	4-1/2"	5625	7092
NFC56055	3/8" x 1-7/8" Hex Nut Sleeve Anchor	3/8"	5/16"	1-7/8"	1-1/4"	5/8"	2314	3793
NFC5608	3/8" x 4" Hex Nut Sleeve Anchor	3/8"	5/16"	4"	1-1/4"	2-3/4"	2314	3793
NFC56080	3/8" x 3" Hex Nut Sleeve Anchor	3/8"	5/16"	3"	1-1/4"	1-3/4"	2314	3793
NFC58080	3/4" x 2-1/2" Hex Nut Sleeve Anchor	3/4"	5/8"	2-1/2"	2"	1/2"	5062	10955
NFC58115	3/4" x 4-1/4" Hex Nut Sleeve Anchor	3/4"	5/8"	4-1/4"	3-1/2"	3/4"	8433	9413
NFC58120	3/4" x 6-1/4" Hex Nut Sleeve Anchor	3/4"	5/8"	6-1/4"	3-1/2"	2-3/4"	8433	10452
FLAT HEAD								
FHSA1432	1/4" x 2" Flat Head Sleeve Anchor	1/4"	3/16"	2"	1"	1"	1364	952
FHSA1448	1/4" x 3" Flat Head Sleeve Anchor	1/4"	3/16"	3"	1"	2"	1364	952
FHSA1464	1/4" x 4" Flat Head Sleeve Anchor	1/4"	3/16"	4"	1"	3"	1364	952
FHSA3848	3/8" x 3" Flat Head Sleeve Anchor	3/8"	5/16"	3"	1-1/4"	1-1/2"	2314	3793
FHSA3864	3/8" x 4" Flat Head Sleeve Anchor	3/8"	5/16"	4"	1-1/4"	2-3/4"	2314	3793
FHSA3880	3/8" x 5" Flat Head Sleeve Anchor	3/8"	5/16"	5"	1-1/4"	3-3/4"	2314	3793
FHSA3896	3/8" x 6" Flat Head Sleeve Anchor	3/8"	5/16"	6"	1-1/4"	4-3/4"	2314	3793
FHSAT1432	1/4" x 2" Flat Head Sleeve Anchor	1/4"	3/16"	2"	1"	1"	1364	952
ROUND HEAD								
RHSA1420	1/4" x 1-1/4" Round Head Sleeve Anchor	1/4"	3/16"	1-1/4"	1"	1/4"	1364	952
RHSA1432	1/4" x 2" Round Head Sleeve Anchor	1/4"	3/16"	2"	1"	1"	1364	952
RHSA1444	1/4" x 2-3/4" Round Head Sleeve Anchor	1/4"	3/16"	2-3/4"	1"	1-3/4"	1364	952
RHSA3840	3/8" x 2-1/2" Round Head Sleeve Anchor	3/8"	5/16"	2-1/2"	1-1/4"	1-1/4"	2314	3793
RHSA3860	3/8" x 3-3/4" Round Head Sleeve Anchor	3/8"	5/16"	3-3/4"	1-1/4"	2-1/2"	2314	3793
RHSA3876	3/8" x 4-3/4" Round Head Sleeve Anchor	3/8"	5/16"	4-3/4"	1-1/4"	3-1/2"	2314	3793
RHSA3892	3/8" x 5-3/4" Round Head Sleeve Anchor	3/8"	5/16"	5-3/4"	2"	3-3/4"	2314	3793
RHSA3896	3/8" x 6" Round Head Sleeve Anchor	3/8"	5/16"	6"	2"	4"	2314	3793
TIE WIRE								
SATW	Tie Wire Sleeve Anchor	5/16"	1/4"	1-1/2"	1-1/2"	1/4" hole	2522	1675

PLASTIC TOGGLES

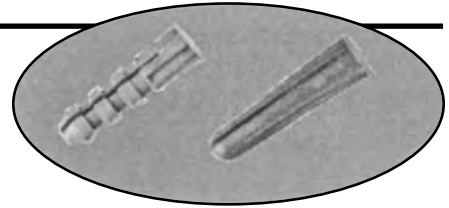
- Can be used in sheetrock or solid masonry.
- Anchor stays in place if screw is removed.



Product No.	Anchor Size	Wall Thickness to be Fastened	Hole Size
PA800	Small	0 - 1/8"	5/16"
PA812	Medium	3/8" - 1/2"	5/16"
PA858	Large	5/8" - 3/4"	5/16"

PLASTIC ANCHORS

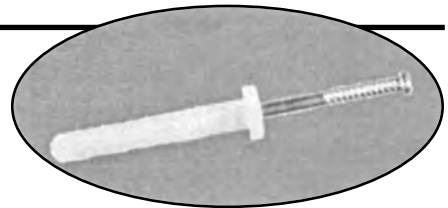
- Can be used in concrete, block, tile, brick, sheetrock, plaster, etc.
- Molded collar allows for use in hollow material.
- Can be used with sheetmetal screws or wood screws.
- Made from polyvinylchloride (PVC).
- Kits packed with combo-drive sheetmetal screws.
- Also available without lip.



Product No.	Description	Dia. & Length	Hole Size	Screw Sizes
Ribbed				
RPA1012/L	1/4" x 1" Ribbed Plastic Anchors w/Lip	1/4" x 1"	1/4"	#10-#12
RPA1416/L	5/16" x 1-1/4" Ribbed Plastic Anchors w/Lip	5/16" x 1-1/4"	5/16"	#14-#16
RPA68B/L	3/16" x 7/8" Ribbed Plastic Anchors w/Lip-Bulk	3/16" x 7/8"	3/16"	#6-#8
RPS68/L	3/16" x 7/8" Ribbed Plastic Anchors w/Lip	3/16" x 7/8"	3/16"	#6-#8
Conical				
NFC6810	3/16" x 3/4" Conical Plastic Anchors	3/16" x 3/4"	3/16"	#4-#6-#8
NFC6815	3/16" x 7/8" Conical Plastic Anchors	3/16" x 7/8"	3/16"	#6-#8-#10
NFC6820	1/4" x 1" Conical Plastic Anchors	1/4" x 1"	1/4"	#10-#12
NFC6860	5/16" x 1-3/8" Conical Plastic Anchors	5/16" x 1-3/8"	5/16"	#14-#16

NYLON NAIL ANCHORS

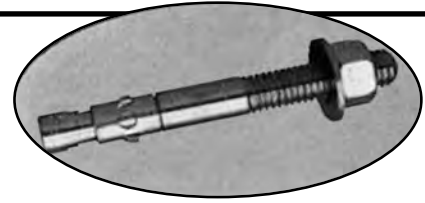
- Can be used in concrete, block, brick or sheetrock.
- Integral unit made of nylon with steel nail.
- Three head styles - round, flat and mushroom.
- Removable nail.



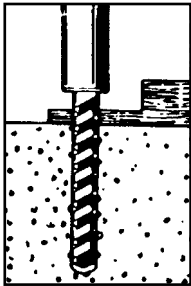
Product No.	Description	Dia. & Length	Head Dia.	Hole Size
NFC2308M	3/16" x 1" Mushroom Head Nylon Nail Anchors	3/16" x 1"	9/16"	3/16"
NFC2406M	1/4" x 3/4" Mushroom Head Nylon Nail Anchors	1/4" x 3/4"	9/16"	1/4"
NFC2408M	1/4" x 1" Mushroom Head Nylon Nail Anchors	1/4" x 1"	9/16"	1/4"
NFC2413M	1/4" x 1-1/2" Mushroom Head Nylon Nail Anchors	1/4" x 1-1/2"	9/16"	1/4"
NFC2416M	1/4" x 2" Mushroom Head Nylon Nail Anchors	1/4" x 2"	9/16"	1/4"
NFC2418M	1/4" x 3" Mushroom Head Nylon Nail Anchors	1/4" x 3"	9/16"	1/4"
NFC2420M	1/4" x 4" Mushroom Head Nylon Nail Anchors	1/4" x 4"	9/16"	1/4"
NFC2307R	3/16" x 1" Round Head Nylon Nail Anchors	3/16" x 1"	3/8"	3/16"
NFC2311R	3/16" x 1-1/2" Round Head Nylon Nail Anchors	3/16" x 1-1/2"	3/8"	3/16"
NFC2407R	1/4" x 1" Round Head Nylon Nail Anchors	1/4" x 1"	7/16"	1/4"
NFC2411R	1/4" x 1-1/2" Round Head Nylon Nail Anchors	1/4" x 1-1/2"	7/16"	1/4"
NFC2416R	1/4" x 2" Round Head Nylon Nail Anchors	1/4" x 2"	7/16"	1/4"
NFC2309F	3/16" x 1" Flat Head Nylon Nail Anchors	3/16" x 1"	3/8"	3/16"
NFC2409F	1/4" x 1" Flat Head Nylon Nail Anchors	1/4" x 1"	7/16"	1/4"
NFC2413F	1/4" x 1-1/2" Flat Head Nylon Nail Anchors	1/4" x 1-1/2"	7/16"	1/4"
NFC2416F	1/4" x 2" Flat Head Nylon Nail Anchors	1/4" x 2"	7/16"	1/4"

STUD WEDGE ANCHORS

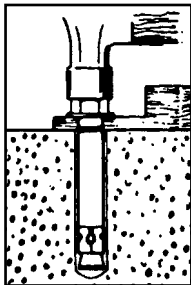
- Anchor diameter equals hole diameter.
- Comes complete with nuts and washers, ready to use.
- Collar expander offers optimum contact with masonry.
- Projections on collar immediately grip concrete.
- Collar design expands on first turn of the nut.
- Easy to install through object to be fastened.
- Stainless Steel (gr.303) catalog No. add "ss" to the end of current number.



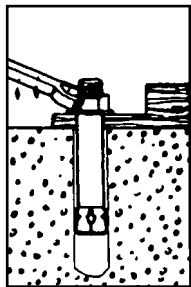
Easy Installation



Drill hole same diameter as Nova Stud using a bit conforming to Ansi B9412-77.



Tap Nova Stud into hole so that washer is flush with fixture.

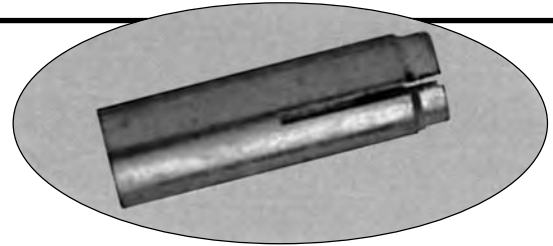


Expand anchor by tightening nut.

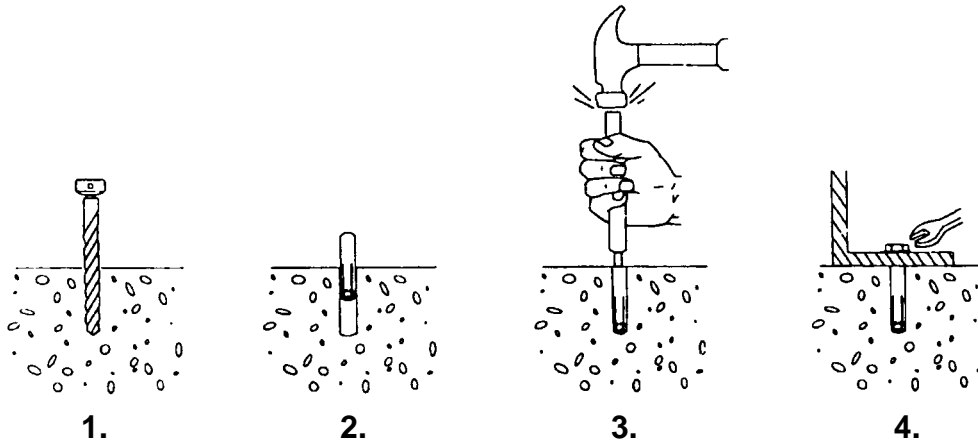
Product No.	Size	Hole Size & Threads per inch	Fastens Material Up To	Thread Length	Min. Embed
NFC700	1/4" x 1-3/4"	1/4"/20	3/16"	3/4"	1-1/8"
NFC702	1/4" x 2-1/4"	1/4"/20	5/8"	3/4"	1-1/8"
NFC706	1/4" x 3-1/4"	1/4"/20	1-1/2"	3/4"	1-1/8"
NFC709	3/8" x 2-1/4"	3/8"/16	1/8"	7/8"	1-5/8"
NFC712	3/8" x 2-3/4"	3/8"/16	1/2"	1-1/8"	1-5/8"
NFC766	3/8" x 3"	3/8"/16	3/4"	1-1/8"	1-5/8"
NFC767	3/8" x 3-3/4"	3/8"/16	1-1/2"	1-1/8"	1-5/8"
NFC716	3/8" x 5"	3/8"/16	2-3/4"	1-1/8"	1-5/8"
NFC720	1/2" x 2-3/4"	1/2"/13	1/8"	1-1/8"	2-1/4"
NFC721	1/2" x 7"	1/2"/13	4"	1-1/4"	2-1/4"
NFC723	1/2" x 3-3/4"	1/2"/13	7/8"	1-1/4"	2-1/4"
NFC768	1/2" x 4-1/4"	1/2"/13	1-1/2"	1-1/4"	1-1/4"
NFC724	1/2" x 5-1/2"	1/2"/13	2-1/2"	1-1/4"	2-1/4"
NFC725	5/8" x 3-1/2"	5/8"/11	3/16"	1-1/2"	2-3/4"
NFC769	5/8" x 4-1/2"	5/8"/11	1-1/8"	1-1/2"	2-3/4"
NFC726	5/8" x 5"	5/8"/11	1-1/2"	1-1/2"	2-3/4"
NFC730	5/8" x 6"	5/8"/11	2-1/2"	1-1/2"	2-3/4"
NFC770	5/8" x 7"	5/8"/11	3-1/2"	1-1/2"	2-3/4"
NFC771	5/8" x 8-1/2"	5/8"/11	5-1/2"	1-1/2"	2-3/4"
NFC790	5/8" x 10"	5/8"/11	7"	1-1/2"	2-3/4"
NFC794	5/8" x 12"	5/8"/11	9"	1-1/2"	2-3/4"
NFC776	7/8" x 6"	7/8"/9	1"	2-1/4"	4"
NFC777	7/8" x 8"	7/8"/9	3"	2-1/4"	4"
NFC778	7/8" x 10"	7/8"/9	5"	2-1/4"	4"
NFC779	7/8" x 12"	7/8"/9	7"	2-1/4"	4"
NFC732	3/4" x 4-1/4"	3/4"/10	1/2"	1-1/2"	3-1/4"
NFC772	3/4" x 4-3/4"	3/4"/10	3/4"	1-1/2"	3-1/4"
NFC733	3/4" x 5-1/2"	3/4"/10	1-1/2"	1-1/2"	3-1/4"
NFC734	3/4" x 6-1/4"	3/4"/10	3"	1-1/2"	3-1/4"
NFC735	3/4" x 7"	3/4"/10	4-1/2"	1-1/2"	3-1/4"
NFC739	3/4" x 10"	3/4"/10	7-1/2"	1-1/2"	3-1/4"
NFC741	3/4" x 12"	3/4"/10	9"	1-1/2"	3-1/4"
NFC750	5/16" x 2"	5/16"/18	1/8"	7/8"	1-1/2"
NFC752	5/16" x 2-3/4"	5/16"/18	5/8"	1-1/8"	1-1/2"
NFC754	5/16" x 3-3/4"	5/15"/18	1-1/2"	1-1/8"	1-1/2"
NFC755	5/16" x 5"	5/16"/18	2-3/4"	1-1/8"	1-1/2"
NFC761	1" x 6"	1"/8	1/2"	2-1/4"	4-1/2"
NFC763	1" x 9"	1"/8	3-1/2"	2-1/4"	4-1/2"
NFC765	1" x 12"	1"/8	6-1/2"	2-1/4"	4-1/2"
NFC780	1-1/4" x 9"	1-1/4"/7	2-1/4"	2-1/4"	5-1/2"
NFC781	1-1/4" x 12"	1/4"/7	5-1/4"	2-1/4"	5-1/2"

1/2" DROP-IN ANCHORS Zinc Plated Steel

- Shallow embedment depth with high performance.
- Anchor is installed flush with base material.
- Internal threads.
- Sold with setting tool.
- Also available in Stainless Steel.



Installation Instructions



1. Select a carbide-tipped drill bit with same nominal diameter as anchor body. Drill bit must conform to tip diameter tolerances of ANSI Specification B94. 12-1977. Attach depth gauge to rotary hammer drill. (Add enough length to depth gauge to allow space for conical tip of drill bit.) Drill hole perpendicular to work surface. Hold drill securely and straight during drilling or wobble may cause irregularly shaped holes.
2. Drop in anchor and tap it so that it becomes flush with surface.
3. To set drop-in anchor: Expand anchor by inserting setting tool into anchor body and hammering on tool contacts top of drop in hammer.
4. Position fixture, inset bolt and tighten.

Product No.	Description	Anchor Size	Hole Size	Thread Length	Anchor Length	Setting Tool #
NFCD12	1/2" Drop-In Anchors	1/2"	5/8"	3/4"	2"	NFCDT12
NFCD14	1/4" Drop-In Anchors	1/4"	3/8"	1/2"	1"	NFCDT14
NFCD34	3/4" Drop-In Anchors	3/4"	1"	1-1/4"	3-3/16"	NFCDT34
NFCD38	3/8" Drop-In Anchors	3/8"	1/2"	5/8"	1-9/16"	NFCDT38
NFCD58	5/8" Drop-In Anchors	5/8"	7/8"	1"	2-9/16"	NFCDT58

SINGLE EXPANSION SHIELDS

- Can be used for fastening into rock, concrete, brick, etc.
- If bolt is removed and replaced, holding power is unaffected.
- One-piece design, made of zinc alloy, is entirely rust-proof.



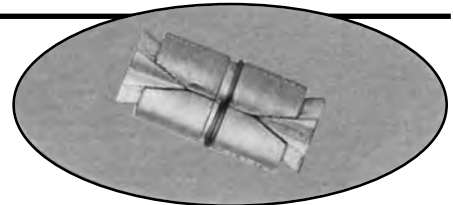
Installation Instructions

1. Drill hole of recommended diameter. Install shield flush with surface of hole.
2. Place fixture, insert machine bolt through fixture into shield and tighten.
3. To determine length of bolt: thickness of fixture plus length of shield, equals length of bolt.

Product No.	Description	Internal Dia.	Hole Size	Anchor Length	Tensile Strength 3000 PSI	Shear Strength 3000 PSI
NFC4052	1/4-20 Single Expansion Shields	1/4"	1/2"	1-5/16"	1800 lbs.	2100 lbs.
NFC4060	5/8-11 Single Expansion Shields	5/8"	1"	2-5/8"	5050 lbs.	13050 lbs.
NFC4062	3/4-10 Single Expansion Shields	3/4"	1-1/4"	2-3/4"	8800 lbs.	15400 lbs.
NFC4064	5/16-18 Single Expansion Shields	5/16"	5/8"	1-1/2"	2000 lbs.	3250 lbs.
NFC4066	3/8-16 Single Expansion Shields	3/8"	3/4"	1-1/2"	2200 lbs.	3950 lbs.
NFC4068	1/2-13 Single Expansion Shields	1/2"	7/8"	2"	3500 lbs.	8200 lbs.

DOUBLE EXPANSION SHIELDS

- Can be used for fastening into rock, concrete, brick, etc.
- Eliminates high stress points detrimental in fastening into materials of medium hardness, expands fully and has high gripping power.
- Ideal for shear loads or where bolt is subject to side pressure or vibration.
- Does not fracture, and permits fastenings at any length.



Installation Instructions

1. Drill hole of recommended diameter (slightly deeper than length of shield). Insert the shield into hole with threaded side down.
2. Shield should be flush or slightly below surface of masonry. Place fixture. Insert machine bolt and tighten.
3. A deep setting increases holding power of masonry. If desired, place a pipe sleeve between shield and fixture being attached.

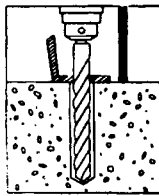
Product No.	Description	Internal Dia.	Hole Size	Anchor Length	Tensile Strength 3000 PSI	Shear Strength 3000 PSI
NFC4015	1/4-20 Double Expansion Shields	1/4"	1/2"	1"	1850 lbs.	2780 lbs.
NFC4020	5/16-18 Double Expansion Shields	5/16"	5/8"	1-1/4"	2000 lbs.	3600 lbs.
NFC4025	3/8-16 Double Expansion Shields	3/8"	3/4"	1-1/2"	3900 lbs.	4485 lbs.
NFC4030	1/2-13 Double Expansion Shields	1/2"	7/8"	2"	4600 lbs.	9300 lbs.
NFC4035	5/8-11 Double Expansion Shields	5/8"	1"	2-1/4"	5950 lbs.	13250 lbs.
NFC4040	3/4-10 Double Expansion Shields	3/4"	1-1/4"	2-7/8"	9350 lbs.	16200 lbs.

HAMMER DRIVES

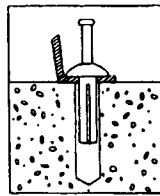
- Can be used in concrete, block, brick or stone.
- Quickly hammered into place, ease of installation.
- Nail acts as an expansion and locking pin.
- Tamper-proof.
- Integral unit made of zinc alloy with hardened steel nail, nail zinc plated per ASTM B633, SC1, Type III.
- Also available with Stainless Nail.



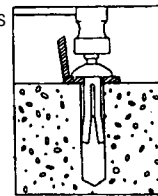
Drill hole in base material same diameter as anchor. Minimum depth of hole should be overall length of anchor minus thickness of material to be fastened.



Insert anchor through the object to be fastened and into hole in base material.



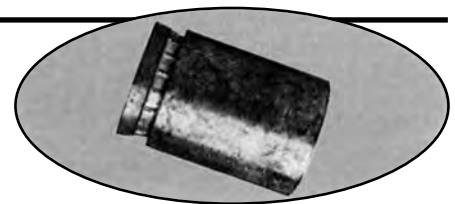
Tap nail until it is flush with hammer drive anchor head.



Product No.	Description	Anchor Dia. & Length	Hole Size	Grip Range
NFC4100	1/4" x 3/4" Zinc Hammer Drives	1/4" x 3/4"	1/4"	0-1/8"
NFC4101	3/16" x 7/8" Zinc Hammer Drives	3/16" x 7/8"	3/16"	0-1/8"
NFC4102	1/4" x 1" Zinc Hammer Drives	1/4" x 1"	1/4"	1/8-1/4"
NFC4103	1/4" x 1-1/4" Zinc Hammer Drives	1/4" x 1-1/4"	1/4"	1/4-1/2"
NFC4104	1/4" x 1-1/2" Zinc Hammer Drives	1/4" x 1-1/2"	1/4"	1/2-3/4"
NFC4105	1/4" x 2" Zinc Hammer Drives	1/4" x 2"	1/4"	3/4" - 1-1/4"

MACHINE SCREW ANCHORS

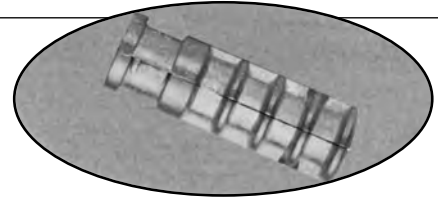
- Can be used in concrete, block, brick or stone.
- Lead sleeve conforms to irregularities of hole.
- Can be used with machine screws or bolts.
- Setting tools provided in each box of anchors.
- Sleeve manufactured from lead or lead alloy to ASTM B633, SC1, Type III.
- Rust-proof.



Product No.	Description	Internal Dia.	Hole Size	Minimum Hole	Setting Tool
NFC147	6-32 Machine Screw Anchors	6-32	5/16"	1/2"	NFC1470
NFC149	8-32 Machine Screw Anchors	8-32	5/6"	1/2"	NFC1490
NFC151	10-24 Machine Screw Anchors	10-24	3/8"	5/8"	NFC1510
NFC252	1/4-20 Machine Screw Anchors	1/4-20	1/2"	7/8"	NFC2525
NFC353	5/16-18 Machine Screw Anchors	5/16-18	5/8"	1"	NFC3530
NFC454	3/8-16 Machine Screw Anchors	3/8-16	3/4"	1-1/4"	NFC4540
NFC555	1/2-13 Machine Screw Anchors	1/2-13	7/8"	1-1/2"	NFC5550
NFC666	5/8-11 Machine Screw Anchors	5/8-11	1-1/8"	2"	NFC6660
NFC888	3/4-10 Machine Screw Anchors	3/4-10	1-1/4"	2-1/4"	NFC8880

LAG SHIELDS

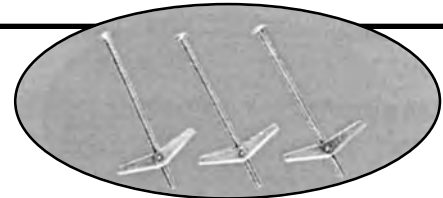
- Can be used in all types of masonry from concrete to brick.
- Unique four-way expansion assures a tight grip even in out-of-round holes.
- Short Style for hard masonry, long style for soft.
- Rust-proof.



Product No.	Description	Anchor Size	Hole Size	Anchor Length
NFC1052	1/4" Short Lag Shields	1/4"	1/2"	1"
NFC1053	5/16" Short Lag Shields	5/16"	1/2"	1-1/4"
NFC1054	3/8" Short Lag Shields	3/8"	5/8"	1-3/4"
NFC1055	1/2" Short Lag Shields	1/2"	3/4"	2"
NFC1062	5/8" Short Lag Shields	5/8"	7/8"	2"
NFC1063	3/4" Short Lag Shields	3/4"	1"	2"
NFC1056	1/4" Long Lag Shields	1/4"	1/2"	1-1/2"
NFC1057	5/16" Long Lag Shields	5/16"	1/2"	1-3/4"
NFC1058	3/8" Long Lag Shields	3/4"	5/8"	2-1/2"
NFC1059	1/2" Long Lag Shields	1/2"	3/4"	3"
NFC1060	5/8" Long Lag Shields	5/8"	7/8"	3-1/2"
NFC1061	3/4" Long Lag Shields	3/4"	1"	3 -1/2"

TOGGLE BOLTS AND TOGGLE WINGS

- Screw and wing are zinc plated to ASTM B633, SC1, Type III.
- Can be used in any hollow base material application.
- Comes with fully threaded machine screws with standard coarse threads.
- Wing nut springs open automatically.
- Toggle wings available separately.



Toggle Bolts with Wings

Product No.	Description	Dia. & Length	Tensile Value	Product No.	Description	Dia. & Length	Tensile Value
NFC5023	1/8"x2" Mushroom Head	1/8" x 2"	240	NFC5351	5/16"x5" Round Head	5/16" x 5"	1030
NFC5033	1/8"x3" Mushroom Head	1/8" x 3"	240	NFC5361	5/16"x6" Round Head	5/16" x 6"	1030
NFC5043	1/8"x4" Mushroom Head	1/8" x 4"	240	NFC5431	3/8"x3" Round Head	3/8" x 3"	1090
NFC5123	3/16"x2" Mushroom Head	3/16" x 2"	430	NFC5441	3/8"x4" Round Head	3/8" x 4"	1090
NFC5133	3/16"x3" Mushroom Head	3/16" x 3"	430	NFC5451	3/8"x5" Round Head	3/8" x 5"	1090
NFC5143	3/16"x4" Mushroom Head	3/16" x 4"	430	NFC5461	3/8"x6" Round Head	3/8" x 6"	1090
NFC5153	3/16"x5" Mushroom Head	3/16" x 5"	430	NFC5022	1/8"x2" Flat Head	1/8" x 2"	240
NFC5163	3/16"x6" Mushroom Head	3/16" x 6"	430	NFC5032	1/8"x3" Flat Head	1/8" x 3"	240
NFC5233	1/4"x3" Mushroom Head	1/4" x 3"	900	NFC5122	3/16"x2" Flat Head	3/16" x 2"	430
NFC5243	1/4"x4" Mushroom Head	1/4" x 4"	900	NFC5132	3/16"x3" Flat Head	3/16" x 3"	430
NFC5263	1/4"x6" Mushroom Head	1/4" x 6"	900	NFC5142	3/16"x4" Flat Head	3/16" x 4"	430
NFC5273	1/4"x5" Mushroom Head	1/4" x 5"	900	NFC5152	3/16"x5" Flat Head	3/16" x 5"	430
NFC5021	1/8"x2" Round Head	1/8" x 2"	240	NFC5162	3/16"x6" Flat Head	3/16" x 6"	430
NFC5031	1/8"x3" Round Head	1/8" x 3"	240	NFC5232	1/4"x3" Flat Head	1/4" x 3"	900
NFC5041	1/8"x4" Round Head	1/8" x 4"	240	NFC5242	1/4"x4" Flat Head	1/4" x 4"	900
NFC5121	3/16"x2" Round Head	3/16" x 2"	430	NFC5252	1/4"x5" Flat Head	1/4" x 5"	900
NFC5131	3/16"x3" Round Head	3/16" x 3"	430	NFC5262	1/4"x6" Flat Head	1/4" x 6"	900
NFC5141	3/16"x4" Round Head	3/16" x 4"	430	NFC5332	5/16"x3" Flat Head	5/16" x 3"	1030
NFC5151	3/16"x5" Round Head	3/16" x 5"	430	NFC5342	5/16"x4" Flat Head	5/16" x 4"	1030
NFC5161	3/16"x6" Round Head	3/16" x 6"	430	NFC5352	5/16"x5" Flat Head	5/16" x 5"	1030
NFC5231	1/4"x3" Round Head	1/4" x 3"	900	NFC5362	5/16"x6" Flat Head	5/16" x 6"	1030
NFC5241	1/4"x4" Round Head	1/4" x 4"	900	NFC5432	3/8"x3" Flat Head	3/8" x 3"	1090
NFC5251	1/4"x5" Round Head	1/4" x 5"	900	NFC5442	3/8"x4" Flat Head	3/8" x 4"	1090
NFC5261	1/4"x6" Round Head	1/4" x 6"	900	NFC5452	3/8"x5" Flat Head	3/8" x 5"	1090
NFC5331	5/16"x3" Round Head	5/16" x 3"	1030	NFC5462	3/8"x6" Flat Head	3/8" x 6"	1090
NFC5341	5/16"x4" Round Head	5/16" x 4"	1030				

ZIP-ITS™

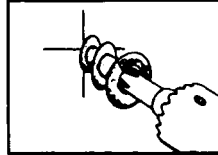
- Available in non-conductive nylon or zinc alloy.
- Drills its own hole, no bits needed.
- Use with #8 or #10 sheet metal screw or drywall screw.



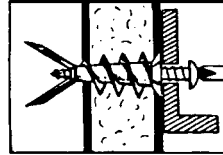
Installation Instructions



Inset either No.2 or No.3 Phillips driver bit into the recess of the Zip-It anchor head. Use a manual screw-driver or a low rpm battery powered electric screw gun.



Push the Zip-It anchor into the surface of the wallboard until the two cutting blades penetrate the surface. Using gentle forward pressure, rotate the Zip-It until the collar sets flush to the surface of the wall.



Put the fixture in place, insert the screw and tighten until it feels secure. As the screw is threaded into the nylon versions, the point will expand resulting in increased load capacity in thicker wallboard.

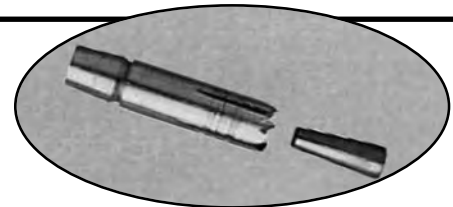
Note: Pre-drill hole if difficulty is encountered during installation of the Zip-It. In very hard wallboard or double-board construction, use 1/4" diameter drill bit. In solid plaster wall use 7/16" diameter drill bit (HSS or Carbide). Job site tests are recommended when pre-drilling holes.

Note: When using an electric screw gun for application, set clutch and use slow speed (do not exceed approximately 300-400 rpm).

Product No.	Description	Wt. (lbs.) per 100	Qty. Ctn.
EPA	Nylon ZIP-ITS	.54	1000
EZA	Zinc Alloy ZIP-ITS	1.50	1000

1/2" SELF-DRILLING ANCHORS

- Self-drilling action produces accurate hole size, everytime.
- Quick, easy installation.
- Dependable, convenient overhead application.
- Eliminates use of carbide bits by drilling its own hole.



Product No.	Description	Anchor Size	Outside Dia.	Overall Length	Thread Depth
NFCS12	1/2" Self-Drilling Anchors	1/2"	11/16"	2"	7/8"
NFCS14	1/4" Self-Drilling Anchors	1/4"	7/16"	17/32"	1/2"
NFCS34	3/4" Self-Drilling Anchors	3/4"	1"	3-3/16"	1"
NFCS38	3/8" Self-Drilling Anchors	3/8"	9/16"	1-1/2"	5/8"
NFCS56	5/16" Self-Drilling Anchors	5/16"	1/2"	1-7/16"	9/16"
NFCS58	5/8" Self-Drilling Anchors	5/8"	7/8"	2-7/16"	1"
NFCS78	7/8" Self-Drilling Anchors	7/8"	1-1/8"	4-7/16"	1"



CONCRETE INSERTS

AMIFAST PRECAST CONCRETE INSERTS

ZINC ALLOY HEAVY-DUTY RUSTPROOF



SIZE (IN.)	BOX QTY.	WT. PER 1,000 PCS.	AVERAGE FORCE
10-24 x 11/16	5000	42	-
1/4 x 1-1/2	1000	50	5130
3/8 x 1	1200	48	2890
3/8 x 1-3/8	800	65	4940
1/2 x 1-1/2	350	130	6260
1/2 x 2-7/8	160	290	13590
5/8 x 1-11/16	250	197	7970
5/8 x 2-7/8	130	363	15410
3/4 x 1-11/16	200	220	7850
3/4 x 2-7/8	100	470	14930



SIZES AVAILABLE	3/8"	1/2"	5/8"	3/4"
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SELF-DRILLING SCREWS

STANDARD DRILL SCREWS

Self-drilling fasteners in the most popular sizes.



Self-drilling fasteners eliminate separate drilling and tapping operations for faster, more economical installations.

Features & Benefits:

- Eliminates separate drilling and tapping operations.
- Broad selection of sizes.
- Many available with Stalgard® corrosion-resistant coating which provides 800 hours of salt spray resistance.
- Selected sizes incorporate Drilltite® dual-processed (forged and milled) point for greater sharpness.

	Description	Drive/Head Style	Point Type	Finish	Part #
#10 Diameter	10-16 x 1	Hex Washer	#2	Zinc	EDA470
	10-16 x 1	Hex Washer	#3	Zinc	EDB485
	10-16 x 1	Hex Washer	#3 Drilltite	Zinc	EAC485
	10-16 x 1-1/4	Hex Washer	#3	Zinc	EDB515
	10-16 x 1-1/2	Hex Washer	#2	Zinc	EDA520
	10-16 x 1-1/2	Hex Washer	#2	Stalgard	EDA521
	10-16 x 1-1/2	Hex Washer	#3	Zinc	EDB540
	10-16 x 1-1/2	Hex Washer	#3	Stalgard	EDB541
	10-16 x 1-1/2	Hex Washer	#3 Drilltite	Zinc	EAC510
	10-16 x 1-3/4	Hex Washer	#3	Zinc	EDB560
	10-16 x 2	Hex Washer	#2	Zinc	EDA545
	10-16 x 2	Hex Washer	#3	Zinc	EDB570
	10-16 x 1/2	Phillips Pan	#2	Zinc	EDD430
	10-16 x 3/4	Phillips Pan	#2	Zinc	EDD475
	10-16 x 1	Phillips Pan	#2	Zinc	EDD501
	10-16 x 1	Phillips Oval	#2	Zinc	EDG510
	10-16 x 1-1/4	Phillips Oval	#2	Zinc	EDG530
	#12 Diameter	12-14 x 3/4	Hex Washer	#1 Stitch	Zinc	EDC745
12-14 x 3/4		Hex Washer	#3	Zinc	EDB740
12-14 x 3/4		Hex Washer	#3	Stalgard	EDB741
12-14 x 3/4		Hex Washer	#3 Drilltite	Zinc	EAC735
12-14 x 1		Hex Washer	#3	Zinc	EDB760
12-14 x 1		Hex Washer	#3	Stalgard	EDB761
12-14 x 1		Hex Washer	#3 Drilltite	Zinc	EAC745
12-14 x 1-1/4		Hex Washer	#3	Zinc	EDB780
12-14 x 1-1/2		Hex Washer	#3	Zinc	EDB800
12-14 x 2		Hex Washer	#3	Zinc	EDB820
12-14 x 2-1/2		Hex Washer	#3	Stalgard	EDB830
12-14 x 3		Hex Washer	#3	Stalgard	EDB840
12-14 x 4		Hex Washer	#3	Stalgard	EDB845
#1/4" Dia.		1/4-14 x 3/4	Hex Washer	#3	Zinc	EDB935
	1/4-14 x 3/4	Hex Washer	#3	Stalgard	EDB936
	1/4-14 x 3/4	Hex Washer	#3 Drilltite	Zinc	EAC885

	Description	Drive/Head Style	Point Type	Finish	Part #
#1/4" Diameter	1/4-14 x 7/8	Hex Washer	#1 (stitch)	Stalgard	EDC930
	1/4-14 x 1	Hex Washer	#3	Zinc	EDB945
	1/4-14 x 1	Hex Washer	#3	Stalgard	EDB946
	1/4-14 x 1	Hex Washer	#3 Drilltite	Zinc	EAC895
	1/4-14 x 1-1/4	Hex Washer	#3	Zinc	EDB955
	1/4-14 x 1-1/2	Hex Washer	#3	Zinc	EDB960
	1/4-14 x 2	Hex Washer	#3	Stalgard	EDB971
	1/4-14 x 2-1/2	Hex Washer	#3	Stalgard	EDB976
	1/4-14 x 3	Hex Washer	#3	Stalgard	EDB981
	1/4-14 x 4	Hex Washer	#3	Stalgard	EDB983
	1/4-20 x 1	Hex Washer	#3	Stalgard	EDB984
#5/16" Dia.	5/16-18 x 1	Hex Washer	#3 Drilltite	Zinc	EDB990
	5/16-18 x 1-1/4	Hex Washer	#3 Drilltite	Zinc	EDB993
	5/16-18 x 1-1/2	Hex Washer	#3 Drilltite	Zinc	EDB997

	Description	Drive/Head Style	Point Type	Finish	Part #
#8 Diameter	8-18 x 1/2	Hex Washer	#2	Zinc	EDA235
	8-18 x 1/2	Hex Washer	#2	Stalgard	EDA236
	8-18 x 5/8	Hex Washer	#2	Zinc	EDA250
	8-18 x 5/8	Hex Washer	#2	Stalgard	EDA251
	8-18 x 3/4	Hex Washer	#2	Zinc	EDA260
	8-18 x 1	Hex Washer	#2	Zinc	EDA285
	8-18 x 1/2	Slotted Hex Washer	#2	Zinc	EDA240
	8-18 x 5/8	Slotted Hex Washer	#3	Zinc	EDC245
	8-18 x 1/2	Phillips Pan	#2	Zinc	EDD250
	8-18 x 1/2	Phillips Pan	#2	Stalgard	EDD251
	8-18 x 5/8	Phillips Pan	#2	Zinc	EDD260
	8-18 x 3/4	Phillips Pan	#2	Zinc	EDD265
	8-18 x 1	Phillips Pan	#2	Zinc	EDD290
	#10 Diameter	10-16 x 1/2	Hex Washer	#2	Zinc	EDA430
10-16 x 1/2		Hex Washer	#3	Zinc	EDB400
10-16 x 5/8		Hex Washer	#3	Zinc	EDB425
10-16 x 3/4		Hex Washer	#1 Stitch	Zinc	EDC450
10-16 x 3/4		Hex Washer	#2	Zinc	EDA450
10-16 x 3/4		Hex Washer	#2	Stalgard	EDA451
10-16 x 3/4		Hex Washer	#3	Zinc	EDB445
10-16 x 3/4		Hex Washer	#3	Stalgard	EDB446
10-16 x 3/4		Hex Washer	#3 Drilltite	Zinc	EAC465

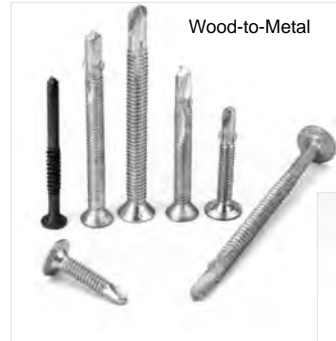


SELF-DRILLING SCREWS

DRILL SCREWS for WOOD-to-METAL APPLICATIONS

These self-drilling fasteners are designed to eliminate separate drilling and tapping operations for faster installation in demanding wood-to-metal applications.

	Description	Drive/Head Style	Point Type	Finish	Part #
#8 Dia.	8-18 x 1-5/16	Phillips Flat/Pilot	#3	Phosphate	EDK240
	8-18 x 1-15/16	Phillips Flat/Pilot	#3	Phosphate	EDK300
#10 Dia.	10-24 x 3/4	Phillips Wafer	#3	Zinc	EDM580
	10-24 x 1	Phillips Wafer	#3	Zinc	EDM590
	10-24 x 1-1/4	Phillips Wafer	#3	Zinc	EDM605
	10-24 x 1-7/16	Phillips Wafer	#3 w/Wings	Zinc	EDT600
	10-24 x 1-7/16	Phillips Wafer	#3 Drilltite w/Wings	Zinc	EBK620
	10-24 x 1-7/16	Phillips Wafer	#3 Drilltite w/Wings	Stalgard	EBK621
	10-24 x 1-1/2	Phillips Wafer	#3	Zinc	EDM620
	10-24 x 1-13/16	Phillips Wafer	#2	Zinc	EDM635
#11 Dia.	11-16 x 2-15/16	Phillips Wafer	#4 Milled w/Wings	Stalgard	EBK700
	11-16 x 3-7/16	Phillips Wafer	#4 Milled w/Wings	Stalgard	EBK710
	11-16 x 3-15/16	Phillips Wafer	#4 Milled w/Wings	Stalgard	EBK720
#12 Dia.	12-24 x 1-5/8	Phillips Wafer	#4 Milled w/Wings	Zinc	EBK645
	12-24 x 2	Phillips Flat	#4 w/Wings	Zinc	EDT265
	12-24 x 2	Phillips Flat	#4 Milled w/Wings	Zinc	EBJ875
	12-24 x 2	Phillips Flat	#4 Milled w/Wings	Stalgard	EBJ876
	12-24 x 2-1/2	Phillips Flat	#4 w/Wings	Zinc	EDT280
	12-24 x 2-1/2	Phillips Flat	#4 Milled w/Wings	Zinc	EBJ880
	12-24 x 2-1/2	Phillips Flat	#4 Milled w/Wings	Stalgard	EBJ881
	12-14 x 3-5/8	Phillips Flat	#2 w/Pilot	Stalgard	EBD275
1/4" Dia.	1/4-20 x 2-3/4	Phillips Flat	#4 w/Wings	Zinc	EDT440
	1/4-20 x 2-3/4	Phillips Flat	#4 Milled w/Wings	Zinc	EBJ985
	1/4-20 x 2-3/4	Phillips Flat	#4 Milled w/Wings	Stalgard	EBJ986



DRILL SCREWS for HEAVY-DUTY APPLICATIONS

This line of heavy-duty drill screws is designed for steel applications up to 1/2" thick.*

DRILL SCREWS with FLO-SEAL® SEALING WASHERS

Special overhead design and EPDM Sealing washer combine to provide a custom, weather-tight seal.

	Description	Drive/Head Style	Point Type	Finish	Part #
#10 Dia.	10-16 x 3/4	Hex Washer	#3	Stalgard	EHB105
	10-16 x 1-1/2	Hex Washer	#3	Stalgard	EHB135
#12 Dia.	12-14 x 3/4	Hex Washer	#2	Stalgard	EHB150
	12-14 x 1	Hex Washer	#2	Stalgard	EHB180
	12-14 x 1 Hi-Thread	Hex Washer	#2	Stalgard	EHB200
	12-14 x 1-1/4	Hex Washer	#2	Stalgard	EHB235
	12-14 x 1-1/2	Hex Washer	#2	Stalgard	EHB295
	12-14 x 2	Hex Washer	#2	Stalgard	EHB310
1/4" Dia.	1/4-14 x 3/4	Hex Washer	#3	Stalgard	EHB500
	1/4-14 x 7/8	Hex Washer	#1 Stitch	Stalgard	EHB515
	1/4-14 x 1	Hex Washer	#3	Stalgard	EHB525
	1/4-14 x 1-1/4	Hex Washer	#3	Stalgard	EHB550
	1/4-14 x 1-1/2	Hex Washer	#3	Stalgard	EHB570

#12 Dia.; Decking Fasteners and Drill Screws for Steel Thicknesses of .175" to .500"	Description	Drive/Head Style	Point Type	Finish	Part #
	12-24 x 7/8	Hex Washer	#4	Stalgard	EDC801
	12-24 x 7/8	Hex Washer	#4 Drilltite	Stalgard	EAE730
	12-24 x 7/8	Hex Washer w/Bonded	#4	Stalgard	EHL351
	12-24 x 1-1/4	Hex Washer	#4.5	Stalgard	EDC816
	12-24 x 1-1/4	Hex Washer	#4.5 Drilltite	Stalgard	EAE750
	12-24 x 1-1/4	Hex Washer w/Bonded	#4.5	Stalgard	EHL371
	12-24 x 1-1/4	Hex Washer	#5	Stalgard	EDC836
	12-24 x 1-1/4	Hex Washer	#5 Drilltite	Stalgard	ECC720
	12-24 x 1-1/4	Hex Washer w/Bonded	#5 Drilltite	Stalgard	ECW725
	12-24 x 1-1/2	Hex Washer	#4.5	Stalgard	EDC846
	12-24 x 1-1/2	Hex Washer w/Bonded	#4.5	Stalgard	EHL431
	12-24 x 1-1/2	Hex Washer	#5	Stalgard	EDC861
	12-24 x 1-1/2	Hex Washer	#5 Drilltite	Stalgard	ECC740
	12-24 x 1-1/2	Hex Washer w/Bonded	#5 Drilltite	Stalgard	ECW745
12-24 x 2	Hex Washer	#5	Stalgard	EDC881	
12-24 x 2	Hex Washer	#5 Drilltite	Stalgard	ECC750	
12-24 x 2	Hex Washer w/Bonded	#5 Drilltite	Stalgard	ECW755	
12-24 x 3	Hex Washer	#5	Stalgard	EDC901	
12-24 x 3	Hex Washer	#5 Drilltite	Stalgard	ECC770	
12-24 x 3	Hex Washer w/Bonded	#5 Drilltite	Stalgard	ECW775	





MASONRY FASTENING SYSTEM

ULTRACON[®] MASONRY FASTENING SYSTEM

Specifications:

- Sizes: 3/16" to 5/16".
- Lengths: 1" to 6".
- Head Styles: Hex, hex flange, flat, button and TrimFit[®] head.
- Drive Systems: Hex, phillips, and tamper-resistant TORX[®] Drive††.
- Material: Carbon steel.
- Finishes: Blue, silver and white Stalgard[®] coating.

Features & Benefits:

- Installs quickly, 2 to 3 fasteners per minute, when using installation tools.
- Fastener threads mechanically link to masonry, increasing joint integrity.
- Increases safety – no explosives or dangerous equipment is needed.
- Stalgard coating provides 800 hours of salt spray resistance.



	Description	Blue Part #	Silver Part #	White Part #	
Hex Flange Head	1/4 x 1-3/4		ELH366	ELD275*	
	1/4 x 2-1/4		ELH396	ELD285*	
	1/4 x 2-3/4		ELH426	ELD295*	
	1/4 x 3-1/4		ELH446	ELD305*	
	5/16 x 2		ELH475**		
	5/16 x 3		ELH485**		
	5/16 x 4		ELH495**		
TrimFit [™] Flat Head	1/4 x 1-3/4		ELG771*	ELD400*	
	1/4 x 2-1/4		ELG801*	ELD410*	
	1/4 x 2-3/4		ELG831*	ELD420*	
	1/4 x 3-1/4		ELG861*	ELD430*	
	1/4 x 3-3/4		ELG921*	ELD440*	
Tamper-Resistant TORX [®] Drive ††	Button Head	1/4 x 1-1/4	ELC456*		
		1/4 x 1-3/4	ELC461*		
		1/4 x 2-1/4	ELC471*		
		1/4 x 2-3/4	ELC476*		
	Flat Head	1/4 x 1-1/4	ELC351*		
		1/4 x 1-3/4	ELC356*		
		1/4 x 2-1/4	ELC366*		
		1/4 x 2-3/4	ELC371*		

Installation Tools

500 - Compact high speed installation tool designed for installation of UltraCon[®] hex head and Phillips flat head anchors up to 3-3/4" long.











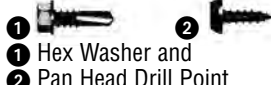






1000 - A multi-purpose tool designed for installation of UltraCon[®] hex head and Phillips flat head anchors up to 3-3/4" long.

	Description	Blue Part #	Silver Part #	White Part #
Hex Washer Head	3/16 x 1-1/4	ELE300		
	3/16 x 1-3/4	ELE310		
	3/16 x 2-1/4	ELE320		
	3/16 x 2-3/4	ELE330		
	3/16 x 3-1/4	ELE340		
	3/16 x 3-3/4	ELE350		
	3/16 x 4	ELE360		
	1/4 x 1	ELE400		
	1/4 x 1-1/4	ELE405	ELH316	
	1/4 x 1-3/4	ELE415	ELH346	ELD195*
	1/4 x 2-1/4	ELE425	ELH376	ELD205*
	1/4 x 2-3/4	ELE435	ELH406	ELD215*
	1/4 x 3-1/4	ELE445	ELH436	ELD225*
	1/4 x 3-3/4	ELE455		
	1/4 x 4	ELE465		
	1/4 x 5	ELE475	ELH456	ELD255*
1/4 x 6	ELE485	ELH466	ELD265*	
Phillips Flat Head	3/16 x 1-1/4	ELF305	ELH525	
	3/16 x 1-3/4	ELF315	ELH555	ELD330*
	3/16 x 2-1/4	ELF325	ELH585	ELD340*
	3/16 x 2-3/4	ELF335	ELH615	ELD350*
	3/16 x 3-1/4	ELF345	ELH645	ELD360*
	3/16 x 3-3/4	ELF355	ELH675	ELD370*
	3/16 x 4	ELF365		ELD380*
	1/4 x 1-1/4	ELF400	ELH735	
	1/4 x 1-3/4	ELF410	ELH765	
	1/4 x 2-1/4	ELF420	ELH795	
	1/4 x 2-3/4	ELF430	ELH825	
	1/4 x 3-1/4	ELF440	ELH855	
	1/4 x 3-3/4	ELF450	ELH885	
	1/4 x 4	ELF460		
	1/4 x 5	ELF470		
	1/4 x 6	ELF480		
	5/16 x 3		ELH910**	
	5/16 x 4		ELH920**	
	5/16 x 5		ELH930**	
	5/16 x 6		ELH940**	

†† Tamper-resistant TORX Drive size is TR27.

SCREWS AND APPLICATIONS

When you think of multipurpose, drywall, wood, metal or deck screws, think Wharton Hardware. We're your source for all your metal product needs, including screws for uses ranging from attaching gypsum board to metal studs to attaching metal decking to steel plate. Listed in the chart below are common types of screws and their applications.

APPLICATION	SCREW TYPE	APPLICATION	SCREW TYPE
DRYWALL/MULTIPURPOSE			
Gypsum Wallboard to 20-25 Gauge Metal Studs	 Fine Thread, Bugle Head, Phosphate Sharp Point	Decking	
Gypsum Wallboard to 20-27 Gauge Metal Studs and Wood	 Multilevel Thread, Bugle Head, Sharp Point	Outside Structures Playground Equipment	Deck-Lock® Deck-Lock® Plus, Ceramic-Coated Deck Screws Stainless-Steel Deck Screws Square-Drive Deck Screws
Wood Trim To Metal Studs and Wood	 Trim Head, Sharp Point	Outside Furniture	
For Temporary Fastening of Gypsum to Gypsum	 Laminating, Sharp Point	METAL	
Metal Stud 2-25 Gauge to Track	 Pan Head Framing, Sharp Point	Gypsum Wallboard Insulation or Wood to 14-20 Gauge Metal Studs	 Fine Thread, Self-Drilling Point, Phosphate or Zinc Coated
Metal Lathe to 20-25 Gauge Metal Studs	 Phillips Modified Truss Head, Sharp Point	Metal Studs to Track and Fixtures 14-20 Gauge	 Pan Head Framing, Drill Point
WOOD			
Gypsum Wallboard to Wood Studs	 Coarse Thread, Bugle Head, Sharp Point, Phosphate, Clear Zinc or Yellow Zinc Coated	Metal 14-20 Gauge Metal Applications	 ① Hex Washer and ② Pan Head Drill Point
Particle board and Softwood	 Deep Coarse Thread, Flat Head, Sharp Point	Metal Lathe to 14-20 Gauge Metal Studs	 Phillips Modified Truss Head, Self-Drilling
CEMENT BOARD			
Cement Board Screw to 12-20 Gauge Metal Studs	 Reinforced Neck w/Countersunk Nibs, Self-Drilling Point, Cement Board-to-Metal	Roofing and Sheathing to Wood	 Hex Washer Head, Sharp Point with Watertight Neoprene Washer
Cement Board Screw to 20-25 Gauge Metal Studs or Wood	 Reinforced Neck w/Countersunk Nibs, High and Low Threads, Type "S" Pinch Point, Corrosion-Resistant, Cement Board-to-Wood	HVAC or Thin Gauge Metal to Metal	 Hex Washer Head, Slotted Needle Point, Self-Piercing



THREADED ROD ANCHORING SYSTEM

HANGERMATE® ANCHORS
Anchoring system for threaded rod components.

HangerMate anchors accept 1/4-20 and 3/8-16 threaded rod and components of various piping systems for attachment to steel, masonry, wood and drywall.

Specifications:

- Sizes: For use with 1/4-20 and 3/8-16 threaded rod.
- Lengths: 1-1/8" to 3".
- Drive System: Hex.
- Material: Carbon steel.
- Finish: Plating per ASTM B633 Type II Class 12.

Features & Benefits:

- Eases installation of sprinkler systems, strut, HVAC, cable trays and various piping systems.
- Single fastening format – easily installs with contractor-grade power tools.
- Self-drilling points for steel up to 1/2" thick.
- In wood applications, no pre-drilling is typically required.
- Many styles UL listed and/or FM approved.

	Description	Rod Size	Steel Thick.	Part No.
End-drilled Head	1/4-20x1 #3 point	1/4-20	.060-.250	EZG160
	1/4-20x1 #2 point	3/8-16	.060-.125	EZG450
	1/4-20x1 #3 point	3/8-16	.060-.250	EZG470
	1/4-20x1 #3 point w/nuts 3/8-	16	.060-.250	EZG471
	1/4-20x1-1/2 #3 point	3/8-16	.060-.250	EZG490
	1/4-20x1-1/2 #3 point w/nuts	3/8-16	.060-.250	EZG491
	1/4-20x1-1/2 #5 point	3/8-16	.187-.500	EZG510
	1/4-20x1-1/2 #5 point w/nuts	3/8-16	.060-.500	EZG511
	1/4-20x2 #3 point	3/8-16	.060-.250	EZG530
	1/4-20x3 #3 point	3/8-16	.060-.250	EZG540
	5/16-24x1-1/8 #3 point	3/8-16	.060-.250	EZG550
Cross-drilled Head	1/4-20x1 #3 point	1/4-20	.060-.250	EZH155
	1/4-20x1 #2 point	3/8-16	.060-.125	EZH455
	1/4-20x1 #3 point	3/8-16	.060-.250	EZH475
	1/4-20x1 #3 point w/nuts 3/8-	16	.060-.250	EZH476
	1/4-20x1-1/2 #3 point	3/8-16	.060-.250	EZH495
	1/4-20x1-1/2 #3 point w/nuts	3/8-16	.060-.250	EZH496
	1/4-20x1-1/2 #5 point	3/8-16	.187-.500	EZH515
	1/4-20x1-1/2 #5 point w/nuts	3/8-16	.060-.500	EZH516
	1/4-20x2 #3 point	3/8-16	.060-.250	EZH535



HangerMate® Fastening System
Anchoring system for threaded rod components

Description Rod Size Steel Thick. Part No.

Wood-Cutting Point (typically no drilling required); End-drilled Head

5/16x2-1/4	1/4-20	EZG315
5/16x2-1/4	3/8-16	EZG660
5/16x3	3/8-16	EZG670

Wood-Cutting Point (typically no drilling required); Cross-drilled Head

5/16x2-1/4	1/4-20	EZH320
5/16x2-1/4	3/8-16	EZH665

For Concrete Applications; End-drilled Head

5/16x2-1/4	1/4-20	EZG365
5/16x2-1/4	3/8-16	EZG730

For Concrete Applications; Cross-drilled Head

5/16x2-1/4	1/4-20	EZH370
5/16x2-1/4	3/8-16	EZH735

Description Part No.
HangerMate Installation Tools

For all applications:

Drive Socket EZE215

For concrete applications:

Drive Sleeve EZE220
Drill Bit Adaptor Kit EZE240
ANSI 1/4 Tanged Drill Bit for Hammer Drills EZE340
ANSI 1/4 SDS Drill Bit for Rotary Hammer Drills EZE350



PHILLIPS TABLE OF SCREW SIZES

PHILLIPS HEAD STYLE

Point Size	Body Diameter	Wood Screw Size		Machine Screw Size			Sheet Metal Screw Size
		Flat Oval	Round	Flat Oval Binding	Round Fillister	Truss Brazier Button	Flat, Oval Round, Stove Binding
0		0,1	0,1	0,1	0,1	0,1	0,1
1	3/16	2, 3, 4	2, 3, 4	2, 3, 4	2, 3, 4	2, 3, 4, 5	2, 3, 4
2	1/4	5, 6, 7, 8, 9	5, 6, 7, 8, 9, 10	5, 6, 8, 10	5, 6, 8, 10	6, 8, 10	5, 6, 7, 8, 10
3	5/16	10, 12, 14, 16	12, 14, 16	12, 1/4	12, 1/4, 5/16	12, 1/4	12, 14
4	3/8	18, 20, 24	18, 20, 24	5/16, 3/8, 7/16, 1/2	3/8, 7/16, 1/2	5/16, 3/8, 7/16, 1/2	—





PHILLIPS BIT CHART

This brief chart will help you match the screw size to the proper Phillips point.

POINT #0 – FOR SCREWS #0 & #1
 POINT #1 – FOR SCREWS #2 THRU #4
 POINT #2 – FOR SCREWS #5 THRU #10
 POINT #3 – FOR SCREWS #12 THRU #16 AND 1/4
 POINT #4 – FOR SCREWS 5/16 OR 18 AND LARGER



Phillips Insert Bits

1/4" HEX SHANK INSERT BITS	POINT SIZE	OVERALL LENGTH	PART NO.
 A Style	1	1"	250PB1-A
	2	1"	250PB2-A
	3	1"	250PB3-A
 Standard Style	0	1"	250PB0
	1	1"	250PB1
	2	1"	250PB2
	3	1"	250PB3
	2	1-1/2"	250PB2-1.5
	1	2"	250PB1-2
	2	2"	250PB2-2
	3	2"	250PB3-2
 *Reduced Diameter	2	2-1/2"	250PB2-2.5
	2	3"	250PB2-3
	0	1"	*250PBR0
	1	1"	*250PBR1
 ACR® Anti-Cam Out Bits	2	1"	*250PBR2
	2	2"	*250PBR2-2
	1	1"	250PB1-CR
	2	1"	250PB2-CR
	3	1"	250PB3-CR
	2	1"	*250PBR2-CR


SLOTTED TABLE OF SCREW SIZES

SLOTTED HEAD STYLE

Screw Size	Thread Diameter	Maximum Head Diameter						Slot Width	
		Flat or Oval Head	Round Head	Fillister Head	Binding Head	Pan Head	Truss Head	Min.	Max.
2	.086	.172	.162	.140	.181	.167	.194	.023	.031
3	.099	.199	.187	.161	.208	.193	.226	.027	.035
4	.112	.225	.211	.183	.235	.219	.257	.031	.039
5	.125	.252	.236	.205	.263	.245	.289	.035	.043
6	.138	.279	.260	.226	.290	.270	.321	.039	.048
8	.164	.332	.309	.270	.344	.322	.384	.045	.054
10	.190	.385	.359	.313	.399	.373	.448	.050	.060
12	.216	.438	.408	.357	.454	.425	.511	.056	.067
1/4	.250	.507	.472	.414	.513	.492	.573	.064	.075
5/16	.310	.635	.590	.518	.641	.615	.698	.072	.084
3/8	.370	.762	.708	.622	.769	.740	.823	.081	.094



Slotted Insert Bits






1/4" HEX SHANK (SHORT LENGTH)	SCREW SIZE	BLADE WIDTH	BLADE THICKNESS	OVERALL LENGTH	PART NO.
	No.1	.109	.024	1"	250SS1
	No.2	.125	.026	1"	250SS2
	No.3	.140	.028	1"	250SS3
	No.4	.156	.032	1"	250SS4
	No.5	.218	.036	1"	250SS5
	No.6	.250	.040	1"	250SS6
	No.8	.281	.046	1"	250SS8
	No.10	.281	.050	1"	250SS10
	No.12	.355	.056	1"	250SS12
	1/4" HEX SHANK (STANDARD LENGTH)	4F-5R	.187	.034	1-1/2"	250SB1
6F-8R	.250	.040	1-1/2"	250SB2	
8F-10R	.281	.042	1-1/2"	250SB3	
10F-12R	.281	.046	1-1/2"	250SB4	
12F-14R	.281	.050	1-1/2"	250SB5	
14F-16R	.359	.055	1-1/2"	250SB6	
5/16" HEX SHANK INSERT BITS	4F-5R	.187	.034	1-1/2"	312SB1
6F-8R	.250	.040	1-1/2"	312SB2	
8F-10R	.281	.042	1-1/2"	312SB3	
10F-12R	.281	.046	1-1/2"	312SB4	
12F-14R	.312	.050	1-1/2"	312SB5	
14F-16R	.359	.055	1-1/2"	312SB6	

BIT HOLDERS

For 1/4" Hex Insert Bits

For use in all Drywall Drivers.

ALL BIT HOLDERS ARE MANUFACTURED OF INDUSTRIAL QUALITY STAINLESS STEEL.











	NON-MAGNETIC		MAGNETIC	
	OVERALL LENGTH	PART NO.	OVERALL LENGTH	PART NO.
1/4" HEX DRIVE-NO RING RETAINER 	1-7/8"	BHE 1/4	1-7/8"	MBHE 1/4
1/4" HEX DRIVE-WITH RING RETAINER  7/16" Body	3" 2-5/16" 2-1/8"	BH1/4 BHW1/4 BHZ1/4	3" 2-5/16" 2-1/8"	MBH1/4 MBHW1/4 MBHZ1/4
 3/8" Body, 7/16" Nose	2-1/4" 3"	BHC1/4 BHT1/4	2-1/4" 3"	MBHC1/4 MBHT1/4†
 3/8" Body	2-7/8" 4" 6" 8" 10" 12"	BHR1/4 BHR1/4-4 BHR1/4-6 BHR1/4-8 BHR1/4-10 BHR1/4-12	2-7/8" 4" 6" 8" 10" 12"	MBHR1/4 MBHR1/4-4 MBHR1/4-6 MBHR1/4-8 MBHR1/4-10 MBHR1/4-12
1/4" HEX DRIVE-SCREW ON CAP w/O-RING  7/16" Body	3-1/8" 4" 6" 8" 10" 12" 2-7/8" 2-3/8"	BHM1/4 BHM1/4-4 BHM1/4-6 BHM1/4-8 BHM1/4-10 BHM1/4-12 BHN1/4 BH01/4	3-1/8" 4" 6" 8" 10" 12" 2-7/8" 2-3/8"	MBHM1/4 MBHM1/4-4 MBHM1/4-6 MBHM1/4-8 MBHM1/4-10 MBHM1/4-12 MBHN1/4 MBH01/4

† Replacement part for MBHS 1/4.

1/4" HEX DRIVE NUTSETTERS

Magnetic and Non-Magnetic

For driving hex head self-drilling fasteners and sheet metal screws.

	BROACHED HEX	OVERALL LENGTH	NON-MAG. PART NO.	MAGNETIC PART NO.
1/4" HEX INSERT DRIVE NUTSETTERS				
Available in metric. 	3/16"	1-5/32"	SHS 3/16	MSHS 3/16
	1/4"	1-5/32"	SHS 1/4	MSHS 1/4
	5/16"	1-5/32"	SHS 5/16	MSHS 5/16
	3/8"	1-5/32"	SHS 3/8	MSHS 3/8
	7/16"	1-1/4"	SHS 7/16	MSHS 7/16
1/4" HEX DRIVE POWER NUTSETTERS - SHORT				
Available in metric. 	3/16"	1-5/8"	SH 3/16	MSH 3/16
	1/4"	1-5/8"	SH 1/4	MSH 1/4
	5/16"	1-5/8"	SH 5/16	MSH 5/16
	3/8"	1-3/4"	SH 3/8	MSH 3/8
	7/16"	1-3/4"	SH 7/16	MSH 7/16
Available in metric.  Thin Wall*  Tapered	1/4"	2"	SH 1/4-2	-
	1/2"	1-3/4"	SH 1/2	MSH 1/2
	1/4"	1-5/8"	SH 1/4 T*	MSH 1/4 T*
	1/4"	1-5/8"	SHT 1/4	MSHT 1/4
	1/4"	2"	SHB 1/4	MSHB 1/4
1/4" HEX INSERT DRIVE NUTSETTERS - LONG				
	3/16"	2-9/16"	SHL 3/16	MSHL 3/16
	1/4"	2-9/16"	SHL 1/4	MSHL 1/4
	5/16"	2-9/16"	SHL 5/16	MSHL 5/16
	3/8"	2-9/16"	SHL 3/8	MSHL 3/8
	7/16"	2-9/16"	SHL 7/16	MSHL 7/16
	1/2"	2-9/16"	SHL 1/2	MSHL 1/2
1/4" HEX INSERT DRIVE NUTSETTERS - X-LONG				
	1/4"	4"	SHL 1/4-4	MSHL 1/4-4
		6"	SHL 1/4-6	MSHL 1/4-6
		8"	SHL 1/4-8	MSHL 1/4-8
		10"	SHL 1/4-10	MSHL 1/4-10
		12"	SHL 1/4-12	MSHL 1/4-12
	5/16"	4"	SHL 5/16-4	MSHL 5/16-4
		6"	SHL 5/16-6	MSHL 5/16-6
		8"	SHL 5/16-8	MSHL 5/16-8
		10"	SHL 5/16-10	MSHL 5/16-10
		12"	SHL 5/16-12	MSHL 5/16-12
	3/8"	4"	SHL 3/8-4	MSHL 3/8-4
		6"	SHL 3/8-6	MSHL 3/8-6
		8"	SHL 3/8-8	MSHL 3/8-8
		10"	SHL 3/8-10	MSHL 3/8-10
		12"	SHL 3/8-12	MSHL 3/8-12
1/4" HEX DRIVE POWER - SHORT LOBULAR				
Lobular design engages sides of screws, reduces "rounding off".  	3/16"	1-5/8"	L-SH 3/16	L-MSH 3/16
	1/4"	1-5/8"	L-SH 1/4	L-MSH 1/4
	5/16"	1-5/8"	L-SH 5/16	L-MSH 5/16
	3/8"	1-3/4"	L-SH 3/8	L-MSH 3/8
	7/16"	1-3/4"	L-SH 7/16	L-MSH 7/16
1/4" HEX DRIVE POWER - LONG LOBULAR				
Lobular design engages sides of screws, reduces "rounding off".  	3/16"	2-9/16"	L-SHL 3/16	L-MSHL 3/16
	1/4"	2-9/16"	L-SHL 1/4	L-MSHL 1/4
	5/16"	2-9/16"	L-SHL 5/16	L-MSHL 5/16
	3/8"	2-9/16"	L-SHL 3/8	L-MSHL 3/8
	7/16"	2-9/16"	L-SHL 7/16	L-MSHL 7/16

*Extra thin for shutter installation.

RS22

.22 Caliber Single Shot Tool

RS22—Trigger Operated Powder Actuated Tool



ADVANTAGES

- | Designed for frequent use providing professional fastening results in a variety of concrete, masonry or steel applications.
- | The RS22 is a traditional trigger operated tool.
- | Positive barrel and load retention prevents barrel from opening freely, allowing easy horizontal and overhead fastening.
- | Powder load automatically ejects after each use.
- | Ergonomic design for operator comfort.
- | Heavy-duty, all-steel construction.
- | 90-day warranty.

SPECIFICATIONS

- | Uses standard .22 caliber single shot powder loads 2 (Brown), 3 (Green), 4 (Yellow).
- | Weight: 4.1 pounds.
- | Length: 14-3/4 inches.
- | Muzzle Bushing O.D.: 3/4".
- | Pin Capacity: 2-1/2" (3" w/washer).

MOST COMMON FASTENERS

Thread Stud #	Shank Length (in.)	Shank Length (mm)	Most Common Application
| 1524SDP (washed)	3	76.2	2" x 4" to concrete
| 1516SDC (washed)	2-1/2	63.5	2" x 4" to concrete
| 1506	3/4	19.1	Drywall track to concrete

D45A

.25 Caliber Disc Tool

Semi-Automatic

2" Pin Capacity (2-1/2" w/washer)

Automatic Piston Return



ADVANTAGES

- | Most durable, powerful powder tool—designed for high production use in steel and concrete.
- | Heavy-duty buffer system—prevents front-end tool damage for longer tool life.
- | Weekly cleaning, not daily cleaning—saves time, reduces costs.
- | 33% faster than semi-automatic tools—saves time, labor costs.
- | Ramset Disc Technology—loads only advance after firing—eliminates 10-20% of load waste.
- | 5-year warranty.

SPECIFICATIONS

- | .25 caliber, 10-shot disc loads, 2 (Brown), 3 (Green), 4 (Yellow), 5 (Red).
- | Weight: 4.5 pounds.
- | Length: 15 inches.
- | Muzzle Bushing O.D.: 5/8".
- | Pin Capacity: 2" (2-1/2" w/washer).

MOST COMMON FASTENERS

Pin #	Shank Length (in.)	Shank Length (mm)	Most Common Application
| SP58TH	5/8	15.9	Track to steel
| SP12	1/2	12.7	Track to hard steel
| 1506B	3/4	19.1	Track to concrete

D60

.25 Caliber Disc Tool
Semi-Automatic
Power Adjustable
2-3/8" Pin Capacity (2-1/2" w/washer)



ADVANTAGES

- | Quick power adjustment—gives eight levels of power with only one load level for a variety of applications.
- | Rugged polyamide housing—reduces heat transfer and maximizes operator comfort.
- | Soft, recoil-absorbing handle—for increased operator comfort.
- | Ramset Disc Technology—loads only advance after firing—eliminates 10-20% of load waste.
- | 5-year warranty.

SPECIFICATIONS

- | .25 caliber, 10-shot disc loads, 2 (Brown), 3 (Green), 4 (Yellow).
- | Weight: 4.9 pounds.
- | Length: 12-1/2 inches.
- | Muzzle Bushing O.D.: 3/4".
- | Pin Capacity: 2-3/8" (2-1/2" w/washer).

MOST COMMON FASTENERS

Pin #	Shank Lgth (in.) (mm)	Thread Lgth (in.) (mm)	Most Common Application
1508	1 25.4		Sheet metal to concrete
1643W	1 25.4	3/4 19.1	Electrical box to concrete

Cobra

.27 Caliber Strip Tool
Semi-Automatic
2-1/2" Pin Capacity (3" w/washer)



ADVANTAGES

- | Semi-automatic .27-caliber tool—uses strip loads.
- | Padded recoil-absorbing handle—for greater operator comfort.
- | Fastens up to 3" standard Ramset drive pins and threaded studs—ideal for general construction applications.
- | Full 1-year warranty.

SPECIFICATIONS

- | .27 caliber, 10-shot strip loads, 2 (Brown), 3 (Green), 4 (Yellow), 5 (Red).
- | Weight: 4.5 pounds.
- | Length: 13-1/4 inches.
- | Muzzle Bushing O.D.: 9/16".
- | Pin Capacity: 2-3/8" (2-1/2" w/washer).

MOST COMMON FASTENERS

Pin #	Shank Length (in.) (mm)	Most Common Application
1524SDP (washed)	3 76.2	2" x 4" to concrete
1516SDC (washed)	2-1/2 63.5	2" x 4" to concrete
1506	3/4 19.1	Drywall track to concrete

TrakFast
Gas Technology
Fully Automatic
1-1/2" Pin Capacity
42-Pin Magazine Capacity



Still the most revolutionary fastening system in the construction industry!

Since its introduction in 1991, TrakFast has been the tool of choice for both interior and exterior contractors. The TrakFast Automatic Fastening System fastens all types of track, from standard track to hat channel, deep leg, Z and J channel. Contractors continue to report tremendous savings when using TrakFast for high production fastening. They have learned that TrakFast's actual cost in place beats all other systems. The increased speed and productivity of TrakFast allows the contractor to bid more competitively, complete the job sooner and move on to the next job. Anyone can use TrakFast—just load the pins and fire. It's that easy!

Fastening System Productivity

In the time it takes you to drive two pins with a powder tool, you can drive up to 10 pins with TrakFast!

ADVANTAGES

- | **SPEED** Three to five times faster than powder tools. 42-pin magazine reduces loading time.
- | **EASY TO USE** Tool automatically resets piston. No recoil, tool absorbs shock resulting in less operator fatigue.
- | **NO LICENSING REQUIRED** Unlike powder-actuated tools, no licensing is needed.
- | **NO CHANGING LOADS** TrakFast uses a fuel cell, not a load. No need to inventory different colored loads.
- | **NARROW NOSE AND PROFILE** Allows tool to reach inside deep leg track (1-5/8" wide x 2" high).
- | 2-year warranty (6 months on wearable parts).

TrakFast's power comes from the battery and fuel cell.

The 6-volt rechargeable Ni-CD battery can drive approximately 3000 shots per charge. The clean burning fuel cell can drive over 1000 pins and keeps the tool cleaner than powder actuated tools.

SPECIFICATIONS

- | **Part No. TF1100.**
- | Length: 17 inches.
- | Height: 15-1/2"
- | Weight: 8.375 lbs.
- | Maximum Capacity: 42 pins.
- | Maximum cycles/second: 2.
- | Fuel cell: 1000 shots.
- | Battery (charged): 3000 shots.

MOST COMMON FASTENERS

Pin #	Pin Length (in.) (mm)	Most Common Application
FPP012	1/2 12.7	Track to steel
FPP034B	3/4 19.1	Track to concrete

DESCRIPTION

We maintain only the highest standards in the materials, production techniques and quality control measures used to manufacture our fasteners, assuring consistent, optimum quality in every fastener.

FASTENER TERMINOLOGY SUFFIX

K = Knurled X = Collated C = 100 count
 B = Black SD = Washer M = 1000 count
 E = Ramguard

ADVANTAGES

BLACK PINS

The special black coating improves pin penetration into difficult base material (i.e. hard concrete). We offer this black coating on all of our fasteners manufactured for the attachment of drywall track and channel to concrete and steel.

PINS

ITW Ramset/Red Head powder actuated fasteners are specifically fabricated to meet the exacting requirements of toughness and durability that enable them to penetrate dense concrete and structural quality steel.

Selection Charts

BLACK TRACK PINS *Designed for use in concrete and structural steel applications.*

Available in 100-Pack or 1000-Pack per box



PART NUMBER	SHANK LENGTH		721	AUTO FAST	D60	SA270	ROCKET/			RS22/ HD22
	IN.	(MM)					D45A	COBRA		
1506B	3/4	(19.1)	■	■	■	■	■	■	■	■

Shank diameter = .145 Head diameter = .300

DRIVE PINS *Designed for use in concrete and structural steel applications.*

100 per box



PART NUMBER	SHANK LENGTH		721	AUTO FAST	D60	SA270	ROCKET/			RS22/ HD22
	IN.	(MM)					D45A	COBRA		
1503K	1/2	Knurled (12.7)	■	■	■	■	■	■	■	■
1506	3/4	(19.1)	■	■	■	■	■	■	■	■
1508	1	(25.4)	■	■	■	■	■	■	■	■
1510	1-1/4	(31.8)	■	■	■	■	■	■	■	■
1512	1-1/2	(38.1)	■	■	■	■	■	■	■	■
1514	2	(50.8)	■	■	■	■	■	■	■	■
1516	2-1/2	(63.5)	■	■	■	■	■	■	■	■
1524	3	(76.2)	■	■	■	■	■	■	■	■

Shank diameter = .145 Head diameter = .300

DRIVE PINS WITH WASHER *Washer increases bearing surface against the material to be fastened.*

100 per box



PART NUMBER	SHANK LENGTH		721	AUTO FAST	D60	SA270	ROCKET/			RS22/ HD22
	IN.	(MM)					D45A	COBRA		
1506SD	3/4	(19.1)	■	■	■	■	■	■	■	■
1508SD	1	(25.4)	■	■	■	■	■	■	■	■
1510SD	1-1/4	(31.8)	■	■	■	■	■	■	■	■
1512SD	1-1/2	(38.1)	■	■	■	■	■	■	■	■
1514SD	2	(50.8)	■	■	■	■	■	■	■	■
1516SDC	2-1/2	(63.5)	■	■	■	■	■	■	■	■
1524SDP*	3	(76.2)	■	■	■	■	■	■	■	■

*Square washer indicates 3" pin has been installed
 Shank diameter = .145 Head diameter = .300

POWERPOINT PINS *Used for fastening into harder steel and concrete. Premium steel and hard concrete pin.*

100 per box



PART NUMBER	SHANK LENGTH		721	AUTO FAST	D60	SA270	ROCKET/			RS22/ HD22
	IN.	(MM)					D45A	COBRA		
SP12	1/2	(12.7)	■	■	■	■	■	■	■	■
SP58	5/8	(15.9)	■	■	■	■	■	■	■	■
SP34	3/4	(19.1)	■	■	■	■	■	■	■	■
SP78	7/8	(22.2)	■	■	■	■	■	■	■	■

Shank diameter = .150 Head diameter = .300

Selection Charts

POWERPOINT STEP SHANK PINS *Used for fastening into harder steel and concrete. Premium steel and hard concrete pin.*

100 per box



PART NUMBER	SHANK LENGTH		721	AUTO FAST	D60	SA270	ROCKET/			RS22/ HD22
	IN.	(MM)					D45A	COBRA		
SP100	1	(25.4)	■	■	■	■	■	■	■	■
SP114	1-1/4	(31.8)	■	■	■	■	■	■	■	■
SP112	1-1/2	(38.1)	■	■	■	■	■	■	■	■
SP178	1-7/8	(47.6)	■	■	■	■	■	■	■	■

Shank diameter = .150 / .180
Head diameter = .300

TOP HAT DRIVE PIN *Increases bearing surface against material to be fastened for improved attachment to inconsistent base materials.*

Available in 100 per box and 1000 per box.



SP58TH

PART NUMBER	SHANK LENGTH		721	AUTO FAST	D60	SA270	ROCKET/			RS22/ HD22
	IN.	(MM)					D45A	COBRA		
SP58TH	5/8	(15.9)	■	■	■	■	■	■	■	■
1906	3/4	(19.1)	■	■	■	■	■	■	■	■
1906M	3/4	(19.1)	■	■	■	■	■	■	■	■
1908	1	(25.4)	■	■	■	■	■	■	■	■

Shank diameter = .145 (SP58TH = .150)
Head diameter = 8mm (SP56TH = .300)

RAMGUARD PINS *Designed for improved corrosion resistance in treated lumber applications.*

100 per box.



PART NUMBER	SHANK LENGTH		721	AUTO FAST	D60	SA270	ROCKET/			RS22/ HD22
	IN.	(MM)					D45A	COBRA		
1516E	2-1/2	(63.5)	■	■	■	■	■	■	■	■
1524E	3	(76.2)	■	■	■	■	■	■	■	■
1516SDE	2-1/2	(63.5)	■	■	■	■	■	■	■	■
1624SDE	3	(76.2)	■	■	■	■	■	■	■	■

Shank diameter = .145
Head diameter = .300

THREADED STUD *For applications that require removability or where shimming is required.*

1/4 - 20 Threaded Stud. 100 per box.



PART NUMBER	THREAD LGTH		SHANK LGTH		721	AUTO FAST	D60	ROCKET/			RS22/ HD22
	IN.	(MM)	IN.	(MM)				D45A	COBRA		
1623WK	3/4	(19.1)	1/2	Knurled (12.7)	■	■	■	■	■	■	■
1642W	1/2	(12.7)	1	(25.4)	■	■	■	■	■	■	■
1643W	3/4	(19.1)	1	(25.4)	■	■	■	■	■	■	■

Shank diameter = .145

Ramset collated Gas Tool Fasteners are specifically engineered for optimal performance in Ramset Gas Power Tools using fastener magazines.

Selection Charts

TRAKFAST STANDARD FUEL/PIN PACK *For high volume, repetitive fastenings to concrete and steel such as drywall track to concrete.*

1000 Pins and 1 Fuel Cell per box.



PART NUMBER	PIN LENGTH IN. (MM)	DESCRIPTION	TF1100	T2
FPP012	1/2 (12.7)	1/2" Plated steel pin	■	
FPP034B	3/4 (19.1)	3/4" Black pin	■	
FPP100	1 (25.4)	1" Plated pin	■	
FPP114	1-1/4 (31.8)	1-1/4" Plated pin	■	

Shank diameter = .109
Head diameter = .250

PREMIUM STEP SHANK FUEL/PIN PACK *For high volume, repetitive fastenings to hard concrete and hard steel such as drywall track to hard concrete and steel.*

1000 Pins and 1 Fuel Cell per box.



PART NUMBER	PIN LENGTH IN. (MM)	DESCRIPTION	TF1100	T2
FPP012S	1/2 (12.7)	1/2" Plated step shank pin	■	
FPP034S	3/4 (19.1)	3/4" Plated step shank pin	■	
FPP012SR	1/2 (12.7)	1/2" Plated step shank pin		■
FPP034SR	3/4 (19.1)	3/4" Plated step shank pin		■

Shank diameter = .104 / .118
Head diameter = .250

TRAKFAST BREAKAWAY STRIP FUEL/PIN PACK *For high volume, repetitive fastenings to concrete such as wood furring to concrete.*

1000 Pins and 1 Fuel Cell per box. Collation designed to breakaway on impact.



PART NUMBER	PIN LENGTH IN. (MM)	DESCRIPTION	TF1100	T2
FPP034T	3/4 (19.1)	3/4" Plated pin	■	
FPP100T	1 (25.4)	1" Plated pin	■	
FPP114T	1-1/4 (31.8)	1-1/4" Plated pin	■	
FPP112T	1-1/2 (38.1)	1-1/2" Plated pin	■	

Shank diameter = .109
Head diameter = .250

Selection Charts

PLY138 – TRAKFAST PLYWOOD PIN *For attaching plywood to metal studs.*

1000 Pins and 1 Fuel Cell per box.



SPECIFICATIONS

Fastener Length: 1-3/8"
 Shank Diameter: .100 dia. (before knurl)
 Head Diameter: .250
 Helical Knurled Shank
 Mechanical Zinc Plated

Can Be Used With:
 Wood Sheathings: 3/8", 1/2", 5/8", 3/4"
 Steel Stud Gauges: 16, 18, 20
 (also works well in 12- and 14-gauge)

ADVANTAGES

vs. Screws

- 3 - 5 times faster than screw installation.
- No worrying about electrical cords.

vs. Air Systems

- No set-up and tear down time.
- No hassling with compressors or hoses.

Strip

- Collation strip breaks away upon impact, allowing the head of the pin to recess into the wood for a nice, clean look.
- 10-pin strips transfer easily from the operator's pouch to the TrakFast tool, eliminating waste.

Pins

- Hardened steel pin ensures a clean penetration of the fastener — no dimpling of the stud.
- Knurled helical shank gives the fastener superior holding values.
- Zinc plated for corrosion resistance.

TEK034 – TEK PIN KNURLED FASTENER *For attaching 14-, 16-, 18-gauge stud to track and other metal to metal applications.*

1000 Pins and 1 Fuel Cell per box.



SPECIFICATIONS

Fastener Length: 3/4"
 Shank Diameter: .109 dia. (over the knurl)
 Head Diameter: .250
 Helical Knurled Shank
 Mechanical Zinc Plated

Can Be Used With:
 Steel Stud Gauges: 12, 14, 16, 18 and 20.

ADVANTAGES

TrakFast TekPin Revolutionizes Metal-to-Metal Fastening. This changes commercial framing forever ... and without ever picking up a screw gun!

Build your walls, box headers and other metal-to-metal applications faster than ever. The TekPin speeds your work up to 5 times faster than using conventional drilling.

The TekPin also finishes flush to the surface, where traditional fasteners stick out. Slide the TekPin in the TrakFast or T2 magazine and there's nothing to fall on the floor like traditional sheet metal screws.

The TekPin is another example of Ramset being First, Fast and Focused as the specialist for the drywall trade.

Excellent withdrawal and shear loads.

Knurls cinch connections tight.

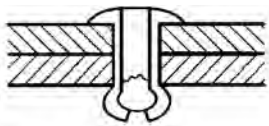
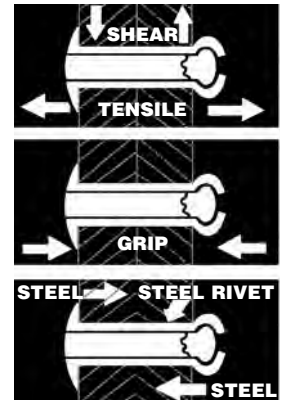
Great for finish work because head drives flat.

Perfect for blocking and bracing applications.

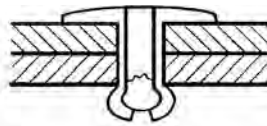
Easy removal.

Reduced operator fatigue.

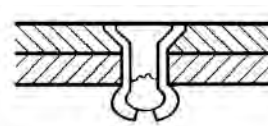
1. The shear and tensile strength of the rivet selected and the number of rivets used in the application should equal or exceed the joint strength requirements. Typical ultimate shear and tensile values of KLIK-FAST rivets are listed by rivet body diameter and alloy.
2. Determine the total material thickness to be joined. Select the rivet that equals or exceeds the application thickness.
3. The rivet body alloy, in addition to being chosen for strength requirements, should also be selected for compatibility with the materials to be joined to avoid galvanic corrosion caused by coupling dissimilar metals.



BUTTONHEAD KLIK-FAST RIVETS are the most popular for industrial applications. The low profile head diameter is twice the rivet body diameter, providing adequate bearing surface for nearly all applications.



LARGE FLANGE KLIK-FAST RIVETS provide greater bearing surface for fastening soft and brittle facing materials such as plywood and plastics including neoprene, vinyl, etc.

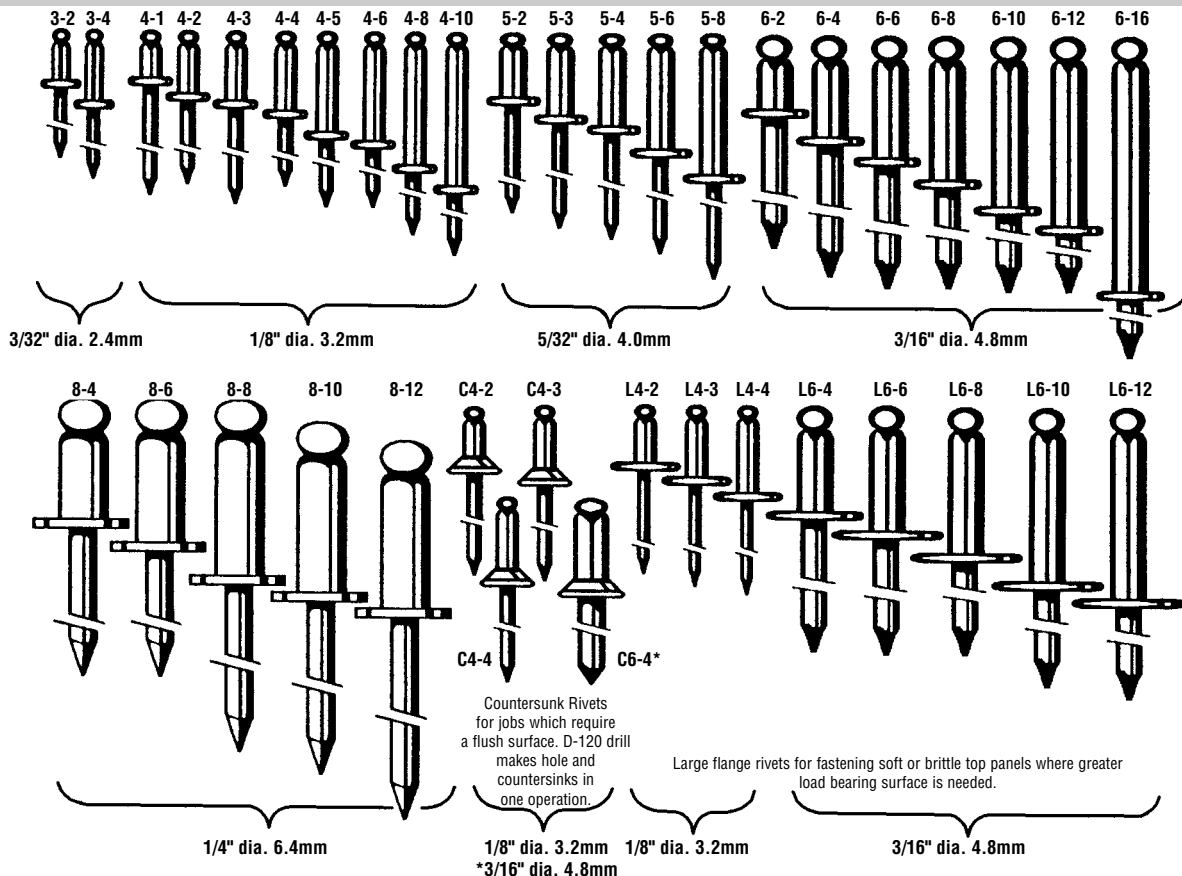


120° COUNTERSUNK KLIK-FAST RIVETS are for applications where a flush appearance is required.



CLOSED-END KLIK-FAST RIVETS provide up to 45% greater shear strength over equivalent open-end rivets, have 100% mandrel retention and are moisture resistant when used in the proper hole.

ACTUAL SIZE RIVET CHART





5052 ALUMINUM RIVET • ALUMINUM MANDREL • IFI GRADE 11

BUTTONHEAD

AFS Part No.	Rivet Dia. Nom. Inch (mm)	Drill No. & Hole Size (mm)	Head Dia. Nom. Inch (mm)	Head Height Max. Inch (mm)	Rivet Length Max.		Grip Range		Typical Ultimate Strength (Lbs.) (newtons)	
					Inch	(mm)	Inch	(mm)	Shear	Tensile
AB3-2A	3/32" (.094)	#41 (.097-.100)	.188	.032	.250	6.4	.032-.125	0.8-3.2	80	120
AB3-4A	2.4	2.5 (2.46-2.54)	4.78	0.81	.375	9.5	.126-.250	3.3-6.4	355	533
AB4-1A	1/8" (.125)	#30 (.129-.133)	.250	.040	.212	5.4	.032-.062	0.8-1.6	155	240
AB4-2A	3.2	3.3 (3.28-3.38)	6.35	1.02	.275	7.0	.063-.125	1.7-3.2	689	1067
AB4-3A					.337	8.6	.126-.187	3.3-4.8		
AB4-4A					.400	10.2	.188-.250	4.9-6.4		
AB4-5A					.462	11.7	.251-.312	6.5-7.9		
AB4-6A					.525	13.4	.313-.375	8.0-9.5		
AB4-8A					.650	16.5	.376-.500	9.6-12.7		
AB4-10A					.775	19.7	.501-.625	12.8-15.9		
AB5-2A	5/32" (.156)	#20 (.160-.164)	.312	.050	.300	7.6	.062-.125	1.6-3.2	230	340
AB5-3A	4.0	4.1 (4.06-4.16)	7.92	1.27	.362	9.2	.126-.187	3.3-4.8	1023	1512
AB5-4A					.425	10.8	.188-.250	4.9-6.4		
AB5-6A					.550	14.0	.251-.375	6.5-9.5		
AB5-8A					.675	17.2	.376-.500	9.6-12.7		
AB5-10A					.800	20.3	.501-.625	12.7-17.1		
AB5-12A					.925	23.5	.626-.750	17.2-19.1		
AB6-2A	3/16" (.187)	#11 (.192-.196)	.375	.060	.325	8.3	.062-.125	1.6-3.2	330	515
AB6-4A	4.8	4.9 (4.88-4.98)	9.53	1.52	.450	11.5	.126-.250	3.3-6.4	1467	2290
AB6-6A					.575	14.6	.251-.375	6.5-9.5		
AB6-8A					.700	17.8	.376-.500	9.6-12.7		
AB6-10A					.825	21.0	.501-.625	12.8-15.9		
AB6-12A					.950	24.2	.626-.750	16.0-19.1		
AB6-14A					1.075	27.3	.751-.875	19.1-22.2		
AB6-16A					1.200	30.5	.751-1.00	19.2-25.4		
AB6-20A					1.450	36.8	1.125-1.250	28.6-31.8		
AB8-4A	1/4" (.250)	F (.257-.261)	.500	.080	.500	12.7	.062-.250	1.6-6.4	600	800
AB8-6A	6.4	6.5 (6.53-6.63)	12.70	1.88	.625	15.9	.251-.375	6.5-9.5	2668	3558
AB8-8A					.750	19.1	.376-.500	9.6-12.7		
AB8-10A					.875	21.0	.501-.625	12.8-15.9		
AB8-12A					1.000	25.4	.626-.750	16.0-19.1		
AB8-14A					1.125	28.6	.751-.875	19.1-22.2		

LARGE FLANGE

ABL4-2A	1/8" (.125)	#30 (.129-.133)	.375	.065	.275	7.0	.032-.125	0.8-3.2	155	240
ABL4-3A	3.2	3.3 (3.28-3.38)	9.53	1.14	.337	8.6	.126-.187	3.3-4.8	689	1067
ABL4-4A					.400	10.2	.188-.250	4.9-6.4		
ABL4-6A					.525	13.3	.251-.375	6.5-9.5		
ABL4-8A					.650	16.5	.376-.500	9.6-12.7		
ABL5-4A	5/32" (.156)	#20 (.160-.164)	.468	.070	.425	10.8	.063-.250	1.6-6.4	230	340
	4.0	4.1 (4.06-4.16)	11.9	1.20					1023	1512
ABL6-4A	3/16" (.187)	#11 (.192-.196)	.615	.090	.450	11.5	.062-.250	1.6-6.4	330	515
ABL6-6A	4.8	4.9 (4.88-4.98)	15.88	2.28	.575	14.6	.251-.375	6.5-9.5	1467	2290
ABL6-8A					.700	17.8	.376-.500	9.6-12.7		
ABL6-10A					.825	21.0	.501-.625	12.8-15.9		
ABL6-12A					.950	24.2	.626-.750	16.0-19.1		
ABL6-16A					1.200	30.5	.875-1.00	22.2-25.4		
ABL6-20A					1.450	36.8	1.125-1.250	28.6-31.8		

120° COUNTERSUNK

AC4-2A	1/8" (.125)	#30 (.129-.133)	.220	.031 REF	.275	7.0	.062-.125	1.6-3.2	155	240
AC4-3A	3.2	3.3 (3.28-3.38)	5.59	1.14	.337	8.6	.126-.187	3.3-4.8	689	1050
AC4-4A					.400	10.2	.188-.250	4.9-6.4		
AC4-6A					.525	13.3	.251-.375	6.5-9.5		
AC5-4A	5/32" (.156)	#20 (.160-.164)	.281	.040 REF	.425	10.8	.188-.250	4.9-6.4	230	340
AC5-6A	4.0	4.1 (4.06-4.16)	7.2	1.20	.550	14.0	.251-.375	6.5-9.5	1020	1512
AC6-4A	3/16" (.187)	#11 (.192-.196)	.350	.050 REF	.407	10.3	.126-.250	3.3-6.4	330	515
AC6-6A	4.8	4.9 (4.88-4.98)	8.89	1.27	.575	14.6	.251-.375	6.5-9.5	1467	2290
AC6-8A					.700	17.8	.376-.500	9.6-12.7		

KLIK-FAST RIVETS conform to IFI-114 (inch) and IFI-505 (metric). Millimeters (mm) and newtons (N) are in gray.



**HP-2®/39000**

The HP-2 is the largest selling hand rivet tool in the industry. Known and trusted for durability, quality and performance, the HP-2 is often copied but never equaled. Its square shoulder fulcrum pin of cold-formed heat-treated steel prevents pin rotation that can elongate the engaging holes and cause premature tool failure in imitation tools. Other quality features include: precision die-case, high-strength aluminum alloy body; drop-forged carbon steel upper handle; and thick, cushion-molded vinyl grips for comfort. The HP-2 sets up to 3/16" steel rivets and comes with four mounted nosepieces (3/32", 1/8", 5/32" and 3/16") and a service wrench. Weight: 1.2 lbs.

**KLIK-TURN™ SP-1/39005**

The SP-1 swivel head hand-held rivet tool features a patented positive-ratchet locking feature which will allow the swivel head section of the tool to turn 360° and hold in place in any of the forty-plus positions. The high-strength steel body and cast aluminum head complement this new design in a swivel head riveting tool. The SP-1 also includes built-in threaded nosepiece storage holes and a service wrench. The SP-1 sets up to 3/16" steel rivets. Weight: 1.2 lbs.

**200 KIT™/39001**

The deluxe hand riveter kit includes the HP-2 and 200 assorted Klik-Fast rivets in popular sizes. The molded plastic case houses and protects the tool, rivets and optional countersink double ended drill bit. Weight: 4 lbs.

STAINLESS STEEL KIT/39003

This kit is the same as our 39001, but contains 200 assorted Klik-Fast stainless steel rivets. Weight: 4 lbs.

THE KLIKER®/39040

The Kliker is a perfect medium duty too. Sets all 1/8" to 5/32" steel, and 3/16" all aluminum Klik-Fast rivets. The Kliker comes packaged in a heavy-duty vinyl pouch with an assortment of Klik-Fast rivets and washers. Weight: 1 lb.



THREAD REPAIR KITS & MASTER SETS

Heli-Coil inserts are available in repair kits and sets for repairing tapped holes which have been stripped or damaged due to wear, corrosion and overtorque. They are available in inch, metric, spark plug and pipe series.

All kits have a quantity of inserts, the proper size drill, high speed steel Heli-Coil tap and an installation tool.

The Professional Kits also include a tang removal tool and quantities of three lengths of inserts.

Thread Size	Kit P/N per	Inserts Kit
Metric Coarse		
M3x0.5	5403-3	36*
M3.5x0.6	5403-3.5	36*
M4x0.7	5403-4	18*
M5x0.8	5403-5	18*
M6x1	5403-6	18*
M7x1	5403-7	18*
M8x1.25	5403-8	18*
M9x1.25	5403-9	12
M10x1.5	5403-10	18*
M11x1.5	5403-11	6
M12x1.75	5403-12	18*
M14x2	5403-14	12
M16x2	5403-16	6
M18x2.5	5403-18	6
M20x2.5	5403-20	4

Metric Fine		
M8x1	5404-8	18*
M10x1	5404-10	18*
M10x1.25	5405-10	18*
M12x1.25	5405-12	18*
M12x1.5	5406-12	18*
M14x1.5	5406-14	6
M16x1.5	5406-16	6
M18x1.5	5406-18	6

* The total quantity of inserts in the Professional Kits represent 3 lengths.



MASTER THREAD REPAIR SETS

Type	Part No.	Insert sizes included in set
Inch Coarse	4934	1/4-20, 5/16-18, 3/8-16, 7/16-14, 1/2-13, 5/8-11
Inch Fine	4936	10-32, 1/4-28, 5/16-24, 3/8-24, 7/16-20, 1/2-20
Metric	4937-125	M5x0.8, M6x1, M8x1.25, M10x1.25
Metric	4937-150	M5x0.8, M6x1, M8x1.25, M10x1.5

All sets contain a drill, tap, tool and inserts for each size listed above. See Heli-Coil Bulletin 998 for a complete listing of all Heli-Coil thread repair products.

Please call us for more information if you don't see the size you need listed here.

**Emhart
Teknologies**
A BLACK & DECKER COMPANY

Thread Size	Kit P/N	Inserts per Kit
Inch Coarse		
4-40	5401-04	36*
5-40	5401-05	36*
6-32	5401-06	36*
8-32	5401-2	36*
10-24	5401-3	36*
12-24	5401-1	36*
1/4-20	5401-4	36*
5/16-18	5401-5	36*
3/8-16	5401-6	18*
7/16-14	5401-7	18*
1/2-13	5401-8	18*
9/16-12	5401-9	6
5/8-11	5401-10	6
3/4-10	5401-12	4
7/8-9	5521-14	6
1-8	5521-16	6
1-1/8-7	5521-18	5
1-1/4-7	5521-20	4
1-3/8-6	5521-22	4
1-1/2-6	5521-24	4
Inch Fine		
6-40	5402-06	36*
8-36	5402-2	36*
10-32	5402-3	36*
1/4-28	5402-4	36*
5/16-24	5402-5	36*
3/8-24	5402-6	18*
7/16-20	5402-7	18*
1/2-20	5402-8	18*
9/16-18	5402-9	6
5/8-18	5402-10	6
3/4-16	5402-12	4
7/8-14	5528-14	6
1-14	5528-16	6
1-12	5528-161	6
1-1/8-12	5528-18	5
1-1/4-12	5528-20	4
1-3/8-12	5528-22	4
1-1/2-12	5528-24	4

* The total quantity of inserts in the Professional Kits represent 3 lengths.

SPARK PLUG SERIES			
Thread Size	Part No.	Reach	Inserts Per Kit
10-1.0mm	5523-10	1/2	24
12-1.25mm	5523-12	1/2	12
		3/4	12
		3/8	6
14-1.25mm	5523-14	7/16	6
		1/2	6
		3/4	6
18-1.50mm	5523-18	.472	6
		1/2	24
		1/2-5/8	10
M14x1.25	5408-14	Short	6
		Normal	6
		Long	6

PIPE THREAD SERIES		
Thread Size	Part No.	Inserts Per Kit
1/8-27	5407-2	12
1/4-18	5407-4	12
3/8-18	5407-6	10
1/2-14	5407-8	10
3/4-14	5407-12	10
1-11-1/2	5407-16	6

All sets contain a drill, tap, tool and inserts for each size listed above. See Heli-Coil Bulletin 998 for a complete listing of all Heli-Coil thread repair products.

NOMINAL WRENCH OPENINGS

Nominal Wrench Openings as related to American National Standards Institute Bolts and Nut Sizes.

Nominal Wrench Opening	Regular Series Hex and Square Nuts and Bolts		Heavy Series Hex and Square Nuts Hex Head Bolts		Finished Series Regular and Thick Hex Nuts Hex Head Bolts		For Hex Head CAP Screws Diameters of Screws	For Square Head Set Screws Diameters of Screws	For Square or Hex Machines Screw Nuts and Stove Bolts Nuts Size or Diam.
	For Nuts For These Sizes of Bolts	For Heads of Bolts of These Diameters	For Nuts for These Sizes of Bolts	For Heads of Bolts of These Diameters	For Nuts For These Sizes of Bolts	For Heads of Bolts of These Diameter			
5/32									No. 0 and 1
3/16								No. 10	No. 2 and 3
7/32								No. 12	
1/4								1/4	No. 4
5/16								5/16	No. 5 and 6
11/32									No. 8
3/8		1/4						3/8	No. 10
7/16	1/4	1/4			1/4	1/4	1/4	7/16	No. 12 and 1/4
1/2		5/16	1/4		5/16	5/16	5/16	1/2	
9/16	5/16	3/8	5/16		3/8	3/8	3/8	9/16	5/16
19/32									
5/8	3/8	7/16				7/16	7/16	5/8	3/8
11/16			3/8		7/16				
3/4	7/16	1/2	7/16		1/2	1/2	1/2	3/4	
25/32									
13/16	1/2	9/16				9/16	9/16		
7/8	9/16		1/2	1/2	9/16			7/8	
15/16		5/8	9/16		5/8	5/8	5/8		
1	5/8							1	
1-1/16			5/8	5/8					
1-1/8	3/4	3/4			3/4	3/4	3/4	1-1/8	
1-1/4			3/4	3/4				1-1/4	
1-5/16	7/8	7/8			7/8	7/8	7/8		
1-3/8								1-3/8	
1-7/16			7/8	7/8					
1-1/2	1	1			1	1	1	1-1/2	
1-5/8			1	1					
1-11/16	1-1/8	1-1/8			1-1/8	1-1/8	1-1/8		
1-13/16			1-1/8	1-1/8					
1-7/8	1-1/4	1-1/4			1-1/4	1-1/4	1-1/4		
2			1-1/4	1-1/4					
2-1/16	1-3/8	1-3/8			1-3/8	1-3/8	1-3/8		
2-3/16			1-3/8	1-3/8					
2-1/4	1-1/2	1-1/2			1-1/2	1-1/2	1-1/2		
2-3/8			1-1/2	1-1/2					
2-7/16	1-5/8	1-5/8			1-5/8	1-5/8			
2-9/16			1-5/8	1-5/8					
2-5/8	1-3/4	1-3/4			1-3/4	1-3/4			
2-3/4			1-3/4	1-3/4					
2-13/16	1-7/8	1-7/8			1-7/8	1-7/8			
2-15/16			1-7/8	1-7/8					
3	2	2			2	2			
3-1/8			2	2					
3-1/4	2-1/4	2-1/4			2-1/4	2-1/4			
3-1/2			2-1/4	2-1/4					
3-3/4	2-1/2	2-1/2			2-1/2	2-1/2			
3-7/8			2-1/2	2-1/2					
4-1/8	2-3/4	2-3/4			2-3/4	2-3/4			
4-1/4			2-3/4	2-3/4					
4-1/2	3	3			3	3			
4-5/8			3	3					
4-7/8		3-1/4							
5			3-1/4						
5-1/4		3-1/2							
5-3/8			3-1/2						
5-5/8		3-3/4							
5-3/4			3-3/4						



A material's R-value is the measure of its resistance to heat flow. It is important to know the R-value because many states or regions require that a roof system have a minimum amount of thermal resistance on commercial, industrial and/or institutional buildings. The way it works is simple: the higher the R-value, the more the material insulates.

Some common roofing materials and their corresponding values for Thermal Conductance (C) and Thermal Resistance (R) are shown in the following table.

Material	Thickness In Inches	C-Value	R-Value
Metal	N/A	0.000	0.00
Concrete	1.0	3.333	0.30
Gypsum	1.0	1.667	0.60
Wood	1.0	1.099	0.91
Tectum	1.0	0.500	2.00
Inside Air Film	N/A	1.087	0.92
Outside Air Film - Summer	N/A	4.000	0.25
Outside Air Film - Winter	N/A	5.882	0.17
Vapor Retarders	N/A	0.000	0.00
BUR Gravel	N/A	2.941	0.34
BUR Smooth	N/A	4.167	0.24
Fiberboard	1.0	0.360	2.78
Perlite	1.0	0.360	2.78
Phenolic Foam*	1.0	0.120	8.30
Fiber Glass	1.0	0.256	3.90
Polyisocyanurate	1.0	0.180	5.56
Polyisocyanurate Composite	1.5	0.240	4.17
Polystyrene Bead Board	1.0	0.280	3.57
Polystyrene Composite Board	1.5	0.301	3.32
Polystyrene - Expanded (EPS)**	1.0	0.260	3.85
Polystyrene - Extruded (XEPS)***	1.0	0.200	5.00
Sprayed Polyurethane Foam****	1.0	0.150	6.88
Cork	1.0	0.280	3.57

* Problems have been reported with regard to the use of Phenolic Foam roof insulation. Incidents of deck corrosion have been reported in cases where the insulation is in direct contact with steel roof decks and there is moisture present.

** Molded, Expanded Polystyrene Insulation, also referred to as MEPS, can have an R-value that will vary from less than 4.00 to slightly more than 4.00. The amount shown is an average amount used for roof system R-value calculations.

*** Extruded, Expanded Polystyrene Insulation is commonly used in Inverted Roof Membrane Assemblies (IRMA).

****Sprayed Polyurethane Foam (SPF) will have an R-Value of 7.14 when it is newly installed. After it ages a few months, the R-Value will reduce to somewhere around 6.88.

The C-Value (C) is a measure of the Thermal Conductance of the material and is the reciprocal of R, or

$$C = \frac{1}{R}$$

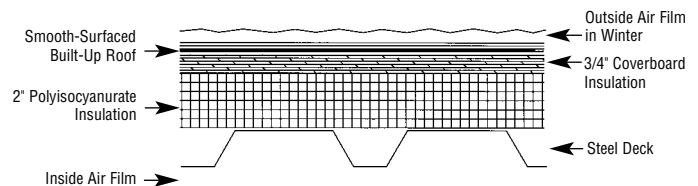
C is determined only when the Thermal Conductivity (k) of a material is known.

$$C = \frac{k}{\text{Thickness In Inches}}$$

Thermal Conductivity is the measure of the amount heat that will be transmitted through a one inch (1") thick piece of homogenous material, one square foot (1 ft.²) in size, in one (1) hour, when there is a one degree Fahrenheit (1°F) temperature change. The equation for "k" is:

$$k = \frac{\text{BTU} \cdot \text{inch}}{\text{sq. ft.} \cdot \text{hour} \cdot ^\circ\text{F}}$$

Now let's see how easy it is to figure the R-Value. First of all, you need to know what the components of the roof system are. We're going to figure the value of some common ones. Let's assume the roof system consists of a smooth-surfaced built-up over 3/4" of perlite coverboard over 2" polyisocyanurate insulation on a steel deck in the winter. The season makes a difference with the value of the outside air film. Let's start from the inside and go out.



COMPONENT	R-VALUE
Inside Air Film	0.92
Steel Deck	0.00
2" Polyisocyanurate (5.56 * 2)	11.12
3/4" Perlite (2.78 * 0.75)	2.09
Smooth Built-Up Roof	0.24
Outside Air Film in Winter	0.17
TOTAL	14.54

Total R-Value for the above roof system is 14.54.

EQUIVALENT MEASURES AND MULTIPLIERS

LINEAR MEASURE

12 inches = 1 foot
3 feet = 1 yard
5½ yards = 1 rod
40 rods = 1 furlong
8 furlongs = 1 mile

EQUIVALENT VALUES

Inches	Feet	Yards	Rods	Furlongs	Miles
36	= 3	= 1			
198	= 16.5	= 5.5	= 1		
1,920	= 660	= 220	= 40	= 1	
93,360	= 5,280	= 1,760	= 320	= 8	= 1

SQUARE MEASURE

144 square inches = 1 square foot
9 square feet = 1 square yard
30¼ square yards = 1 square rod
160 square rods = 1 acre
640 acres = 1 square mile

EQUIVALENT VALUES

1 square mile = 640 acres = 102,400 square rods =
3,097,600 square yards
1 square mile = 27,878,400 square feet =
4,014,489,600 square inches

CUBIC MEASURE

1,728 cubic inches = 1 cubic foot
27 cubic feet = 1 cubic yard
128 cubic feet = 1 cord
24¾ cubic feet = 1 perch
1 cubic yard = 27 cubic feet = 46,656 cubic inches

WEIGHT — AVOIRDUPOIS

437½ grains = 1 ounce
16 ounces = 1 pound
100 pounds = 1 hundredweight
2,000 pounds = 1 ton
2,240 pounds = 1 long ton
1 ton = 20 cwt = 2,000 pounds = 32,000 ounces =
14,000,000 grains
1 pound avdp = 7,000 grains

WEIGHT — TROY

24 grains = 1 pennyweight
20 pennyweights = 1 ounce
12 ounces = 1 pound
1 pound = 12 ounces = 240 pennyweights = 5,760 grains

DRY MEASURE

2 pints = 1 quart
8 quarts = 1 peck
4 pecks = 1 bushel
1 bushel = 4 pecks = 32 quarts = 64 pints
U.S. bushel = 2,150.42 cu. in.
British = 2,218.19 cu. in.

LIQUID MEASURE

4 gills = 1 pint
2 pints = 1 quart
4 quarts = 1 gallon
The Imperial gallon contains 277.41 cu. in. = 0.1605 cu. ft.
1 cubic foot of water = 6.2321 Imperial gallons and weighs
62.321 lbs.
1 Imperial gallon of water weighs 10 lbs.

MEASURE OF ANGLES OR ARCS

60 seconds = 1 minute
60 minutes = 1 degree
90 degrees = 1 right angle or quadrant
360 degrees = 1 circle
1 circle = 360° = 21,600' = 1,296,000"
1 minute of arc on the earth's surface = 1 nautical mile =
1.17 times a land mile or 6,080 feet.

MARINERS' MEASURE

6 feet = 1 fathom
5,280 feet = 1 statute mile
120 fathoms = 1 cable length
6080 feet = 1 nautical mile
7½ cable lengths = 1 mile

MISCELLANEOUS

3 inches = 1 palm
4 inches = 1 hand
9 inches = 1 span
12 articles = 1 dozen
12 dozen = 1 gross
12 gross = 1 great gross
2 articles = 1 pair
18 inches = 1 cubit
21.8 inches = 1 Bible cubit
2½ feet = 1 military pace
1 league = 3 miles
20 articles = 1 score
25 sheets = 1 quire
20 quires = 1 ream

TABLE OF MULTIPLIERS

Diameter of a circle X 3.1416 = Circumference.
Radius of a circle X 6.283185 = Circumference.
Square of the radius of a circle X 3.1416 = Area.
Square of the diameter of a circle X 0.7854 = Area.
Square of the circumference of a circle X 0.07958 = Area.
Half of the circumference of a circle X half its diameter = Area.
Circumference of a circle X 0.159155 = Radius.
Square root of the area of a circle X 0.56419 = Radius.
Circumference of a circle X 0.31831 = Diameter.
Square root of the area of a circle X 1.12838 = Diameter.
Diameter of a circle X 0.866 = Side of an inscribed
equilateral triangle.
Diameter of a circle X 0.7071 = Side of an inscribed square.
Circumference of a circle X 0.225 = Side of an inscribed square.
Circumference of a circle X 0.282 = Side of an equal square.

Diameter of a circle X 0.8862 = Side of an equal square.
Base of a triangle X half the altitude = Area.
Multiplying both diameters and .7854 together = Area of an ellipse.
Surface of a sphere X one-sixth of its diameter = Volume.
Circumference of a sphere X its diameter = Surface.
Square of the diameter of a sphere X 3.1416 = Surface.
Square of the circumference of a sphere X 0.3183 = Surface.
Cube of the diameter of a sphere X 0.5236 = Volume.
Cube of the circumference of a sphere X 0.016887 = Volume.
Radius of a sphere X 1.1547 = Side of an inscribed cube.
Area of its base X one-third of its altitude = Volume of a cone or
pyramid, whether round, square or triangular.
Area of one of its sides X 6 = Surface of a cube.
Altitude of trapezoid X one-half the sum of its parallel sides = Area.



CONVERSION CHARTS

FRACTION - DECIMAL CONVERSION CHART

	Inches	Millimeters		Inches	Millimeters
$\frac{1}{64}$	.015625	.3969	$\frac{33}{64}$	.515625	13.0969
$\frac{1}{32}$	.03125	.7938	$\frac{17}{32}$	.53125	13.4938
$\frac{3}{64}$	.046875	1.1906	$\frac{35}{64}$	.546875	13.8907
$\frac{1}{16}$	.0625	1.5875	$\frac{9}{16}$	.5625	14.2876
$\frac{5}{64}$	.078125	1.9844	$\frac{37}{64}$	.578125	14.6844
$\frac{3}{32}$	.09375	2.3813	$\frac{19}{32}$	.59375	15.0813
$\frac{7}{64}$	.109375	2.7781	$\frac{39}{64}$	.609375	15.4782
$\frac{1}{8}$	.125	3.1750	$\frac{5}{8}$	.625	15.8751
$\frac{9}{64}$	.140625	3.5719	$\frac{41}{64}$	.640625	16.2719
$\frac{5}{32}$	.15625	3.9688	$\frac{21}{32}$	.65625	16.6688
$\frac{11}{64}$	.171875	4.3656	$\frac{43}{64}$	.671875	17.0657
$\frac{3}{16}$	.1875	4.7625	$\frac{11}{16}$	.6875	17.4625
$\frac{13}{64}$	.203125	5.1594	$\frac{45}{64}$	.703125	17.8594
$\frac{7}{32}$	.21875	5.5563	$\frac{23}{32}$	.71875	18.2563
$\frac{15}{64}$	.234375	5.9531	$\frac{47}{64}$	.734375	18.6532
$\frac{1}{4}$	.250	6.3500	$\frac{3}{4}$	.750	19.0501
$\frac{17}{64}$	.265625	6.7469	$\frac{49}{64}$	.765625	19.4470
$\frac{9}{32}$	.28125	7.1438	$\frac{25}{32}$	.78125	19.8438
$\frac{19}{64}$	.296875	7.5406	$\frac{51}{64}$	.796875	20.2407
$\frac{5}{16}$	.3125	7.9375	$\frac{13}{16}$	.8125	20.6376
$\frac{21}{64}$	.328125	8.3344	$\frac{53}{64}$	.828125	21.0345
$\frac{11}{32}$	.34375	8.7313	$\frac{27}{32}$	.84375	21.4313
$\frac{23}{64}$	.359375	9.1282	$\frac{55}{64}$	.859375	21.8282
$\frac{3}{8}$	.375	9.5250	$\frac{7}{8}$	.875	22.2251
$\frac{25}{64}$	.390625	9.9219	$\frac{57}{64}$	.890625	22.6220
$\frac{13}{32}$	.40625	10.3188	$\frac{29}{32}$	.90625	23.0188
$\frac{27}{64}$	.421875	10.7157	$\frac{59}{64}$	.921875	23.4157
$\frac{7}{16}$	.4375	11.1125	$\frac{15}{16}$	.9375	23.8126
$\frac{29}{64}$	.453125	11.5094	$\frac{61}{64}$	.953125	24.2095
$\frac{15}{32}$	.46875	11.9063	$\frac{31}{32}$	.96875	24.6063
$\frac{31}{64}$	.484375	12.3032	$\frac{63}{64}$	.984375	25.0032
$\frac{1}{2}$	.500	12.7001	1	1.000	25.4001

TEMPERATURE CONVERSIONS

Look up reading in middle column (shaded). If in degrees Centigrade, read Fahrenheit equivalent in right-hand column; if in degrees Fahrenheit, read Centigrade equivalent in left-hand column.

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
-73	-100	-148	5.0	41	105.8	33.3	92	197.6	
-68	-90	-130	5.6	42	107.6	33.9	93	199.4	
-62	-80	-112	6.1	43	109.4	34.4	94	201.2	
-57	-70	-94	6.7	44	111.2	35.0	95	203.0	
-51	-60	-76	7.2	45	113.0	35.6	96	204.8	
-46	-50	-58	7.8	46	114.8	36.1	97	206.6	
-40	-40	-40	8.3	47	116.6	36.7	98	208.4	
-34	-30	-22	8.9	48	118.4	37.2	99	210.2	
-29	-20	-4	9.4	49	120.2	37.8	100	212.0	
-23	-10	14	10.0	50	122.0				
-17.8	0	32	10.6	51	123.8	43	110	230	
-17.2	1	33.8	11.1	52	125.6	49	120	248	
-16.7	2	35.6	11.7	53	127.4	54	130	266	
-16.1	3	37.4	12.2	54	129.2	60	140	284	
-15.6	4	39.2	12.8	55	131.0	66	150	302	
-15.0	5	41.0	13.3	56	132.8	71	160	320	
-14.4	6	42.8	13.9	57	134.6	77	170	338	
-13.9	7	44.6	14.4	58	136.4	82	180	356	
-13.3	8	46.4	15.0	59	138.2	88	190	374	
-12.8	9	48.2	15.6	60	140.0	93	200	392	
-12.2	10	50.0	16.1	61	141.8	99	210	410	
-11.7	11	51.8	16.7	62	143.6	100	212	413.6	
-11.1	12	53.6	17.2	63	145.4	104	220	428	
-10.6	13	55.4	17.8	64	147.2	110	230	446	
-10.0	14	57.2	18.3	65	149.0	116	240	464	
-9.4	15	59.0	18.9	66	150.8	121	250	482	
-8.9	16	60.8	19.4	67	152.6	127	260	500	
-8.3	17	62.6	20.0	68	154.4	132	270	518	
-7.8	18	64.4	20.6	69	156.2	138	280	536	
-7.2	19	66.2	21.1	70	158.0	143	290	554	
-6.7	20	68.0	21.7	71	159.8	149	300	572	
-6.1	21	69.8	22.2	72	161.6	154	310	590	
-5.6	22	71.6	22.8	73	163.4	160	320	608	
-5.0	23	73.4	23.3	74	165.2	166	330	626	
-4.4	24	75.2	23.9	75	167.0	170	338	640	
-3.9	25	77.0	24.4	76	168.8	171	340	644	
-3.3	26	78.8	25.0	77	170.6	177	350	662	
-2.8	27	80.6	25.6	78	172.4	182	360	680	
-2.2	28	82.4	26.1	79	174.2	186	366	691	
-1.7	29	84.2	26.7	80	176.0	188	370	698	
-1.1	30	86.0	27.2	81	177.8	193	380	716	
-.6	31	87.8	27.8	82	179.6	198	388	730	
0	32	89.6	28.3	83	181.4	199	390	734	
.6	33	91.4	28.9	84	183.2	204	400	752	
1.1	34	93.2	29.4	85	185.0	208	406	763	
1.7	35	95.0	30.0	86	186.8	210	410	770	
2.2	36	96.8	30.6	87	188.6	216	420	788	
2.8	37	98.6	31.1	88	190.4	221	430	806	
3.3	38	100.4	31.7	89	192.2	227	440	824	
3.9	39	102.2	32.2	90	194.0	232	450	842	
4.4	40	104.0	32.8	91	195.8				

PIPE THREADING CHART

THREADING INFORMATION

Abbreviation	System Name	Compatibility	Seal Method
BSPP	British Standard Pipe Parallel	Male BSPP with Female BSPP Female BSPP with Male BSPP Female BSPP with Male BSPT _r	Washer Washer Washer
BSPT_r	British Standard Pipe Taper	Male BSPT _r with Female BSPT _r Male BSPT _r with Female BSPP Female BSPT _r with Male BSPT _r <i>Female BSPT_r not compatible with Male BSPP</i>	Thread Washer Thread
CHT	American Standard Fire Hose Thread (1" National Hose Thread is C hemical H ose Thread, also known as Booster Hose Thread)	1" Male NH (NST) with 1" Female NH (NST) 1" Female NH (NST) with 1" Male NH (NST) 1" Thread is used on both 3/4" hose and 1" hose. <i>Not compatible with other systems</i>	Washer Washer
GHT	Garden Hose Thread	Male GHT with Female GHT Female GHT with Male GHT Thread is same for all size hose <i>Not compatible with other systems</i>	Washer Washer
IPS	Iron Pipe Straight Thread	Generic Name for Straight Pipe Thread See NPSH for compatibility	Washer
IPT	Iron Pipe Thread	Generic Name for All Pipe Thread <i>More information required</i>	
JIC	Joint Industrial Committee	Used with other mating JIC threads	Mechanical
NH or NST	American Standard Fire Hose Coupling Thread (National Hose thread also known as National Standard Thread)		Washer Washer
NPT	American Standard Taper Pipe Thread (National Pipe Tapered)	Male NPT with Female NPT Male NPT with Female NPTF Male NPT with Female NPSM Male NPT with Female NPSH Female NPT with Male NPT Female NPT with Male NPTF Female NPT not compatible with Male NPSM or Male NPSH	Thread Thread Washer Washer Thread Thread
NPTF	American Standard Taper Pipe Fuel Dryseal Thread (National Pipe Tapered Fine)	Male NPTF with Female NPTF Male NPTF with Female NPT Male NPTF with Female NPSM Male NPTF with Female NPSH Female NPTF with Male NPTF Female NPTF with Male NPT <i>Female NPTF with Male NPSM or NPSH</i> <i>Note: NPTF with NPTF threads do not require sealant for the initial use. After that, sealant is required.</i>	Thread Thread Washer Washer Thread Thread <i>Not Compatible</i>
NPSH	American Standard Straight Pipe for Hose Couplings (National Pipe Straight Hose)	Male NPSH with Female NPSH Female NPSH with Male NPSH Female NPSH with Male NPT Female NPSH with Male NPTF Female NPSH with Male NPSM	Washer Washer Washer Washer Washer
NPSM	American Standard Straight Mechanical Joints (National Pipe Straight Mechanical)	Male NPSM with Female NPSM Male NPSM with Female NPSM Female NPSM with Male NPSM Female NPSM with Male NPT Female NPSM with Male NPTF	Seal can be either mechanical or washer. Mating fittings must be of same type.
SIPT	Straight Iron Pipe Thread	Generic name for Straight Pipe Thread	Washer
TIPT	Tapered Iron Pipe Thread	Generic name for Tapered Pipe Thread	Thread
NYC	NYC Fire Department	Straight Thread used in New York City	Washer
Chicago	Chicago Fire Department	Straight Thread used in Chicago	Washer



CONVERSION TABLE

ALPHABETICAL CONVERSION TABLE

Acre 160 square rods 4840 square yards 43,560 square feet	Cubic Foot of Water 62.4 pounds 1000 ounces, approx.	Gallon British Imperial and Canadian 277.3 cubic inches 1.201 U. S. gallons Weight of 10 lb. water at 15° C. 4.546 liters
Atmosphere, one (air pressure) 14.7 lbs. per square inch	Cubic Inch 16.39 cubic centimeters	Gill 1/4 pint
Barrel 7056 cubic inches 30.5 gallons	Cubic Meter 35,315 cubic feet 1.308 cubic yards	Grain 1/700 pound avoirdupois 0.0648 gram
Board Foot 144 cubic inches 2360 cubic centimeters	Cubic Yard 27 cubic feet 0.765 cubic meter	Gram 15.43 grains 0.0353 ounce 0.0022 pound
B.T.U. (British Thermal Unit) 778 foot pounds 0.2930 watt hour 0.252 calorie	Decimeter 3.937 inches	Hand 4 inches
Bushel 2150.42 cubic inches 1-1/4 cubic feet (approx.)	Dram (Fluid) 60 grains 3.697 milliliters 4 grams (approx.)	Hectare (Square Hectometer) 2.47 acres
Calorie 1 kilogram of water at 4° C. raised 1 degree Centigrade 3.97 B.T.U.	Em, Pica (Printing Industry) 1/6 of an inch Fathom (Nautical) 6 feet 1.83 meters	Horsepower 33,000 ft. lb. per minute 42.41 B.T.U. per minute 1.014 chevals 746 watts
Carat 200 milligrams 3.0865 grains	Fluid Ounce 8 Fluid drams 29.573 Milliliters	Hundredweight (British) 112 pounds 50.60 kilograms
Centare (Square Meter) 10.764 square feet 1.196 square yards	Foot 12 inches 0.305 meter	Inch 39450 1/3 wave lengths of red ray of cadmium 25.4 or 127/5 millimeters
(Centimeter) 0.3937 inch .01 meter	Foot Pound 0.1384 kilogrammeter	Kilogram 1000 grams 2.2046 pounds 35.274 ounces 15432.36 grains 0.0011 short ton 0.00098 long ton
Chain (Engineer's) 100 links of 1 foot each 30.48 meters	Furlong (British) 220 yards 201.2 meters	Kilometer 1000 meters 0.621 mile
Chain (Surveyor's or Gunter's) 4 rods 100 links 66 feet 20.1 meters	Gallon (U.S.) 231 cubic inches 4 quarts 8 pints 3.785 liters 128 fluid ounces	Kilowatt 1.34 horsepower 44.257 ft. lb. per minute 56.87 B.T.U. per minute
(Cheval) (French Horsepower) 0.986 horsepower	Gallon of Water 8.33 pounds	Knot (Nautical, Speed) 6080.20 feet per hour 1.85 kilometers per hour 1' arc at equator
Circular Mil Area of circle of diameter is one mil or 1/1000 inch 0.000000785 square inch	Gallon Per Cubic Foot 1.254 liters per cubic foot 7.5 gallons = 1 cubic foot	Light Year 5.9 x 10 ¹² miles 9.5 X 10 ¹² kilometers
Cord 128 cubic feet 3.625 cubic meters		Link (Surveyor's Measure) 0.66 foot 0.201 meter
Cubic Foot 1728 cubic inches 60 pints 7.5 gallons 8/10 bushel 0.028 cubic meter 28.32 liters		



CONVERSION TABLE

ALPHABETICAL CONVERSION TABLE (Continued)

Liter (Note error in metric system, for liter was designed to be 1 cu. decimeter) 1.000027 cubic decimeters 0.264 gallon 1.057 quarts 61.02 cubic inches 0.035 cubic feet 33.8147 fluid ounces 270.518 fluid drams	Ounce, Fine Troy ounce 480 grains 31.104 grams	Rood (British) 40 perches 1/4 acre
Meter 39.37 inches 3.28 feet 1.09 yards 1,553,154.13 wave lengths of red ray cadmium	Perch (British) 30.25 square yards 1/160 acre	Square Centimeter 0.155 square inch
Metric Ton 2204.6 pounds 1.1023 short tons	Pied (French Foot) 12 Paris inches 0.325 meter	Square Foot 0.093 square meter
Microgram 1/1000 milligrams	Pint 4 gills 0.4732 liter	Square Inch 6.452 square centimeters
Mil 0.001 inch 25.4 microns 0.0254 millimeters	Point (Printer's Type) 1/72 inch	Square Kilometer 0.386 square mile
Mile 1760 yards 5280 feet 1.61 kilometers	Pole (British) 5-1/2 yards 5.03 meter 1 rod approx.	Square Meter (Centare) 10.764 square feet 1.196 square yards
Milligrams 0.0154 grain	Pounce (Paris Inch) 2.71 centimeter	Square Mil 0.000001 square inch 0.00000645 square centimeter
Milliliter (See Liter Above) 1.000027 cubic centimeters 0.0610 cubic inch	Pound 16 ounces 7000 grains 454 grams 0.454 kilogram 14.58 troy ounces	Square Mile 640 acres 3,097,600 square yards 2.59 square kilometers
Miner's Inch 1.2 cubic feet per minute	Pound Per Cubic Foot 16.02 kilogram per cubic meter	Square Millimeter 0.00155 square inch
Minim (Fluid) 1/60 fluid dram 1/480 fluid ounce	Pound Per Square Inch 0.434 x head of water, feet	Square Rod 25.29 square meters
Ounce (Avoirdupois, Ordinary) 437.5 grains 0.911 troy ounces 0.000446 long ton 28.35 grams	Pound Per Square Inch 0.0703 kilogram per square centimeter	Square Yard 0.836 square meter
Ounce, Fluid 1.805 cubic inches 29.573 milliliters	Pound Per Square Foot 4.88 kilogram per square meter	Stone (British) 14 pounds 6.35 kilograms
	Quart 2 pints 1/4 gallon 0.946 liter	Ton (Short) 2000 pounds 907 kilograms
	Quarter (British Quarter Hundredweight) 28 pounds 12.70 kilograms	Ton (Long) 2240 pounds 1016 kilograms
	Rod (Surveyor's Measure) 25 links 5.03 meters	(Tonne) (Metric) 1000 kilograms 2204.62 pounds
		Yard 3 feet 36 inches 0.914 meter 1,420,212 wave lengths of red ray of cadmium



TAP DRILL SIZES

Tap Drill Sizes for Fractional Size Threads Approximately 65% Depth Thread / American National Thread Form

Tap Size	Threads per Inch	Hole Diameter	Drill
1/16	72	.049	3/64
1/16	64	.047	3/64
1/16	60	.046	56
5/64	72	.065	52
5/64	64	.063	1/16
5/64	60	.062	1/16
5/64	56	.061	53
3/32	60	.077	5/64
3/32	56	.076	48
3/32	50	.074	49
3/32	48	.073	49
7/64	56	.092	42
7/64	50	.090	43
7/64	48	.089	43
1/8	48	.105	36
1/8	40	.101	38
1/8	36	.098	40
1/8	32	.095	3/32
9/64	40	.116	32
9/64	36	.114	33
9/64	32	.110	35
5/32	40	.132	30
5/32	36	.129	30
5/32	32	.126	1/8
11/64	36	.145	27
11/64	32	.141	9/64
3/16	36	.161	20
3/16	32	.157	22
3/16	30	.155	23
3/16	24	.147	26
13/64	32	.173	17
13/64	30	.171	11/64
13/64	24	.163	20
7/32	32	.188	12
7/32	28	.184	13
7/32	24	.178	16
15/64	32	.204	6
15/64	28	.200	8
15/64	24	.194	10
1/4	32	.220	7/32
1/4	28	.215	3
1/4	27	.214	3
1/4	24	.209	4
1/4	20	.201	7
5/16	32	.282	9/32
5/16	27	.276	J
5/16	24	.272	I
5/16	20	.264	17/64
5/16	18	.258	F
3/8	27	.339	R
3/8	24	.334	Q
3/8	20	.326	21/64
3/8	16	.314	5/16
7/16	27	.401	Y
7/16	24	.397	X
7/16	20	.389	25/64
7/16	14	.368	U
1/2	27	.464	15/32
1/2	24	.460	29/64

Tap Size	Threads per Inch	Hole Diameter	Drill
1/2	20	.451	29/64
1/2	13	.425	27/64
1/2	12	.419	27/64
9/16	27	.526	17/32
9/16	18	.508	33/64
9/16	12	.481	31/64
5/8	27	.589	19/32
5/8	18	.571	37/64
5/8	12	.544	35/64
5/8	11	.536	17/32
11/16	16	.627	5/8
11/16	11	.599	19/32
3/4	27	.714	23/32
3/4	16	.689	11/16
3/4	12	.669	43/64
3/4	10	.653	21/32
13/16	12	.731	47/64
13/16	10	.715	23/32
7/8	27	.839	27/32
7/8	18	.821	53/64
7/8	14	.805	13/16
7/8	12	.794	51/64
7/8	9	.767	49/64
15/16	12	.856	55/64
15/16	9	.829	53/64
1	27	.964	31/32
1	14	.930	15/16
1	12	.919	59/64
1	8	.878	7/8
1-1/16	8	.941	15/16
1-1/8	12	1.044	1-3/64
1-1/8	7	.986	63/64
1-3/16	7	1.048	1-3/64
1-1/4	12	1.169	1-11/64
1-1/4	7	1.111	1-7/64
1-5/16	7	1.173	1-11/64
1-3/8	12	1.294	1-19/64
1-3/8	6	1.213	1-7/32
1-1/2	12	1.419	1-27/64
1-1/2	6	1.338	1-11/32
1-5/8	5-1/2	1.448	1-29/64
1-3/4	5	1.555	1-9/16
1-7/8	5	1.680	1-11/16
2	4-1/2	1.783	1-25/32
2-1/8	4-1/2	1.909	1-29/32
2-1/4	4-1/2	2.034	2-1/32
2-3/8	4	2.131	2-1/8
2-1/2	4	2.256	2-1/4
2-5/8	4	2.381	2-3/8
2-3/4	4	2.506	2-1/2
2-7/8	3-1/2	2.597	2-19/32
3	3-1/2	2.722	2-23/32
3-1/8	3-1/2	2.847	2-27/32
3-1/4	3-1/2	2.972	2-31/32
3-3/8	3-1/4	3.075	3-1/16
3-1/2	3-1/4	3.200	3-3/16
3-5/8	3-1/4	3.325	3-5/16
3-3/4	3	3.425	3-7/16
4	3	3.675	3-11/16



UNIT CONVERSIONS

To Convert	Into	Multiply by
Acre	hectare	0.4047
Acres	square feet	43,560.0
Acres	square miles	1.562×10^{-3}
Ampere-hours	coulombs	3,600.0
Angstrom unit	inch	3.937×10^{-9}
Angstrom unit	micron	1×10^{-4}
Astronomical unit	kilometers	1.495×10^8
Atmospheres	cms of mercury	76.0
Bolt (U.S. cloth)	meters	36.576
BTU	horsepower-hrs	3.931×10^{-4}
BTU	kilowatt-hrs	2.928×10^{-4}
BTU/hr	watts	0.2931
Bushels	cubic inches	2,150.4
Calories, gram (mean)	BTU (mean)	3.9685×10^{-3}
Centares	square meters	1.0
Centimeters	kilometers	1×10^{-5}
Centimeters	meters	1×10^{-2}
Centimeters	millimeters	10.0
Centimeters	feet	3.281×10^{-2}
Centimeters	inches	0.3937
Chain	Inches	792.0
Circumference	radians	6.283
Coulombs	faradays	1.036×10^{-5}
Cubic centimeters	cubic inches	0.06102
Cubic centimeters	pints (U.S. liq.)	2.113×10^{-3}
Cubic feet	cubic meters	0.02832
Cubic feet/min	pounds water/min	62.43
Cubic feet/sec	gallons/min	448.831
Cubits	inches	18.0
Days	seconds	86,400.0
Degrees (angle)	radians	1.745×10^{-2}
Degrees/sec	revolutions/min	0.1667
Dynes	grams	1.020×10^{-3}
Dynes	joules/meter (newtons)	1×10^{-5}
Ell	inches	45.0
Em, pica	inch	0.167
Ergs	BTU	9.480×10^{-11}
Ergs	foot-pounds	7.3670×10^{-8}
Ergs	kilowatt-hours	2.778×10^{-14}
Faradays/sec	amperes (absolute)	96,500
Fathoms	feet	6.0
Feet	centimeters	30.48
Feet	meters	0.3048
Feet	miles (nautical)	1.645×10^{-4}
Feet	miles (statute)	1.894×10^{-4}
Feet/min	centimeters/sec	0.5080
Feet/sec	knots	0.5921
Feet/sec	miles/hour	0.6818
Foot-pounds	BTU	1.286×10^{-8}
Foot-pounds	kilowatt-hours	3.766×10^{-7}
Furlongs	miles (U.S.)	0.125
Furlongs	feet	660.0
Gallons	liters	3.785
Gallons of water	pounds of water	8.3453
Gallons/min	cubic feet/hour	8.0208
Grams	ounces (avoirdupois)	3.527×10^{-2}
Grams	ounces (troy)	3.215×10^{-2}
Grams	pounds	2.205×10^{-3}
Hand	centimeters	10.16
Hectares	acres	2.471
Hectares	square feet	1.076×10^5
Horsepower	BTU/min	42.44
Horsepower	kilowatts	0.7457
Horsepower	watts	745.7
Hours	days	4.167×10^{-2}
Hours	weeks	5.952×10^{-3}
Inches	centimeters	2.540
Inches	miles	1.578×10^{-5}
International ampere	ampere (absolute)	0.9998
International volt	volts (absolute)	1.0003
Joules	BTU	9.480×10^{-4}
Joules	ergs	1×10^7
Kilograms	pounds	2.205
Kilometers	feet	3,281.0
Kilometers	meters	1,000.0
Kilometers	miles	0.6214

To Convert	Into	Multiply by
Kilometers/hr	knots	0.5396
Kilowatts	horsepower	1.341
Kilowatt-hours	BTU	3,413.0
Knots	feet/hour	6,080.0
Knots	nautical miles/hr	1.0
Knots	statute miles/hr	1.151
League	miles (approximately)	3.0
Light year	miles	5.9×10^{12}
Links (surveyor's)	inches	7.92
Liters	cubic centimeters	1,000.0
Liters	cubic inches	61.02
Liters	gallons (U.S. liq.)	0.2642
Liters	milliliters	1,000.0
Liters	pints (U.S. liq.)	2.113
Meters	centimeters	100.0
Meters	feet	3.281
Meters	kilometers	1×10^{-3}
Meters	miles (nautical)	5.396×10^{-4}
Meters	miles (statute)	6.214×10^{-4}
Meters	millimeters	1,000.0
Microns	meters	1×10^{-6}
Miles (nautical)	feet	6,080.27
Miles (statute)	feet	5,280.0
Miles (nautical)	kilometers	1.853
Miles (statute)	kilometers	1.609
Miles (nautical)	miles (statute)	1.1516
Miles (statute)	miles (nautical)	0.8684
Miles/hour	feet/min	88.0
Milligrams/liter	parts/million	1.0
Milliliters	liters	1×10^{-3}
Millimeters	inches	3.937×10^{-2}
Newtons	dynes	1×10^5
Ohms (International)	ohms (absolute)	1.0005
Ounces	grams	28.349527
Ounces	pounds	6.25×10^{-2}
Ounces (troy)	ounces (avoirdupois)	1.09714
Parsec	miles	19×10^{12}
Parsec	kilometers	3.084×10^{13}
Pints (liq.)	cubic centimeters	473.2
Pints (liq.)	cubic inches	28.87
Pints (liq.)	gallons	0.125
Pints (liq.)	quarts (liq.)	0.5
Pounds	kilograms	0.4536
Pounds	ounces	16.0
Pounds	ounces (troy)	14.5833
Pounds	pounds (troy)	1.21528
Pounds/sq. inch	grams/sq. cm	70.31
Quarts (dry)	cubic inches	67.20
Quarts (liq.)	cubic inches	57.75
Quarts (liq.)	gallons	0.25
Quarts (liq.)	liters	0.9463
Quires	sheets	25.0
Radians	degrees	57.30
Radians	minutes	3,438.0
Reams	sheets	500.0
Revolutions	degrees	360.0
Revolutions/min	degrees/sec	6.0
Rods	meters	5.029
Rods	feet	16.5
Rods (surveyor's measure)	yards	5.5
Seconds	minutes	1.667×10^{-2}
Slug	pounds	32.17
Tons (long)	kilograms	1,016.0
Tons (short)	kilograms	907.1848
Tons (long)	pounds	2,240.0
Tons (short)	pounds	2,000.0
Tons (long)	tons (short)	1.120
Tons (short)	tons (long)	0.89287
Volt (absolute)	statvolts	3.336×10^{-3}
Watts	BTU/hour	3.4129
Watts	horsepower	1.341×10^{-3}
Watts (international)	watts (absolute)	1.0002
Yards	meters	0.9144
Yards	miles (nautical)	4.934×10^{-4}
Yards	miles (statute)	5.682×10^{-4}



PUMP SELECTION

Determining pump size and type

To select the pump best adapted for any particular pumping job the following information is necessary: (1) number of gallons per minute; (2) character of liquid to be pumped; (3) total head including friction; (4) height of suction lift, length and diameter of suction pipe.

TOTAL HEAD: It is important to properly figure the total head of a pump. This includes: (1) suction lift; (2) discharge head; (3) friction head.

SUCTION LIFT: The vertical distance from surface of liquid to pump cylinder is the suction lift. Although a suction lift of 33.9 feet at sea level is theo-

retically possible, it is seldom that under practical conditions a lift of 25 feet can be exceeded.

DISCHARGE HEAD: The vertical distance from pump cylinder to highest point in discharge line is the discharge head.

FRICTION HEAD: Friction head is determined from friction tables and is based on the quantity of water and size pipe used. Friction loss in the tables is stated in pounds per square inch and feet head.

Useful rules

To convert inches of vacuum to feet suction lift multiply by 1.13. To convert lbs. pressure to feet head divide by .434. To convert feet head to lbs. pressure multiply by .434. 1 U.S. Gallon equals 231 cubic inches. 1 U.S. Gallon of water weighs 8.33 lbs. 1 cubic foot of water weighs 62.425 lbs. Mean

atmosphere pressure is usually estimated at 14.7 pounds per square inch at sea level, and with perfect vacuum it will sustain a column of mercury 29.9 inches or a column of water 33.9 feet high.

To find the horse power required for pumping water

$$\text{Required H.P.} = \frac{\text{gals. per min.} \times \text{wt. of one gal. water} \times \text{total head in ft.}}{33,000 \times \text{mechanical efficiency of pump}}$$

A number of the factors in this formula will be constant for all problems. Weight of 1 gallon of water is 8.33 pounds.

Total head in feet = suction lift + discharge head + friction head
33,000 foot lbs. per min. = 1 h.p.

The mechanical efficiency of reciprocating pumps can be safely estimated at 50% to 75%; that of centrifugal pumps at 40% to 60%.

Substituting known factors in the formula given we have

$$\text{H.P.} = \frac{80 \times 8.33 \times 1073}{33,000 \times .70} = 30.9$$

EXAMPLE: It is desired to pump 80 g.p.m. through 4 miles of 2½-inch pipe against an elevation of 90 feet with suction lift to 10 feet. (from table) Friction for 80 g.p.m. through each 100 feet of 2½-inch pipe is 2 pounds. 4 x 5280 = 21,120 feet of 2½-inch = 211.2 x 2 = 422.4 lbs. per sq. inch. 422.4 ÷ .434 = 973 = number of feet head loss. 973 + 90 + 10 = 1073 total head in feet.

Friction of water in 90° elbows

Equivalent number of feet of straight pipe

Size of elbow, inches.....	½	¾	1	1¼	1½	2	2½	3	4	5	6	8	10	12	20
Friction equivalent, feet straight pipe	5	6	6	8	8	8	11	15	16	18	18	24	30	40	70

Table converting inches vacuum into feet suction

To convert inches vacuum into feet, multiply by 1.13

Inch Vac.	Feet	Inch Vac.	Feet	Inch Vac.	Feet	Inch Vac.	Feet	Inch Vac.	Feet	Inch Vac.	Feet	Inch Vac.	Feet	Inch Vac.	Feet
¼	0.28	4¼	4.82	8¼	9.35	12¼	13.89	16¼	18.42	20¼	22.96	24¼	27.50	28¼	32.03
½	0.56	½	5.11	½	9.64	½	14.18	½	18.71	½	23.24	½	27.78	½	32.32
¾	0.85	¾	5.39	¾	9.92	¾	14.46	¾	18.99	¾	23.53	¾	28.07	¾	32.60
1	1.13	5	5.67	9	10.21	13	14.74	17	19.28	21	23.81	25	28.35	29	32.89
¼	1.41	¼	5.95	¼	10.49	¼	14.74	¼	19.56	¼	24.09	¼	28.63	¼	33.17
½	1.70	½	6.23	½	10.77	½	15.31	½	19.84	½	24.38	½	28.91	½	33.46
¾	1.98	¾	6.52	¾	11.06	¾	15.59	¾	20.13	¾	24.66	¾	29.20	¾	33.74
2	2.27	6	6.80	10	11.34	14	15.88	18	20.41	22	24.95	26	29.48	....	....
¼	2.55	¼	7.08	¼	11.62	¼	16.16	¼	20.70	¼	25.23	¼	29.76	....	....
½	2.85	½	7.37	½	11.90	½	16.45	½	20.98	½	25.51	½	30.05	....	....
¾	3.12	¾	7.65	¾	12.19	¾	16.73	¾	21.27	¾	25.80	¾	30.33	....	....
3	3.41	7	7.94	11	12.47	15	17.01	19	21.55	23	26.08	27	30.62	....	....
¼	3.69	¼	8.22	¼	12.75	¼	17.29	¼	21.83	¼	26.36	¼	30.90	....	....
½	3.98	½	8.50	½	13.04	½	17.57	½	22.11	½	26.65	½	31.19	....	....
¾	4.26	¾	8.79	¾	13.32	¾	17.86	¾	22.40	¾	26.93	¾	31.47	....	....
4	4.54	8	9.07	12	13.61	16	18.14	20	22.68	24	27.22	28	31.75	....	....

Table converting pressure per square inch into feet head of water

Pounds Per Sq. In.	Feet Head	Pounds Per Sq. In.	Feet Head	Pounds Per Sq. In.	Feet Head	Pounds Per Sq. In.	Feet Head	Pounds Per Sq. In.	Feet Head	Pounds Per Sq. In.	Feet Head
1	2.31	8	18.47	40	92.36	110	253.98	170	392.52	300	692.69
2	4.62	9	20.78	50	115.45	120	277.07	180	415.61	325	750.41
3	6.93	10	23.09	60	138.54	125	288.62	190	438.90	350	808.13
4	9.24	15	34.63	70	161.63	130	300.16	200	461.78	375	865.89
5	11.54	20	46.18	80	184.72	140	323.25	225	519.51	400	922.58
6	13.85	25	57.72	90	207.81	150	346.34	250	577.24	500	1,154.48
7	16.16	30	69.27	100	230.90	160	369.43	275	643.03	1,000	2,308.00

HOW TO SIZE GENERATORS

ELECTRICAL TERMS AND DEFINITIONS

Volt (E) — Unit of electrical pressure, electromotive force (e.m.f.) or difference of potential. Force required to send one ampere of current through one ohm of resistance.

Ampere (I) — Unit of current strength or current flow. The current which one volt can send through a resistance of one ohm.

Ohm (R) — Unit of electrical resistance. The resistance offered to the passage of one ampere, when impelled by one volt.

Impedance (Z) — Resistance of an alternating current circuit having both resistance and reactance. The impedance is always the vector sum of resistance and reactance.

Watt (W) — The unit of electrical energy. The product of the ampere and volt. One ampere of current flowing under a pressure of one volt gives one watt of energy.

Kilowatt (K.W.) — 1,000 watts — Large (usual) unit for measurement of power.

Horse Power (H.P.) — Mechanical unit for measurement of power or rate of work. Work required to raise 33,000 pounds one foot in one minute, and equals 746 or 0.746 K.W.

Watt-Hour — Electrical unit of work or energy. Watt-hours equal watts times hours.

Kilowatt-Hour (K.W.-Hr.) — 1,000 watt-hours. Large (usual) unit of work or energy.

Cycle — The period of a complete alternation of an alternating current circuit, comprising a positive and negative alternation.

Frequency (of alternating current) — Number of cycles per second.

Single-Phase — The term applied to an alternating current circuit energized by a single alternating e.m.f. Such a circuit is usually supplied through two wires.

Polyphase — A general term applied to an alternating system with more than one phase. See two-phase, three-phase, etc.

Two-phase — The term applied to an alternating system comprising two electric circuits energized by alternating e.m.f.'s which differ in phase by a quarter of a cycle — frequently referred to as quarter-phase.

Three-phase — The term applied to an alternating system comprising three electric circuits energized by alternating e.m.f.'s which differ in phase by one-third of a cycle.

Power-Factor (P.F.) — The power-factor is the ratio of true power to apparent power of an alternating current system. The power-factor may be expressed as a percentage but is usually written as a decimal fraction.

Volt-Ampere — Product of volts and Ampere.

Kilovolt-Ampere (K.V.A.) — 1,000-volt Ampere.

*Approximate wattage consumption of running and starting electric motors.

Motor	Approximate RUNNING Wattage				Approximate STARTING Wattage			
	Split Phase Motors				Repulsion Induction Motors		Capacitor Start Motors	
	HP	Full Load	Average Load	Full Load	Average Load	Full Load	Average Load	
1/6	528	343	5,280	3,432	1,320	858	2,112	1,373
1/4	696	453	6,960	4,524	1,740	1,131	2,784	1,810
1/3	864	562	8,640	5,616	2,160	1,404	3,456	2,246
1/2	1,176	765	11,760	7,644	2,940	1,911	4,704	3,058
3/4	1,656	1,076			4,140	2,691	6,624	4,306
1	1,920	1,248			4,800	3,120	7,678	4,992
1-1/2	2,400	1,560			6,000	3,900	9,600	6,240
2	2,880	1,872			7,200	4,680	11,520	7,488
3	4,080	2,652			10,200	6,630	16,320	10,608
5	6,720	4,368			16,800	10,920	26,880	17,472
7-1/2	9,600	6,240			24,000	15,600	38,400	24,960
10	12,000	7,800			30,000	19,500	48,000	31,200

Total all requirements, and add approximately 25 percent for overlooked items and miscalculations.

Select an alternator that is equal to or greater than the rated output requirement of your load. Never pick an alternator smaller than your load requirement, as damage can be done to the alternator by continuously overloading it.

*APPROXIMATE WATTAGE CONSUMPTION (Running Load)

Home	Kitchen Ventilator	150	Milking Machine.....	1,000 & up	
Sump Pump	400	Radio.....	40-100	Milk Cooler.....	1,000 & up
Refrigerator	400	Television	200-600	Milk Pump.....	800 & up
Freezer	400-600	Washing Machine	400-600	Barn Cleaner	2,000 & up
Air Conditioner	600-2,000	Dishwasher	300	Feed Conveyor	600 & up
Toaster	1,200	Sewing Machine.....	200-500	Silage Unloader.....	3,000 & up
Skillet.....	1,500	Vacuum Cleaner.....	400 & up	Chick Brooder.....	100 & up
Mixer, Portable	150	Light Bulbs	As Marked	1/4" Electric Drill.....	250
Coffee Maker.....	1,000	Electric Heat System	5,000-20,000	1/2" Electric Drill.....	750
Iron, Steam & Dry	500-1,200			1" Electric Drill.....	1,000
Range, Electric - One element.....	1,500	Lawn & Garden		9" Disc Sander	1,200
Water Heater, Electric.....	1,000-5,000	Hedge Trimmer.....	450	3" Belt Sander	1,000
Clothes Dryer, Electric	4,000	Weed Eater	500	Concrete Vibrator.....	2,500
Furnace Oil Burner	300	Edge Trimmer	1,100	Circular Saw 6-1/2"	1,000
Furnace Blower Motor 1/4HP.....	800	Lawn Mower	1,200	Impact, Electric	950
Furnace Blower Motor 1/3HP.....	1,200	Chainsaw	1,200-2,500	12" Electric Chain Saw	1,100
Circulating Heater.....	250 & up			14" Band Saw	1,100
Glow Heater	600-1,000	Farm & Industrial		7-1/4" Circular Saw	900
Electric Fan	300	Battery Charger.....	750	8-1/4" Circular Saw	1,400

*Figures are approximate. Check nameplates and literature on your equipment for specific consumption and starting requirements.



WELDED WIRE MESH

Welded Wire Mesh

Spacing	Gauge	Wire #	Sheet Size	Lbs./Sheet
6x6	10/10	w1.4	5x10	10.5
6x6	10/10	w1.4	8x20	33.6
6x6	8/8	w2.1	5x10	15.0
6x6	8/8	w2.1	8x20	48.0
6x6	6/6	w2.9	5x10	21.0
6x6	6/6	w2.9	8x20	67.2
6x6	4/4	w4.0	5x10	29.0
6x6	4/4	w4.0	8x20	92.8
4x4	6/6	w2.9	5x10	31.0
4x4	6/6	w2.9	8x20	99.2
4x4	4/4	w4.0	5x10	42.5
4x4	4/4	w4.0	8x20	136.0

Gauge to Decimal Conversion Chart

Gauge Number	Thickness (Inches)		Pounds Per Sq. Ft.
	Nominal	Tolerance Range	
10	.1345	.1405 to .1285	5.48695
11	.1196	.1256 to .1136	4.87911
12	.1046	.1106 to .0986	4.26718
13	.0897	.0947 to .0847	3.65933
14	.0747	.0797 to .0697	3.04740
15	.0673	.0723 to .0623	2.74552
16	.0598	.0648 to .0548	2.43955
17	.0538	.0578 to .0498	2.19478
18	.0478	.0518 to .0438	1.95001
19	.0418	.0458 to .0378	1.70524
20	.0359	.0389 to .0329	1.46455
21	.0329	.0359 to .0299	1.34216
22	.0299	.0329 to .0269	1.21978
23	.0269	.0299 to .0239	1.09739
24	.0239	.0269 to .0209	.97501
25	.0209	.0239 to .0179	.85262
26	.0179	.0199 to .0159	.73023
27	.0164	.0184 to .0144	.66094

ESTIMATING DATA

Tables & Estimating Data for Epoxy Mortars	
<i>Coverage per Gallon of Epoxy Mortar (Epoxy Binder + Sand)</i>	
Thickness Inches	Coverage Sq. Feet
1/16	25.7
1/8	12.8
3/16	8.6
1/4	6.4
3/8	4.3
1/2	3.2

Epoxy Mortar Yield per Gallon of Epoxy Binder		
Epoxy Binder Gal.	Aggregate Gallon*	Mortar Gallon
1	1	1.6
1	2	2.2
1	3	2.8
1	4	3.4
1	5	4.0

*Flint Shot approximately 12-14 lb./gal. With other aggregates, figures will vary with mesh size and amount of entrained air.

Requirements for Filling Joint Slots Lineal Feet per Gallon						
	Inches					
	1/4	1/2	3/4	1	1-1/4	1-1/2
1/4	308.0					
1/2	154.0	77.0				
3/4	102.7	51.3	34.2			
1	77.0	38.5	25.7	19.3		
1-1/4	61.6	30.8	20.5	15.4	12.3	
1-1/2	51.3	25.7	17.1	12.8	10.3	8.6
1-3/4	44.0	22.0	14.7	11.0	8.8	7.3
2	38.5	19.3	12.8	9.6	7.6	6.4
2-1/2	30.8	15.4	10.3	7.7	6.2	5.1
3	25.7	12.8	8.6	6.4	5.1	4.3

Coverage for Coating or Membranes	
Thickness of Coating Applied (1000 mils = 1 inch)	Coverage per U.S. Gallon 100% Solids System
1/4 in. = 250 mils	6.4 sq. ft.
3/16 in. = 187.5 mils	8.5 sq. ft.
1/8 in. = 125 mils	12.8 sq. ft.
100 mils	16.0 sq. ft.
1/16 in. = 62.5 mils	25.5 sq. ft.
50 mils	32.0 sq. ft.
1/32 in. = 31.25 mils	51.0 sq. ft.
20 mils	80.0 sq. ft.
1/64 in. = 15.625 mils	102.0 sq. ft.
10 mils	160.0 sq. ft.
5 mils	320.0 sq. ft.
1 mil	1600.0 sq. ft.

If coating contains a solvent which will evaporate, thickness of coating will be reduced by same percentage as solvent loss.

Fractions and Decimal Equivalent							
Fraction	Decimal Equivalent	Fraction	Decimal Equivalent	Fraction	Decimal Equivalent	Fraction	Decimal Equivalent
1/64	.015625	17/64	.265625	33/64	.515625	49/64	.765625
1/32	.03125	9/32	.28125	17/32	.53125	25/32	.78125
3/64	.046875	19/64	.296875	35/64	.546875	51/64	.796875
1/64	.0625	5/16	.3125	9/16	.5625	13/16	.8125
5/64	.078125	21/64	.328125	37/64	.578125	53/64	.828125
3/32	.09375	11/32	.34375	19/32	.59375	27/32	.84375
7/64	.109375	23/64	.359375	39/64	.609375	55/64	.859375
1/8	.125	3/8	.375	5/8	.625	7/8	.875
9/64	.140625	25/64	.390625	41/64	.640625	57/64	.890625
5/32	.15625	13/32	.40625	21/32	.65625	29/32	.90625
11/64	.171875	27/64	.421875	43/64	.671875	59/64	.921875
3/16	.1875	7/16	.4375	11/16	.6875	15/16	.9375
13/64	.203125	29/64	.453125	45/64	.703125	61/64	.953125
7/32	.21875	15/32	.46875	23/32	.71875	31/32	.96875
15/64	.234375	31/64	.484375	47/64	.734375	63/64	.984375
1/4	.250	1/2	.500	3/4	.750	1	1.0



CONVERSION TABLES

Comparison of Gallons and Cubic Feet United States Gallons in a Given Number of Cubic Feet

1 cubic foot = 7.4805 U.S. gallons; 1 gallon = 231 cubic inches = .13368056 cubic foot

Cu. Ft.	Gallons	Cu. Ft.	Gallons
0.1	0.75	600	4,488.3
0.2	1.50	700	5,236.4
0.3	2.24	800	5,984.4
0.4	2.99	900	6,732.5
0.5	3.74	1,000	7,480.5
0.6	4.49	2,000	14,961.0
0.7	5.24	3,000	22,441.6
0.8	5.98	4,000	29,922.1
0.9	6.73	5,000	37,402.6
		6,000	44,883.1
1.0	7.48	7,000	52,363.6
2.0	14.96	8,000	59,844.2
3.0	22.44	9,000	67,324.7
4.0	29.92		
5.0	37.40	10,000	74,805.2
6.0	44.88	20,000	149,610.4
7.0	52.36	30,000	224,415.6
8.0	59.84	40,000	299,220.8
9.0	67.32	50,000	374,025.9
		60,000	448,831.1
10.0	74.80	70,000	523,636.3
20.0	149.60	80,000	598,441.5
30.0	224.40	90,000	673,246.7
40.0	299.20		
50.0	374.00	100,000	748,051.9
60.0	448.80	200,000	1,496,103.8
70.0	523.60	300,000	2,244,155.7
80.0	598.40	400,000	2,992,207.6
90.0	673.20	500,000	3,740,259.5
		600,000	4,488,311.4
100.0	748.00	700,000	5,236,363.3
200.0	1,496.10	800,000	5,984,415.2
300.0	2,244.20	900,000	6,732,467.1
400.0	2,992.20		
500.0	3,740.30	1,000,000	7,480,519.0

Cubic Feet in a Given Number of Gallons	
Gal.	Cu. Ft.
1	.134
2	.267
3	.401
4	.535
5	.668
6	.802
7	.936
8	1.069
9	1.203
10	1.337
1,000	133.681
2,000	267.361
3,000	401.042
4,000	534.722
5,000	668.403
6,000	802.083
7,000	935.764
8,000	1,069.444
9,000	1,203.125
10,000	1,336.806
1,000,000	133,680.600
2,000,000	267,361.100
3,000,000	401,041.700
4,000,000	534,722.200
5,000,000	668,402.800
6,000,000	802,083.300
7,000,000	935,763.300
8,000,000	1,069,444.400
9,000,000	1,203,125.000
10,000,000	1,336,805.600

Water Pressure

Comparison of Heads of Water in Feet with Pressures in Various Units

One foot of water at 39.1°F = 62.425 pounds per square foot
 One foot of water at 39.1°F = 0.4335 pounds per square inch
 One foot of water at 39.1°F = 0.0295 atmosphere
 One foot of water at 39.1°F = 0.8826 inch of mercury at 32°F
 One foot of water at 39.1°F = 773.3 feet of air at 32°F and atmospheric pressure
 One pound on the square foot, at 39.1°F = 0.01602 foot of water
 One pound on the square inch, at 39.1°F = 2.307 feet of water
 One atmosphere at 29.922 inches of mercury = 33.9 feet of water
 One inch of mercury at 32°F = 1.133 of water
 One foot of air at 32°F and 1 atmosphere = 0.001293 foot of water
 One foot of average sea-water = 1.026 feet of pure water
 One foot of water at 62°F = 62.355 pounds per square foot
 One foot of water at 62°F = 0.43302 pound per square inch
 One foot of water at 62°F = 0.5774 ounce = 0.036085 pound per square inch
 One pound of water on the square inch at 62°F = 2.3094 feet of water
 One ounce of water on the square inch at 62°F = 1,732 inches of water

MEASURING TABLES

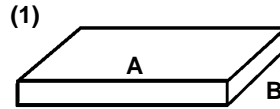
How to Measure Flat Surfaces

How to measure a Flat roof

See Figure 1. Multiply length (A) by width (B).

Example: Length 100 feet, width 50 feet.

100 x 50 = 5000 square feet or 50 squares of roof surface.

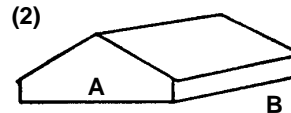


How to measure a Gable roof

See Figure 2. Multiply length (B) by width (A) and add 1/4 of the total.

Example: Length 100 feet, width 50 feet.

100 x 50 = 5000; 1/4 of 5000 = 1250; 5000 + 1250 = 6250 square feet or about 63 squares of roof surface.

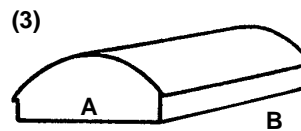


How to measure an Arch roof

See Figure 3. Multiply length (B) by width (A) and add 1/2 of the total.

Example: Length 100 feet, width 50 feet.

100 x 50 = 5000; 1/2 of 5000 = 2500; 5000 + 2500 = 7500 square feet or 75 squares of roof surface.

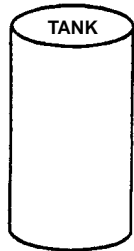


How to Measure a Tank

To compute the area of a tank, multiply height (B) by diameter (A) and multiply that total by 3.

Example: Diameter 20 feet, height 50 feet.

20 x 50 = 1000; 1000 x 3 = 3000 square feet or about 30 squares of surface.



Often we are asked to calculate the amount of paint required to cover a tank of given dimensions. This is a simple system of figuring the number of square feet in the surface of a tank from which you can easily calculate the number of gallons of paint required. Divide the square feet of surface by the covering capacity.

1. To find the area of the top of a tank - multiply the square of the diameter by .7854.
2. To find the circumference of the tank - multiply the diameter by 3.1416.
3. To find the area of the walls of the tank - multiply height by the circumference.

Weights of Building Materials Per Cubic Foot

MATERIAL	Lbs. Cu. Ft. WEIGHT
Asbestos	153 to 192
Asphalt-pavement composition	100
Birch	48
Brick, best pressed	150
Brick, common and hard	125
Brickwork in lime mortar, average	120
Brickwork in cement mortar, average	130
Brickwork, pressed brick, thin joints	140
Clay (Dry)	63 to 95
Clay (Fire)	130
Clay (Wet)	120 to 140
Concrete	138
Concrete:	
Cinder concrete	112
Gravel and Limestone concrete	150
Trap-rock concrete	155
Crushed Stone	100
Cypress	36
Fir, Douglas	36
Firebrick	150
Granite	167
Gravel	95
Gypsum partition block (hollow)	48
Hemlock	30
Hollow tile partition block	60
Iron, Cast	450
Iron, Wrought	480
Limestone	155 to 172
Maple	48
Marble	171 to 179
Masonry, squared granite or limestone	165
Masonry, granite or limestone, dry rubble	138
Masonry, granite or limestone, rubble	150
Masonry, sandstone	150
Mortar, hardened	90 to 100
Oak	48
Plaster	96
Plaster of Paris	98
Reinforced Concrete	150
Sand (Dry)	97 to 117
Sand (Wet)	120 to 140
Slate	172 to 177
Spruce	30
Steel, structural	489.6
Tile, solid	110 to 120

Conversion Factors

Volume

Cubic inch = 16.39 cc

Cubic foot = 1728 cu. in. = 7.481 gal.

Cubic yard = 27 cu. ft. = 0.7646 cbm

US gallon = 231 cu. in. = 3.785 liter

US gallon = 128 fluid ounce

US fluid ounce = 29.57 cc

Imperial gallon = 1.20 US gallon

Imperial fluid ounce = .961 US fluid ounce

Length

1 inch = .0833 ft. = 2.54 cm

1 foot = .333 yd. = .3048 m

1 mile = 5280 ft. = 1.609 km

1 meter = 39.37 in. = 3.281 ft.

Specific Weight

1 pound water = 27.6 cu. in. = .1198 gal.

1 cu. ft. water = 62.43 pounds

1 gallon water = 8.345 pounds

Area

Pi = 3.14159

Circular inch = .7854 sq. in.

Square inch = 6.452 sq. cm

Square feet = 144 sq. in. = .111 sq. yd.

Square yard = 9 sq. ft. = .8361 sq. in.

Square mile = 640 acres = 2.590 sq. km

Temperature

°C = (°F - 32)

°F = 1.8 x °C + 32

1.8





CONCRETE CONVERSIONS

Number of Square Feet of Concrete Floor of Any Thickness from 1 Cubic Yard of Concrete					
Thickness Inches	No. Sq. Ft.	Thickness Inches	No. Sq. Ft.	Thickness Inches	No. Sq. Ft.
1	324	5	65	9	36
1-1/4	259	5-1/4	62	9-1/4	35
1-1/2	216	5-1/2	59	9-1/2	34
1-3/4	185	5-3/4	56	9-3/4	33
2	162	6	54	10	32
2-1/4	144	6-1/4	52	10-1/4	31
2-1/2	130	6-1/2	50	10-1/2	31
2-3/4	118	6-3/4	48	10-3/4	30
3	108	7	46	11	29-1/2
3-1/4	100	7-1/4	44	11-1/4	29
3-1/2	93	7-1/2	43	11-1/2	28
3-3/4	86	7-3/4	42	11-3/4	27-1/2
4	81	8	40	12	27
4-1/4	76	8-1/4	39	12-1/4	26-1/2
4-1/2	72	8-1/2	38	12-1/2	26
4-3/4	68	8-3/4	37	12-3/4	25-1/2

Aggregate Extension

Using Silica Sand
 Number of Pounds/165.36 = Additional cu. ft.

Epoxy Mortar And Patching Coverage		
Mortar (Binder & Sand)	Table 1 Coverage (Square Ft.)	Thickness (Inches)
1 gallon	25.7	1/16
1 gallon	12.8	1/8
1 gallon	8.6	3/16
1 gallon	6.4	1/4
1 gallon	4.3	3/8
1 gallon	3.2	1/2
Resinous Binder (gallons)	Table 2 Silica Sand (gallons)	Mortar Approximate (gallons)
1	+1	1.6
1	+2	2.2
1	+3	2.8
1	+4	3.4
1	+5	4.0

Conversion Tables					
Water		Cement		Temperature	
US Gallons	Pounds	Bags	Pounds	Farenheit	Centigrade
1	8.35	0.25	23.5	°C = °F - 32	
2	16.69	0.50	47.0	1.8	
3	25.04	0.75	70.5	°F = 1.8 x °C + 32	
4	33.38	1.00	94.0	0	-17.8
5	41.73	1.25	117.5	5	-15.0
6	50.07	1.50	141.0	10	-12.2
7	58.42	1.75	164.5	15	-9.4
8	66.76	2.00	188.0	20	-6.7
9	75.11	2.25	211.5	25	-3.9
10	83.45	2.50	235.0	30	-1.1
11	91.80	2.75	258.5	32	0.0
12	100.14	3.00	282.0	35	1.7
13	108.49	3.25	305.5	40	4.4
14	116.83	3.50	329.0	45	7.2
15	125.18	3.75	352.5	50	10.0
16	133.52	4.00	376.0	55	12.8
17	141.87	4.25	399.5	60	15.6
18	150.21	4.50	423.0	65	18.3
19	158.56	4.75	446.5	70	21.1
20	166.90	5.00	470.0	75	23.9
21	175.25	5.25	493.5	80	26.7
22	183.59	5.50	517.0	85	29.4
23	191.94	5.75	540.5	90	32.2
24	200.28	6.00	564.0	95	35.0
25	208.63	6.25	587.5	100	37.8
26	216.97	6.50	611.0	105	40.6
27	225.32	6.75	634.5	110	43.3
28	233.66	7.00	658.0	115	46.1
29	242.01	7.25	681.5	120	48.9
30	250.35	7.50	705.0	125	51.7
31	258.70	7.75	728.5	130	54.4
32	267.04	8.00	752.0	135	57.2
33	275.39			140	60.0
34	283.73			145	62.8
35	292.08			150	65.6
36	300.42			155	68.3
37	308.77			160	71.1
38	317.11			165	73.9
39	325.46			170	76.7
40	333.80			175	79.4
41	342.15			180	82.2
42	350.49			185	85.0
43	358.84			190	87.8
44	367.18			195	90.6
45	375.53			200	93.3
				205	96.1
				210	98.9
				212	100.0



COVERAGE TABLE

CONCRETE ENGINEERING DATA

Quantities of Materials Required for Caulking or Sealing Joints and Openings

LINEAL FEET PER GALLON OF SEALANTS FOR VARIOUS JOINTS															
Joint	1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	1-1/8	1-1/4	1-3/8	1-1/2
1/8	1232	820	616	494	410	350	306	246	205	176	154	136	123	112	102
3/16		547	404	328	274	234	205	164	133	116	102	91	82	74	68
1/4			308	246	205	176	154	123	102	88	76	68	61	55	50
5/16				196	164	140	122	98	82	70	61	54	49	44	41
3/8					136	116	102	82	68	58	51	45	41	37	34
7/16						100	87	72	57	50	43	39	35	32	29
1/2							77	61	51	44	38	34	31	28	25
5/8								49	41	35	31	27	24	22	19
3/4									34	29	25	23	20	18	17
7/8										25	22	19	17	16	14
1											19	17	15	14	12
1-1/8												15	13	12	11
1-1/4													12	11	10
1-3/8														10	9
1-1/2															8

Divide answer into total joint footage to determine number of gallons required for job.

JOINT WIDTH vs. DEPTH

With Concrete, Masonry, Stone:

If Joint WIDTH is:	Sealant DEPTH should be:	
	Min.	Max.
1/4" (min. suggested)	1/4"	1/4"
Over 1/4" to 1/2"	1/4"	Equal to WIDTH
Over 1/4" to 1"	1/2"	Equal to WIDTH
Over 1" to 2"	1/2"	1/2 of WIDTH
Over 2"	(Consult sealant supplier for recommendation)	

POOR



BETTER



IDEAL



Thickness

Coverage (Sq. Ft./Gal.)

Ratio of film thickness and coverage of materials either of plastic or liquid consistency based upon 231 cu. in. to one gallon.

1/2 inch (500 mils)	3.2 ft. ² /gal.
1/4 inch (250 mils)	6.4 ft. ² /gal.
1/8 inch (125 mils)	12.8 ft. ² /gal.
1/16 inch (62.5 mils)	25.6 ft. ² /gal.
50 mils	32.1 ft. ² /gal.
30 mils	53.5 ft. ² /gal.
20 mils	80.2 ft. ² /gal.
10 mils	160.4 ft. ² /gal.
8 mils	200 ft. ² /gal.
5 mils	300 ft. ² /gal.
1 mil	1604 ft. ² /gal.

Thickness of film: (3/1000th inch)
1.6 is the factor (reducing cubic content of gal.)
Divide 1.6 by thickness in inches to get coverage per gal.

1 inch = 1000 mils



Directions to Pennsauken, New Jersey Store:

FROM PHILADELPHIA:

Tacony Palmyra Bridge – After the bridge take Route 73 South about 2 miles to Route 130 South. Proceed South on Route 130 for about 2 miles to Union Avenue Exit. Take Union Avenue jughandle, cross over Route 130 and make a right into the yard.

Betsy Ross Bridge – Take off-ramp for Route 130 South. After about 200 yards take first jughandle off Route 130 - Union Avenue Exit. Cross Route 130 on Union Avenue and make a right into the yard.

Ben Franklin Bridge – Take Route 30 East (Admiral Wilson Boulevard) to the Airport Circle. Follow signs for Route 130 North. Proceed North on Route 130 for about 4.5 miles to Union Avenue. Make a right on Union Avenue and a right into our yard.

Walt Whitman Bridge – Follow signs for Route 130 North. Proceed North on Route 130 for about 7 miles. Make a right on Union Avenue and a right into our yard.

FROM ATLANTIC CITY:

Take the Atlantic City Expressway to Route 42 North to Route 130 North. Proceed North on Route 130 for about 7 miles. Make a right on Union Avenue and a right into our yard.

FROM DELAWARE:

Take the Delaware Memorial Bridge to Route 295 North. Mount Laurel take exit for Route 73 North. After about 4 miles take left lane exit for Route 90. Get off of Route 90 at first exit - Route 130 South. After about 200 yards get off Route 130 at Union Avenue. Cross over Route 130 by using the jughandle and make a right into the yard.

FROM CENTRAL AND NORTHERN NEW JERSEY:

Take the New Jersey Turnpike South to Exit 4 - Route 73. Make a right onto 73 North after the tolls, heading toward Philadelphia. After about 4 miles take left lane exit for Route 90. Get off of Route 90 at first exit - Route 130 South. After about 200 yards get off Route 130 at Union Avenue. Cross over Route 130 by using the jughandle and make a right into the yard.

Directions to Springfield, Virginia Store:

FROM BALTIMORE:

Take Route 695 (Baltimore Beltway) to Route 95 South to Route 495/95 South (Washington Beltway) to Route 95 South (Richmond) to Exit 167 Backlick Road/Fullerton Road third building on right.

FROM HAGERSTOWN:

Take Route 70 South to Route 270 South to Route 495 (Washington Beltway) to Route 95 South (Richmond) to Exit 167 Backlick Road/Fullerton Road third building on right.

FROM ANNAPOLIS:

Take Route 50 West to Route 495/95 South (Washington Beltway) to Route 95 South (Richmond) to Exit 167 Backlick Road/Fullerton Road third building on right.

FROM WASHINGTON D.C.:

Take Route 395 South to Route 95 South (Richmond) to Exit 167 Backlick Road/Fullerton Road third building on right.

FROM RICHMOND:

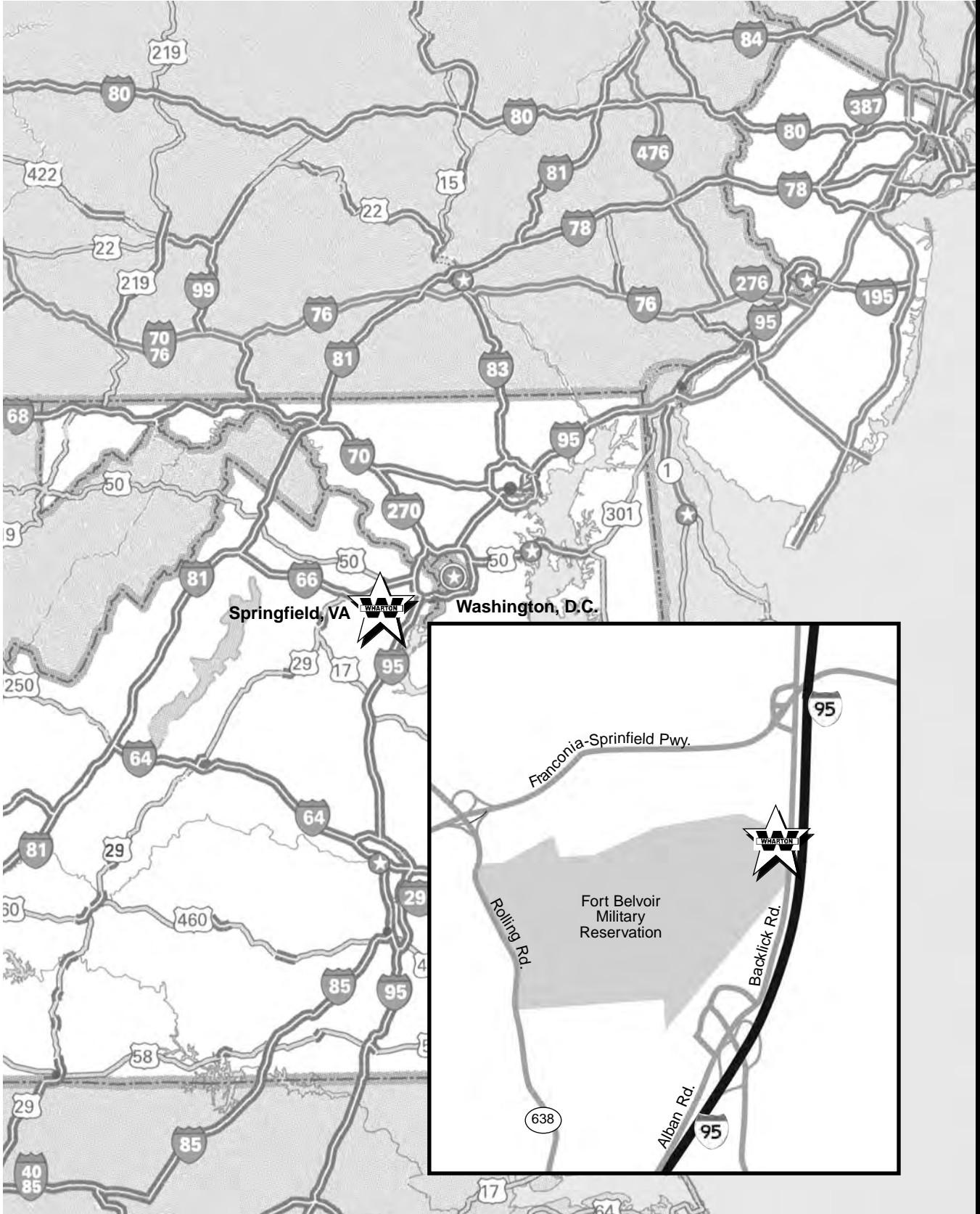
Take Route 95 North to Exit 166 Fullerton Road/Backlick Road follow signs to Backlick Road 1/2 mile on left.

FROM WINCHESTER:

Take Route 81 South to Route 66 West to Fairfax County Parkway South to Springfield/Franconia Parkway to Backlick Road South 1-1/2 miles on right.

FROM ALEXANDRIA:

Take Route 495/95 South (Washington Beltway) to Route 95 South to Exit 167 Backlick Road/Fullerton Road third building on right.



Directions to Clinton, MD Store:

FROM WASHINGTON, D.C.:

Take the I-295 South to I-95 ramp North to Baltimore. Take the Branch Avenue/MD-5 ramp. Turn right onto Branch Avenue/MD-5 South. Take the Coventry Way ramp toward Clinton/Andrews Air force Base. Turn left onto Coventry Way. Turn right onto Old Alexandria Ferry Road, continue approximately 1-1/2 miles. Turn left at 8042 Old Alexandria Ferry Road.

FROM BALTIMORE:

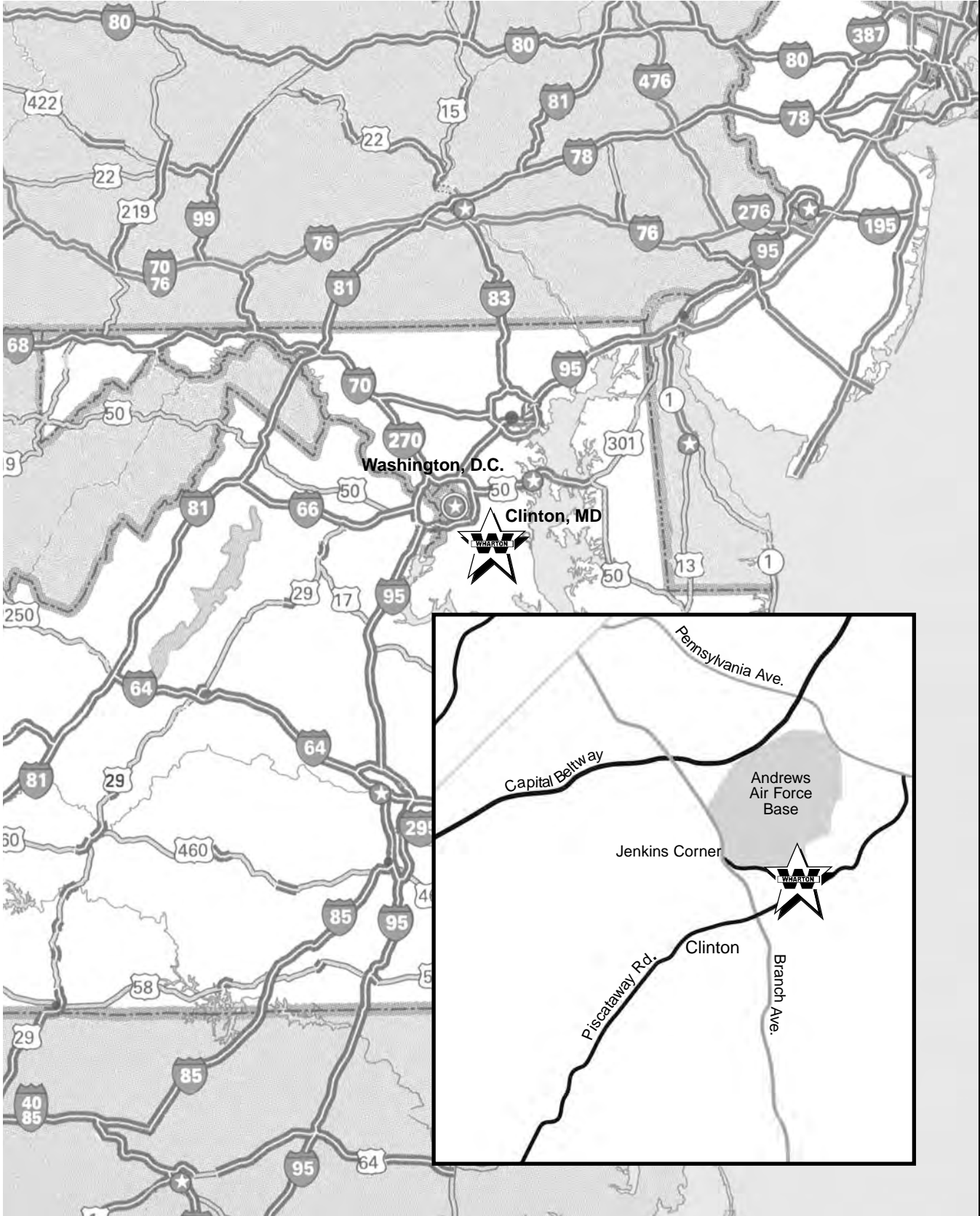
Take I-95 South to I-495 South/Capitol Beltway toward Richmond Virginia/Andrews Air Force Base. Merge onto MD-5 South/Branch Avenue via EXIT 7A toward Waldorf. Take the Coventry Way ramp toward Clinton/Andrews Air Force Base. Turn right onto Old Alexandria Ferry Road, continue approximately 1-1/2 miles. Turn left at 8042 Old Alexandria Ferry Road.

FROM ANNAPOLIS AND EASTERN SHORE:

Take Route 50 West to I-95 South to Richmond. Merge onto to I-495 South/Capitol Beltway toward Richmond Virginia/Andrews Air Force Base. Merge onto MD-5 South/Branch Avenue via EXIT 7A toward Waldorf. Take the Coventry Way ramp toward Clinton/Andrews Air Force Base. Turn right onto Old Alexandria Ferry Road, continue approximately 1-1/2 miles. Turn left at 8042 Old Alexandria Ferry Road.

FROM SAINT CHARLES AND SOUTHERN MD:

Take US-301 North/Crain Hwy/Blue Star Memorial Hwy. Stay straight to go onto Branch Avenue/MD-5 North. Merge onto Woodyard Road/MD-223 toward Mellwood. Turn left onto Old Alexandria Ferry Road, continue approximately 1/2 a block, turn right at 8042 Old Alexandria Ferry Road.





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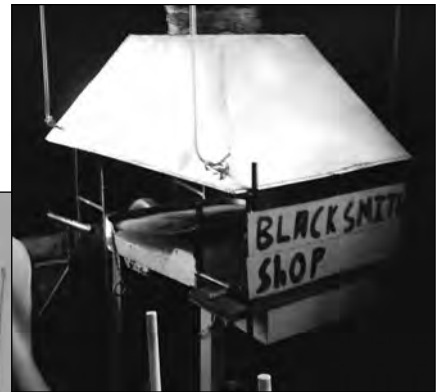


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