

WELDING & METALWORKING

Gas Equipment & Accessories	1002-1019
Soldering Tools & Accessories	1020-1023
Arc Tools & Accessories	1024-1030
Welding Machines	1031-1033
MIG Guns & Accessories	1034-1041
TIG Torches & Accessories	1042-1058
Plasma Cutting Guides, Layout & Measuring Tools	1059-1062
Welding Screens & Blankets	1063-1064
Welding Helmets & Lenses	1065-1075
Welding Clothing & Gloves	1076-1080
Alloys & Fluxes	1081-1087
Metal Working Fluids & Equipment	1088-1097
Cutting Tools	1098-1137
Abrasives	1140-1166
Brushes	1167-1174
Sandblasting & Fume Extractors	1175-1181
Parts Cleaners	1182-1183
Cleaners & Degreasers	1184-1189
Lubricants	1190-1197
Lubricating Equipment	1198-1204
Funnels	1205
Sealants & Adhesives	1206-1222



3M



GOSS
PROFESSIONAL TORCH EQUIPMENT



JACKSON
SAFETY BRAND



NORTON



lev-co

Markal
High Performance Industrial Markers

optrel

OSBORN
INTERNATIONAL
A Unit of Jason Incorporated

GAS WELDING OUTFITS & ACCESSORIES

WELDING & CUTTING OUTFITS

All Harris Classic outfits come complete with tool bag and include the following torch features: Solid forged head, brazed triangular tube design, ease-on cutting valve and protected torch union



Solid Forged Head



Brazed Triangular Tube Design



Ease-On Cutting Valve



Protected Torch Union

STEELWORKER® CLASSIC WITH TOOL BAG

- Cuts to 5" and welds to 1/2"

Includes:

- Torch handle (85)
- Mixer (D-85)
- Cutting attachment (72-3)
- Cutting tip (6290-1AC)
- Welding tip (23A90-5)
- Single stage 0-100 PSIG oxygen regulator
- Single stage 0-15 PSIG fuel gas regulator
- 20' x 3/16" hose
- Goggles
- Striker

Model No. TTU521
Mfg. No. 4403224
Price/Each \$457.66



TTU521



PIPELINER® CLASSIC WITH TOOL BAG

- Cuts to 6" and welds to 1"

Includes:

- Torch handle (43-2)
- Mixer (E-43)
- Cutting attachment (73-3)
- Cutting tip (6290-1AC)
- Welding tip (23A90-5)
- Single stage 0-125 PSIG oxygen regulator
- Single stage 0-15 PSIG fuel gas regulator
- 20' x 1/4" hose
- Goggles
- Striker

Model No. TTU520
Mfg. No. 4403235
Price/Each \$650.30



TTU520



EXPERT® CLASSIC WITH TOOL BAG

- Cuts to 4" and welds to 1/2"

Includes:

- Torch handle (85)
- Mixer (D-85)
- Cutting attachment (72-3)
- Cutting tip (6290-1AC)
- Welding tip (23A90-5)
- Single stage 0-100 PSIG oxygen regulator
- Single stage 0-15 PSIG fuel gas regulator
- 20' x 3/16" hose
- Goggles
- Striker

Model No. TTU522
Mfg. No. 4403228
Price/Each \$436.51



TTU522



PORT-A-TORCH® OUTFITS

- All outfit components are industrial grade for professional use
- Cutting attachments feature solid forged heads, triangular stainless steel tubes with brazed connections, solid brass forged levers and a lock ring that secures torch nut in place
- Torch handles feature silver-brazed, twin-tube construction and easily replaceable *Flashguard*® check valves
- Regulators equipped with an encapsulated *Teflon*® seat for safety and extended service life

- Includes:** Welding tip (23A90-3), Fuel gas regulator (601-15-200), Oxygen regulator (601-80-540), 3/16" x 12' hose, 20 cu. ft. oxygen cylinder, 10 cu. ft. "MC" acetylene cylinder, cylinder wrench, goggles, striker and instruction manual
- Stored in a heavy-duty, weather-proof and flame retardant tool bag

Model No.	Mfg. No.	Description	Torch Handle	Cutting Attachment	Mixer	Cutting Tip	Price /Each
TTU624	4403211	Classic Style	85	72-3	D-85	6290-1AC	816.22
TTU625	4403214	V-Series Style	V100C	V1350	V-W1	V-V3-101	816.22



TTU624



GAS WELDING OUTFITS & ACCESSORIES

LIGHT/MEDIUM DUTY TOTE-A-TORCH OUTFITS

- For use in general repair, maintenance and HVAC applications
- Can weld up to 3/16" and cut up to 1/2"
- Rear entry regulators provide better balance
- Acetylene regulator has an MC CGA200 inlet connection; oxygen regulator has standard CGA540 connection

Includes:

- Torch handle with check valve
- Cutting attachment
- Oxygen/acetylene regulators with 2" double-scale gauges
- Cutting tip
- Welding nozzle
- 12.5' twin hose
- Goggles
- Striker
- Tank wrench
- Cylinders
- Polypropylene carrier

Model No. TTT892
Mfg. No. 72-PTC
Price/Each \$797.28



PROWELD
by GENTEC

MEDIUM-DUTY WELDING & CUTTING OUTFITS

- Can weld up to 1/4" and cut up to 1/2"
- Ideal general purpose kit for construction, petroleum and chemical industries
- Victor® Super Range® compatible
- Comes with deluxe tool box for easy transportation

Includes:

- Torch handle with check valve
- Cutting attachment
- Oxygen/acetylene regulators with 2" double-scale gauges
- Cutting tip
- Welding nozzle
- 20' twin hose
- Goggles
- Striker

Model No. TTT002
Mfg. No. 7120
Price/Each \$378.36



PROWELD
by GENTEC

HEAVY-DUTY WELDING & CUTTING OUTFITS

- Can weld up to 1/2" and cut up to 3/4"
- Ideal for industrial and commercial applications
- Victor® Journeyman® compatible
- Comes with deluxe tool box for easy transportation

Includes:

- Torch handle with check valve
- Cutting attachment
- Oxygen/acetylene regulators with 2 1/2" double-scale gauges
- Cutting tip
- Welding nozzle
- 20' twin hose
- Goggles
- Striker

Model No. TTT891
Mfg. No. 7130
Price/Each \$504.90



PROWELD
by GENTEC

OXY-FUEL THE SMALL TORCH™ KITS

- Designed for plumbing, HVAC, refrigeration and jewelry manufacturing and repair
- Braze and solder material from the tiniest up to 1/8" thick steel
- Melts up to 3 oz silver
- Provides stable and precise concentrated feather flame up to 6000°F for various material such as metals, ceramics and glass
- Acetylene gas service

Includes:

- Torch handle (10ST)
- Tips (10STP2 – 6)
- Hose
- Oxy/fuel regulators (where applicable)

GENTEC
GENSTAR TECHNOLOGIES



333-102201204



333-102201209

TOTE-A-TORCH OUTFITS

- Light-to-medium duty portable outfit
- Welds up to 3/16" and cuts up to 1/2"
- Rear entry regulators for better balance
- Acetylene regulator has an "MC" (CGA 200) inlet connection; oxygen regulator has standard CGA 540 connection
- Victor® portable torch or Super Range® compatible

Includes:

- Torch handle (142T)
- Cutting attachment (142C)
- Regulators (210X-80/210Y-15)
- Cutting tip (172C-0)
- Welding nozzle (172W-1)
- 12.5' twin hoses
- Goggles
- Striker
- Plastic carrier
- One "MC" acetylene cylinder
- One "R" oxygen cylinder

Model No. 331-1070
Mfg. No. 12-PTC
Price/Each \$848.80



GENTEC
GENSTAR TECHNOLOGIES

Model No.	Mfg. No.	Description	Price /Each
333-102201204	GKSTA06	Kit w/o Regulators	172.30
333-102201209	GKSTA16	Kit with Oxy/Fuel Regulators	419.46

Can't find what
you're looking for?
Call us today!



GAS WELDING OUTFITS & ACCESSORIES

AIR-ACETYLENE OUTFITS

- Choice of Quick-Connect (Swirl Flame), or Screw-Connect (Soft Flame) type tips
- KASL Series features quickly-connect auto-ignite tips with swirl flame which is ignited with a push of a button
- B tank connection
- Includes:**
 - Regulator (101 Y-BA)
 - Torch handle
 - Tip Hose (HGA-012A)

333-102205701



Model No.	Mfg. No.	Soft Solder"	Silver Braze"	Handle	Torch Tip	Price /Each
SWIRL FLAME, QUICK-CONNECT STYLE OUTFITS						
333-102205601	KASBSP	1 1/2	3/4	66QT-RA	6Q-STA	285.62
SOFT FLAME, SCREW-CONNECT STYLE OUTFITS						
333-102205701	KASF4BSP	1	n/a	77ST-RA	7S-4SA	172.76
SWIRL FLAME, QUICK-CONNECT STYLE OUTFITS W/AUTO-IGNITE TIPS						
333-102205608	KASL5BSP	1 1/2	3/4	66QT-RA	6Q-STASL	285.62

AIR-ACETYLENE FEATHER FLAME® TORCH KITS

- Screw-in style
- Feather brush flame
- Interchangeable screw-in tips
- Heavy-duty torch
- UL listed brass regulator
- Includes:**
 - 12' hose
 - Handle
 - Lighter
 - Wrench

330-1663



Model No.	Mfg. No.	Tip No.	Reg. FTG	Price/Each
330-1663	KA-1H	BA-3	"B" Cylinder	216.78
330-1669	KA-2H	BA-3	"MC" Cylinder	216.78

AIR-ACETYLENE TARGET TORCH™ KITS

- Snap-in style
- Hot turbine flame
- Interchangeable snap-in style tips
- Heavy-duty torch
- UL listed brass regulator
- For professional soldering and brazing applications
- Includes:**
 - Quick disconnect handle
 - 12' hose
 - Tip(s)

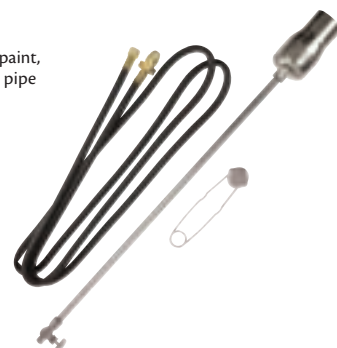
330-1777



Model No.	Mfg. No.	Tip No.	Reg. FTG	Price/Each
330-1777	KX-3B	GA-3, GA-11	"B" Cylinder	450.71
330-1780	KX-7B	GA-8	"B" Cylinder	355.11

HOTSPOTTER ALL-PURPOSE PROPANE HEAVY-DUTY TORCH KITS

- All-purpose propane flame tool operates off the pressure of a standard propane tank – no regulator required
- 31" handle
- Ideal for a wide variety of all-season maintenance/repair applications
- Burns weeds, repairs asphalt, seals tar, peels paint, removes road markings, melts ice and thaws pipe
- Includes:**
 - 10' neoprene hose
 - On/off valve
 - 500 000 BTU rating
 - Durable cast iron and steel nozzle
 - Striker



Model No.	Mfg. No.	Price /Each
312-4904	WB-101	125.69

PROPANE TORCH KITS

- Lightweight and durable steel construction
- Designed for heavy-duty outdoor applications such as weed burning, drying/heating, asphalt, tar and road repair
- 500 000 BTU output
- On/Off brass needle and flame adjustable valve
- 10' hose with POL excess flow check valve and B-connection, no regulator required
- Includes:**
 - Torch
 - Spark lighter
 - 10' hose



Model No.	Mfg. No.	Price /Each
TTU321	KP-320A	117.32

AUTO-IGNITE HAND TORCHES

- High output swirl flame
- Use with Propane and MAPP®
- Durable cast iron construction
- Precise flame adjustment
- CGA600 inlet connection



Model No.	Mfg. No.	Replacement Tip End	Price /Each
333-9120750400	8Q-44TP	4TPESL	151.22



GAS WELDING OUTFITS & ACCESSORIES

CLASSIC TORCH HANDLES NO. 43-2

- High capacity combination handle
- Stainless steel head
- Equipped with *FlashGuard*® check valves
- Capacity: cuts 6", welds to 1"
- 9 1/2" length

Model No. TTT898
Mfg. No. 1401150
Price/Each \$325.59



CLASSIC TORCH HANDLES NO. 85

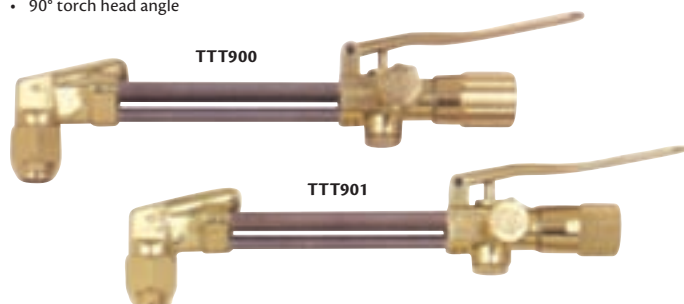
- Silver brazed twin tube construction for safety and durability
- Equipped with *FlashGuard*® check valves
- Capacity: cuts 5", welds to 1/2"
- 8 1/2" length

Model No. TTT899
Mfg. No. 1401340
Price/Each \$250.36



CLASSIC CUTTING ATTACHMENTS

- Solid forged head resists abuse and distortion
- Triangular tube design is compact and lightweight with exceptional strength and rigidity
- Brazed connections prevents leaks
- Protected torch union nut protects seals and O-rings from abuse
- Solid forged lever for exceptional strength
- Ease-on cutting oxygen control for smoother starts
- 90° torch head angle



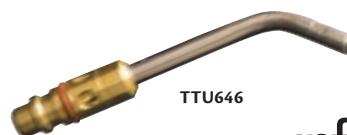
HARRIS® INFERNO® AIR FUEL ACETYLENE KITS & TIPS

- Brazing and soldering without oxygen
- Hottest air fuel tip available
- Compatible with all competitive quick connect air fuel torches
- Results in faster brazing and soldering
- Precision manufactured for the best flame on the market today
- Kit includes: Quick connect handle, regulator (CGA 520), tip (TTU646) and hose
- Every tip made in USA by Harris® to exacting standards

Model No. TTU641
Mfg. No. 4400085
Price/Each \$285.78



TTU641



TTU646



Model No.	Mfg. No.	Uses Torch Head	Price/Each
TTT900	1300340	43-2	362.20
TTT901	1300380	85	355.87

HAND CUTTING TORCHES

- The industry standard by which all other designs are compared!
- Cuts to 12"
- Solid forged head
- Triangular tube design
- Brazed connections
- Equipped with *FlashGuard*® check valves
- Choice of positive pressure "E" **Torches** for acetylene and alternate fuels, and low pressure "F" **Injector Torches** for maximum performance with alternate fuels such as propane, natural gas, MAPP® gas, and propylene

Note: "F" torches are NOT FOR USE with acetylene



TTT905



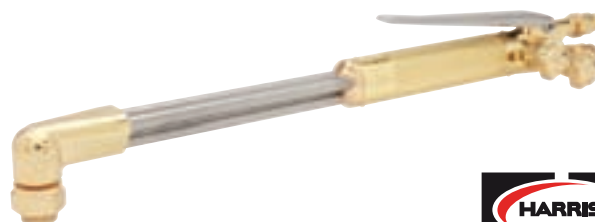
Model No.	Mfg. No.	Head Angle°	Length"	Price/Each
POSITIVE PRESSURE "E" TORCHES				
TTT902	1003464	70	21	472.73
TTT903	1003440	90	21	472.73
TTT904	1003351	70	36	588.27
TTT905	1003441	90	36	629.43
LOW PRESSURE "F" INJECTOR TORCHES				
TTT906	1003370	70	21	472.73
TTT907	1003470	90	21	472.73
TTT910	1003400	70	36	629.43
TTT911	1003480	90	36	629.43

ACETYLENE TIPS

Model No.	Mfg. No.	Tip"	Gas Flow @ 14 PSI SCFH	Soft Solder"	Brazing"	Price /Each
TTU645	1601110	1/4	3.10	Up to 1	Up to 1/2	80.59
TTU646	1601111	5/16	5.80	3/4 - 1 1/2	1/4 - 3/4	95.41
TTU647	1601112	3/8	6.60	1 - 2	1/2 - 1	104.38
TTU648	1601113	7/16	9.80	1 1/4 - 3	7/8 - 1 5/8	110.88

STRAIGHT CUTTING 242V TORCHES

- Rugged construction for heavy-duty applications
- Cutting capacity up to 8"
- Uses Victor® series 1 tips
- Solid brass forged head
- Triangular stainless steel tubes with brazed connections
- Stainless steel cutting oxygen lever
- Non-slip grooves on handle provides maximum comfort and control
- *Flashguard*® check valves
- Positive pressure mixer for use with acetylene and all other fuel gases
- UL listed
- Meets CGA E.5 standards



Model No.	Mfg. No.	Head Angle°	Price /Each
TTU546	1003569	90	245.91

GAS WELDING OUTFITS & ACCESSORIES

SINGLE STAGE REGULATORS NO. 25

- One-piece encapsulated seat design with an internal filter and a PTFE Teflon® seat
- Chrome-plated bonnet with forged brass body
- 2" dual scale gauges
- Gauge guards sold separately



Model No.	Mfg. No.	Gas	Max Inlet PSIG	Delivery Pressure Range, PSIG	Delivery Pressure Gauge, PSIG	Supply Pressure Gauge, PSIG	Inlet Connection	Outlet Connection	Price /Each
TTT920	3000380	Acetylene	500	0-15	30	400	CGA510	9/16"-18 LH	159.29
TTT921	3000450	Propane*	500	0-50	60	400	CGA510P	9/16"-18 LH	159.29
TTT922	3000510	Oxygen	3000	0-100	150	4000	CGA540	9/16"-18 RH	159.29
TTT923	3000540	Ar, N ₂ , He	3000	0-100	150	4000	CGA580	9/16"-18 RH	159.29
TTT924	3000550	Industrial Air	3000	0-100	150	4000	CGA590	9/16"-18 RH	159.29
TTT925	3000806	N ₂	3000	0-200	400	4000	CGA580	9/16"-18 RH	193.61

GAUGE GUARDS

TTT926	4300140	Fuel Gas							32.80
TTT927	4300139	Oxygen							32.80

*Regulator designated for propane service can be used with any of the other welding grade liquid petroleum gases. NOT FOR USE WITH ACETYLENE.

152 SERIES - SINGLE STAGE REGULATORS

- Designed for medium-duty gas welding, cutting and heating applications
- Body and housing cap are machined from class "A" brass bar stock
- Self re-seating external safety pressure relief valve on oxygen models
- Stem type seat assembly for more reliable performance
- 2" gauges for easy reading
- 2" diaphragm
- UL listed



Model No.	Mfg. No.	Gas Service	Max Inlet/Delivery Pressure (PSI)	Inlet Gauge	Outlet Gauge	Inlet Connection	Outlet Connection	Price /Each
331-3575	152X-80	Oxygen	3000/4-80	2", 4000 PSI	2", 100 PSI	CGA540	9/16"-18 RH (M)	147.08
331-3585	152Y-15	Acetylene	400/2-15	2", 400 PSI	2", 30 PSI, RL	CGA510	9/16"-18 LH (M)	147.08



153 SERIES - SINGLE STAGE REGULATORS

- Designed for heavy-duty gas welding, cutting and heating applications
- 2 1/2" gauges for easy reading
- 3 1/4" stainless steel diaphragm for accurate pressure delivery
- Delrin cap bushing for smooth adjustments
- Stem type seat assembly for more reliable performance
- Body and housing cap machined from class "A" brass bar stock
- Self re-seating external pressure relief valve on oxygen model
- Sintered bronze inlet filter
- UL listed



Model No.	Mfg. No.	Gas Service	Max Inlet/Delivery Pressure (PSI)	Inlet Gauge	Outlet Gauge	Inlet Connection	Outlet Connection	Price /Each
331-3665	153X-125	Oxygen	3000/5-125	2 1/2", 4000 PSI	2 1/2", 200 PSI	CGA540	9/16"-18 RH (M)	283.04
331-3675	153Y-15	Acetylene	400/2-15	2 1/2", 400 PSI	2 1/2", 30 PSI, RL	CGA510	9/16"-18 LH (M)	283.04



452 SERIES - SINGLE STAGE REGULATORS

- Designed for medium to heavy-duty gas welding, cutting and heating applications; the "Horse" is a Harris® style regulator
- 2 3/4" diaphragm and a Victor® style seat mechanism
- Forged brass body
- Chrome plated housing cap
- Self re-seating external pressure relief valve on oxygen, inert gases and carbon dioxide models
- Sintered bronze inlet filter
- 2" gauges for easy reading
- UL listed



Model No.	Mfg. No.	Gas Service	Max Inlet/Delivery Pressure (PSI)	Inlet Gauge	Outlet Gauge	Inlet Connection	Outlet Connection	Price /Each
331-4385	452X-80	Oxygen	3000/4-80	2", 4000 PSI	2", 100 PSI	CGA540	9/16"-18 RH (M)	133.50
331-4380	452X-175	Oxygen	3000/5-175	2", 4000 PSI	2", 300 PSI	CGA540	9/16"-18 RH (M)	133.50
331-4395	452Y-15	Acetylene	400/2-15	2", 400 PSI	2", 30 PSI, RL	CGA510	9/16"-18 LH (M)	133.50
TTT120	452C-175	Carbon Dioxide	3000/5-175	2", 4000 PSI	2", 300 PSI	CGA320	5/8"-18 RH (F)	133.50
331-4285	452C-300	Carbon Dioxide	3000/20-300	2", 4000 PSI	2", 400 PSI	CGA320	5/8"-18 RH (F)	222.42
TTT118	452IN-80	Inert Gases*	3000/4-80	2", 4000 PSI	2", 100 PSI	CGA580	5/8"-18 RH (F)	135.96
331-4340	452IN-300	Inert Gases*	3000/20-300	2", 4000 PSI	2", 400 PSI	CGA580	5/8"-18 RH (F)	191.58
804-1975	452IN-450	Inert Gases*	3000/30-450	2", 4000 PSI	2", 600 PSI	CGA580	5/8"-18 RH (F)	210.06

*Argon, nitrogen, helium



GAS WELDING OUTFITS & ACCESSORIES

153 SERIES – GAUGE PROTECTORS

- Durable metal construction
- Reduces potential damage to pressure gauges
- Easy to install and remove from regulators
- For use with Gentec® 153 Series regulators, interchangeable with other major brands

Note: Gauge protectors are not designed to replace or alleviate the need for proper cylinder storage systems. Cylinders should always be used and stored in conjunction with local and OSHA requirements.



Model No.	Mfg. No.	Description	Price/Each
TTT893	GP153X	Oxygen Gauge Protector	19.50
TTT894	GP153Y	Acetylene Gauge Protector	19.50



TTT893



TTT894

190 SERIES - FLOW GAUGE REGULATORS

- "MIG METER" flow gauge regulators are designed for MIG and TIG applications
- 2" gauges for easy reading
- Accurate measurement of gas flow up to 50 SCFH
- Body machined from class "A" brass bar stock
- Chrome-plated housing cap
- Internal safety pressure relief design
- Plastic adjustment knob for smooth "easy touch" flow settings
- UL listed



Model No.	Mfg. No.	Gas Service	Max Inlet/Delivery Pressure (PSI)	Inlet Gauge	Outlet Gauge	Inlet Connection	Outlet Connection	Price /Each
331-1540	190AR-50	Argon	0-50	2", 4000 PSI	2", 50 SCFH	CGA580	5/8"-18 RH (F), 0.32 Orifice	117.94
331-1575	190CD-45	Carbon Dioxide	0-45	2", 4000 PSI	2", 50 SCFH	CGA320	5/8"-18 RH (F), 0.32 Orifice	117.94



191 SERIES - FLOWMETER REGULATORS

- Designed for MIG and TIG applications
- Provides accurate regulation of gas flow
- Piston type construction
- Body machined from class "A" brass bar stock
- Polycarbonate flow tube and outer cover are impact resistant
- Conforms to CGA E-4 standard for gas pressure regulators



Model No.	Mfg. No.	Gas Service	Flow Capacity (SCFH)	Inlet Gauge	Flowmeter (SCFH)	Inlet Connection	Outlet Connection	Price /Each
331-1610	191AR-60	Argon	50	1 1/2", 4000 PSI	60	CGA580	5/8"-18 RH (M)	147.16
TTT131	191CD-60	Carbon Dioxide	50	1 1/2", 4000 PSI	60	CGA320	5/8"-18 RH (F)	153.58

WITH 6-FOOT HOSE INCLUDED

331-4150	191AR-60-6HSP	Argon	50	1 1/2", 4000 PSI	60	CGA580	5/8"-18 RH (M)	176.66
331-3200	191CD-60-6HSP	Carbon Dioxide	50	1 1/2", 4000 PSI	60	CGA320	5/8"-18 RH (F)	184.72

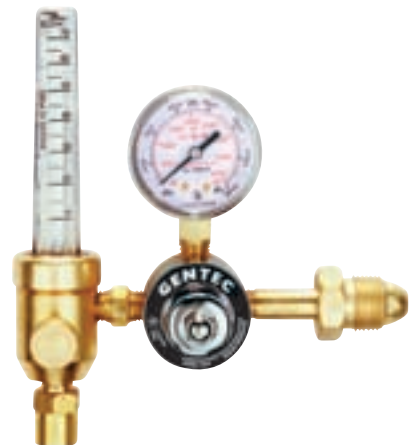


195 SERIES - "MIG MASTER" FLOWMETER REGULATORS

- Designed for MIG and TIG applications and provide accurate regulation of gas flow
- Provides reliable performance in commercial, industrial and lab applications
- Single stage construction
- 0-60 SCFH argon (Ar) flow, 0-150 SCFH helium (He) flow, 0-60 SCFH carbon dioxide (CO₂) flow
- Polycarbonate flow tube and outer cover are impact resistant for maximum durability and service life
- Flowmeter is backpressure compensated to ensure accurate readings when line restrictions are present
- 2" high-pressure gauge for easy reading
- Body machined from class "A" brass bar stock
- Chrome-plated housing cap
- Internal safety pressure relief design
- Sintered bronze inlet filter
- UL listed



Model No.	Mfg. No.	Gas Service	Outlet Pressure Preset (PSI)	Inlet Gauge	Flowmeter (SCFH)	Inlet Connection	Outlet Connection	Price /Each
331-1638	195AR-60	Argon	50	2", 4000 PSI	60	CGA580	5/8"-18 RH (F)	203.00
331-4166	195AR-60-680	Argon	50	2", 6000 PSI	60	CGA680	5/8"-18 RH (F)	211.42
331-4175	195CD-60	Carbon Dioxide	50	2", 4000 PSI	60	CGA320	5/8"-18 RH (F)	209.40



GAS WELDING OUTFITS & ACCESSORIES

195FM SERIES - FLOWMETERS

- Designed for accurate regulation of gas flow
- Backpressure compensated design insures accurate readings when line restrictions are present
- Polycarbonate flow tube is square shaped for easy reading
- Body machined from class "A" brass bar stock
- Easy adjustment brass knob for "fine-tune" flow settings
- UL listed



Model No.	Mfg. No.	Gas Service	Max Inlet Preset (PSI)	Inlet Connection	Outlet Connection	Flowmeter Flow Range (SCFH)	Price /Each
331-4185	195FM	Argon, Carbon Dioxide	50	1/4" NPT(M)	5/8"-18 RH(F)	0-60 Ar	107.62



198CD ELECTRICALLY HEATED REGULATORS/FLOWMETERS FOR CARBON DIOXIDE

- Designed for applications requiring extremely high gas flow rates
- Built-in, thermostatically-controlled electric heater keeps the carbon dioxide warm, allowing for continuous duty cycle without freezing
- 110 VAC/190 W heater is standard
- 0-60 SCFH flowmeter is backpressure compensated to ensure accurate reading when line restrictions are present
- Forged brass body and housing cap with sintered bronze inlet filter

Caution: Use this regulator only with non-siphoned standard carbon dioxide cylinders



Model No.	Mfg. No.	Gas Service	Max Delivery Pressure (PSI)	Inlet Gauge	Flowmeter (SCFH)	Inlet Connection	Outlet Connection	Price /Each
331-4210	198CD-60	Carbon Dioxide	50 (Preset)	2", 4000 PSI	60	CGA320	5/8"-18 RH(F)	398.06



PROPANE REGULATORS

- High pressure regulator
- Use only with vapour withdrawal cylinders
- All brass regulator used with propane torches and furnaces
- 0 to 60 PSI outlet pressure gauge from propane gas
- UL listed with POL inlet spud and nut, 1/4" NPT openings and 9/16"-18 L.H. hose outlet

Model No. 330-1474
Mfg. No. EP-70G
Price/Each \$129.34



ACETYLENE REGULATORS

- Made for rugged use
- Manufactured of solid brass
- 1 1/2" W x 3 5/16" H
- Specially designed conical seat and a neoprene diaphragm
- Inlets have filters to prevent dirt from entering regulator
- "A" hose fitting 3/8 - 24 L.H.
- UL listed

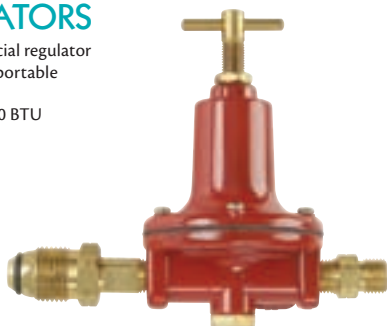


Model No.	Mfg. No.	Connection	Price/Each
330-1423	EA-1G	"B" Cylinder	125.37
330-1426	EA-2G	"MC" Cylinder	125.37

PROPANE REGULATORS

- High pressure industrial/commercial regulator
- For liquid or vapour service with portable torches or construction heaters
- Rated for approximately 1 000 000 BTU
- Includes fittings: 0 - 50 PSIG
- **Hose sold separately**

Model No. 898-1003-KIT
Price/Each \$50.74



PROPANE HOSES

- For use with propane regulator
- Quality flexible hose

Model No.	Mfg. No.	Length'	Price/Each
722-1070	HP-6	6	21.70
722-1010	HP-10	10	29.02
722-1030	HP-20	20	53.28
722-1040	HP-25	25	65.04



GAS WELDING OUTFITS & ACCESSORIES

BALLOON FILLER REGULATORS

ECONOMY BALLOON BLOWERS

- Features straight through construction
- Rugged brass body
- Piston-type mechanism
- Hand tight CGA 580 inlet connection with sintered bronze inlet filter

Model No.	Mfg. No.	Price/Each
331-9000	229	38.66

STANDARD BALLOON BLOWERS

- Rugged all brass body
- Piston-type mechanism
- Wrench tight CGA 580 inlet connection with sintered bronze filler valve

Model No.	Mfg. No.	Price/Each
331-9020	230	59.42

PREMIUM BALLOON BLOWERS

- Rugged all brass body
- Piston-type mechanism
- Drilled and tapped for tie hook and string cutter
- Hand tight CGA 580 inlet connection with sintered bronze inlet filter
- 1 1/2", 4000 PSI rear entry inlet gauge

Model No.	Mfg. No.	Price/Each
331-9130	230HGA	79.60



BRASS GAUGES

- Brass casing
- Lexan™ cover lens
- 1/4" NPT inlet



Model No.	Description	Price /Each
NT616	2" x 100 PSI	6.85
NT617	2" x 200 PSI	6.85
NT618	2" x 30 PSI – Red line	6.85
NT619	2" x 400 PSI	6.85
NT620	2" x 4000 PSI	7.55
NT622	2 1/2" x 200 PSI	7.55
NT623	2 1/2" x 30 PSI – Red line	7.55
NT624	2 1/2" x 400 PSI	7.55
NT625	2 1/2" x 4000 PSI	7.55



PRESSURE GAUGES

- Dual scale



Model No.	Mfg. No.	Scale Ranges	Entry Type	Price /Each
1 1/2" STEEL CASE, 1/8" NPT INLET				
331-2980	G15-03RL	0-30 PSI – Red Line	Side	11.68
331-2985	G15-100	0-100 PSI	Side	11.68
331-2990	G15-400	0-400 PSI	Side	11.68
331-2995	G15-4000	0-4000 PSI	Side	14.00
331-2445	GR15-4000	0-4000 PSI	Rear	14.00
2" STEEL CASE, 1/4" NPT INLET				
331-2405	G20-050CF	0-30 SCFH	Side	12.04



GAS ROLLER GUIDES

- The essential accessory for your gas torch
- Suits oxy/acetylene torches
- Optimum tip height at all times
- Stainless steel axles and guards, non-rusting
- Non-jamming hub design
- CNC machined quality parts
- No tools required for fitting
- **Adaptor bushing sold separately**



Model No.	Mfg. No.	Description	Price/Each
826-1085	TJ1601	Gas Roller Guide	43.50

TRAKKA LINE CUTTERS

- Cuts accurate and precise straight lines and bevel edges with ease and control
- Suits oxy/acetylene torches
- Offers optimum tip height at all times
- Magnetic clamping system, bases slide and twist to lock to suit plate width
- Bevel edges cut easily
- 1.35 m (4.4 ft) aluminum guide rail, cuts 1.2 m (3.9 ft)
- CNC machined quality parts, brass forgings, stainless rails and axles
- **Adaptor bushing sold separately**



Model No.	Mfg. No.	Description	Price/Each
826-1480	TJ5085	Trakka Line Cutter	365.00
ACCESSORIES			
826-1640	TJ5181	1.2 m Aluminum Guide Rail (requires rail joiner)	82.20
826-1645	TJ5260	Rail Joiner for 826-1640	44.55

CUTTING GUIDES

- Suits oxy/acetylene torches
- For straight line, curved line or bevel cutting applications
- Rotating head design allows full 360° one-position operation
- Cuts accurate holes from 1" (25 mm) diameter
- **Universal Cutting Guide** for any cutting tip up to 18 mm O.D.

Standard Cutting Guide requires adaptor bushing (**sold separately**)



826-1025

Model No.	Mfg. No.	Description	Price/Each
826-1655	TJ1080	Universal Cutting Guide	105.00
826-1025	TJ1083	Standard Cutting Guide	87.00
ACCESSORIES			
826-1560	TJ6086	Magnet (sold separately)	37.00

ADAPTOR BUSHINGS

Model No.	Mfg. No.	For	Price/Each
826-1205	TJ2182	Victor® Series 1	20.90
826-1210	TJ2183	Airco®	20.90
826-1215	TJ2184	Purox®	20.90
826-1220	TJ2185	Harris®	20.90
826-1225	TJ2186	Liquid Air®	20.90
826-1235	TJ2189	Victor® Series 3	30.00
826-1245	TJ2192	Smith SC®	20.90
826-1250	TJ2193	Smith MC®	30.00



GOSS®
PROFESSIONAL TORCH EQUIPMENT

CUTTING TIP CHART

MATERIAL THICKNESS	1/8	1/4	1/2	3/4	1	1-1/2	2	4	5	6	8	10	12
RECOMMENDED TIP NUMBER AND DRILL SIZE	00 68	0 60	1 56	1 56	2 54	2 54	3 52	3 49	4 44	6 38	6 31	7 28	8
OXYGEN PRESSURE SETTING LB/IN ² g	20-25	25-30	30-35	30-35	35-40	40-45	40-45	40-50	45-55	45-55	45-55	45-55	45-55
ACETYLENE PRESSURE SETTING LB/IN ² g	3-5	3-5	3-5	3-5	3-7	3-7	5-10	5-10	6-12	7-13	8-14	10-15	10-15
CUTTING IN / MIN	27-30	26-29	20-24	17-21	14-18	13-17	12-15	8-11	7-9	6-8	5-6	4-5	3-4

AIRCO® 144/ALC 802 STYLE CUTTING TIPS

- For general hand or machine cutting
- Acetylene-oxygen
- Medium preheat
- Fits Airco® 3790, 4690, 4700, 4800, 5700, 5800, 1100, 3000, 9000 and 9500 torches



Model No.	Size	Price/Each
TTU465	00	10.90
TTU466	0	10.90
TTU467	1	10.90
TTU468	2	10.90
TTU469	3	10.90
TTU470	4	10.90
328-1351	5	13.67
328-1354	6	13.67
328-1360	8	13.67

AIRCO® 164/ALC 803 STYLE CUTTING TIPS

- For general, cast iron and stainless steel cutting
- Acetylene-oxygen
- Very high preheat
- Fits Airco® 3790, 4690, 4700, 4800, 5700, 5800, 1100, 3000, 9000 and 9500 torches



Model No.	Size	Price/Each
TTU471	00	10.75
TTU358	0	10.75
TTU359	1	10.75
TTU360	2	10.75
TTU361	3	10.75
TTU362	4	10.75
TTU472	5	10.75
TTU473	6	10.75
TTU474	7	10.75
328-1468	8	15.07

AIRCO® 261/ALC 829 STYLE CUTTING TIPS

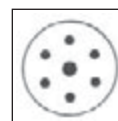
- For general cutting, two-piece tip for hand cutting
- Propane or oxygen-natural gas
- High preheat
- Fits Airco® 2900, 3790, 4690, 4700, 4800, 5700, 5800, 1100, 3000, 9000 and 9500 torches



Model No.	Size	Price/Each
328-1681	00	18.28
TTU475	0	10.40
TTU476	1	10.40
TTU477	2	10.40
TTU478	3	10.40
TTU479	4	10.40
TTU480	5	10.40
328-1702	6	18.28
328-1705	7	18.28
328-1708	8	20.63

PUROX® 4202/ESAB STYLE CUTTING TIPS

- For general cutting
- Acetylene-oxygen
- Medium preheat
- Fits CW-200, CW-202, CW-300 Type E torches and C-205 machine torch



Model No.	Size	Price/Each
TTU481	3	11.50
TTU482	4	11.50
TTU483	5	11.50
TTU484	7	11.50
TTU485	9	11.50
328-3238	11	16.29
328-3241	13	16.29

SMITH® SC12 STYLE CUTTING TIPS

- For hand or machine cutting with oxy-acetylene
- Medium preheat
- Fits Smith® cutting attachments Silver Star and MC40
- Fits Smith® cutting torches Tuf Tony and Silver Star
- Fits Smith® machine torches SC770, SC771, SC780A, SC781A and SC782A



SMITH® MC12 STYLE CUTTING TIPS

- For hand cutting with oxy-acetylene
- Medium preheat
- Fits Smith® cutting assemblies MCS05, MCS09, AC305, and AC309



Model No.	Size	Price/Each
TTU530	1	16.45

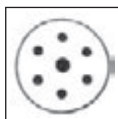
Model No.	Size	Price/Each
TTU531	1	16.50

Manufacturers names are used descriptively only to identify products with which these Replacement Tips may be used. They have no relationship with other manufacturers listed.



HARRIS® 6290 STYLE CUTTING TIPS

- For general hand cutting
- Acetylene-oxygen
- Medium preheat
- Fits Harris® 42-3, 62-3, 72, 72A, 73, 73A and 85 torches



Model No.	Size	Price/Each
TTU458	000	8.20
TTU459	00	8.20
TTU349	0	8.20
TTU350	1	8.20
TTU351	2	8.20
TTU352	3	8.20
TTU460	4	8.20
TTU461	5	8.20
TTU462	6	8.20

HARRIS® 6290-NX STYLE CUTTING TIPS

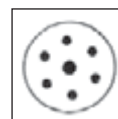
- For general hand cutting
- Propane or oxygen-natural gas
- Medium preheat
- Fits Harris® 42-3, 49AF, 49F, 62-3, 72, 73, 85 and 142 torches



Model No.	Size	Price/Each
TTU463	000	8.55
328-2125	00	13.23
TTU353	0	8.55
TTU354	1	8.55
TTU355	2	8.55
TTU356	3	8.55
TTU357	4	8.55
TTU464	5	8.55
328-2146	6	13.23

VICTOR® 3-101 STYLE CUTTING TIPS

- For general hand cutting
- Acetylene-oxygen
- Medium preheat
- Fits CA 1260, CA 1350, C 1450, CA 2060, CST 800 and C 1400 torches



Model No.	Size	Price/Each
TTU448	000	8.25
TTU449	00	8.25
TTU340	0	8.25
TTU341	1	8.25
TTU342	2	8.25
TTU343	3	8.25
TTU450	4	8.65
TTU451	5	8.65

VICTOR® 1-101 STYLE CUTTING TIPS

- For general cutting
- Acetylene-oxygen
- Machine preheat for hand and machine cutting
- Fits 2460, CA 1060, ST, SST and 1400C machine torches



Model No.	Size	Price/Each
TTU441	000	8.65
TTU333	00	8.65
TTU334	0	8.65
TTU335	1	8.65
TTU336	2	8.65
TTU337	3	8.65
TTU338	4	8.65
TTU339	5	8.65
TTU442	6	8.65
TTU443	7	8.65
TTU444	8	8.65

VICTOR® 1-118 STYLE CUTTING TIPS

- For gouging, scarfing and descaling
- Acetylene-oxygen
- Fits 2460, CA 1060, ST, SST and 1400C torches



Model No.	Size	Price/Each
328-4015	0	31.56
TTU445	2	20.80
TTU446	4	20.80
TTU447	6	32.60
328-4027	8	49.64

VICTOR® GPN STYLE CUTTING TIPS

- For general cutting
- Propane or oxygen-natural gas
- Medium preheat for hand and machine cutting
- Fits 2450, CA 1060, CAN 1060, ST, SST, STN and 1400C machine torches



Model No.	Size	Price/Each
328-3826	000	14.71
TTU452	00	8.45
TTU344	0	8.50
TTU345	1	8.50
TTU346	2	8.50
TTU347	3	8.50
TTU348	4	8.50
TTU453	5	8.45
328-3850	6	16.85
328-3853	7	16.85
328-3856	8	16.85

VICTOR® 3-GPN STYLE CUTTING TIPS

- For general cutting
- Propane or oxygen-natural gas
- Medium preheat series 3 tip
- Fits CA 1260, CA 1350, C 1450, CA 2060, CST 800 and C 1400 torches



Model No.	Size	Price/Each
TTU454	0	9.80
TTU455	1	9.80
TTU456	2	9.80
TTU457	3	9.80

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GAS WELDING OUTFITS & ACCESSORIES

PUROX W-300/ ESAB W-300 STYLE WELDING TIPS

- For welding
- Acetylene-oxygen
- Complete welding tip and mixer
- Fits W-300 and W-400 torches



Model No.	Mfg. No.	Size	Price/Each
328-4483	3025-2	2	45.66
328-4486	3025-4	4	45.66
328-4489	3025-6	6	45.66
328-4495	3025-9	9	52.20
328-4501	3025-15	15	52.20



AIR ACETYLENE FEATHER FLAME® SCREW-IN TIPS

- Quiet, adjustable flame
- For soft soldering and light brazing



Model No.	Mfg. No.	Tip Size"	Soft Solder"	Price/Each
330-1054	BA-1	1/16	1/16 – 1/8	28.95
330-1057	BA-2	1/8	1/8 – 1/4	26.27
330-1060	BA-3	3/16	1/4 – 1/2	26.27
330-1066	BA-4	1/4	1/2 – 1	26.27
330-1069	BA-5	5/16	1 – 1 1/2	33.04
330-1072	BA-6	7/16	2 – 4	36.77



HEATING TIPS

TIP DIAMETERS AS FOLLOWS:

- No. 1 Tip - 11/16"
- No. 2 Tip - 11/16"
- No. 3 Tip - 13/16"
- No. 4 Tip - 1 5/16"



Model No.	Mfg. No.	Tip Size	Thread Size"	Price /Each
FOR USE WITH LP OR NATURAL GAS				
328-1015	221-1	1	1/2-25	52.09
328-1018	221-2	2	1/2-25	52.09
328-1021	221-3	3	1/2-25	80.69
328-1024	221-4	4	1/2-25	112.36

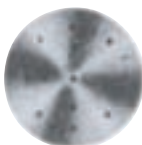
FOR USE WITH ACETYLENE GAS

328-1063	230-1	1	7/16-20	38.51
328-1066	230-2	2	7/16-20	44.13
328-1069	230-3	3	7/16-20	54.85
328-1072	231-1	1	1/2-25	38.51
328-1075	231-2	2	1/2-25	44.13
328-1078	231-3	3	1/2-25	54.85

221



230/231



HEATING TIP ADAPTORS FOR CUTTING TORCHES

- For use with the designated cutting torches



Airco®



Harris®



Victor®



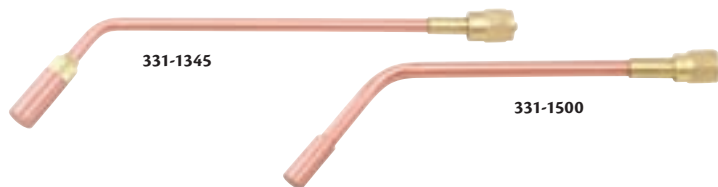
Model No.	Mfg. No	Seat Style	Thread"	Price/Each
328-1252	801-S	Airco® Air Products	1/2-25	20.84
328-2305	1361-S	Harris® 6290	1/2-25	19.20
328-3628	2301-S	Victor® 1 Series	1/2-25	19.20

OXY-ACETYLENE & OXY-HYDROGEN HEATING NOZZLES

- Victor® compatible
- Ideal for preheating and straightening, etc.



Model No.	Mfg. No.	Tip Size	Duty	Oxygen PSIG	Acetylene Fuel PSIG	Oxygen SCFH	Acetylene Fuel SCFH	Victor® Equivalent	Fits	Price /Each
TTU284	172H-2	2	Medium	4/8	4/8	3/10	3/9	2-MFA-1	142T	69.96
TTU285	172H-4	4	Medium	8/12	6/10	7/22	6/20	4-MFA-1		69.96
331-1345	172H-6	6	Medium	10/15	8/12	15/44	14/40	6-MFA-1		69.96
331-1355	172H-8	8	Medium	20/30	10/15	33/88	30/80	8-MFA-1		69.96
TTU286	173H-4	4	Heavy	8/12	6/10	7/22	6/20	4-MFA	143T/143TL/ 143TLH	103.60
331-1495	173H-6	6	Heavy	10/15	8/12	15/44	14/40	6-MFA		103.60
331-1500	173H-8	8	Heavy	20/30	10/15	33/88	30/80	8-MFA		104.58
TTU287	173H-10	10	Heavy	30/40	12/15	44/110	40/100	10-MFA		131.94



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GAS WELDING OUTFITS & ACCESSORIES

SPIRAL TIP CLEANERS

- Cleaning data on back of case
- Hardened steel file included in each case
- Choice of standard or extra long king set
- Quality aluminum case
- Includes 12 cleaners

Model No.	Description	Price/Each
NT641	Standard Set	2.05
NT640	King Set	2.50



TIP DRILL KITS

- Cleans welding tips and a variety of other fuel orifices and injectors
- Includes 10 drills in sizes 52-74
- Promotes more effective fuel use and increases performance in welding, cutting and heating tips
- Drills store neatly in pipe vise handle

Model No. NT660
Price/Each \$9.95



WELD FILLET GAUGES

- Precision gauge
- Covers eleven sizes from 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8", 3/4", 7/8" and 1"
- Constructed of rust proof 22 gauge, type 304 steel
- Die blanked to eliminate sharp edges - adds to accuracy
- Permanently etched and black filled lettering for long life and abrasion resistance

Model No. 704-5015
Mfg. No. MWFG
Price/Each \$26.46



TIP-NIP TIP REFACERS

- For easy, fast precision tip resurfacing
- Insert tip and give a few turns
- Pitted tip is resurfaced for new performance
- Extends tip life

Model No. NT820
Price/Each \$19.15



THREE-FLINT LIGHTERS

- Heavy-duty steel band with three flints attached
- Dependable ignition under all working conditions



322-1240



322-1320

Model No.	Mfg. No.	Description	Price/Each
322-1240	4501	Spark Lighter	5.42
322-1320	5012X	Three-Flint Renewal, 4/Pkg.	4.56

UNIVERSAL SINGLE FLINT LIGHTERS

- Square hood wrapped around the frame
- Under the hood is the round file which spins, always assuring a fresh spark
- Replaceable flints



322-1540

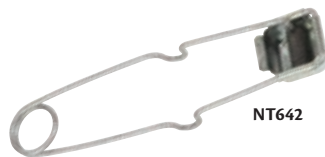


322-1560

Model No.	Mfg. No.	Description	Price/Each
322-1540	3001	Spark Lighter	3.30
322-1560	3001X	Single Flint Renewal, 5/Holder	1.55

FLINT LIGHTERS

- Choice of single or three-flint lighters
- Additional flints sold separately



NT642



NT663



TTU071



TTU072

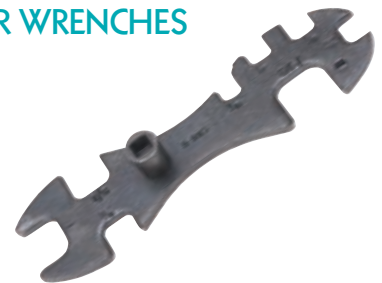


Model No.	Description	Price/Each
NT642	Single Flint Lighter	1.95
TTU432	Single Flint Lighter w/ 5 Flint Holders	21.95
NT663	Flints, 5 per Holder	1.35
TTU071	Three-Flint Lighter	2.95
TTU072	Flints - Each	0.85

10-WAY CYLINDER WRENCHES

- For regulators, torches and commercial acetylene cylinders
- Drop-forged, special alloy steel for maximum durability
- Baked powder coat finish

Model No. BZ944
Mfg. No. 27-1013
Price/Each \$7.18



TANK KEYS

- For B and MC acetylene valves, double ended

Model No. TTU322
Mfg. No. B-MC
Price/Each \$0.56



GAS WELDING OUTFITS & ACCESSORIES

QUICK-CONNECTS FOR WELDING EQUIPMENT

Western's Quick-Connects provide fast, reliable and positive connections and quick disconnections for torches, hoses and regulators. All models are color-coded for gas service for added safety (oxygen/green, fuel gas/red, inert gas/blue). Oxy/fuel gas models include integral reverse flow Check Valves. Quick-Connects fit all B-size welding and cutting equipment.

FEATURES & SPECIFICATIONS:

- Brass construction provides long service life— cycle tested over 10 000 operations indicating a service life of 10 to 12 years of comparable use
- Non-interchangeable Oxygen and Fuel Gas connectors prevent accidental gas mixing
- Instant closure on reverse flow Check Valves with total shutoff at only 10 oz. of back pressure
- Exceed CGA flow specifications—1100 SCFH flow at 125 PSIG inlet pressure and 800 SCFH flow at 125 PSIG inlet pressure when two additional check valves are used in conjunction with the Quick-Connects
- Spring loaded locking mechanism responds to fingertip action and achieves a gas-tight connection
- For inert gas models, demand valve on supply side creates a positive seal when fitting is not connected
- Double seal socket connection on second seal provides added safety protection
- 200 PSIG maximum operating pressure



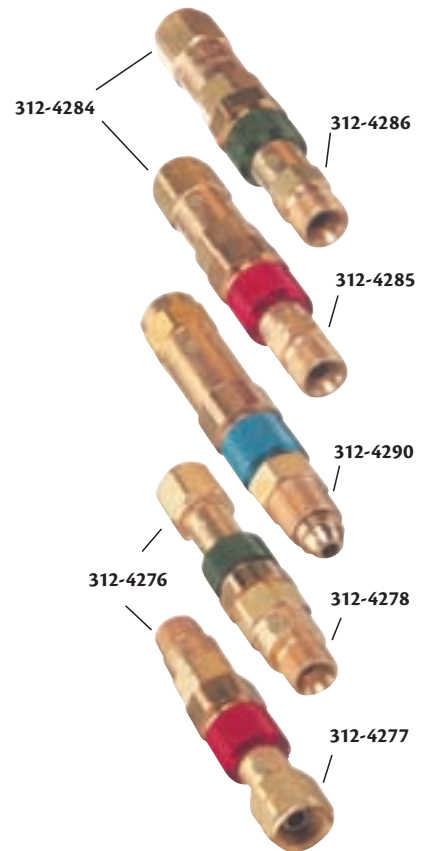
WESTERN
ENTERPRISES

QUICK CONNECT SETS

Model No.	Mfg. No.	Description	Components	Price/Each
312-4276	QDB10	Torch-to-Hose Set w/Check Valves	QDB11—Fuel Gas/QDB12—Oxygen/Inert	75.52
312-4280	QDB20	Hose-to-Hose Set w/Check Valves	QDB21—Fuel Gas/QDB22—Oxygen/Inert	79.51
312-4284	QDB30	Regulator-to-Hose w/Check Valves	QDB31—Fuel Gas/QDB32—Oxygen	79.51

QUICK-CONNECTS INDIVIDUAL UNITS

Model No.	Mfg. No.	Description	Components	Price/Each
TORCH-TO-HOSE				
312-4277	QDB11	Fuel Gas w/Check Valve	QDB200—Male Plug/QDB201—Female Socket	41.73
312-4278	QDB12	Oxygen/Inert Gas w/Check Valve	QDB100—Male Plug/QDB101—Female Socket	41.73
HOSE-TO-HOSE				
312-4281	QDB21	Fuel Gas w/Check Valve	QDB205—Male Plug/QDB201—Female Socket	41.81
312-4282	QDB22	Oxygen/Inert Gas w/Check Valve	QDB105—Male Plug/QDB101—Female Socket	41.81
REGULATOR-TO-HOSE				
312-4285	QDB31	Fuel Gas w/Check Valve	QDB205—Male Plug/QDB206—Female Socket	41.81
312-4286	QDB32	Oxygen w/Check Valve	QDB105—Male Plug/QDB106—Female Socket	43.49
312-4287	QDB33	Inert Gas—Regulator-to-Hose	QDB300—Male Plug/QDB301—Female Socket	41.73
312-4290	QDB34	Inert Gas—Hose-to-Machine	QDB302—Male Plug/QDB303—Female Socket	41.73



FLASHBACK ARRESTORS – OXY/FUEL GAS

Welders rely on Western's advanced Flashback Arrestors to help prevent serious incidents caused by reverse gas flows or flashbacks. Western's Flashback Arrestors are designed to stop flashbacks by preventing ignition of mixed gases and to protect equipment such as hoses, regulators and cylinders.

FEATURES & SPECIFICATIONS:

- Color-coded for gas service to provide added safety – oxygen (green), fuel gas (red)
- Internal check valves designed to prevent reverse flow and accidental mixing of oxygen and fuel gases
- Maximum operating pressures are 15 PSIG for acetylene, 22 PSIG for other fuel gases, and 125 PSIG for oxygen
- Rated capacity of 40 SCFH with a 5 PSIG pressure drop
- Torch and regulator models provide downstream and upstream protection
- 10" maximum cutting capacity
- Reusable; manual resetting not required
- UL listed and 100% tested



WESTERN
ENTERPRISES

Model No.	Mfg. No.	Description	Components	Price/Each
312-3376	FA-10	Flashback Arrestor Set, Torch Style	FA-100P, FA200P	74.24
312-3377	FA-30	Flashback Arrestor Set, Regulator Adaptor Style	FA-130P, FA-230P	80.98

FLASHBACK ARRESTORS INDIVIDUAL UNITS

Model No.	Mfg. No.	Description	Price/Each
312-3378	FA-100P	Flashback Arrestor, Oxygen, Torch Style	41.41
312-3380	FA-200P	Flashback Arrestor, Fuel Gas, Torch Style	41.41
312-3379	FA-130P	Flashback Arrestor, Oxygen, Regulator Adaptor Style	45.28
312-3381	FA-230P	Flashback Arrestor, Fuel Gas, Regulator Adaptor Style	45.28



VALVED Y-CONNECTIONS, BRASS

PRESSURES TO 200 PSIG (1400 KPA)

- For use of two cutting and/or two welding torches at once
- Precision shut off valves
- B-Size (9/16"-18 Thread)



WESTERN
ENTERPRISES

Model No.	Mfg. No.	Description	Service	Price/Each
312-1572	111	Oxygen RH: B-Size F Inlet to B-Size M Outlets	CGA-022	45.40
312-1584	112	Acetylene/F. Gases LH: B-Size F Inlet to B-Size M Outlets	CGA-023	45.40
312-1852	411	Inert Gas RH: 5/8"-18 M Inlet to 5/8"-18 F Outlets	CGA-032	57.25
312-1854	412	Water, Industrial Air LH: 5/8"-18 M Inlet to 5/8"-18 F Outlets	CGA-033	65.23



GAS WELDING OUTFITS & ACCESSORIES

BULK SINGLE LINE CORRUGATED WELDING HOSES, GRADE R

- **Green hose** is for oxygen
- **Red hose** is for acetylene use only, and where cover must resist abrasion, weather and ozone
- Heat resistant EPDM tube and cover
- Two spiral polyester yarn reinforcement, more flexible than braid reinforced hose, easier to coil and handle
- Conforms to RMA/CGA specifications
- Multi-ventilating pores disperses permeating gases, enhances welder's safety
- Working pressure: 200 PSI, 1.38 Mpa
- **Sold in full 700' reels, priced per foot**



Thermoid®
HBD INDUSTRIES, INC.

Model No.	Mfg. No.	Nominal I.D."	Nominal O.D."	Min. Bend Radius"	Price /Each
GREEN HOSES					
302-5005	00521803205	3/16	0.44	1.25	0.72
302-5020	00521804205	1/4	0.53	1.50	0.89
302-5070	00521806400	3/8	0.72	2.25	1.26
RED HOSES					
302-5000	00521903205	3/16	0.44	1.25	0.72
302-5015	00521904205	1/4	0.53	1.50	0.89
302-5065	00521906400	3/8	0.72	2.25	1.26

"TULINE" TWIN WELDING HOSE ASSEMBLIES

- Premium quality US made hose with "B" size brass fittings



Thermoid®
HBD INDUSTRIES, INC.

Model No.	Mfg. No.	Nominal I.D."	Length' /Each	Price
GRADE R HOSES				
PB087	00521403225	3/16	25	31.36
PB090	00521484225	1/4	25	35.69
PB091	00521484250	1/4	50	59.00
PB092	00521484290	1/4	100	112.96
PB094	00521405252	5/16	50	90.68
PB095	00521405291	5/16	100	153.38
302-1260	00521406251	3/8	50	124.60
302-1270	00521406290	3/8	100	229.04

Model No.	Mfg. No.	Nominal I.D."	Length' /Each	Price
GRADE T HOSES				
PB069	00521584225	1/4	25	57.62
PB070	00521584250	1/4	50	102.52
PB071	00521584290	1/4	100	189.73
PB073	00521585250	5/16	50	130.04
302-7170	00521586250	3/8	50	130.93
302-7180	00521586290	3/8	100	246.27

HOSE REPAIR KITS

- Special B-size kit offers 12 different items most frequently used for hose repair
- Kit with C-5 crimp tool for 3/16" x 1/4" I.D. hose
- Tough polyethylene case includes handy chart that identifies and describes fittings in each compartment
- **Includes:**
 - Hose nuts & nipples
 - Splicers
 - Couplers
 - Ferrules
 - Crimping tool

Model No. NP497
Mfg. No. CK-24
Price/Each \$114.09



WESTERN ENTERPRISES

BULK "TULINE" TWIN WELDING HOSES, GRADE T

- For use with all fuel gases and where a flame and oil resistant tube and cover are required
- CR (polychloroprene) tube and cover offers medium-high fuel gas resistance
- Two spiral polyester yarn reinforcement, more flexible than braid reinforced hose, easier to coil and handle
- Conforms to RMA/CGA specifications
- Multi-ventilating pores disperses permeating gases, enhances welder's safety
- Working pressure: 200 PSI, 1.38 Mpa
- **Sold in full 700' reels, priced per foot**

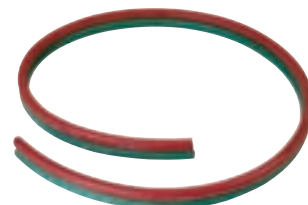
Thermoid®
HBD INDUSTRIES, INC.



Model No.	Mfg. No.	Nominal I.D."	Nominal O.D."	Min. Bend Radius"	Price /Each
302-7010	00521504200	1/4	0.53	1.50	1.81

BULK "TULINE" TWIN WELDING HOSES, GRADE R

- **Red hose** is for acetylene use only, and where cover must resist abrasion, weather and ozone
- Heat resistant EPDM tube and cover
- Two spiral polyester yarn reinforcement, more flexible than braid reinforced hose, easier to coil and handle
- Conforms to RMA/CGA specifications
- Multi-ventilating pores disperses permeating gases, enhances welder's safety
- Working pressure: 200 PSI, 1.38 Mpa
- **Sold in full 700' reels, priced per foot**



Thermoid®
HBD INDUSTRIES, INC.

Model No.	Mfg No.	Nominal I.D."	Nominal O.D."	Min. Bend Radius"	Price/Each
302-1000	00521403200	3/16	0.44	1.25	0.97
302-1010	00521404200	1/4	0.53	1.50	1.09
302-1020	00521405200	5/16	0.59	2.00	1.58
302-1030	00521406200	3/8	0.66	2.25	2.15

MIG/TIG INERT GAS HOSES

- Working Pressure: 300 PSI
- Connection: 5/8" - 18 RH(M)
- I.D.: 1.4"
- Length: 6'

GENTEC®
GENSTAR TECHNOLOGIES



Model No.	Mfg. No.	Price/Each
TTU563	HA14-0061N	14.00

EMERGENCY WELDING HOSE REPAIR KITS

- **Plastic kit box contains:**
 - 1 Standard jaw pincers
 - 6 Oxygen "B" RH brass nuts
 - 6 Acetylene "B" LH brass nuts
 - 6 1/4" brass nipples
 - 4 1/4" brass hose menders
 - 2 3/16" brass nipples
 - 2 3/16" brass hose menders
 - 10 1/2" 2-ear clamps
 - 40 9/16" 2-ear clamps
 - 4 9/16" twin clamps

Model No. NP512
Mfg. No. WK-82
Price/Each \$150.00

OETIKER®
Connecting Technology



WELDING REELS

HOSE REELS

- Heavy-duty, reinforced steel stampings for increased strength
- For use with air and water
- Compact design allows reels to fit in tight locations
- Multi-position guide arms for multiple mounting options
- Kinkless, oil resistant high quality hose

- Spring rewind features long life spring with declutching arbor
- Durable, corrosion-resistant powder coat paint finish

aurora tools®



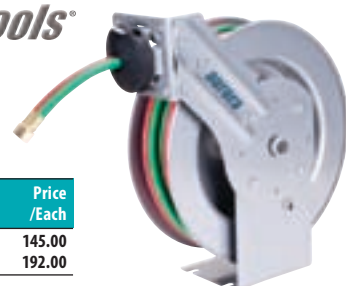
Model No.	Drive Type	Hose I.D."	Hose Length'	Max PSI	Hose Outlet (M) NPT"	Reel Inlet (F) NPT"	Dimensions			Wt lbs.	Price /Each
							W"	x	D"	x	H"
TLZ482	Spring	1/4	35	300	1/4	3/8	6	x	15 1/2	x	14
TLZ483	Spring	3/8	25	300	1/4	3/8	6	x	15 1/8	x	13 7/8
TLZ484	Spring	3/8	35	300	1/4	3/8	6 5/8	x	17 1/2	x	16 1/2
TLZ485	Spring	3/8	50	300	1/4	3/8	6 1/2	x	20	x	18 3/8
TLZ486	Spring	1/2	50	300	1/2	1/2	6 5/8	x	20 1/4	x	17 7/8

WELDING HOSE REELS

- Heavy-duty, reinforced steel stampings for increased strength
- 1/4" oxygen and acetylene twin hose
- Leakproof double O-ring seals
- Compact design allows reels to fit in tight locations
- Multi-position guide arms for multiple mounting options
- Kinkless, oil resistant high quality hose

- Spring rewind features long life spring with declutching arbor
- Grade R hose
- Durable, corrosion-resistant powder coat paint finish

aurora tools®



Model No.	Drive Type	Hose I.D."	Hose Length'	Max PSI	Oxygen Inlet & Outlet	Acetylene Inlet & Outlet	Dimensions			Wt lbs.	Price /Each
							W"	x	D"	x	H"
TLZ487	Spring	1/4	25	300	9/16" x 18 UNF (Female)	9/16" x 18 UNF (Female)	8	x	14 3/4	x	13 5/8
TLZ488	Spring	1/4	50	300	9/16" x 18 UNF (Female)	9/16" x 18 UNF (Female)	8 5/8	x	20 1/2	x	20 1/2

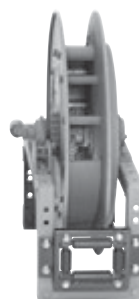
ARC WELDING REELS

POWER OR MANUAL REWIND TO HANDLE #2 THROUGH 4/0 CABLE TO 400 AMPS

- 400-amp rated rotary electrical device
- Instant use with any cable length unwound
- For use with single conductor electrode cable or grounding lead
- Quick connection to your welder
- 4-way roller assembly
- Roller position must be specified

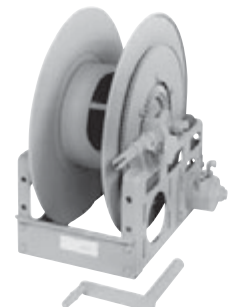
SWCR SERIES

- Non sparking ratchet assembly
- Declutching arbor is provided to prevent damage from reverse winding
- A cable stop should be used



WCR SERIES

- Gear driven crank rewind, chain and sprocket powered by an electric, hydraulic or compressed air motor or spring rewind
- Auxiliary rewind and pinion brake standard



Hannay Reels®
The reel leader.

		Cable Capacity of Reel'							Approx. Wt. Crank/Spring Rewind			
Model No.	Mfg. No.	Gauge of Cable O.D."	#2 0.50	#1 0.58	1/0 0.62	2/0 0.67	3/0 0.72	4/0 0.81	Net lbs.	Ship lbs.	Standard Roller Assembly	Price /Each
SWCR												
886-1130	SWCR716-23-24-15.5G		85	85	60	60	60	40	85	120	R204	1270.74
TTT563	SWCR716-25-26-15.5B		-	-	-	-	60	50	91	126	R204	1303.54
TTT564	SWCR716-25-26-15.5A		-	-	100	-	-	-	106	141	R205	1500.29
WCR												
886-1921	WCR16-19-21		-	275	200	200	150	150	71	106	-	942.81
TTT565	WCR16-23-24		-	-	-	-	300	200	78	113	-	942.81

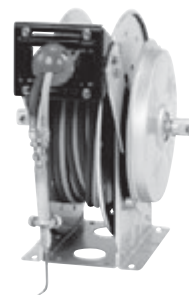
GAS WELDING REELS

SPRING REWIND TO HANDLE TWIN 1/4" THROUGH 3/8" WELDING HOSE

- Heavy-duty spring motor
- Non sparking ratchet assembly
- Declutching arbor to prevent damage from reverse winding
- Standard inlets 90° ball bearing swivel joints 1/2" female NPT threads
- Standard outlets male 9/16"-18 threads right hand for oxygen, left hand for gas
- Pressures to 300 PSI (21 bar)
- Temperatures from -40°F to 200°F (-40°C to 93°C)
- Type of gas used MUST be specified
- 4-way roller assembly (roller position must be specified)
- Hose stop is required



Hannay Reels®
The reel leader.



Shown with optional hose stop in the optional "TR" position



Model No.	Mfg. No.	Twin Hose Length'		Approx. Net lbs.		Wt. Roller Assembly	Standard Price /Each
		I.D." 0.53	3/8 0.66	1/4	3/8		
TTT568	N416-19-20-10.5C	35	35	70	85	N204	836.24
886-1060	N416-19-20-8J	50	50	74	90	N204	893.61
TTT569	N416-23-24-10.5G	75	75	94	109	N204	1164.17
886-1080	N417-23-24-10.5G	100	100	95	113	N205	1164.17

Model No.	Mfg. No.	Description	Price /Each
886-1030	HS-3	Hose Stop	26.23

GAS CYLINDER CABINETS

- Heavy-duty construction
- 2" x 2" 10-gauge formed steel angle posts
- 9-gauge wire mesh doors and walls for venting
- 14-gauge checker plate shelves and roof
- English and French warning labels included
- Padlock hasp for added security
- Innovative door design allows for left or right opening installation
- Easy assemble, knock-down feature saves on shipping costs

Note: Constructed to meet or exceed strict CSA International B149.2-0 Propane Storage and Handling Code. Cylinders must be stored vertically at all times.



SAF847



SAF837



SEB837



SEB838

COMPRESSED GAS (9" DIAMETER CYLINDERS)

Model No.	W"	x	D"	x	H"	Cylinder Capacity	Wt. lbs.	Price /Each
SAF837	44	x	30	x	74	10	210	1079.21
SAF848*	88	x	30	x	74	20	420	1746.50

*Consists of two units of the SAF837

LIQUID PROPANE (35-LB CYLINDERS)

Model No.	W"	x	D"	x	H"	Cylinder Capacity	Wt. lbs.	Price /Each
SEB837*	30	x	17	x	37	2	70	442.07
SEB838*	17	x	17	x	69	2	85	529.67
SAF836	44	x	30	x	37	6	135	902.05
SAF847	44	x	30	x	74	12	270	1079.07

*All-welded, fully assembled

ALUMINUM LPG CYLINDER LOCKER STORAGE

- Safely secure LPG and oxygen cylinders from theft and unauthorized access
- Superior features make these units extremely durable and easy to use
- Constructed of 100% welded aluminum, they won't rust, corrode or discolor
- Aluminum, expanded metal panels are the heaviest in the industry – 20% heavier than others – offering additional resistance to tampering
- Heavier gauge aluminum mesh and extruded (not bent) frame add rigidity
- Justrite® offers an exclusive solid aluminum roof panel that slants to the back to shed water and ice

Aluminum cylinder storage lockers are ideal for any facility using a forklift truck or welding equipment. Compare features and benefits! These sturdy cylinder lockers offer today's best value for safely storing gas cylinders.

Sloped roof design sheds water and ice to the rear. Solid top reinforces stability.

Comes complete with warning and full/empty cylinder labels. Extruded framework provides superior strength.

Complies with NFPA 58 and OSHA 1910.110 or CSA-B149.2.



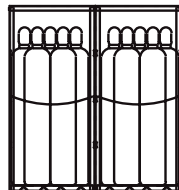
Heavy expanded aluminum for improved security. All-welded aluminum construction resists abusive outdoor elements – won't rust or discolor.

Easy to use rack positions cylinders securely and stores 20 and 33-lb. cylinders.

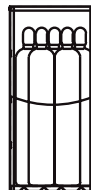
Designed to accept padlock (not included) to prevent unauthorized access.

Cylinders stay clear of ground with strong floor plate.

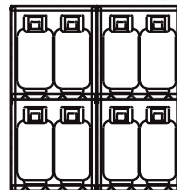
Pre-drilled hole at each corner for anchoring. Accepts 1/2" anchor maximum security and stability.



Vertical Storage Locker 20 Compressed Gas Cylinders Model SAI577



Vertical Storage Locker 10 Compressed Gas Cylinders Model SAI576



Vertical Storage Locker 16 LPG Cylinders Model SAI575



Vertical Storage Locker 8 LPG Cylinders Model SAI574



Vertical Storage Locker 4 LPG Cylinders Model SAI573



Model No.	Mfg. No.	Description	Cylinder Type	Capacity	W"	x	H"	x	D"	Wt. lbs.	Price /Each
SAI573	23009	4-Cylinder Vertical	LPG	4 - 20 or 33-lb cylinders	30	x	33 1/2	x	32	79	1199.28
SAI574	23010	8-Cylinder Vertical	LPG	8 - 20 or 33-lb cylinders	30	x	65	x	32	114	1673.92
SAI575	23011	16-Cylinder Vertical	LPG	16 - 20 or 33-lb cylinders	60	x	65	x	32	211	3034.61
SAI576	23006	10-Cylinder Vertical	Compressed Gas	Up to 10 comp. gas cylinders	30	x	65	x	32	102	1412.81
SAI577	23007	20-Cylinder Vertical	Compressed Gas	Up to 20 comp. gas cylinders	60	x	65	x	32	187	2590.04

RI29420E

OFFICE
PRODUCTS

INSTRUMENTS,
SCALES &
ELECTRICAL

SHIPPING &
PACKAGING

TOOLS &
EQUIPMENT

WELDING &
METALWORKING

SAFETY
EQUIPMENT &
SUPPLIES

JANITORIAL &
MAINTENANCE

MATERIAL
HANDLING &
STORAGE

WELDING CARTS & RACKS

GAS CYLINDER POLY-STANDS

- Free-standing design maximizes floor space
- Made of polyethylene resisting sparking, rust and corrosion
- Prevents accidental tipping with durable nylon straps to keep cylinders and stand secure
- Ideal for inexpensive wall-mounted storage
- Accommodates two cylinders 3" to 12 3/8" diameter
- Dimensions: 28" W x 14" D x 30" H
- Handling capacity of 400 lbs.
- Weight: 17.5 lbs.
- Colour: Yellow
- OSHA 29 CFR.1910 approved

Model No. SE966

Mfg. No. 7212-YE

Price/Each \$210.98



6-PACK CYLINDER RACKS

- Maximizes floor space
- Will not rust or corrode
- Suited for outdoor storage
- Forkliftable, crane liftable or optional black caster frame for mobility to go anywhere
- Sturdy retaining straps assure stable storage
- Optional black accessory strap can be added to bottom for extra security
- Molded-in cap holders to keep cylinder caps at hand
- Cylinder rack has a loading capacity of 1200 lbs.
- Black rack ramp optional to attach to cylinder rack for easy manoeuvring of cylinders
- Handling capacity of 600 lbs.
- Handles 3" to 10" diameter cylinders
- OSHA 29 CFR.1910 approved



Model No.	Mfg No.	Description	L"	x	W"	x	H"	Wt. lbs.	Price /Each
SE967	7202-YE	Cylinder Rack	48	x	31	x	41	62	551.03
SE968	7204-BK	Caster Frame	33 1/2	x	31 1/2	x	4 1/2	50	235.80
SE969	7205-BK	Bottom Straps	-					1	24.82
SE970	7203-BK	Rack Ramp	46	x	20	x	6	21	163.82

GAS CYLINDER BRACKETS

- Brackets are constructed of either epoxy powder coated 11-gauge hot rolled steel or type 304 stainless steel to endure the harshest environments
- Edges are protected with steel reinforced vinyl guarding to maintain cylinders and provide extra grip

- Support straps are 54" L x 1.5" W polypropylene with steel cinch buckle; strength rated at 1200 PSI
- Stainless steel models feature nylon snap buckles to provide durability under the most challenging environments
- Wall mount brackets support 4" to 12" diameter cylinders; bench mount brackets support 4" to 14" diameter cylinders



MK820



SB860



SB863



SB864



Model No.	Mfg. No.	Description	W"	x	Dimensions D"	x	H"	Wt. lbs.	Price /Each
SB860	G-100	Single Cylinder Wall Bracket, Grey	8	x	2 1/4	x	4 1/4	3	38.20
MK819	G-100SS	Single Cylinder Wall Bracket, Stainless	8	x	2 1/4	x	4 1/4	3	94.92
SB863	G-200	Double Cylinder Wall Bracket, Grey	23 3/4	x	2 1/4	x	4 1/4	9	91.75
MK821	G-200SS	Double Cylinder Wall Bracket, Stainless	23 3/4	x	2 1/4	x	4 1/4	9	182.56
SB864	G-300	Triple Cylinder Wall Bracket, Grey	35 3/4	x	2 1/4	x	4 1/4	11	115.03
SB861	G-150	Single Cylinder Bench Bracket, Grey	8	x	2 1/4	x	4 1/4	3	69.12
MK820	G-150SS	Single Cylinder Bench Bracket, Stainless	8	x	2 1/4	x	4 1/4	3	139.29

UNIVERSAL MODULAR CYLINDER BRACKETS

- Design your own configuration
- Units link together to customize the amount of cylinders needed
- Attaches to any wall securely and easily
- Yellow polyethylene
- Accommodates 3" to 10" diameter cylinders
- Straps included
- Dimensions: 15.3" W x 3.3" D x 6.3" H
- Weight: 1 lbs.
- OSHA 29 CFR.1910 approved
- Sold individually

Model No. SED115

Mfg. No. 7216-YE

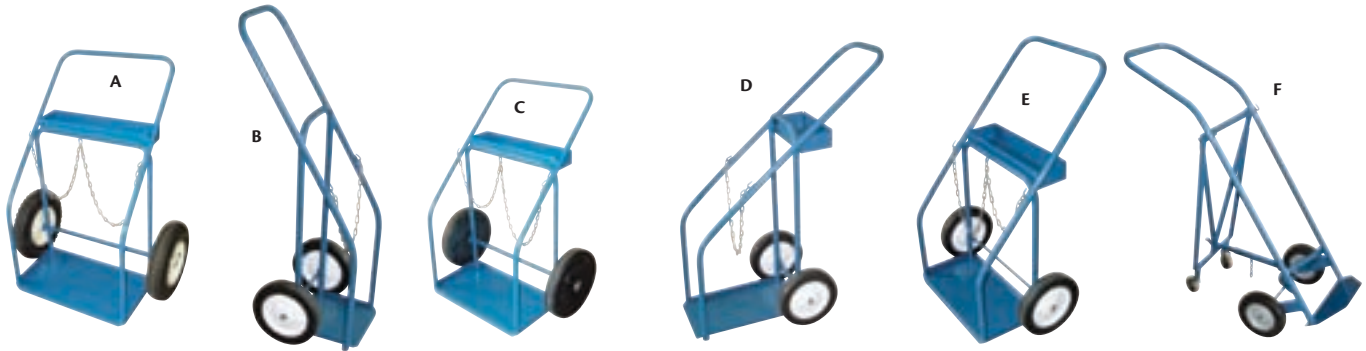
Price/Each \$24.82



WELDING CARTS & RACKS

GAS CYLINDER CARTS

- Choice of carts for a wide range of cylinder sizes and terrains



	Model No.	Base W" x D"	Wheel Type	Capacity	Weight lbs.	Price /Each
A	ML413	25 x 13	16" Dia. pneumatic	244 cu.ft. oxygen, 300 cu.ft. acetylene cylinders	55	257.86
B	ML414	12 x 10	10" Dia. semi-pneumatic	300 cu.ft. 9" Dia. cylinder	22	112.85
C	ML415	25 x 13	14" Dia. x 3" rubber	244 cu.ft. oxygen, 300 cu.ft. acetylene cylinders	55	244.17
D	ML416	12 x 16	10" Dia. semi-pneumatic	144 cu.ft. or 244 cu.ft. oxygen, 130 cu.ft. acetylene cylinders	27	134.52
E	ML417	19 x 10	10" Dia. semi-pneumatic	144 cu.ft. or 244 cu.ft. oxygen, 130 cu.ft. acetylene cylinders	30	134.52
F	TT455	12 x 14	8" Dia. rubber semi-pneumatic	244 cu.ft. oxygen cylinder	30	303.65

MINI-MIG WELDING CARTS

MM-8 Series Cylinder Cart

- Designed to carry a variety of Mini-MIG, Inverters, and Plasma machines
- Dimensions: 18" W x 36" D x 17" H
- Weight: 48 lbs
- Cylinder capacity: 9 1/2"

Model No. ML419

Price/Each \$142.92



DUAL-CYLINDER DOLLIES

- Accommodates cylinders up to 12" in diameter, including a class 300 SCF industrial gas cylinder and a no. 5 acetylene cylinder
- Composite construction withstands extreme weather conditions
- Tough 16.5" diameter pneumatic wheels gives maneuverability on rough terrain
- 36" built-in tray holds tools, valves and torches
- Powder coat finish steel tool/supplies tray
- Handle offers maximum stability allowing for wrapping of hose equipment
- Rust, corrosion and spark resistant
- Will not dent, chip or scratch paint from cylinders
- Dimensions: 36.88" L x 23 1/2" W x 45" H
- Weight: 60 lbs.
- Load capacity: 500 lbs.

Model No. SAP856

Mfg. No. 7302-BK

Price/Each \$620.53



FOUR-WHEEL CYLINDER HAND TRUCKS

- Fully welded construction of heavy 11 and 10-gauge steel with 3/16" thick steel supports and 1" diameter by 14-gauge round steel tube for maximum strength
- These durable units include two 10.5" pneumatic tires to provide easy transportation of medical, industrial and commercial use gas cylinders
- Swing-down steel carriages allow use of rear swivel casters for additional safety and control
- Single cylinder trucks handle cylinders up to 12" in diameter; dual cylinder carts can handle cylinders up to 10" in diameter
- Heavy poly straps with cinch buckle system provide security during transport
- Epoxy powder coat finish for durability
- Load capacity: 1000 lbs.



MOBILE CYLINDER SUPPORTS

- Securely holds four cylinders up to 12" in diameter even in transit
- Constructed from 11-gauge, all-welded steel with grey enamel finish
- Includes push handle and easy rolling caster or without handle and casters for forklift attaching
- Dimensions: 24" W x 40" D x 36" H
- Load capacity: 1200 lbs.



Model No.	Mfg. No.	Description	L"	x	W"	x	H"	Wt. lbs.	Price /Each
MK817	G-904	Single Cylinder Hand Truck	19	x	21	x	47	48	627.88
MK818	G-953	Dual Cylinder Hand Truck	20	x	31.5	x	47	65	648.98

Model No.	Mfg. No.	Description	Wt. lbs.	Price /Each
SB865	G-430	4 Unit Mobile Cylinder Cart	153	997.22
SB866	G-450	4 Unit Mobile Cylinder Cart (forklift attachment)	122	891.69

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SAFETY
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SOLDERING TOOLS & ACCESSORIES

PYROPEN®

- Ideal for service jobs in out of the way or confined space areas
- No batteries or electricity required
- Lightweight and easy to carry around
- Butane gas operated, will operate for up to three hours on one filling, and are ready to solder within 30 seconds
- Adjustable temperature controlled by varying gas flow
- Benefits for the outdoor servicing of electronics, radio and telecommunications
- Inactive hot air, ideal for shrink tubing, soldering and desoldering of SMD's



PYROPEN® SOLDERING KIT

- Metal carrying case complete with 3.3 mm soldering tip plus a 5.7 mm hot air tip, torch ejector, spanner, tool support clip, cleaning sponge and operating manual (fuel not included)
- Brazing torch feature offers more flexibility
- Interchangeable soldering tip and torch ejector



Model No. BW160
Mfg No. WSTA3
Price/Each \$188.84

SELF-IGNITING PYROPEN®

- Fitted with tapered needle tip plus hot air nozzle
- Protective plastic cap and operation manual (fuel not included)
- Instant push button self ignition ideal for single-handed operation

Model No. BW161
Mfg No. WPA2
Price/Each \$207.99



REPLACEMENT TIPS

Model No.	Mfg. No.	Description	Price /Each
BW165	WPT1	Taper Needle	21.48
BW166	WPT2	2.0 mm Chisel	21.48
BW169	WPT5	Taper Needle	21.48
BW172	WPT8	2.0 mm 35° Spade	21.48
BW175	WPT11	8.0 mm High Powered Chisel	25.72
BW177	WPT13	5.0 mm High Powered Long Taper Chisel	25.72

Weller®

PRO SERIES HIGH PERFORMANCE SOLDERING IRONS

- Super-fast heat-up! Heats up to 900°F working temperature in just 35 seconds
- Patented design provides performance that exceeds a 60-watt iron
- Red power-on LED changes to green when iron reaches working temperature
- LED work light illuminates working surface in low-light conditions
- Co-molded grip for a comfortable feel
- Tool is designed to be self-standing, no stand is needed
- Iron uses a phono jack style plug in tip for rapid exchange
- Ideal for hobbies, kits, radios, electrical and electronics

Model No. TTU438
Mfg No. WPS18MP
Price/Each \$38.43



REPLACEMENT TIPS

Model No.	Mfg. No.	Description	Price /Each
TTU439	WPS10	Conical Tip, 0.3125"	11.62
TTU440	WPS11	Chisel Tip, 0.125"	11.62

Weller®

PORTASOL® ECONOMICAL BUTANE SOLDERING IRONS

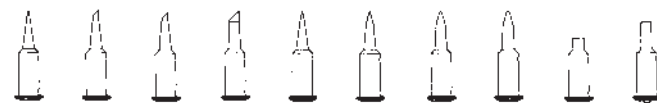
- Self-igniting portable butane heat tool can solder, cut rope, and perform other open flame operations
- Allows anti-static soldering, ideal for electronics, avionics, cellular communications, alarm systems, marine and automotive
- Rugged stainless steel body
- Up to 125 W of power
- Fully adjustable up to 1076°F (580°C)
- Runs up to two hours on single refill
- Fuel level is clearly visible through a window on the body of the tool for quick filling
- Auto switch safety shut-off, iron plated tips
- Built-in filter reduces chance of problems caused by contaminated fuel
- **BW163** kit includes the iron, sponge, stand, and extra tips in a blow molded box



Model No.	Mfg. No.	Description	Price/Each
BW200	PSI100C	Portasol® Soldering Tool	98.52
BW163*	PSI100K	Portasol® Soldering Tool Kit	129.99

* Comes with **BW193** 2.4 mm double flat tip, **BW196** hot blower, **BW195** 4.8 mm double flat tip, **BW197** hot knife, cleaning sponge, storage case (fuel not included).

REPLACEMENT TIPS



Model No.	Mfg. No.	Description	Price /Each
BW188	PSI1	1.0 mm Single Flat	16.41
BW189	PSI2	2.4 mm Single Flat	16.41
BW190	PSI3	3.2 mm Single Flat	16.41
BW191	PSI4	4.8 mm Single Flat	16.41
BW192	PSI5	1.0 mm Double Flat	16.41
BW193	PSI6	2.4 mm Double Flat	16.41
BW194	PSI7	3.2 mm Double Flat	16.41
BW195	PSI8	4.8 mm Double Flat	16.41
BW196	PSI9	Hot Blower Tip	16.41
BW197	PSI10	Hot Knife Tip	16.41

Note: Temperature range for tips is up to 850°F (450°C).

PREMIUM BUTANE

- Recommended for users of butane soldering tools
- Filtered to a much higher degree than standard butane, will extend tool life by preventing gumming up of butane soldering tool orifices
- 60-g canister

Model No. BW164
Mfg No. WB1C
Price/Each \$5.18

Weller®



SOLDERING TOOLS & ACCESSORIES

SOLDERING GUNS

- 120 volts
- Heat resistant plastic housing
- Fingertip trigger for high or low output selection
- Ready to use in six seconds
- Heavy gauge, high efficiency, tin-plated copper tip
- Twin lights illuminate work



KITS

TW149 and **TW151** include: Soldering gun with one soldering tip, one sealing tip, one cutting tip, one flux brush, soldering aid tool and a coil of lead free solder. Packed in plastic carrying case.

GUNS & KITS

Model No.	Mfg. No.	Description	Watts	Price /Each
TW148	D550	Professional Soldering Gun	260/200	71.15
TW149	D550PK	Professional Soldering Gun Kit	260/200	82.10
TW150	D650	Industrial Soldering Gun	300/200	97.16
TW151	D650PK	Industrial Soldering Gun Kit	300/200	101.25

Weller®

REPLACEMENT SOLDERING GUN TIPS

Weller® tips are made of copper and are compatible with Weller® soldering guns. Available in cutting, smoothing and standard tips.



Cutting



Smoothing



Standard

Model No.	Mfg. No.	Description	Price /Each
PROFESSIONAL			
TW152	6130	Cutting Tip w/Hex Nut	6.84
TW153	6150	Cutting Tip Only	6.42
TW154	6140	Smoothing Tip w/Hex Nut	6.84
INDUSTRIAL			
TW155	6160	Smoothing Tip Only	6.42
TW156	7250	Standard Tip Only, 2/Pkg.	6.84
TW157	7250N	Standard Tip w/Hex Nut	6.84

MARKSMAN SERIES SOLDERING IRONS

- Fine quality iron for intermittent use
- Heat and impact resistant red handle and stainless steel barrel
- Working light in handle for 25- and 40-watt models



Model No.	Mfg. No.	Volts	Watts	Length"	Temp °F/°C	Standard Tip	Price /Each
NICKEL-PLATED COPPER							
TW158	SP23LCSA	120	25	8 1/4	750/400	TW162	18.79
TW159	SP40LCSA	120	40	8 1/4	900/482	TW166	26.64
IRON-PLATED COPPER							
TW160	SP1203CSA	120	120	11 3/8	900/482	TW167	71.15
TW161	SP1753CSA	120	175	12 1/2	900/482	TW168	87.57

Weller®

MARKSMAN SERIES TIPS

Replacement tips are nickel-plated copper or iron-plated copper for heavy-duty irons.



TW162



TW163



TW164



TW166



TW167

Model No.	Mfg. No.	Description	Use With Iron No.	Tip"	Price /Each
TW162	MT1	Cone Shaped Tip	TW158	1/8	6.27
TW163	MT2	Screwdriver Tip	TW158	1/8	6.27
TW164	MT3	Chisel Tip	TW158	1/8	6.27
TW166	MT10	Chisel Tip	TW159	1/4	11.35
TW167	MTG30	Iron-Plated Chisel Tip	TW160	1/2	16.28
TW168	MTG40	Iron-Plated Chisel Tip	TW161	5/8	27.77

PROFESSIONAL SOLDERING IRONS

IDEAL FOR A WIDE VARIETY OF ELECTRONICS TASKS

- Interchangeable heater elements with quick change collar
- Lightweight handle with cushion grip
- Use ST Series tips only



Model No.	Mfg. No.	Description	Volts	Watts	Hz	Price /Each
TW633	WP25	Soldering Iron w/TW640 Tip	120	25	50/60	57.05
TW634	WP35	Soldering Iron w/TW640 Tip	120	35	50/60	71.15

ST SERIES TIPS

Solid copper, plated with iron, nickel and chromium. Precision ground tips provide maximum heat transfer from heater to tip.

TW638



TW639



TW640



TW641



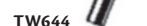
TW642



TW643



TW644



TW645



Model No.	Mfg. No.	Description	Tip"	Reach"	Price /Each
TW638	ST1	Screwdriver Tip	0.062	0.75	4.91
TW639	ST2	Screwdriver Tip	0.093	0.75	4.91
TW640	ST3	Screwdriver Tip	0.125	0.75	5.06
TW641	ST4	Screwdriver Tip	0.187	0.75	5.06
TW642	ST5	Single Flat Tip	0.031	0.75	4.91
TW643	ST6	Screwdriver Tip	0.031	0.75	5.06
TW644	ST7	Conical Tip	0.031	0.75	4.91
TW645	ST8	Narrow SD Tip	0.062	0.75	5.06

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SOLDERING TOOLS & ACCESSORIES

WES51 ANALOG SOLDERING STATIONS

- Station automatically powers down after 90 minutes of inactivity to prolong tip life and save power
- Improved plug on the **TEF891** iron and new receptacle on the power unit for easier iron replacement
- Designed for continuous production soldering
- Slim, comfortable pencil reduces operator fatigue

Model No. TEG036
Mfg No. WES51
Price/Each \$171.05

PENCIL

Model No. TEF891
Mfg. No. PES51
Price/Each \$58.27



Weller®

WESD51 DIGITAL SOLDERING STATIONS

- Microprocessor controlled with digital LED display allows you to read temperature setting and actual tip temperature
- Can switch between °F and °C

Model No. TEG038
Mfg No. WESD51
Price/Each \$246.32

PENCIL

Model No. TEF891
Mfg. No. PES51
Price/Each \$58.27

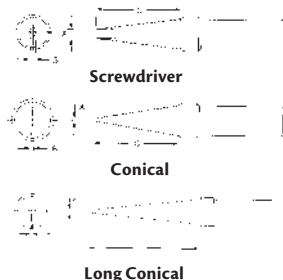
Wireless temperature
lockout gives you
control over the
process



Weller®

ET SERIES TIPS FOR TEF891 SOLDERING PENCIL

Model No.	Mfg. No.	A"	B"	C"	Price /Each
SCREWDRIVER					
BW087	ETA	0.062	0.032	0.625	5.46
BW088	ETB	0.093	0.020	0.625	5.46
BW089	ETC	0.125	0.027	0.625	5.46
CONICAL					
BW092	ETP	0.031	0.012	0.625	5.46
LONG CONICAL					
BW100	ETO	0.031	0.044	1.000	5.46
BW101	ETS	0.015	0.000	1.000	5.46



WD1002 DIGITAL SILVER SERIES SOLDERING STATIONS

HIGH PERFORMANCE SOLDERING STATION

- Features a powerful 80-watt soldering iron that is ideal in the most demanding soldering applications including high volume production soldering or high mass soldering and especially lead free soldering
- Fast temperature recovery allows to safely and efficiently solder lead free components and greatly contribute to increased productivity in traditional lead based soldering applications
- Base station features three user programmable "radio buttons" that allow to instantly switch to another temperature
- LCD screen gives the operator all important information at a glance providing an extensive user friendly menu for the operator to custom set the station to his own needs
- Programmable features include set back temperature to conserve tip life, auto shut off, temperature lockout, switching between degrees Fahrenheit or Celsius and more
- A comfortable four-position ergonomic iron stand allows you to store three optional tips for different soldering applications
- Iron comes with the **TEF746** chisel tip (0.063")
- Additional tips available

Model No. TTU437
Mfg No. WD1002
Price/Each \$469.37

PENCIL

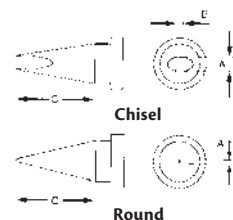
Model No. BW119
Mfg. No. WSP80
Price/Each \$166.94



Weller®

LT SERIES TIPS FOR BW119 SOLDERING PENCIL

Model No.	Mfg. No.	A"	B"	C"	Price /Each
CHISEL					
TEF746	LTA	0.063	0.028	0.380	6.27
TEF754	LTH	0.031	0.016	0.430	6.27
TEF755	LTK	0.047	0.016	0.730	6.27
ROUND					
TEF738	LT1	0.010	-	0.430	6.27
TEF739	LTH	0.008	-	0.980	6.27



Call us for all
your Welding &
Metalworking
requirements!



WTCPT TEMPERATURE CONTROLLED SOLDERING STATIONS

Suitable for production, rework and repair of through hole and SMT boards, some ground planes and multi-layer boards. Repetitive soldering at a consistent temperature.

- A ferromagnetic temperature sensor in the tip controls tip temperature - no adjustments are necessary
- A lighted rocker switch indicates on/off status
- Quick disconnect plug for soldering iron allows fast iron change
- Power unit features impact resistant plastic for durability
- ESD safe to protect sensitive components

Model No. BW009
Mfg No. WTCPT
Price/Each \$238.09

PENCIL

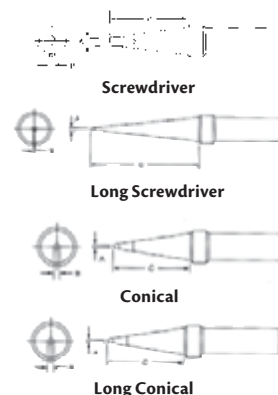
Model No. BW010
Mfg. No. TC201T
Price/Each \$120.42



Weller®

PT SERIES TIPS FOR BW010 SOLDERING PENCIL

Model No.	Mfg. No.	A"	B"	C"	Price /Each
SCREWDRIVER - 700°F					
BW035	PTA7	0.062	0.032	0.62	4.78
BW037	PTB7	0.093	0.020	0.62	4.78
BW039	PTC7	0.125	0.027	0.62	4.78
BW041	PTD7	0.187	0.035	0.62	4.78
LONG SCREWDRIVER - 700°F					
BW046	PTJ7	0.031	0.012	1.00	4.78
BW047	PTK7	0.046	0.026	1.00	4.78
CONICAL - 700°F					
BW052	PTP7	0.031	0.012	0.62	4.78
LONG CONICAL - 700°F					
BW051	PTO7	0.031	0.044	1.00	4.78



SOLDERING TOOLS & ACCESSORIES

OXYGEN/MAP-PRO™ GAS BRAZING/ WELDING/CUTTING TORCH KIT

- Uses oxygen and propane or propylene gas

Includes:

- Burner wand
- Hose
- Oxygen regulator
- Fuel gas valve
- Cylinder stand
- TTU687 14.1-oz. MAP-Pro™ gas cylinder
- TTU688 1.40-oz. oxygen cylinder
- Spark lighter
- 5 brazing/welding rods



BERNZOMATIC

Model No. TTU689
Mfg. No. BZOX2550KC
Price/Each \$97.03

TRIGGER START CAST ALUMINUM MAP-PRO™ GAS TORCH KIT

- Regulated for cold weather use
- Includes stainless steel burn tubes
- Compatible with both propylene and propane gases

Includes:

- BV756 torch head
- TTU687 14.1-oz. MAP-Pro™ gas cylinder

Model No. TTU692
Mfg. No. BZTS4000ZKC
Price/Each \$89.65



BERNZOMATIC

PENCIL FLAME TORCH KIT

- Solid brass construction
- General purpose utility flame
- Needle valve control and filtered orifice

Includes:

- BV769 torch unit
- TTU686 14.1-oz. propane cylinder



BERNZOMATIC

Model No. TTU690
Mfg. No. BZUL100
Price/Each \$23.21

SPARK IGNITING MICRO TORCHES

- Precision light soldering, polyfoam cutting and heating
- Ideal for electronic repair
- Refillable, uses butane fuel
- Burns for 80 hours
- Includes electrical soldering tip



BERNZOMATIC

Model No. TTU299
Mfg. No. ST2200T
Price/Each \$50.13

TRIGGER START TORCHES

- Comfortable, easy grip
- Self igniting quick-start trigger
- Uses propane gas
- Solid brass burn tip for easy repairs
- Pressure regulated to burn upside down

TORCH HEAD

Model No. WN961
Mfg. No. TS3000T
Price/Each \$44.54

TORCH KIT

Includes: TTU686 14.1-oz propane cylinder



BERNZOMATIC

Model No. TTU691
Mfg. No. BZTS3000KC
Price/Each \$58.48

TRIGGER START SWIVEL HEAD TORCHES

Specially designed for convenience and accessibility.

- Solid brass regulator provides greater durability
- 360° swiveling torch head provides versatility and accessibility to tight and awkward work spaces
- Slim, one-handed trigger start eliminates the need for external ignition sources
- Double "O" ring connection helps prevent gas leaks
- Uses propylene gas



BERNZOMATIC

Model No. WN963
Mfg. No. TS99T
Price/Each \$79.24

FUELS

14.1-OZ. PROPANE CYLINDER

Use with torches and most portable appliances requiring propane.

Model No. TTU686 Mfg. No. 304184 Price/Each \$6.78

14.1-OZ. MAP-PRO™ GAS CYLINDER

Propylene gas burns hotter than propane. Use only with torches and appliances specifying "for use with propylene".

Model No. TTU687 Mfg. No. 332478 Price/Each \$10.54

1.4-OZ. DISPOSABLE OXYGEN CYLINDER

Use with propylene gas for hottest brazing performance and light cutting/welding.

Model No. TTU688 Mfg. No. 304180 Price/Each \$13.47

5.5-OZ. DISPOSABLE BUTANE CYLINDER

Use with refillable butane torches.

Model No. TTU636 Mfg. No. BF55 Price/Each \$6.28

BERNZOMATIC



TTU686

TTU687

TTU688

TTU636

ARC WELDING TOOLS & ACCESSORIES

SHORTSTUB™ ELECTRODE HOLDERS

- Grip the electrode closer to the end
- Allows you to use 20% more of the electrode than with standard tong holders
- Manufactured from copper alloy for maximum conductivity and strength
- Fibreglass insulators are designed to withstand intense heat and impact
- Will not burn, break or carbon char



Model No.	Amps	Description	Price /Each
NT629	400	Electrode Holder w/Neck Ring	14.05
NT631	600	Electrode Holder w/Neck Ring	17.00
NT630	400	Slimline – Bernard® Style Holder	14.05
NT818	-	Replacement Head for 400 Amps Electrode Holders	15.60



BERNARD® SHORTSTUB™ ELECTRODE HOLDERS

- Electrode can be used to within one inch of Shortstub™ head
- Built to last with a proven high impact, high heat separate head
- 2000-lb. gripping pressure
- Better visibility, greater hand-to-arc distance



Model No.	Mfg. No.	Amps	Electrode Capacity"	Price /Each
360-9001	405	400	1/16 - 1/4	39.55



CAM ACTION CABLE CONNECTORS



- One model fits cable sizes 4 through 4/0
- Manufactured from heavy wall precision machined brass alloy
- Cable is held securely by large dome screw
- Brass body assembly slides easily into unique heavy-duty neoprene insulator with no external screws to avoid shock hazards
- Cam locking connectors are compatible with most common brands

Model No.	Description	Price /Each
NT664	Male/Female Connector Set	15.40
NT649	Male Half with Insulator	7.40
NT650	Female Half with Insulator	6.50



EITHER-END CABLE CONNECTORS

- For use with 1/0 - 2/0 cable
- Unique "Either-End" design allows ends to interlock without the need for male/female connection points
- Brass body assembly slides into heavy-duty neoprene insulator



Model No.	Mfg. No.	Description	Price /Each
NP528	E-102M	Either-End Connector Set	43.22



JACKSON QUIK-TRIK® CABLE CONNECTORS

- Top-of-the-line Quik-Trik® connector sets have Morse-tapered sections that are drawn together with a cam and locking bar for maximum conductivity
- Flexible insulators with tapered ends that cover the cable jacket and lock out moisture, dirt and oil



Model No.	Mfg. No.	Cable Capacity	Price /Each
140-1865	QNB-2-BP	1/0 - 2/0	48.36
140-1870	QNB-4-BP	3/0 - 4/0	48.79



LENCO® LC-10 CABLE CONNECTORS

- Positive lock-tight action
- Metal parts are precision machined from heavy, specially shaped brass extrusion
- Cam action design of male half connector pulls the two halves tightly together
- Female brass connector is recessed to minimize accidental shorting
- Molded connector covers
- 250 Amps
- Cable capacity: 4 - 1/0



Model No.	Mfg. No.	Description	Price /Each
380-1610	05040	Complete Connector Set	25.33
380-1620	05043	Male Half	12.66
380-1615	05046	Female Half	12.66



ARC WELDING TOOLS & ACCESSORIES

HAMMER-ON LUGS

- Manufactured from heavy wall cast copper alloy, annealed for maximum conductivity
- Fast, easy installation, just slide into cable and strike it with hammer for durable connection



Model No.	For AWG Cable Sizes	Price /Each
NT606	1 - 4	5.05
NT605	1/0 - 2/0	6.75
NT604	3/0 - 4/0	8.79

SOLDER/CRIMP LUGS

- Manufactured from heavy wall copper alloy, annealed for maximum conductivity
- Long length and flared ends make installation fast and easy



Model No.	For AWG Cable Sizes	Price /Each
TTU567	1 - 4	1.80
TTU568	1/0 - 2/0	2.95
TTU569	3/0 - 4/0	3.70

WELDING CABLES - 105°C/600 V

- For connections from electrode holder and clamp to arc welder, bus, welding box or transformer
- Extra flexible for long life
- Conductor: Extra flexible, 30 AWG (class K) stranded annealed uncoated copper per ASTM B-172
- Jacket: Ethylene propylene diene monomer (EPDM) rubber; black
- Resistant to chemicals, oils, and acids and is also weather, ozone and sunlight-resistant
- Separator: Paper
- Temperature: 105°C to -50°C
- Voltage: 600 volts
- **Sold and priced per full reel length**



RECOMMENDED MINIMUM COPPER WELDING CABLE SIZE

Welding Current Amps	50	100	150	200	250	300	350	400	450	500
100	4	4	4	2	2	1	1/0	1/0	2/0	2/0
150	4	4	2	1	1/0	2/0	3/0	3/0	4/0	4/0
200	2	2	1	1/0	2/0	3/0	4/0			
250	2	2	1/0	2/0	3/0	4/0				
300	1	1	2/0	3/0	4/0					
350	1/0	1/0	3/0	4/0						
400	2/0	2/0	3/0							
500	3/0	4/0	4/0							
600	4/0	4/0								

Amp capacities are based on 105°C conductor temp., 40°C ambient air / 50% duty cycle and approximate voltage drop of 4V @ 25°C conductor temp. or 5VB @ 105°C conductor temp.



Model No.	AWG Size	Nominal O.D."	Reel Size'	Price /Each
TTU106	# 4 Cable	0.375	300	P.O.A.
TTU107	# 2 Cable	0.440	300	P.O.A.
TTU108	# 1 Cable	0.515	300	P.O.A.
TTU109	# 1/0 Cable	0.550	300	P.O.A.
TTU110	# 2/0 Cable	0.590	300	P.O.A.
TTU111	# 4/0 Cable	0.725	300	P.O.A.

HIGH-LEVERAGE CABLE CUTTERS

- High-leverage jaws with shear-cut blades
- Cuts up to: 4/0 aluminum cable (not ACSR), 2/0 soft copper cable
- Plastic covered, non-slip grips
- Compact cutter fits in most tool pouches
- NOT an insulated tool
- Overall length: 9 1/2"

Model No. TBG092
Mfg. No. 0890CSJ
Price/Each \$39.72

H.K. Porter®



ELECTRICAL PLUGS & RECEPTACLES

- For use with copper or aluminum wire
- Plug - Universal angle ground, 50 amps, 250 volts, male
- Receptacle - 50 amps, 250 volts



COOPER

Model No.	Mfg. No.	Description	Price /Each
NP495	S42	Plug	30.58
NP496	1252	Receptacle	39.02

ARC WELDING TOOLS & ACCESSORIES



GROUND CLAMPS

- Manufactured from nickel-plated steel with forged brass conductors
- Heavy-duty springs provide positive strength at jaws
- **NT661** is ideal for farm welder and light shop work; current flows directly from lower jaw to welding cable
- **NT662** is ideal for portable gas drive welders; braided zinc coated copper strap carries current to both upper and lower jaws, fully insulated hinge and spring prevents arcing



Model No.	Amps	Price /Each
NT661	300	4.50
NT662	500	8.40

HEAVY-DUTY GROUND CLAMPS

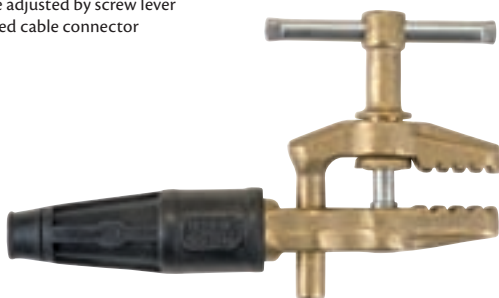
- Manufactured from heavy-duty nickel-plated steel with forged brass conductors and braided copper strap to carry current to upper jaw
- Heavy-duty spring provides positive contact at jaws
- Cable is easy to install with built-in cable connector and oval point screw
- Allen-type wrench included



Model No.	Amps	Price /Each
NT668	300	12.80
NT669	500	15.30

HEAVY-DUTY "C-STYLE" GROUND CLAMPS

- C-type jaws are adjusted by screw lever
- Rubber insulated cable connector



Model No.	Amps	Price /Each
NT665	600	43.25

JACKSON GROUND CLAMPS

- Double-lock clamps have forged copper alloy conductors
- High clamping pressure and long "finger-grip" levered handles for easy jaw opening
- Extra large contact areas for greater conductivity
- Fully insulated pivots and springs



Model No.	Mfg. No.	Amps	Cable Capacity	Jaw Capacity"	Price /Each
140-1775	GC-2	200	4 - 1/0	1 1/4	23.64
140-1780	GC-3	300	1/0 - 2/0	1 5/8	34.72
140-1785	GC-5	500	3/0 - 4/0	2	48.93

MAGNETIC HOLDERS

- Multi-purpose holders for assembly and positioning
- Adheres to any metal object
- Ideal for welding, soldering, assembly and pipe installation



Model No.	Description	Dimensions"	Price /Each
NT626	Medium	5 x 3 1/4 x 1/2	3.20
NT627	Large	6 1/4 x 4 x 3/4	5.30
NT628	X-Large	8 x 5 x 1	8.05

AIR CARBON ARC GOUGING TORCHES

For gouging, cutting, beveling, piercing and flushing metal.

- Economical air carbon arc cutting process
- Can be used on most metals
- Chemical change are virtually nil, as the process is primarily physical

AIR REQUIREMENTS

Ordinary compressed air as supplied by a shop airline or compressor is suitable. Most applications require 80-100 PSI.

Air

PSI:	80
kg/cm ² :	5.6
CFM:	35
CMM:	0.076

Compressor

Intermittent:	5 HP (3.73 KW)
Continuous:	7.5 HP (5.60 KW)



Model No.	Amps	Price /Each
NT667	800	170.00

AIR CARBON ARC GOUGING ELECTRODES

- Consistent copper coating DCCC
- Used for gouging out defective welds and cutting non-ferrous metals
- Electrodes are 12" in length
- Sold per package



Model No.	Dia."	Qty /Pkg.	Price /Each
NT632	5/32	100	19.50
NT633	3/16	50	11.80
NT634	1/4	50	14.20
NT635	5/16	50	16.30
NT636	3/8	50	21.35
NT637	1/2	50	40.60



INDUSTRIAL-DUTY SCRATCH BRUSHES

- Wood handle
- Choice of carbon or stainless steel bristles



Long Handle



Model No.	Length of Brush"	O.A. Length"	Wire Bristles	Rows	Trim Length"	Price /Each
LONG HANDLE BRUSHES						
NT607	5 3/4	13 3/4	Carbon Steel	3 x 19	1	2.00
NT608	5 3/4	13 3/4	Carbon Steel	4 x 19	1	2.45
NT611	5 3/4	13 3/4	Stainless Steel	3 x 19	1	3.25
NT612	6	10 1/4	Stainless Steel	4 x 19	1	3.85
SHOE HANDLE BRUSHES						
NT609	5 1/4	10 1/2	Carbon Steel	3 x 16	1	2.15
NT610	5 1/4	10 1/2	Carbon Steel	4 x 16	1	2.20
NT613	5	10 1/2	Stainless Steel	3 x 16	1	3.95
NT614	5	10 1/4	Stainless Steel	4 x 16	1	4.20
"TOOTHBRUSH" CLEANING BRUSH						
NT615	1 1/2"	7 3/4	Stainless Steel	3 x 7	1/2	0.95

ATLAS STEEL GRIP TOMAHAWKS®

- Heads are pinned to shafts
- Flex-O steel coil hand grips
- Head length: 6 1/2"
- Overall length: 10 1/2"



Model No.	Mfg. No.	Head Style	Price /Each
PB134	G	Chisel and Cross Chisel	13.36
PB135	H	Cone and Chisel	13.36
PB136	HCP	Cone and Cross Chisel	13.36

CHIPPING HAMMERS

- Cone and chisel head
- Spring steel handle
- Head length: 6 1/4"
- Overall length: 10 1/2"

Model No. NP532
Price/Each \$4.45



PLASTIC HANDLE CHIPPING HAMMERS

- High impact thermoplastic handles reduce impact sting
- Outlast standard wood handles
- Easy-to-find bright yellow colour
- Forged steel head, 11 7/8" overall length



Model No.	Mfg. No.	Head Style	Wt. oz.	Price /Each
380-1865	LPHCM	Cross Chisel and Pick	20	21.15
380-1875	LPHH	Chisel and Pick	16	21.15
380-1880	LPHHC	Cross Chisel and Pick	16	21.15
380-1870	LPHG	Chisel and Cross Chisel	20	22.56



ARC WELDING TOOLS & ACCESSORIES

ATLAS LONG-NEK TOMAHAWKS®

- "Fit-the-hand" hickory handle
- Deep neck steel head design offers 50% greater handle support and protection from splinter when working over edges
- Overall length: 12"

BZ946



BZ945



PB139



378-1245



Model No.	Mfg. No.	Head Style	Head Length"	Price /Each
BZ946	WH-10	Chisel and Cross Chisel	7	21.24
BZ945	WH-20	Cone and Chisel	7 3/4	21.24
PB139	WH-30	Cone and Cross Chisel	7 3/4	21.24
378-1245	WH-40	Cone and Cross Chisel	8 1/4	21.80
378-1055	26	Replacement Handle	-	6.75

MULTI-PURPOSE MIG PLIERS

- Eight-way pliers
- Nickel plated finish
- Ideally suited for removal of hot spatter from nozzle ends, as well as many other uses



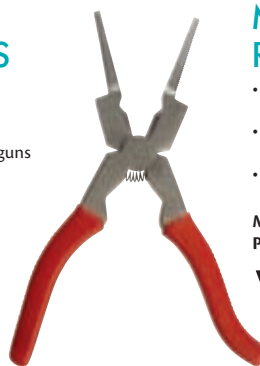
Model No.	Description	Price /Each
NP537	Pliers	10.95
NT666	Holster for Pliers	4.95

MATADOR® WELDER'S PLIERS

- Ideal for installing tips, nozzles and bushings, cutting and hammering
- Universal use for all wire feed guns
- Vanadium-steel construction is tough, durable
- Satin finish reduces rust



Model No.	Mfg. No.	Price /Each
899-1700	4705008	25.42



MIG NOZZLE REAMERS

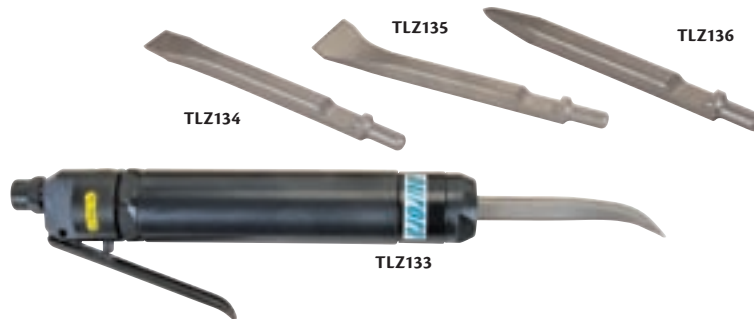
- Cleans hot MIG nozzle on the torch
- Self adjusting to fit all size nozzles
- Expanding spring steel cleaner

Model No. TTU660
Price/Each \$6.85



AIR FLUX CHIPPERS

- Lightweight and compact design permits increased operator efficiency
- Paddle style trigger offers better speed control and precision
- Low noise, low vibration
- Durability
- Comes with 35 mm flat chisel
- Overall length: 10 1/4"
- Weight: 4.1 lbs.



aurora tools®

Model No.	Stroke in mm	Blows per minute BPM	Average Air Consumption CFM	Air Inlet	Hose Size in mm	Vibrations Less Than m/s²	Sound Pressure Level dB(A)	Price /Each
TLZ133	1 1/2 38	4400	9	1/4" - 18 NPT	3/8 9.5	10.2	92	178.00

ACCESSORIES

Model No.	Description	Price/Each
TLZ134	20 mm Flat Chisel	22.25
TLZ135	35 mm Flat Chisel	22.25
TLZ136	Moil Pointed Chisel	22.25

SAFETUBE® ROD CANISTERS

- Protects electrodes from dirt, grease and moisture
- Pressure fitted o-ring provides a watertight seal
- Diamond shape prevents canister from rolling
- Withstands electrodes heated to 250°F
- Requires only a quarter turn to remove cap
- Safety yellow colour increases visibility

14" CANISTER

- Holds up to 10 lbs. (5 kg) of 14" electrodes

18" CANISTER

- Holds up to 15 lbs. (7.5 kg) of 18" electrodes

CARRY STRAP

- Increases portability of *Safetube*® rod canister
- Elastic strap keeps cap attached to canister at all times



ROD HOLDERS

- Double leather bottom and metal swivel clip
- 5-ply Kevlar® stitched with rivet reinforcement

Model No. NP519
Price/Each 8.50



Model No.	Mfg. No.	Description	Capacity	Size"	Price /Each
382-4010	1205441	Canister	Up to 10 lbs. of 14" Electrodes	14	9.38
382-4040	1205455	Canister	Up to 15 lbs. of 18" Electrodes	18	12.51
382-4020	1205451	Adjustable Carry Strap	-	-	8.65

ROD GUARD® TOTAL WELDING ROD PROTECTION SYSTEMS

- Canister and accessories provide great storage and inventory control for all welding electrodes and filler metals
- Each *Rod Guard*® canister is certified chloride-free and features a threaded cap with long-lasting neoprene seal to keep electrodes airtight – preventing them from being contaminated with atmospheric moisture
- Constructed of high-impact polyethylene, can be reused for many years
- Resealable welding electrode storage canister
- Steel-lined high-temperature models are heat resistant to 450°F

14" CANISTER

- Holds up to 10 lbs. of 12" or 14" electrodes
- Withstands 225°F

18" CANISTER

- Designed specifically for 18" electrodes
- Withstands 225°F

36" CANISTER

- Specifically designed for 36" flux-coated bronze or brazing rod and TIG filler-metals
- Nominal wall thickness of 0.100" for added strength and durability
- Rod tips are exposed when long cap is removed, allowing easy accessibility to canister's contents

14" HIGH-TEMPERATURE CANISTER

- Steel-lined and high-temperature resistant to 450°F
- Holds up to 10 lbs. of 12" or 14" electrodes
- Ideal for use with low-hydrogen electrodes and for disposing of used electrode stubs

18" HIGH-TEMPERATURE CANISTER

- Steel-lined and high-temperature resistant to 450°F
- Designed specifically for 18" electrodes
- Ideal for use with low-hydrogen electrodes and for disposing of used electrode stubs

STORAGE RACK

- Perfect for organizing up to three canisters at the job site or workstation
- Accommodates 14" or 18" canisters (Canisters sold separately)



384-1050

(Canisters sold separately)



384-1038



384-1065



384-1030

Model No.	Mfg. No.	Description	Price /Each
CANISTERS			
384-1030	RG100-48	14" Canister	11.42
384-1070	RG200-48	18" Canister	13.08
384-1065	RG300-12	36" Canister	19.71
384-1038	RG100-12HT	14" High Temperature	17.69
384-1075	RG200-12HT	18" High Temperature	23.03
ACCESSORIES			
384-1050	RG101-4	Storage Rack	19.71

ELECTRODE OVENS & HINGES

DRYROD® II PORTABLE ELECTRODE OVENS

- Wire wrapped heating elements provide uniform, continuous heat for 100% protection of electrodes from unpacking to use
- Standard features include an adjustable thermostat (not available on Type 1), 120/240 V selector switch, indicator light (optional on Type 1) and a removable power cord with locking inlet
- Locking power inlet and removable locking cord combination provides a fixed power connection but can be replaced without rewiring
- Rod elevator in Type 1 and 2 easily extracts welding rods
- Digital thermometer available on Types 2, 5, 15, reads in °F or °C
- Type 5 and 15 available with wheels and pull-handle for easy transport
- All units cUL approved



Type 5

Type 1

Type 2

Type 5 with handles



Model No.	Mfg. No.	Voltage	Capacity lbs.	Temperature Range °F	Price /Each
TYPE 1					
382-1205500	1205500	120 V AC/DC @ 75 watts	10	Preset to 300	316.35
382-1205501	1205501	240 V AC @ 75 watts	10	Preset to 300	316.35
TYPE 2					
TTT575	1205512	120/240 V AC @ 150 watts	20	100 - 300	377.62
382-1205510*	1205510	120/240 V AC @ 150 watts	20	100 - 300	460.14
TYPE 5 W/HANDLES					
TTU576	1205523	120/240 V AC @ 300 watts	50	100 - 300	661.46
TTU577*	1205521	120/240 V AC @ 300 watts	50	100 - 300	763.98
TYPE 5 W/WHEELS					
TTT576	1205522	120/240 V AC @ 300 watts	50	100 - 300	710.22
382-1205520*	1205520	120/240 V AC @ 300 watts	50	100 - 300	811.51
TYPE 15					
TTT577	1205532	120/240 V AC @ 600 watts	150	100 - 300	1196.62
382-1205530*	1205530	120/240 V AC @ 600 watts	150	100 - 300	1297.91

*With digital thermometer

DRYROD® II & DRYROD® BENCH OVENS

TYPE 15B

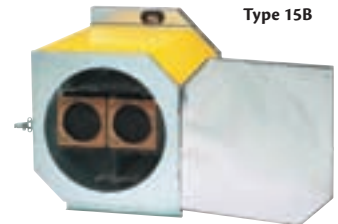
- Designed for small fabrication shops, jobsite trailer or welding lab
- Wire wrapped heating elements to provide even continuous heat for 100% protection of electrodes
- Adjustable temperature ensures full temperature control
- Durable steel body with a powder coat finish
- Optional digital thermometer reads in °F or °C
- cUL approved

TYPE 300

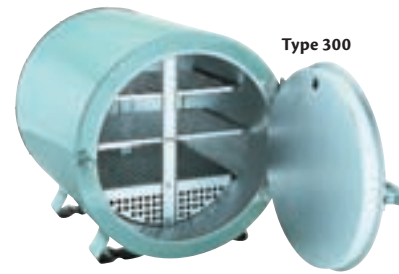
- Designed for large fabrication shops, refineries and on-site job trailers
- Adjustable thermostat ensures full temperature control
- Optional door mounted thermometer can be factory or field-installed
- cUL and CSA approved units



Type 15B



Type 300



Model No.	Mfg. No.	Voltage	Capacity lbs.	Temperature Range °F	Price /Each
TYPE 15B					
TTT578	1205533	120/240 V AC @ 600 watts	150	100 - 300	1047.83
382-1205531*	1205531	120/240 V AC @ 600 watts	150	100 - 300	1150.35
TYPE 300					
382-1060	1200200	120 V AC @ 1000 watts	350	100 - 550	1673.02
382-1070**	1200202	120 V AC @ 1000 watts	350	100 - 550	1898.09
382-1065	1200100	240/480 V AC @ 1000 watts	350	100 - 550	1938.11
382-1075**	1200102	240/480 V AC @ 1000 watts	350	100 - 550	2156.92
382-1062	1205400	240 V AC - CSA Approved	350	100 - 550	1938.11
TTT579**	1205401	240 V AC - CSA Approved	350	100 - 550	2253.20

* With digital thermometer

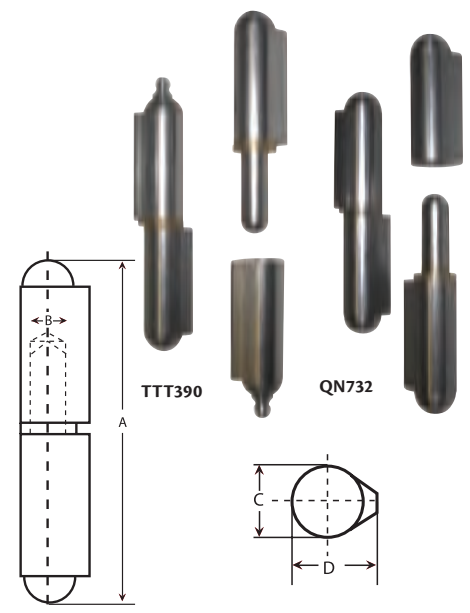
**Stacking version

2-PIECE WELD-ON HINGES

- Extremely popular due to its high weight load capacity as well as professional appearance
- Can be painted to match the door and frame
- Ideal for gates, machinery doors, BBQ pits, electrical boxes and trailers
- Can be welded on as a lift-off, or can be permanently mounted
- Choice of three types



Model No.	Mfg. No.	A Length"	B Pin Dia."	C Outside Dia."	D"	Price /Each
MILD STEEL W/FIXED STEEL PIN & BRASS WASHER						
QN763	FES050	2	3/16	5/16	13/32	1.76
QN761	FES080	3 3/16	5/16	1/2	5/8	2.67
QN732	FES100	4	13/32	5/8	3/4	3.53
QN741	FES150	6	1/2	3/4	1	8.32
QN751	FES200	8	5/8	29/32	1 1/8	14.10
MILD STEEL W/FIXED STEEL PIN, BRASS WASHER & GREASE FITTING						
TTT529	FES080GF	3 3/16	5/16	1/2	5/8	4.68
TTT390	FES100GF	4	13/32	5/8	3/4	5.95
TTT391	FES150GF	6	1/2	3/4	1	10.39
TTT392	FES200GF	8	5/8	29/32	1 1/8	16.59
TTT535	FES260GF	10	3/4	1 1/8	1 3/8	19.79
304 STAINLESS STEEL W/STAINLESS STEEL PIN & WASHER						
TTT536	V2A060	2 3/8	1/4	13/32	15/32	5.98
TTT537	V2A080	3 3/16	5/16	1/2	5/8	8.86
TTT538	V2A100	4	13/32	5/8	3/4	13.67
TTT539	V2A150	6	1/2	3/4	1	33.32
TTU315	V2A200	8	5/8	29/32	1 1/2	46.98



OUTPUT ICONS



For constant voltage MIG, flux-cored and subarc processes



Direct current welding output



Alternating current welding output

INPUT ICONS



Single phase input power



115 V input power



60 Hertz input power



120 V input power



50/60 Hertz input power



230 V input power

TOMAHAWK® 375 AIR PLASMA CUTTERS

The Tomahawk® 375 air plasma cutting system arrives ready to go for fast and precise cutting. Forget the grinder – simply pick up the torch and cut in seconds.

- Internal air compressor enables operation in environments where external compressed air is not available
- 3/8" maximum cut @ 14 IPM
- Continuous output control focuses the arc for different material thickness
- Touch start system, reliable plasma arc initiation without high frequency
- Rapid arc restrike
- Front panel purge control makes it easy to set the air flow rate without initiating the plasma arc
- Engine drive compatible
- 3-year warranty on machine, 1-year on torch



PROCESSES

Plasma cutting for:
Mild steel, stainless steel,
aluminum, brass, copper

OUTPUT



INPUT



INCLUDES:

- Internal air compressor (external air connection also standard)
- Lincoln Electric LC25 torch with 10' (3 m) cable
- Air regulator and pressure gauge
- Internal water separator
- Work clamp and cable
- Spare consumables
- Shoulder strap
- Input power cord

Model No.	Mfg. No.	Input Power Voltage/Phase/Hertz	Rated Output Current/Voltage/Duty Cycle	Input Current @ Rated Output	Pilot Current	Output Range	Air Pressure Required	Air Flow Required	Price /Each
TTU662	K2806-1	208/230/1/60	13 A/85.2 V/100% 18 A/87.2 V/60% 25 A/90 V/35%	21.7 A (max.)	17 A	10-25 A	80-110 PSI (6-7.5 Bar)	70 PSI @ 125-200 SCFH (5 Bar @ 80 Litres/min)	1867.60

TOMAHAWK® 625 PLASMA CUTTERS

The Tomahawk® 625 plasma cutting system is portable enough to carry to any jobsite. Hook up the compressed air, grab the torch and start cutting right away.

- 5/8" maximum cut @ 12 IPM
- Continuous output control focuses the arc for different material thickness
- Touch start system, reliable plasma arc initiation without high frequency
- Rapid arc restrike for fast cutting through gaps, even expanded metal
- Front panel purge control makes it easy to set the air flow rate without initiating the plasma arc
- Lightweight and portable, can be easily carried by one person
- Engine drive compatible
- 3-year warranty on machine, 1-year on torch



PROCESSES

Plasma cutting for:
Mild steel, stainless steel,
aluminum, brass, copper

OUTPUT



INPUT



INCLUDES:

- Lincoln Electric LC40 torch with 20' (6 m) cable
- Air regulator and pressure gauge
- Internal water separator
- Work clamp and cable
- Spare consumables
- Shoulder strap
- Input power cord

Model No.	Mfg. No.	Input Power Voltage/Phase/Hertz	Rated Output Current/Voltage/Duty Cycle	Input Current @ Rated Output	Pilot Current	Output Range	Air Pressure Required	Air Flow Required	Price /Each
TTU663	K2807-1	208/230/1/50/60	24 A/89.6 V/100% 29 A/91.8 V/60% 40 A/96.0 V/35%	36.8 A (max.)	17 A	10-40 A	80-110 PSI (6-7.5 Bar)	70 PSI @ 125-200 SCFH (5 Bar @ 80 Litres/min)	2261.10

WELDING MACHINES

80^{GL} FLUX-CORED WIRE FEED WELDERS

- 18 gauge to 1/8" recommended welding thickness
- 1-year warranty parts and labor,
90 days on gun and cable assembly



Model No.	Mfg. No.	Input Power Voltage/Phase/Hertz	Rated Output DC Current/Voltage/Duty Cycle	Welding Output Range	WFS IPM	Price /Each
TTU556	K2501-1	115/1/60	70 A/17 V/20%	35-88A	0-300	331.60

PROCESSES

Flux-Cored Welding - Steel

OUTPUT



INPUT



INCLUDES:

- 1 lb. spool of 0.035" NR-211-MP flux-cored wire
- Gun and cable assembly
- 10' work cable and clamp
- Spare contact tip
- Flux-cored nozzle
- Instruction manual
- 10' Input cable with attached plug

WIRE FEED™ 255 FLUX-CORED/ MIG WIRE FEED WELDERS

- 24 gauge to 1/2" recommended welding thickness
- 3-year warranty parts and labor,
90 days on gun and cable assembly

MAGNUM® 100SG SPOOL GUN

Designed to easily feed 4" (102 mm) diameter 1 lb. (0.45 kg) spools of 0.030" (0.8 mm) or 0.035" (0.9 mm) diameter *SuperGlaze*® aluminum MIG wire.

Includes:

- Gun
- Adapter kit, 0.035" (0.9 mm)
- 3 Contact tips
- Gas nozzle
- 1 lb. (0.45 kg) spool of *SuperGlaze*® 4043 0.035" (0.9 mm) MIG wire
- Carrying case

Model No. TTU118
Mfg. No. K2532-1
Price/Each \$271.20



Model No.	Mfg. No.	Input Power Voltage/Phase/Hertz	Rated Output DC Current/Voltage/Duty Cycle	Welding Output Range	WFS IPM	Price /Each
TTU560	K2783-1	230/1/60	230 V:255 A/26.8 V @ 20% 230 V:150 A/21.5 V @ 60% 230 V:120 A/20.0 V @ 100%	30-255 A DC	50-700	1798.80

PROCESSES

Flux-Cored Welding - Steel

MIG Welding - Steel

MIG Welding - Aluminum (Optional *Magnum* 100SG spool gun kit TTU118 required)

OUTPUT



INPUT



INCLUDES:

- 15' *Magnum*® 250L gun and cable assembly with .035" contact tip
- 10' work cable and clamp
- 0.045" spare contact tip
- MIG welding nozzle
- Adjustable gas regulator and hose
- Reel adapters for 2" and 3" wide 8" diameter spools
- Accepts larger 33 lb. and 44 lb. spools of wire
- Instruction manual
- 10' Input cable with attached plug
- Spool gun ready (optional kit TTU118)
- Built-in thermal overload protection
- Running gear with single cylinder rack integrated to base (maximum cylinder size 48")

INVERTER ARC™ 120 DC INVERTER STICK WELDERS

- 18 gauge to 1/4" recommended welding thickness
- 1-year warranty parts and labour



Model No.	Mfg. No.	Input Power Voltage/Phase/Hertz	Rated Output DC Current/Duty Cycle	Welding Output Range	Price /Each
TTU561	K2789-1	120/1/60	70 A @ 20%	10-90 A DC	340.10

PROCESSES

Stick
DC TIG

OUTPUT



INPUT



INCLUDES:

- 10' work cable with small *Dinse*® connector and clamp
- 10' Electrode holder with small *Dinse*® connector
- Instruction manual
- 6 1/2' Input cable with attached plug

OPTIONAL ACCESSORIES

17 V TIG TORCHES

150 A air-cooled compact and durable TIG torch with integral gas valve for gas control at the torch, 1-piece 25' cable, power cable adapter must be ordered separately.

Model No.	Price/Each
363-1410	94.27

9 FV TIG TORCHES

1-Piece 25' cable, 125 A gas valve and flexible head torch.

Model No.	Price/Each
363-1970	126.13

17 FV TIG TORCHES

1-Piece 25' cable, 150 A gas valve and flexible head torch.

Model No.	Price/Each
363-2020	119.78

TIG TORCH ADAPTERS

For connection of 17 V torches (1-piece cable) to power sources without gas passing through the connection.

Model No.	Price/Each
TTT885	40.94

CABLE PLUG KITS

Attaches to welding cable to provide quick disconnect from machine.

Model No.	Price/Each
TTU570	19.10

TIG TORCH PARTS KITS

These kits include back cap, collets, collet bodies, nozzles and tungsten.

Model No.	Description	Price/Each
366-3613	9 Series Torches	54.00
821-1855	17 Series Torches	41.18

0.035" ALUMINUM WELDING KITS

- Includes: Drive roll, non-metallic cable liner, and contact tips (qty. 6) for feeding 0.035" (0.9 mm) aluminum MIG wire
- Also includes 1 lb. spool of SuperGlaze™ 4043 aluminum MIG wire



Model No.	Price/Each
TTU575	94.95

SHIELDING GAS KITS

Required when changing from flux-cored to MIG welding, comes with single stage pressure regulator and 6' hose.

Model No.	Price/Each
331-4150	176.66

DRIVE ROLL KITS

Model No.	Description	Price/Each
TTU573	For Solid Wire 0.025" - 0.030"	22.30
TTU574	For Solid Wire 0.035"	29.30
	For Flux-Cored Wire 0.045"	

SPINDLE ADAPTORS

Allows for larger 10-12 pound spools of wire to be used.



Model No.	Price/Each
TTU572	7.60

120 V MIG CONVERSION KITS

- For MIG (gas-shielded solid wire) welding
- Includes: 0.025-0.030" (0.6 - 0.8 mm) cable liner, two 0.025" contact tips, gas nozzle, 2 lb. spool of 0.025" SuperArc™ L-56 mild steel MIG wire, gas regulator for Argon and Argon-blend gases, adapter for CO₂ cylinders, gas solenoid (115 V), hoses, connectors and instructions



Model No.	Price/Each
TTU571	191.10

STICKMATE® LX 235 AC STICK (SMAW) WELDERS

- Applications: Maintenance, construction, farm/ranch, rental, home
- Suitable metals: Steel, stainless steel, cast iron



Model No.	NP481
Mfg. No.	500420
Welding Amp Range AC	30 - 235 A
Welding Amp Range DC	N/A
Input Voltage	230 V AC
Weld Thickness	1/2"
Duty Cycle	20% at 225 A 100% at 100 A
Cables Included	15' Electrode Cable with Holder, 10' Work Cable with Clamp, 6' Primary Cable with Plug 1 A Increments High/Low 1/16" - 5/32"
Amperage Adjustments	
Range Selection	
Electrodes	
Warranty	5/3/1 Industrial Use
Price/Each	\$713.35

HANDLER® 140 MIG (GMAW) WELDERS

- Applications: Maintenance, construction, auto body, farm/ranch, rental, home
- Suitable metals: Steel, stainless steel, aluminum

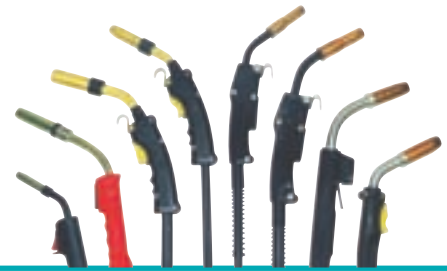


Model No.	NP991
Mfg. No.	500500
Welding Amp Range	25 - 140 A
Input Voltage	115 V AC
Weld Thickness	24 ga - 1/4"
Duty Cycle	20% @ 90 A
Gun Type	H-10 MIG
Gun Length	10'
MIG Ready	Yes
Trigger Activated Arc	Yes
Running Gear	Option
Spool Size	8"
Wire Feed Speed Tracking	Yes
Regulator, Gas Hose, Valve	Included
Contact Tips (.030")	3 included
10' Work Cable with Clamp	Included
Sample Wire Spool	Included
Power Cord with Plug	Included
Warranty	5/3/1 Industrial Use
Price/Each	\$1239.49

MIG GUNS & ACCESSORIES

MIG GUNS

- Recommended for applications using solid and flux core wire
- Guns are complete with 15' cable length
- A complete selection of replacement parts for most brands of guns is available
- Contact us for pricing on guns with different amperage ratings or cable lengths



BERNARD® STYLE REPLACEMENT AIR-COOLED MIG GUNS

200 AMPS

Rating:

- 200 Amps CO₂ @ 100% duty cycle
- 150 Amps mixed gas @ 100% duty cycle
- Wire capacity: 0.023" – 0.045"

300 AMPS

Rating:

- 300 Amps CO₂ @ 100% duty cycle
- 250 Amps mixed gas @ 100% duty cycle
- Wire capacity: 0.030" - 0.062"

350 AMPS

Rating:

- 350 Amps CO₂ @ 100% duty cycle
- 250 Amps mixed gas @ 100% duty cycle
- Wire capacity: 0.030" – 0.062"

400 AMPS

Rating:

- 400 Amps CO₂ @ 100% duty cycle
- 300 Amps mixed gas @ 100% duty cycle
- Wire capacity: 0.035" - 5/64"



Model No.	Mfg. No.	Feeder Plug	Price /Each
200 AMPS			
379-4395	B2-4215A	Bernard DP	269.84
379-1101	B2-4215AM	Miller DP	269.84
379-4510	B2-4215AE	Euro DP	254.56
379-4201	B2-4215AL	Lincoln DP	269.84
TTT009	B2-4215AWM	Lincoln Wirematic	269.84
TTT010	B2-4215AT	Tweco DP	269.84
300 AMPS			
NT172	B2-4315A	Bernard DP	298.85
NT174	B2-4315AM	Miller DP	254.56
NT173	B2-4315AE	Euro DP	254.56
NT204	B2-4315AL	Lincoln DP	254.56
TTT011	B2-4315AWM	Lincoln WM 250	254.56
NT175	B2-4315AT	Tweco DP	254.56

Model No.	Mfg. No.	Feeder Plug	Price /Each
350 AMPS			
379-4570	B2-43515A	Bernard DP	332.53
379-1113	B2-43515AM	Miller DP	288.26
TTT012	B2-43515AE	Euro DP	311.76
379-4223	B2-43515AL	Lincoln DP	288.26
TTT013	B2-43515AWM	Lincoln Wirematic	288.26
379-4920	B2-43515AT	Tweco DP	288.26
400 AMPS			
TW978	B2-4415A	Bernard DP	339.24
TW983	B2-4415AM	Miller DP	288.26
TW979	B2-4415AE	Euro DP	298.13
TW981	B2-4415AL	Lincoln DP	288.26
TW984	B2-4415AT	Tweco DP	288.26

BERNARD® STYLE CONSUMABLES



Contact Tip



Long Contact Tip



Model No.	Mfg. No.	Description	Size"	200 Amps	300 Amps	350 Amps	400 Amps	Price /Each
NT179	B7488	Contact Tip	0.030	X	X	X		0.69
NT180	B7489	Contact Tip	0.035	X	X	X	X	0.69
NT181	B7490	Contact Tip	0.045	X	X	X	X	0.69
NT182	B7491	Contact Tip	1/16	X	X	X	X	0.69
PB048	B7492	Contact Tip	5/64				X	0.69
PB050	B7494	Contact Tip	7/64				X	0.69
PB052	B7496	Contact Tip	0.040	X	X	X	X	0.69
NT183	B7497	Contact Tip	0.023	X	X	X		0.69
PB054	B7498	Contact Tip	0.052	X	X	X	X	0.69
TTT074	B1588	Contact Tip, Long	0.030	X	X	X		1.01
TW993	B1589	Contact Tip, Long	0.035	X	X	X	X	1.01
TW994	B1590	Contact Tip, Long	0.045	X	X	X	X	1.01
TW995	B1591	Contact Tip, Long	1/16	X	X	X	X	1.01
TW996	B1592	Contact Tip, Long	5/64				X	1.72
TW997	B1593	Contact Tip, Long	3/32				X	1.01
TW998	B1594	Contact Tip, Long	7/64				X	1.72
PB042	B1596	Contact Tip, Long	0.040	X	X	X	X	1.01
PB043	B1597	Contact Tip, Long	0.023	X	X	X		0.65
PB044	B1598	Contact Tip, Long	0.052	X	X	X	X	0.65
TTT132	B4280	Contact Tip, Tapered	1/16	X	X	X		1.77
379-1124	B4281	Contact Tip, Tapered	0.035	X	X	X		1.01
TTT133	B4282	Contact Tip, Tapered	0.045	X	X	X		1.77
TTT134	B4283	Contact Tip, Tapered	0.052	X	X	X		1.77

Note: All reference to genuine manufacturer's equipment numbers and/or trade names or trademarks are for identification and convenience only. The trademarks and trade names are the property of their respective owners.

Continued on next page

MIG GUNS & ACCESSORIES

BERNARD® STYLE CONSUMABLES

Continued from previous page



Nozzles



Gas Diffusers



Trigger Assembly



Liner Assembly

Model No.	Mfg. No.	Description	Size"	200 Amps	300 Amps	350 Amps	400 Amps	Price /Each
PB063	B4491	Nozzle, Brass, Standard	3/4 I.D.			X	X	8.24
PB064	B4591	Nozzle, Brass	3/4 I.D.			X		8.77
NT177	B4391	Nozzle, Brass	5/8 I.D.	X	X			5.39
NT178	B4393	Nozzle, Copper	5/8 I.D.	X	X			7.68
BZ934	B4392	Nozzle, Brass, Standard	1/2 I.D.	X	X			9.66
379-4224	B4394	Nozzle, Copper	1/2 I.D.	X	X			8.37
PB059	B4492	Nozzle, Brass	9/16 I.D.			X	X	8.18
PB060	B4592	Nozzle, Copper	9/16 I.D.			X	X	8.77
379-1125	B4295	Nozzle, Brass	11/32 I.D.	X	X			10.22
NT176	B4335	Head Assembly, Standard		X	X			5.16
PB057	B4435	Head Assembly, Standard				X	X	4.47
379-1231	B7126	O-Ring		X	X			0.52
379-1232	B7127	O-Ring				X	X	0.52
379-1140	B4323R	Silicone Cap, Standard		X	X			1.45
379-1186	B4423R	Silicone Cap, Standard				X	X	1.57
379-1223	B4786	Body Tube Assembly		X	X			17.87
TTT137	B4790	Body Tube Assembly				X	X	19.49
379-1222	B4780	Insulator Hex Nut		X	X	X	X	1.50
379-1225	B5662	Trigger Assembly		X	X	X		5.12
TTT139	B5662M	Trigger Assembly, w/Microswitch		X	X			5.59
379-1178	B4422	Trigger Assembly					X	28.72
379-1127	B43015	Liner Assembly, 15'	0.023 - 0.030	X	X			9.67
379-1135	B43115	Liner Assembly, 15', Standard	0.035 - 0.045	X	X			7.75
379-1139	B43215	Liner Assembly, 15'	0.045 - 0.062	X	X			7.75
379-5840	B43115X	Liner Assembly, Teflon®, 15'	0.035 - 3/64	X	X	X		16.32
379-1170	B44115	Liner Assembly, 15'	0.035 - 0.045			X	X	7.75
379-1175	B44215	Liner Assembly, 15'	0.045 - 0.062			X	X	7.75
379-1188	B44315	Liner Assembly, 15'	5/64				X	9.98

MILLER® STYLE REPLACEMENT AIR-COOLED MIG GUNS

- Guns are complete with 15' cable length

150 AMPS

Rating:

- 150 Amps CO₂ @ 100% duty cycle
- 150 Amps mixed gas @ 60% duty cycle
- Wire capacity: 0.023" - 0.035"

250 AMPS

Rating:

- 250 Amps CO₂ @ 100% duty cycle
- 250 Amps mixed gas @ 60% duty cycle
- Wire capacity: 0.030" - 0.045"



379-M169-715

379-1050



GUNS

Model No.	Mfg. No.	Amps	Feeder Plug	Price /Each
TTT018	M169-593	150	Miller DP	231.66
NT206	M169-598	250	Miller DP	422.44

CONSUMABLES

Model No.	Mfg. No.	Description	Size"	150 Amps	250 Amps	Price /Each
NT168	M087-299	Contact Tip	0.023	X	X	0.49
NT165	M000-067	Contact Tip	0.030	X	X	0.49
NT166	M000-068	Contact Tip	0.035	X	X	0.49
NT167	M000-069	Contact Tip	0.045	X	X	0.49
379-M169-715	M169-715	Nozzle	1/2	X		5.87
NT169	M169-724	Nozzle	1/2		X	9.56
NT170	M169-725	1/8" Tip Recess Nozzle	5/8		X	9.56
379-1050	M169-726	1/8" Tip Recess Nozzle, Flush	5/8		X	9.56
TTT177	M169-727	Nozzle	5/8		X	10.41
379-1055	M169-729	1/8" Tip Stickout Nozzle Retainer			X	5.32
TTT178	M170-467	Replacement Retaining Ring		X		2.56
TTT179	M170-468	Replacement O-Ring			X	0.52
TTT180	M169-716	Retaining Head		X		4.79
TTT181	M170-470	Replacement Retaining Ring		X		2.56
TTT182	M170-471	Replacement O-Ring		X		0.52
TTT183	M169-717	Shock Washer		X		5.18
TTT184	M169-730	Shock Washer			X	3.60
TTT185	M169-718	Gooseneck, 45°		X		46.74
TTT186	M169-731	Gooseneck, 45°			X	52.06
NT171	M169-728	Gas Diffuser			X	2.08
TTT188	M194-010	Liner Conduit, 15'	0.023 - 0.025	X	X	8.45
TTT189	M194-011	Liner Conduit, 15'	0.030 - 0.035	X	X	8.45
TTT190	M194-012	Liner Conduit, 15'	0.035 - 0.045	X	X	8.45
TTT191	M194-014	Liner Conduit, 15', Aluminum	0.035 - 3/64		X	43.88

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R26349E

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MATERIAL
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1035

MIG GUNS & ACCESSORIES

TWECO® STYLE REPLACEMENT AIR-COOLED MIG GUNS

- Guns are complete with 15' cable length

160 AMPS

Rating:

- 160 Amps CO₂ @ 80% duty cycle
- 100 Amps mixed gas @ 80% duty cycle
- Wire capacity: 0.023" - 0.045"

200 AMPS

Rating:

- 200 Amps CO₂ @ 100% duty cycle
- 150 Amps mixed gas @ 100% duty cycle
- Wire capacity: 0.023" - 0.045"

300 AMPS

Rating:

- 300 Amps CO₂ @ 100% duty cycle
- 200 Amps mixed gas @ 100% duty cycle
- Wire capacity: 0.030" - 0.062"

400 AMPS

Rating:

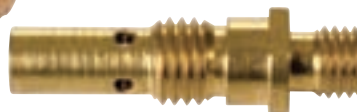
- 400 Amps CO₂ @ 100% duty cycle
- 300 Amps mixed gas @ 100% duty cycle
- Wire capacity: 0.030" - 5/64"



MIG GUN



379-1265



379-1570



379-1455



379-1488

CONSUMABLES

GUNS

Model No.	Mfg. No.	Feeder Plug	Price /Each
160 AMPS			
TTT029	C35-15	No Gun Plug	258.92
TTT030	CC35-15	Century DP	258.92
TTT031	CL35-15	Lincoln SP100-185 DP	231.66
TTT032	CWM35-15	Lincoln Wirematic	258.92
TTT033	CSP35-15	Lincoln SP150/200DP	231.66
TTT034	CM35-15	Miller DP	231.66
TTT035	CT35-15	Tweco DP	231.66
TTT036	CX35-15	Euro DP	231.66
200 AMPS			
TTT037	C215-3035	Tweco Plug	210.65
TTT038	CM215-3035	Miller DP	210.65
TTT039	CL215-3035	Lincoln "LN" DP	210.65
TTT040	CLPM215-3035	Lincoln Power MIG	210.65
TTT042	CX215-3035	Euro DP	192.50
300 AMPS			
NT189	C315-3545	Tweco Plug	282.47
NT192	CM315-3545	Miller DP	282.47
NT207	CL315-3545	Lincoln "LN" DP	291.24
NT208	CH315-3545	Hobart DP	278.87
NT209	CX315-3545	Euro DP	278.87
400 AMPS			
379-1590	C415-3545	Tweco Plug	283.31
379-1680	CM415-3545	Miller DP	292.22
TTT043	CL415-3545	Lincoln "LN" DP	292.22
TTT044	CH415-3545	Hobart DP	292.22
TTT045	CX415-3545	Euro DP	292.22

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CONSUMABLES

Model No.	Mfg. No.	Feeder Plug	Size"	Price /Each
160 AMPS				
379-1265	C11-23	Contact Tip	0.023	0.39
379-1270	C11-30	Contact Tip	0.030	0.45
379-1275	C11-35	Contact Tip, Standard	0.035	0.45
TTT224	C11-40	Contact Tip	0.040	0.46
379-1280	C11-45	Contact Tip	0.045	0.39
379-1285	C11H-35	Contact Tip, Heavy-Duty	0.035	0.53
TTT227	C11H-45	Contact Tip, Heavy-Duty	0.045	0.57
379-4209	C11T-23	Contact Tip, Tapered	0.023	0.53
TTT228	C11T-30	Contact Tip, Tapered	0.030	0.57
TTT229	C11T-35	Contact Tip, Tapered	0.035	0.57
TTT230	C11T-40	Contact Tip, Tapered	0.040	0.57
TTT231	C11T-45	Contact Tip, Tapered	0.045	0.57
379-1455	C21-50	Nozzle, Standard	1/2 I.D.	6.45
TTT232	C21-50-F	Nozzle, Flush	1/2 I.D.	7.04
379-1460	C21-62	Nozzle	5/8 I.D.	4.77
TTT233	C21-62-F	Nozzle, Flush	5/8 I.D.	7.04
379-1445	C21-37	Nozzle	3/8 I.D.	6.45
TTT234	C21-37-F	Nozzle, Flush	3/8 I.D.	7.04
379-1465	C21T-37	Nozzle Tapered	3/8 I.D.	6.45
TTT235	C21T-37-F	Nozzle Tapered, Flush	3/8 I.D.	6.21
379-1570	C35-50	Gas Diffuser, Standard		2.37
TTT236	C35-60-45	Conductor Tube, 45°		13.90
TTT237	C35-60-60	Conductor Tube, 60°, Standard		13.90
TTT238	C35-60-180	Conductor Tube, 180°		13.90
379-1488	C23-40-15	Liner Assembly, 15'	0.023	8.15
379-1569	C35-40-15	Liner Assembly, 15', Standard	0.035	8.15
TTT239	C45-40-15	Liner Assembly, 15'	0.045	8.45
TTT240	C35TF-40-10	Liner Assembly, Teflon® 10'	0.035	32.97
TTT241	C35TF-40-15	Liner Assembly, Teflon® 15'	0.035	32.97
TTT242	C45TF-40-10	Liner Assembly, Teflon® 10'	0.045	19.33
TTT243	C45TF-40-15	Liner Assembly, Teflon® 15'	0.045	19.33

Continued on next page

See pages 1065 to 1080 for our complete line of Welding Helmets & Accessories.



TWECO® CONSUMABLES

Continued from previous page



Model No.	Mfg. No.	Description	Size"	200 Amps	300 Amps	400 Amps	Price /Each
200, 300 & 400 AMPS							
NP602	C14-23	Contact Tip	0.023	X			0.53
NP603	C14-30	Contact Tip	0.030	X	X		0.53
NP604	C14-35	Contact Tip, Standard	0.035	X	X	X	0.53
NP605	C14-40	Contact Tip	0.040	X	X	X	0.53
NP606	C14-45	Contact Tip	0.045	X	X	X	0.53
NP608	C14A-364	Contact Tip, Aluminum	3/64	X	X	X	0.57
NP607	C14-52	Contact Tip	0.052		X	X	0.53
NP601	C14-116	Contact Tip	1/16		X	X	0.53
TTT244	C14-564	Contact Tip	5/64			X	0.57
NP611	C14H-35	Contact Tip, Heavy-Duty	0.035	X	X	X	0.67
NP612	C14H-40	Contact Tip, Heavy-Duty	0.040	X	X	X	0.67
NP613	C14H-45	Contact Tip, Heavy-Duty	0.045	X	X	X	0.67
NP609	C14AH-364	Contact Tip, Heavy-Duty, Aluminium	3/64	X	X	X	0.89
NP614	C14H-52	Contact Tip, Heavy-Duty	0.052		X	X	0.67
NP610	C14H-116	Contact Tip, Heavy-Duty	1/16		X	X	0.67
NP615	C14H-564	Contact Tip, Heavy-Duty	5/64			X	0.67
TTT245	C14T-23	Contact Tip, Tapered	0.023	X			0.62
TTT246	C14T-30	Contact Tip, Tapered	0.030	X	X		0.62
379-1395	C14T-35	Contact Tip, Tapered	0.035	X	X	X	0.56
TTT247	C14T-40	Contact Tip, Tapered	0.040	X	X	X	0.62
379-1400	C14T-45	Contact Tip, Tapered	0.045	X	X	X	0.56
TTT248	C14T-52	Contact Tip, Tapered	0.052		X	X	0.62
TTT249	C14T-116	Contact Tip, Tapered	1/16			X	0.62
379-1475	C22-50	Nozzle, Adjustable, Standard	1/2 I.D.	X			2.75
379-1480	C22-62	Nozzle, Adjustable	5/8 I.D.	X			3.22
NP621	C24A-50	Nozzle, Adjustable	1/2 I.D.		X	X	3.55
NP622	C24A-62	Nozzle, Adjustable, Standard	5/8 I.D.		X	X	3.55
NP623	C24A-75	Nozzle, Adjustable	3/4 I.D.		X	X	3.55
TTT250	C22-37-SS	Nozzle, Short Stop	3/8 I.D.	X			3.22
379-4960	C22-50-SS	Nozzle, Short Stop	1/2 I.D.	X			3.22
TTT251	C22-62-SS	Nozzle, Short Stop	5/8 I.D.	X			3.22
NP620	C24A-37-SS	Nozzle, Short Stop	3/8 I.D.		X	X	3.55
NP697	C24A-50-SS	Nozzle, Short Stop	1/2 I.D.		X	X	3.55
NP698	C24A-62-SS	Nozzle, Short Stop	5/8 I.D.		X	X	3.55
NP699	C24A-75-SS	Nozzle, Short Stop	3/4 I.D.		X	X	3.55
379-1485	C22T-37-SS	Nozzle, Tapered, Short Stop	3/8 I.D.	X			3.22
NP700	C24AT-37-SS	Nozzle, Tapered, Short Stop	3/8 I.D.		X	X	3.55
NP616	C23-37	Nozzle, Self Insulated	3/8 I.D.	X	X	X	8.77
NP617	C23-50	Nozzle, Self Insulated	1/2 I.D.	X	X	X	8.77
NP618	C23-62	Nozzle, Self Insulated	5/8 I.D.	X	X	X	8.77
TTT252	C23-75	Nozzle, Self Insulated	3/4 I.D.		X	X	9.57
379-1500	C23T-37	Nozzle, Self Insulated, Tapered	3/8 I.D.	X	X	X	9.23
NP624	C24CT-37-S	Nozzle, Coarse Thread	3/8 I.D.	X	X	X	5.85
NP625	C24CT-50-S	Nozzle, Coarse Thread	1/2 I.D.	X	X	X	6.38
NP626	C24CT-62-S	Nozzle, Coarse Thread	5/8 I.D.	X	X	X	5.85
NP627	C24CT-75-S	Nozzle, Coarse Thread	3/4 I.D.		X	X	5.85
NP629	C34CT	Nozzle Insulator, Fixed Nozzle		X	X	X	8.97
379-1550	C32	Nozzle Insulator, Standard		X			1.23
NP628	C34A	Nozzle Insulator, Standard			X	X	1.23
379-1630	C52	Gas Diffuser, Standard		X			3.67
NT191	C54A	Gas Diffuser, Standard			X	X	1.85
379-1635	C52FN	Gas Diffuser for Fixed Nozzle		X			3.67
TTT254	C62A-45	Conductor Tube, 45°		X			16.62
379-4490	C63-45	Conductor Tube, 45°			X		16.44
379-4675	C64A-45	Conductor Tube, 45°				X	16.44
TTT255	C62A-60	Conductor Tube, 60°, Standard		X			16.62
379-4565	C63-60	Conductor Tube, 60°, Standard			X		16.44
379-1660	C64A-60	Conductor Tube, 60°, Standard				X	16.44
TTT256	C62A-45HD	Conductor Tube, Heavy-Duty, 45°		X			19.35
TTT257	C63-45HD	Conductor Tube, Heavy-Duty, 45°			X		22.08
TTT258	C64A-45HD	Conductor Tube, Heavy-Duty, 45°				X	23.69
TTT259	C62A-60HD	Conductor Tube, Heavy-Duty, 60°		X			19.35
TTT260	C63-60HD	Conductor Tube, Heavy-Duty, 60°			X		22.08
TTT261	C64A-60HD	Conductor Tube, Heavy-Duty, 60°				X	23.69
TTT262	C72A	Replacement Neoprene Insulation		X			2.04
379-1662	C74A	Replacement Neoprene Insulation			X	X	2.32
TTT263	C62N	Replacement Gas Hose Nipple		X			1.34
379-4815	C64N	Replacement Gas Hose Nipple			X	X	1.34
NP635	C83	Handle Case with Screws		X	X		16.62
379-1665	C84A	Handle Case with Screws				X	19.35



NP611



379-1400



379-1500



379-1635

Note: All reference to genuine manufacturer's equipment numbers and/or trade names or trademarks are for identification and convenience only. The trademarks and trade names are the property of their respective owners.

Continued on next page

MIG GUNS & ACCESSORIES

TWECO® CONSUMABLES

Continued from previous page

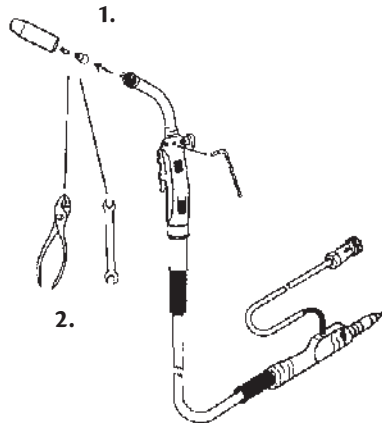


Liner Assembly

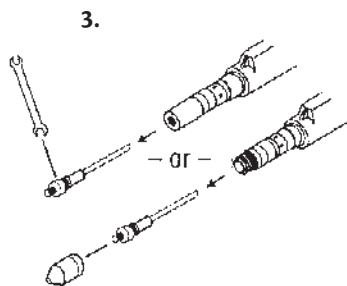
Model No.	Mfg. No.	Description	Size"	200 Amps	300 Amps	400 Amps	Price /Each
200, 300 & 400 AMPS							
379-4935	C122FM	Binder Screw and Post		X			1.20
379-1303	C124FM	Binder Screw and Post			X	X	0.71
TTT264	C152	Gun Hanger		X	X		3.41
TTT265	C154	Gun Hanger				X	3.41
NP637	C92	Trigger Switch Assembly		X	X	X	9.24
379-4500	C92C	Trigger Switch Blades, Replacement		X	X	X	1.23
379-4495	C102	Cable Connector Block Assembly		X	X		20.03
379-4805	C104	Cable Connector Block Assembly				X	14.17
TTT266	C244	Control Wire Terminal		X	X	X	0.35
379-1595	C42-3035-15	Liner Assembly, 15', Standard	0.030 - 0.035	X			7.26
NP631	C44-3545-15	Liner Assembly, 15', Standard	0.035 - 0.045		X	X	7.75
379-1600	C42-4045-15	Liner Assembly, 15'	0.040 - 0.045	X			7.26
NP630	C44-116-15	Liner Assembly, 15'	0.062		X	X	7.75
NP706	C44-564-15	Liner Assembly, 15'	5/64			X	8.45
TTT267	C42-3035-25	Liner Assembly, 25'	0.030 - 0.035	X			16.32
TTT268	C42-4045-25	Liner Assembly, 25'	0.040 - 0.045	X			16.32
379-1618	C44-3545-25	Liner Assembly, 25'	0.035 - 0.045		X	X	17.13
379-1610	C44-116-25	Liner Assembly, 25'	0.062		X	X	17.13
TTT269	C44-564-25	Liner Assembly, 25'	5/64			X	16.32
379-7010	C42N-3545-15	Liner Assembly, Nylon, 15'	0.035 - 0.045	X			21.78
NP633	C44N-3545-15	Liner Assembly, Nylon, 15'	0.035 - 0.045		X	X	19.33
NP632	C44N-116-15	Liner Assembly, Nylon, 15'	0.062		X	X	19.33

Note: All reference to genuine manufacturer's equipment numbers and/or trade names or trademarks are for identification and convenience only. The trademarks and trade names are the property of their respective owners.

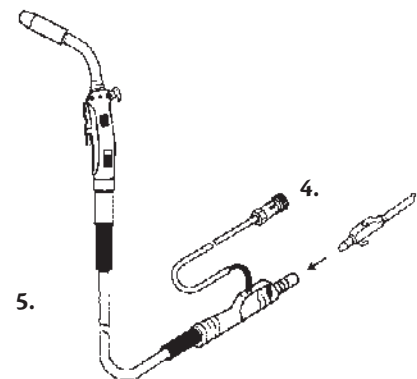
CHANGING THE WIRE ASSEMBLY (LINER)



1. REMOVE MIG GUN
from wire feeder.
Lay in a straight line.



3. REMOVE OLD CONDUIT
from rear of gun.



5. TRIM REPLACEMENT
conduit to the same length
as old liner. See MIG
gun manufacturer's
recommendations for
additional information.

MIG GUNS & ACCESSORIES

BERNARD® Q-GUNS

- Designed from the ground up to solve problems, maximize productivity and improve bottom line
- Standard Bernard® Q-Guns are available with curved handle in 15' cable lengths with either rotatable or fixed necks



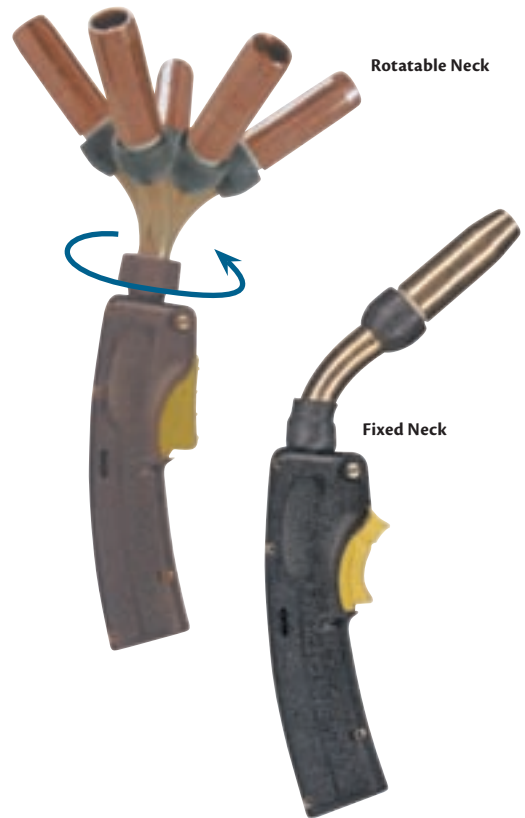
AMPERAGE RATINGS

100% NEMA	100% CE	Duty Cycle 60% CE	35% CE	Description
Q200				
250	200	240	325	CO ₂ Gas
N/A	175	200	240	80% Ar, 20% CO ₂
Q300				
350	320	370	470	CO ₂ Gas
N/A	270	310	390	80% Ar, 20% CO ₂
Q400				
400	350	425	520	CO ₂ Gas
N/A	285	350	440	80% Ar, 20% CO ₂

ROTATABLE NECK

Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Direct Plug
Q200						
TTT046	Q2015AB7EB	397.23	TTT050	Q2015A07EB	397.23	Bernard® Lincoln® Miller® Tweco®
TTT047	Q2015AB7EL	397.23	TTT051	Q2015A07EL	397.23	
TTT048	Q2015AB7EM	397.23	TTT052	Q2015A07EM	397.23	
TTT049	Q2015AB7ET	397.23	TTT053	Q2015A07ET	397.23	
Q300						
TTT054	Q3015AE7EB	473.40	TTT058	Q3015AR7EB	473.40	Bernard® Lincoln® Miller® Tweco®
TTT055	Q3015AE7EL	473.40	TTT059	Q3015AR7EL	473.40	
TTT056	Q3015AE7EM	473.40	TTT060	Q3015AR7EM	473.40	
TTT057	Q3015AE7ET	473.40	TTT061	Q3015AR7ET	473.40	
Q400						
TTT062	Q4015AE7IB	510.04	TTT066	Q4015AR7IB	510.04	Bernard® Lincoln® Miller® Tweco®
TTT063	Q4015AE7IL	510.04	TTT067	Q4015AR7IL	510.04	
TTT064	Q4015AE7IM	510.04	TTT068	Q4015AR7IM	510.04	
TTT065	Q4015AE7IT	510.04	TTT069	Q4015AR7IT	510.04	

FIXED NECK



BERNARD® Q-GUN LINERS

REPLACEMENT JUMP LINERS

- Nylon liners available for aluminum wire

Model No.	Mfg. No.	Description	Wire Size"	Price /Each
TTT070	QJL-2330	Standard	0.023 - 0.030	9.30
360-7772	QJL-3545	Standard	0.035 - 0.045	9.30
TTT071*	QJLN-364	Nylon	0.035 - 0.045	9.30
360-7774	QJL-116	Standard	1/16	9.30
TTT072*	QJLN-116	Nylon	1/16	9.30

* For aluminum wire

REPLACEMENT LINERS

- Length: 15'

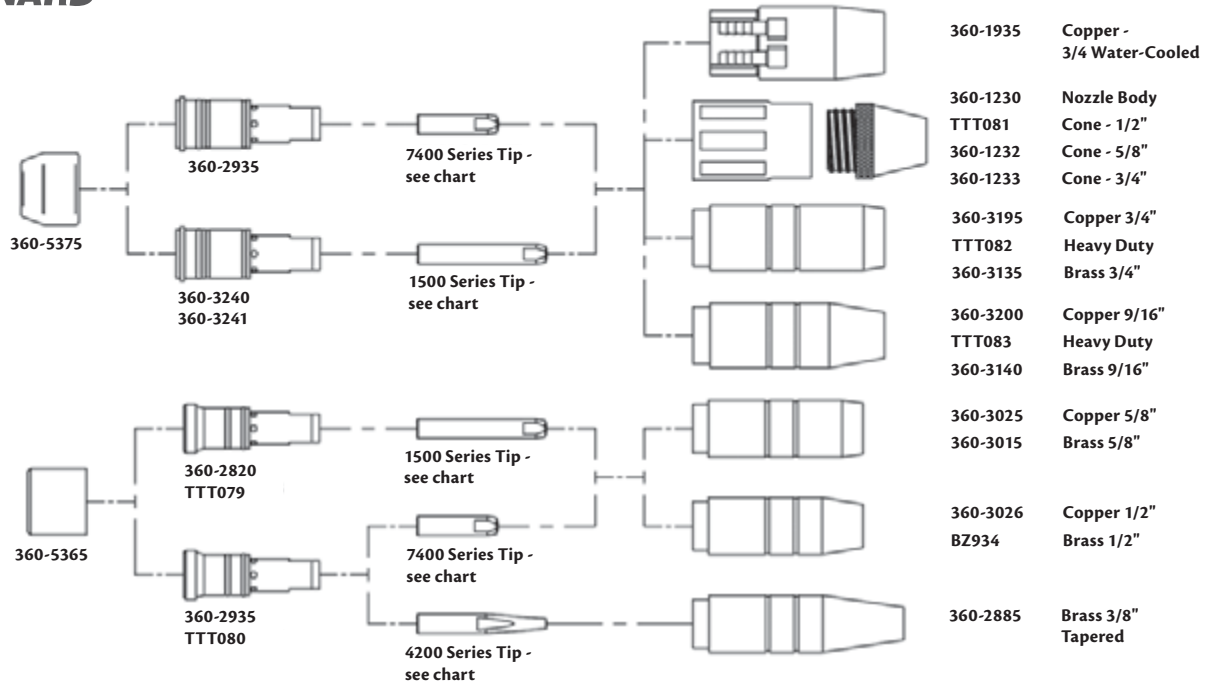
Model No.	Mfg. No.	Description	Amps	Wire Size"	Price /Each
360-4250	43015	Standard	150 - 600	0.023 - 0.030	24.47
360-4275	43115	Standard	150 - 600	0.035 - 0.045	25.62
360-4330	44115	Standard	200 - 600	0.035 - 0.045	26.79
360-4355	44215	Standard	200 - 600	0.045 - 1/16	26.79
360-4390	44315	Standard	200 - 600	5/64	26.79
360-4405	45415	Standard	500 - 600	3/32	31.47
360-4285	43115X	Standard	200 - 600	0.035 - 3/64 Aluminum	31.47
360-4365	44215X	Standard	200 - 600	3/64 - 1/16 Aluminum	31.47

MIG GUNS & ACCESSORIES

ELLIPTICAL CONSUMABLES

CONTACT TIPS

- Elliptical contact tips integrate with the Q-Gun's thermal transfer system to run cooler and last longer
- Engages the wall of the gas diffuser, locking firmly into place with a 1/4 turn
- Provides a much larger surface area for electrical and heat transfer than fine-threaded tips so as to run cool and extend tip life



Model No.	Mfg. No.	Description	Wire Size"	Price /Each
CONTACT TIPS, 1500 SERIES, 2.00" LONG HEAVY-DUTY				
TTT073	1597	Long Heavy-Duty 2.00"	0.023	1.72
TTT074	1588	Long Heavy-Duty 2.00"	0.030	1.01
360-2270	1589	Long Heavy-Duty 2.00"	0.035	1.72
360-2305	1596	Long Heavy-Duty 2.00"	0.039	1.72
360-2275	1590	Long Heavy-Duty 2.00"	0.045	1.72
360-2315	1598	Long Heavy-Duty 2.00"	0.052	1.01
360-2280	1591	Long Heavy-Duty 2.00"	1/16	1.72
TW996	1592	Long Heavy-Duty 2.00"	5/64	1.72
360-2290	1593	Long Heavy-Duty 2.00"	3/32	1.72
TW998	1594	Long Heavy-Duty 2.00"	7/64	1.72
TTT075	1595	Long Heavy-Duty 2.00"	1/8	1.72



CONTACT TIPS, 7400 SERIES, 1.25" LONG STANDARD				
360-3955	7497	Long Standard 1.25"	0.023	1.38
PB045	7488	Long Standard 1.25"	0.030	1.38
BZ933	7489	Long Standard 1.25"	0.035	1.38
360-3950	7496	Long Standard 1.25"	0.039	1.38
360-3920	7490	Long Standard 1.25"	0.045	1.38
360-3960	7498	Long Standard 1.25"	0.052	1.38
360-3925	7491	Long Standard 1.25"	1/16	1.38
360-3930	7492	Long Standard 1.25"	5/64	1.38
360-3935	7493	Long Standard 1.25"	3/32	1.38
360-3940	7494	Long Standard 1.25"	7/64	1.38
360-3945	7495	Long Standard 1.25"	1/8	1.38



CONTACT TIPS, 4200 SERIES, 2.00" LONG TAPERED				
360-2865	4281	Long Tapered 2.00"	0.035	3.88
TTT077	4299	Long Tapered 2.00"	0.039	6.63
360-2870	4282	Long Tapered 2.00"	0.045	3.88
TTT078	4283	Long Tapered 2.00"	0.0528	3.88

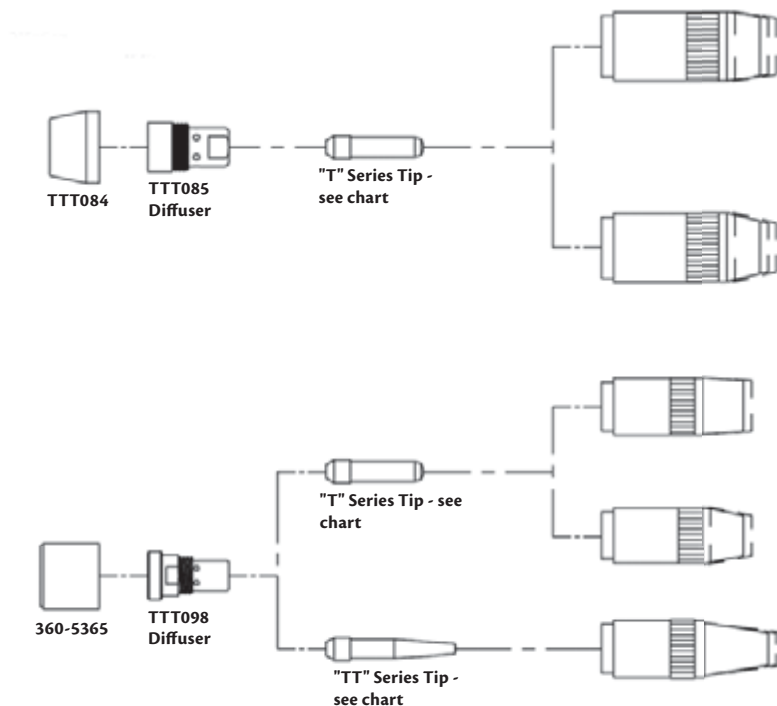


Model No.	Mfg. No.	Description	Wire Size"	Price /Each
CAPS				
360-5365	4323R	Insulator Cap for 200 and 300 Amps	-	6.73
360-5375	4423R	Insulator Cap for 400 Amps	-	6.73
DIFFUSERS				
TTT079	4235-116	W/1500 Series Tip for 200 and 300 Amps	-	13.57
360-3240	4635	W/1500 Series Tip for 400 Amps, 0.030 - 0.045 Wire Size	-	5.50
360-3241	4635-116	W/1500 Series Tip for 400 Amps, 1/16" and Larger Wire Size	-	13.57
TTT080	4335-116	W/7400 Series Tip for 200 and 300 Amps	-	13.57
360-3080	4435	W/7400 Series Tip for 400 Amps	-	13.57

HEAD ASSEMBLY				
360-2820	4235	Head Assembly for 1500 Series Contact Tip		13.57
360-2935	4335	Head Assembly for 7400 & 4200 Series Contact Tip		13.57
NOZZLES				
360-1935	1101QD	Copper, Water-Cooled	3/4	149.26
360-1230	36	Nozzle Body	-	34.76
TTT081	36-50	Nozzle Body Cone	1/2	12.01
360-1232	36-63	Nozzle Body Cone	5/8	12.01
360-1233	36-75	Nozzle Body Cone	3/4	12.01
360-3195	4591	Copper	3/4	16.83
TTT082	4591HD	Heavy-Duty	3/4	22.04
360-3135	4491	Brass	3/4	12.47
360-3200	4592	Copper	9/16	16.83
TTT083	4592HD	Heavy-Duty	9/16	22.04
360-3140	4492	Brass	9/16	12.47
360-3025	4393	Copper	5/8	13.31
360-3015	4391	Brass	5/8	9.66
360-3026	4394	Copper	1/2	13.31
BZ934	4392	Brass	1/2	9.66
360-2885	4295	Brass, Tapered	3/8	12.88

CENTERFIRE™ SERIES NOZZLES, TIPS & DIFFUSERS

- No tools required to replace tip or nozzle
- "Drop-In" tip with no threads means quick change after burnback, reducing down time
- Large diameter tip base and tapered seat provide better electrical conductivity and heat transfer
- Spatter shield within nozzle protects diffuser and gives smoother, less turbulent gas flow
- Solid, concentric relationship between tip and nozzle keeps tip centered even after hard use... and abuse
- Threaded nozzle holds tip fixed at 1/8" or 1/4" recess, flush, or 1/8" stick out
- Compatible with all standard air-cooled Bernard® guns
- Complete family of tips and nozzles is available to meet most of your welding needs



- TTU273 Copper Nozzle**
(3/4" I.D., Flush Tip)
- TTU037 Copper Nozzle**
(3/4" I.D., 1/8" Tip Recess)
- TTT092 Copper Nozzle**
(3/4" I.D., 1/4" Tip Recess)
- TTT093 Brass Nozzle**
(3/4" I.D., 1/8" Tip Recess)
- TTT094 Brass Nozzle**
(3/4" I.D., 1/4" Tip Recess)
- TTU274 Copper Nozzle**
(5/8" I.D., Flush Tip)
- TTU038 Copper Nozzle**
(5/8" I.D., 1/8" Tip Recess)
- TTT095 Copper Nozzle**
(5/8" I.D., 1/4" Tip Recess)
- TTT096 Brass Nozzle**
(5/8" I.D., 1/8" Tip Recess)
- TTT097 Brass Nozzle**
(5/8" I.D., 1/4" Tip Recess)
- TTT104 Brass Nozzle**
(5/8" I.D., 1/8" Tip Recess)
- TTT106 Brass Nozzle**
(1/2" I.D., Flush Tip)
- TTT105 Brass Nozzle**
(1/2" I.D., 1/8" Tip Recess)
- TTU275 Brass Nozzle**
(3/8" I.D., Flush Tip)
- TTT107 Brass Nozzle**
(3/8" I.D., 1/8" Tip Recess)
- TTU276 Brass Nozzle**
(3/8" I.D., 1/8" Tip Extension)

T SERIES		"T" Series Tip		
Model No.	Mfg. No.	Description	Wire Size"	Price /Each
DIFFUSERS				
TTT084	10012	Insulator Cap	-	6.73
TTT085	D-1	Diffuser	-	13.43
CONTACT TIPS				
TTT086	T-030	1.50" Long	0.030	1.63
TTT087	T-035	1.50" Long	0.035	1.63
TTT088	T-039	1.50" Long	0.039	1.63
TTT089	T-045	1.50" Long	0.045	1.63
TTT090	T-052	1.50" Long	0.052	1.63
TTT091	T-062	1.50" Long	1/16	1.63
NOZZLES				
TTU273	N-3400C	Copper, Flush Tip	3/4 I.D.	16.76
TTU037	N-3418C	Copper, 1/8" Tip Recess	3/4 I.D.	16.76
TTT092	N-3414C	Copper, 1/4" Tip Recess	3/4 I.D.	16.76
TTT093	N-3418B	Brass, 1/8" Tip Recess	3/4 I.D.	16.23
TTT094	N-3414B	Brass, 1/4" Tip Recess	3/4 I.D.	16.23
TTU274	N-5800C	Copper, Flush Tip	5/8 I.D.	16.76
TTU038	N-5818C	Copper, 1/8" Tip Recess	5/8 I.D.	16.76
TTT095	N-5814C	Copper, 1/4" Tip Recess	5/8 I.D.	16.76
TTT096	N-5818B	Brass, 1/8" Tip Recess	5/8 I.D.	16.23
TTT097	N-5814B	Brass, 1/4" Tip Recess	5/8 I.D.	16.23

TT SERIES		"TT" Series Tip		
Model No.	Mfg. No.	Description	Wire Size"	Price /Each
DIFFUSERS				
360-5365	4323R	Insulator Cap	-	6.73
TTT098	DS-1	Diffuser	-	13.43
CONTACT TIPS				
TTT099	TT-030	2.00" Long	0.030	2.00
TTT100	TT-035	2.00" Long	0.035	2.00
TTT101	TT-045	2.00" Long	0.045	2.00
TTT102	TT-052	2.00" Long	0.052	2.00
TTT103	TT-062	2.00" Long	1/16	2.00
NOZZLES				
TTT104	NS-5818B	Brass, 1/8" Tip Recess	5/8 I.D.	13.18
TTT106	NS-1200B	Brass, Flush Tip	1/2 I.D.	13.18
TTT105	NS-1218B	Brass, 1/8" Tip Recess	1/2 I.D.	13.18
TTU275	NST-3800B	Brass, Flush Tip	3/8 I.D.	15.01
TTT107	NST-3818B	Brass, 1/8" Tip Recess	3/8 I.D.	15.01
TTU276	NST-38XTB	Brass, 1/8" Tip Extension	3/8 I.D.	15.01

TIG TORCHES & ACCESSORIES

Innovative "WP" silicone rubber insulated TIG welding torches

AIR (GAS) COOLED TORCHES

WP-24

Small, Lightweight

- Ideal for intricate work
- Reaches into tight places
- Handle mounted gas control valve
- Feather weight, but well balanced and durable
- Torch body head: 60° angle
- Torch length: 7 1/2"
- Max capacity: 80 A
- Handle style: Ribbed



366-4669

WP-9

Versatile, Lightweight for Thin Gauge Materials

- Quick-release tungsten adjustment
- Torch body head: 70° angle
- Torch length: 7"
- Max capacity: 125 A
- Handle style: Ribbed

Description	Amps	Max. Angle	Gas Valve	Power Cable	Accessory Kit**
WP-24 TORCH BODY					
W/insulating gasket	80	60°	No		AK-5
W/insulating gasket and flexible head	80	60°	No		AK-5
W/insulating gasket, gas valve and flexible head	80	60°	Slide		AK-5
TORCH PACKAGES - TORCH BODY, HANDLE, 25' POWER CABLE					
W/insulating gasket	80	60°	No	1-Piece Rubber Jacketed	AK-5
W/insulating gasket and flexible head	80	60°	No	1-Piece Rubber Jacketed	AK-5
W/insulating gasket, gas valve and flexible head	80	60°	Slide	1-Piece Rubber Jacketed	AK-5
WP-9 TORCH BODY					
W/cup gasket	125	70°	No		AK-1
W/cup gasket and gas valve	125	70°	Knob & Stem		AK-1
W/cup gasket and flexible head	125	70°	No		AK-1
W/cup gasket, gas valve and flexible head	125	70°	Knob & Stem		AK-1
TORCH PACKAGES - TORCH BODY, HANDLE, MEDIUM BACK CAP, 25' POWER CABLE					
W/cup gasket	125	70°	No	1-Piece Rubber Jacketed	AK-1
W/cup gasket and gas valve	125	70°	Knob & Stem	1-Piece Rubber Jacketed	AK-1
W/cup gasket and flexible head	125	70°	No	1-Piece Rubber Jacketed	AK-1
W/cup gasket, gas valve and flexible head	125	70°	Knob & Stem	1-Piece Rubber Jacketed	AK-1
WP-17 TORCH BODY					
W/cup gasket	150	70°	No		AK-2
W/cup gasket and gas valve	150	70°	Knob & Stem		AK-2
W/cup gasket and flexible head	150	70°	No		AK-2
W/cup gasket, gas valve and flexible head	150	70°	Knob & Stem		AK-2
TORCH PACKAGES - TORCH BODY, LONG BACK CAP, HANDLE, 25' POWER CABLE					
W/cup gasket	150	70°	No	2-Piece	AK-2
W/cup gasket and gas valve	150	70°	Knob & Stem	2-Piece	AK-2
W/cup gasket	150	70°	No	1-Piece Rubber Jacketed	AK-2
W/cup gasket and gas valve	150	70°	Knob & Stem	1-Piece Rubber Jacketed	AK-2
W/cup gasket and flexible head	150	70°	No	1-Piece Rubber Jacketed	AK-2
W/cup gasket, gas valve and flexible head	150	70°	Knob & Stem	1-Piece Rubber Jacketed	AK-2
WP-26 TORCH BODY					
W/cup gasket	200	70°	No		AK-3
W/cup gasket and gas valve	200	70°	Knob & Stem		AK-3
W/cup gasket and flexible head	200	70°	No		AK-3
W/cup gasket, gas valve and flexible head	200	70°	Knob & Stem		AK-3
TORCH PACKAGES - TORCH BODY, LONG BACK CAP, HANDLE, 25' POWER CABLE					
W/cup gasket	200	70°	No	2-Piece	AK-3
W/cup gasket and gas valve	200	70°	Knob & Stem	2-Piece	AK-3
W/cup gasket	200	70°	No	1-Piece Rubber Jacketed	AK-3
W/cup gasket and gas valve	200	70°	Knob & Stem	1-Piece Rubber Jacketed	AK-3
W/cup gasket and flexible head	200	70°	No	1-Piece Rubber Jacketed	AK-3
W/cup gasket, gas valve and flexible head	200	70°	Knob & Stem	1-Piece Rubber Jacketed	AK-3

** See page 1051 for accessory kits

TIG TORCHES & ACCESSORIES

WP-17

High Capacity for Thin to Medium Gauge Materials

- Compact and durable for field welding applications
- Ribbed handle for comfort and cool operation
- Finger tip gas control valve on WP-17V
- Torch body head: 70° angle
- Torch length: 7 3/4"
- Max capacity: 150 A
- Handle style: Ribbed



WP-17

WP-26

Maximum Capacity for Continuous Heavy-Duty Use

- Heavy copper construction for rugged field work
- Torch body head: 70° angle
- Torch length: 8 1/2"
- Max capacity: 200 A
- Handle style: Ribbed



WP-26

WELDCRAFT



Model No.	Weldcraft Mfg. No.	Price /Each	Model No.	Weldmate Mfg. No.	Price /Each	Model No.	C-K Mfg. No.	Price /Each
366-4669	WP-24	76.93						
TTT271	WP-24F	124.88						
TTT272	WP-24FV	169.72						
TTT273*	WP-24-25-R	204.58				820-2265	CK25-25-R-FX	133.78
TTT275*	WP-24F-25-R	277.38						
TTT276*	WP-24FV-25-R	298.15						
366-4249	WP-9	54.07	363-1265	ANVT-9	24.27	820-1615	CK90	59.95
366-4378	WP-9V	84.08	363-1905	ANVT-9V	38.83	820-2070	CK90V	82.03
366-4278	WP-9F	107.22	363-1925	ANVT-9F	48.53			
366-4300	WP-9FV	135.62	363-1950	ANVT-9FV	63.10			
366-4402*	WP-9-25-R	187.12	363-1895	ANVT-9-25-R	72.63	820-1620	CK925VH	173.53
366-4399*	WP-9V-25-R	196.90	363-1920	ANVT-9V-25-R	100.65			
TTT277*	WP-9F-25-R	221.13	363-1945	ANVT-9F-25-R	98.10			
366-4324*	WP-9FV-25-R	250.60	363-1970	ANVT-9FV-25-R	126.13			
366-4438	WP-17	56.80	363-1270	ANVT-17	26.68	820-CK17V-FX	CK17V-FX	65.52
366-4513	WP-17V	89.37	363-1275	ANVT-17V	41.25			
366-4462	WP-17F	111.37	363-1975	ANVT-17F	37.05			
366-4486	WP-17FV	142.08						
NP473	WP-17-25-2	244.00	363-1400	ANVT-17-25-R	79.00	820-2155	CK17-25-R-FX	104.48
NP474	WP-17V-25-2	243.20	363-1410	ANVT-17V-25-R	94.27			
366-4459*	WP-17-25-R	189.63	363-2020	ANVT-17FV-25-R	119.78			
366-4540*	WP-17V-25-R	204.65						
366-4483*	WP-17F-25-R	228.95						
366-4510*	WP-17FV-25-R	256.90						
366-4744	WP-26	64.80	363-1280	ANVT-26	37.00			
366-4822	WP-26V	107.22	363-1640	ANVT-26V	54.62			
366-4774	WP-26F	142.40	363-2025	ANVT-26F	63.10			
366-4795	WP-26FV	201.23	363-2050	ANVT-26FV	81.30			
NP475	WP-26-25-2	292.17	363-1435	ANVT-26-25-R	115.95			
NP476	WP-26V-25-2	281.08	363-1460	ANVT-26V-25-R	138.88			
366-4765*	WP-26-25-R	259.95	363-2045	ANVT-26F-25-R	150.35			
366-4843*	WP-26V-25-R	235.43	363-2070	ANVT-26FV-25-R	168.18			
366-4792*	WP-26F-25-R	328.90						
366-4819*	WP-26FV-25-R	352.13						

* Power cable adapter must be ordered separately

TIG TORCHES & ACCESSORIES

WATER COOLED

- Require cooling water flow of one quart per minute at a maximum of 50 PSI pressure.

WP-24W

Small Torch

- Ideal for cramped locations
- Fits through narrow openings yet excellent capacity
- Extremely light and well balanced
- Water cooling requirements: 1 quart per minute at maximum of 50 PSI pressure
- Torch body head: 70° angle
- Torch length: 7 1/2"
- Max capacity: 180 amps
- Handle style: Textured

WP-24W



WP-20

Lightweight, Small Durable

- Compact and well-balanced for general duty use
- Efficient around-the-head cooling for trouble free performance and long life
- Water cooling requirements: 1 quart per minute at maximum of 50 PSI pressure
- Torch body head: 70° angle
- Torch length: 7"
- Max capacity: 250 amps
- Handle style: Textured

WP-20



Description	Amps	Max. Angle	Gas Valve	Power Cable	Accessory Kit **
WP-24W TORCH BODY					
W/insulating gasket	180	70°	No		
WP-24W TORCH PACKAGES - TORCH BODY, HANDLE, 25' POWER CABLE & HOSES					
W/insulating gasket	180	70°	No		AK-SW
W/insulating gasket	180	70°	No	1-Piece Rubber Jacketed	AK-SW
WP-20 TORCH BODY					
W/cup gasket	250	70°	No		AK-4
W/cup gasket and gas valve	250	70°	Knob & Stem		AK-4
WP-20 TORCH PACKAGES - TORCH BODY, MEDIUM BACK CAP, HANDLE, 25' POWER CABLE & HOSES					
W/cup gasket	250	70°	No	3-Piece Vinyl	AK-4
W/cup gasket and gas valve	250	70°	Knob & Stem	3-Piece Vinyl	AK-4
W/cup gasket	250	70°	No	1-Piece Rubber Jacketed	AK-4
WP-18 TORCH BODY					
W/cup gasket	350	70°	No		AK-3
W/cup gasket and gas valve	350	70°	Knob & Stem		AK-3
WP-18 TORCH PACKAGES - TORCH BODY, LONG BACK CAP, 25' POWER CABLE & HOSES					
W/cup gasket	350	70°	No	3-Piece Vinyl	AK-3
W/cup gasket and gas valve	350	70°	Knob & Stem	3-Piece Vinyl	AK-3
W/cup gasket	350	70°	No	1-Piece Rubber Jacketed	AK-3
W/cup gasket and gas valve	350	70°	Knob & Stem	1-Piece Rubber Jacketed	AK-3
WP-12 TORCH BODY					
W/nozzle gasket	500	70°	No		—
WP-12 TORCH PACKAGES - TORCH BODY, LONG BACK CAP, 25' POWER CABLE & HOSE ASSEMBLY IN RUBBER SHEATH					
W/nozzle gasket	500	70°	No	Rubber	—

** See page 1051 for accessory kits

WP-18

Work Horse for Continuous Duty

- Heavy-duty rugged production torch for continuous duty to 350 amps
- Water cooling requirements: 1 quart per minute at maximum of 50 PSI pressure
- Built-in fingertip gas control valve available on WP-18V models
- Torch body head: 70° angle
- Torch length: 9 1/4"
- Max capacity: 350 amps
- Handle style: Textured



WP-18

WP-12

Totally Sealed Water Chamber with Heavy Duty Components

- Heavy-duty performer with a unique water cooling design
- Heavy-duty collets, collet bodies and gas lens
- Water cooling requirements: 1.5 - 2 quarts per minute at maximum of 50 PSI pressure
- Torch body head: 70° angle
- Torch length: 11 1/2"
- Max capacity: 500 amps
- Handle style: Smooth

WELDCRAFT®



Model No.	Weldcraft Mfg. No.	Price /Each	Model No.	Weldmate Mfg. No.	Price /Each	Model No.	C-K Mfg. No.	Price /Each
366-4726	WP-24W	155.40						
366-4732*	WP-24W-25	279.13						
TTT278*	WP-24W-25-R	428.82						
366-4597	WP-20	101.05				820-1260	CK200	50.48
TTT279	WP-20V	159.65				820-1265	CK200V	75.73
NP477	WP-20-25	202.67						
NP478	WP-20V-25	280.18						
366-4610*	WP-20-25-R	350.68				820-1405	CK225	160.33
366-4543	WP-18	106.55	363-1285	ANVT-18	55.70	820-1505	CK300	57.93
366-4585	WP-18V	177.33				820-1510	CK300V	91.50
NP479	WP-18-25	224.73						
NP480	WP-18V-25	313.97						
TTT281*	WP-18-25-R	357.02						
TTT282*	WP-18V-25-R	413.92				820-1545	CK325V	231.47
366-4405	WP-12	343.93						
366-4414*	WP-12-25	768.00						

* Power cable adapter must be ordered separately

TIG TORCHES & ACCESSORIES

FLEX TORCHES

WATER-COOLED

- Modular design for easy low-cost repairs
- Tough copper head and coil assembly – runs cooler, lasts longer
- "Bellows" type boot for maximum flexibility
- Built-in restraining wire – resist leaking from coil and boot
- Built-in ball/stem gas control valve for greater control
- Ribbed handle for cool operation
- Heavy-duty, two-piece power cable for uninterrupted use
- Long neck option, **366-4735**, for extended reach requirements
- Maximum amperage is determined by torch assembly and head
- Vinyl for heavy duty use and reinforced neoprene hose for increased durability and flexibility
- Torch assembly includes: **366-1315** and **366-2998** heads, power cable, water hose, gas hose, and handle

WELDCRAFT®

TORCH PACKAGE ASSEMBLY

Model No.	Mfg. No.	Power Cable'	Power Cable	Water Hose	Gas Hose	Price /Each
366-7040	WP-225-12	12	45V03	45V07	45V09	293.38
TTT283	WP-225-25	25	45V04	45V08	45V10	321.70
TTT284	WP-225-12-HD	12, Vinyl	45V03HD	45V07HD	45V09	353.42
TTT285	WP-225-25-HD	25, Vinyl	45V04HD	45V08HD	45V10	433.45
TTT286	WP-225-12-R	12, Neoprene	45V03R	45V07R	45V09R	378.15
366-7200	WP-225-25-R	25, Neoprene	45V04R	45V08R	45V10R	442.10

FLEXIBLE TORCH BODY

Model No.	Mfg. No.	Max. Amps	Price /Each
TORCH BODY, FOR USE WITH INTERCHANGEABLE HEADS			
366-7000	WP-225	225	199.67

LONG REACH FLEX-PENCIL TYPE TORCH PACKAGE ASSEMBLY

Model No.	Mfg. No.	Power Cable'	Power Cable	Water Hose	Gas Hose	Price /Each
TTT287	WP-25-12	12	45V03	45V07	45V09	288.35
366-4741	WP-25-25	25	45V04	45V08	45V10	302.50
TTT290	WP-25-12-R	12, Neoprene	45V03R	45V07R	45V09R	385.65

LONG REACH FLEX-PENCIL TYPE TORCH BODY

Model No.	Mfg. No.	Max. Amps	Price /Each
TORCH BODY			
366-4735	WP-25	200	212.13

INTERCHANGEABLE HEADS



366-1315



TTT293



366-2998



TTT294



TTT295

Model No.	Mfg. No.	A/C*	Max. Amps	W/C**	Head Angle°	Fits	Price /Each
366-1315	9-70	125		200	70	WP-9, WP-9V WP-20 SF-225	45.07
TTT292	9P	125		200	180	WP-9, WP-9V WP-20 SF-225	48.58
TTT293	24	80		160	70	WP-24, WP-24W SF-225	48.58
366-2998	1726	150/200		225	70	WP-17, WP-17V WP-18, WP-18V, WP-26, WP-26V SF-225	45.07
TTT294	1726P	150/200		225	180	WP-17, WP-17V WP-18, WP-18V, WP-26, WP-26V SF-225	48.58
TTT295	24-90	80		160	90	WP-24, WP-24W SF-225	48.58

* Air cooled

** Water cooled

CRAFTER SERIES WATER-COOLED TORCHES

- Engineered for the professional TIG welder
- Patented integral double lip back cap seal, series **CS310**, improves high frequency shielding and reduces gas leakage
- Self-indexing flat top handle lets you orient the torch by feel, improving comfort and torch control
- Reinforced rubber hose sets remain flexible in cold weather
- ColorSmart™** colour-coded hose set quickly identifies cold water, hot water return, power and gas
- Mechanical hose connections on the water and gas hoses eliminate the need for wire ties

Torch Packages come assembled with:

CS310

- Torch body
- Handle
- Gas and water hoses
- Power cable
- #6 HPN nozzle
- 3/32" collet
- 3/32" collet body
- 3/32" x 7" tungsten electrode
- Long back cap
- Cable cover

CS410

- Torch body
- Handle
- Gas and water hoses
- Power cable
- #8 HPN nozzle
- 1/8" collet
- 1/8" collet body
- 1/8" x 7" tungsten electrode
- Long back cap
- Cable cover

WELDCRAFT®

Model No.	Mfg. No.	Amps	Description	Price /Each
CS310				
TTT296	CS310-12	310	Torch w/12' cable	366.37
366-3730	CS310-25	310	Torch w/25' cable	553.75
CS410				
TTT297	CS410-12	410	Torch w/12' cable	447.53
366-3745	CS410-25	410	Torch w/25' cable	655.27



LAVA NOZZLES (CERAMIC)

- Made from grade "A" lava materials
- Less shock-and heat-resistant than alumina nozzles
- Functions in confined areas where excessive heat is reflected back into the nozzle

- Ideal for general applications
- Packed 10 nozzles per box

WELDCRAFT®



Size	Orifice"	Fits Torch Series	Model No.	Weldcraft Mfg. No.	Price /Each	Model No.	Weldmate Mfg. No.	Price /Each	Model No.	C-K Mfg. No.	Price /Each
LAVA NOZZLES - 1 27/32" LENGTH											
4	1/4	WP-17, WP-17V,	NP431	10S243	6.97				818-2185	3C4	6.60
5	5/16	WP-18, WP-18V,	366-2800	10S242	6.97				818-2210	3C5	6.60
6	3/8	WP-26, WP-26V	366-2806	10S244	6.97				818-2230	3C6	6.60
7	7/16		366-2809	10S245	6.97	363-1355	AN10S244	6.60	818-2240	3C7	6.60
8	1/2		366-1000	08N78	7.55	363-1330	AN08N78	7.37	818-2250	3C8	7.37
10	5/8		NP430	08N79	7.55	363-1335	AN08N79	7.37	818-2150	3C10	7.37
12	3/4		TTT308	08N80	7.55	363-1340	AN08N80	7.37	TTT001	3C12	7.37
LAVA NOZZLES - 1 5/32" LENGTH											
4	1/4	WP-9, WP-9V,	366-1609	13N14	8.21				818-1730	2C4	5.87
5	5/16	WP-20,	366-1612	13N15	8.21				818-1755	2C5	5.87
6	3/8	WP-25,	366-1615	13N16	8.21				818-1765	2C6	5.87
7	7/16		NP440	13N17	8.35				818-1775	2C7	5.87
8	1/2		NP441	13N18	8.35				818-1780	2C8	6.12
10	5/8		366-1624	13N19	8.35				818-1695	2C10	6.12
LAVA NOZZLES - 5/8" LENGTH											
0.165	0.165	WP-24, WP-24W	TTT309	53N23	9.03						
4	1/4		366-2368	53N24	9.03				818-2785	8C4	6.00
5	5/16		366-2371	53N25	9.03				818-2800	8C5	6.00
6	3/8		366-2377	53N27	9.03				818-2805	8C6	6.00
LAVA NOZZLES - 1 1/8" LENGTH											
4L	1/4	WP-24, WP-24W	366-2380	53N28	9.30				818-2795	8C4L	7.58
6L	3/8		366-2374	53N26	9.30						
LONG LAVA NOZZLES - 3 7/32" LENGTH											
4L	1/4	WP-17, WP-17V,	NP456	12N03	27.90				818-2205	3C4L	12.55
5L	5/16	WP-18, WP-18V,	NP457	10S260	27.90				818-2225	3C5L	12.55
6L	3/8	WP-26, WP-26V	366-1576	12N02	27.90				818-2235	3C6L	12.55
7L	7/16		NP459	10S261	27.90				818-2245	3C7L	12.55
LONG LAVA NOZZLES - 1 7/8" LENGTH											
3L	3/16	WP-9, WP-9V,	366-2941	796F70	12.17				818-1725	2C3L	9.25
4L	1/4	WP-20,	366-2926	796F71	12.17				818-1750	2C4L	9.25
5L	5/16	WP-25	366-2929	796F72	12.17				818-1760	2C5L	9.25
6L	3/8		366-2932	796F73	12.17				818-1770	2C6L	9.25
LONG LAVA NOZZLES - 2 1/2" LENGTH											
3XL	3/16	WP-9, WP-9V,	TTT310	796F74	16.82						
4XL	1/4	WP-20, WP-25	366-2938	796F75	16.82						

Note: The nozzle indicates the orifice (I.D. of the outlet end) in 1/16ths of an inch. No. 4 = 1/4" I.D.



NP431



363-1330



818-1730



NP457

TIG TORCHES & ACCESSORIES

ALUMINA NOZZLES

- Made from high strength alumina materials
- Very good electrical insulating properties
- Exceptionally high impact resistance, heat resistance and thermal conductivity
- Recommended for most welding operations except for use in confined area
- Resists splatter build-up
- Packed 10 nozzles per box

WELDCRAFT



Size	Orifice"	Fits Torch Series	Model No.	Weldcraft Mfg. No.	Price /Each	Model No.	Weldmate Mfg. No.	Price /Each	Model No.	C-K Mfg. No.	Price /Each
ALUMINA NOZZLES – 1 27/32" LENGTH											
4	1/4	WP-17, WP-17V,	366-1504	10N50	2.42	363-1000	AN10N50	0.73	818-2050	3A4	1.37
5	5/16	WP-18, WP-18V,	NP396	10N49	2.42	363-1005	AN10N49	0.73	818-2060	3A5	1.37
6	3/8	WP-26, WP-26V	366-1492	10N48	2.42	363-1010	AN10N48	0.73	818-2070	3A6	1.37
7	7/16		366-1486	10N47	2.42	363-1015	AN10N47	0.73	818-2080	3A7	1.37
8	1/2		366-1483	10N46	2.42	363-1020	AN10N46	0.73	818-2090	3A8	1.37
10	5/8		366-1480	10N45	2.42	363-1025	AN10N45	0.73	818-2040	3A10	1.37
12	3/4		366-1477	10N44	2.42	363-1030	AN10N44	0.73	818-2045	3A12	1.37
ALUMINA NOZZLES – 1 5/32" LENGTH											
4	1/4	WP-9, WP-9V,	366-1591	13N08	2.23	363-1035	AN13N08	0.63	818-1615	2A4	1.37
5	5/16	WP-20,	366-1594	13N09	2.23	363-1040	AN13N09	0.63	818-1625	2A5	1.37
6	3/8	WP-25	366-1597	13N10	2.23	363-1045	AN13N10	0.63	818-1635	2A6	1.37
7	7/16		366-1600	13N11	2.23	363-1050	AN13N11	0.63	818-1645	2A7	1.37
8	1/2		366-1603	13N12	2.23	363-1055	AN13N12	0.63	818-1655	2A8	1.37
10	5/8		366-1606	13N13	2.23	363-1060	AN13N13	0.63	818-1610	2A10	1.37
ALUMINA NOZZLES – 1 1/4" LENGTH											
4	1/4	WP-12	TTT298	14N57	6.42						
5	5/16		TTT299	14N58	6.42						
6	3/8		366-1678	14N59	6.42						
7	7/16		366-1681	14N60	6.42						
8	1/2		366-1684	14N61	6.42						
10	5/8		366-1687	14N61-10	18.60						
12	3/4		366-1690	14N61-12	18.60						
ALUMINA NOZZLES – 5/8" LENGTH											
4	1/4	WP-24, WP-24W	TTT300	A53N24	7.52						
5	5/16		TTT301	A53N25	7.52						
LONG ALUMINA NOZZLES – 3" LENGTH											
5L	5/16	WP-17, WP-17V,	NP445	10N49L	22.62				818-3625	3A5L	14.97
6L	3/8	WP-18, WP-18V,	NP446	10N48L	14.97				TTT004	3A6L	14.97
7L	7/16	WP-26, WP-26V	366-1489	10N47L	22.62				TTT005	3A7L	14.97
ALUMINA GAS LENS NOZZLES – 1 5/8" LENGTH (ALSO ORDER INSULATOR)											
4	1/4	WP-17, WP-17V,	366-2467	54N18	2.43	363-1815	AN54N18	0.85	818-2115	3AG4	1.37
5	5/16	WP-18, WP-18V,	366-2461	54N17	2.43	363-1810	AN54N17	0.85	818-2120	3AG5	1.37
6	3/8	WP-26, WP-26V	NP386	54N16	2.43	363-1805	AN54N16	0.85	818-2125	3AG6	1.37
7	7/16		366-2449	54N15	2.43	363-1800	AN54N15	0.85	818-2130	3AG7	1.37
8	1/2		366-2446	54N14	2.43	363-1795	AN54N14	0.85	818-2135	3AG8	1.37
ALUMINA GAS LENS NOZZLES – 1 1/8" LENGTH (ALSO ORDER INSULATOR)											
Short	11/16	WP-17, WP-17V WP-18, WP-18V WP-26, WP-26V	TTT307	54N19	2.43	363-2080	AN54N19	0.85	818-2105	3AG11	1.37
ALUMINA GAS LENS NOZZLES – 1" LENGTH (ALSO ORDER INSULATOR)											
4	1/4	WP-9, WP-9V,	366-2392	53N58	2.28				818-1665	2AG4	1.37
5	5/16	WP-20,	NP390	53N59	2.28	363-1735	AN53N59	0.73	818-1670	2AG5	1.37
6	3/8	WP-24,	NP391	53N60	2.28	363-1740	AN53N60	0.73	818-1675	2AG6	1.37
7	7/16	WP-25,	366-2404	53N61	2.28	363-1745	AN53N61	0.73	818-1680	2AG7	1.37
ALUMINA GAS LENS NOZZLES – 1 7/8" LENGTH, LARGE DIAMETER GAS LENS (ALSO ORDER INSULATOR)											
10	5/8	WP-26, WP-26V,	366-2434	53N88	5.38	363-1780	AN53N88	1.88	818-2100	3AG10LD	3.00
12	3/4	WP-12	366-2431	53N87	5.38	363-1775	AN53N87	1.88	818-2110	3AG12LD	3.00
Short	15/16		366-2437	53N89	5.38	363-1785	AN53N89	3.00			



NP396



363-1035



ACCESSORIES & SPARE PARTS

- Accessories, such as collets, collet bodies, different length back caps, gas lens collet bodies and nozzles, must be ordered to complete the torch package
- Accessories may be ordered in convenient accessory kits or separately as needed



WELDCRAFT



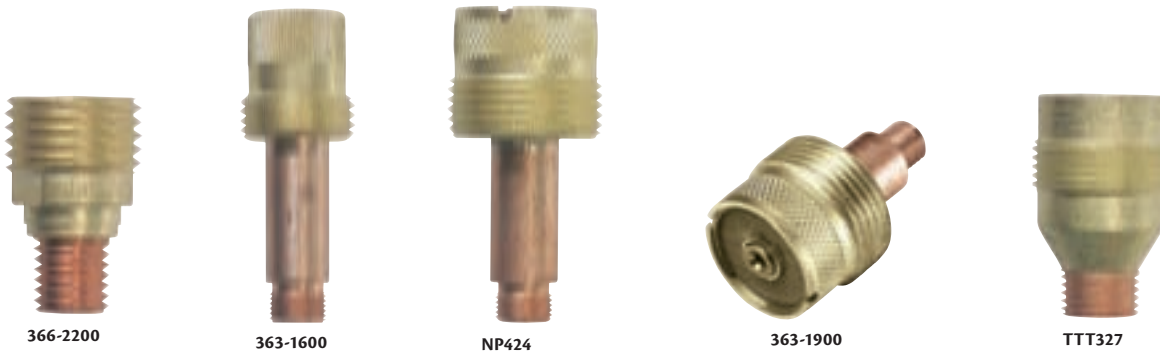
Size"	Fits Torch Series	Model No.	Weldcraft Mfg. No.	Price /Each	Model No.	Weldmate Mfg. No.	Price /Each	Model No.	C-K Mfg. No.	Price /Each
COLLETS										
0.020	WP-9, WP-9V,	366-1627	13N20	1.80				818-1710	2C20	1.07
0.040	WP-20,	366-1633	13N21	1.80	363-1095	AN13N21	0.70	818-1735	2C40	1.07
1/16	WP-25	366-1639	13N22	1.80	363-1100	AN13N22	1.07	818-1700	2C116	1.07
3/32		NP413	13N23	1.80	363-1105	AN13N23	0.70	818-1715	2C332	1.07
1/8		NP412	13N24	1.80	363-1110	AN13N24	0.70	818-1740	2C418	1.07
0.020	WP-17, WP-17V,	TTT311	10N21	3.28				818-2170	3C20	1.27
0.040	WP-18, WP-18V,	366-1435	10N22	3.28	363-1070	AN10N22	0.85	818-2190	3C40	1.27
1/16	WP-26, WP-26V	366-1441	10N23	3.28	363-1075	AN10N23	0.85	818-2155	3C116	1.27
3/32		366-1447	10N24	3.28	363-1080	AN10N24	0.85	818-2175	3C332	1.27
1/8		366-1453	10N25	3.28	363-1085	AN10N25	0.85	818-2195	3C418	1.27
5/32		366-2473	54N20	3.58	363-1820	AN54N20	0.70	818-2215	3C532	1.27
0.020	WP-24, WP-24W	TTT312	53N15	3.05	363-1705	AN53N15	1.27	TTT006	8C20	1.27
0.040		TTT313	53N16	3.05	363-1710	AN53N16	1.27	818-8C40	8C40	1.27
1/16		366-2338	53N14	3.05	363-1700	AN53N14	1.27	818-2770	8C116	1.27
3/32		366-1882	24C332	3.05				818-2780	8C332	1.27
0.020	For Gas Lens	TTT314	53N62	3.58	363-1755	AN53N62	1.87	TTT007	8CG20	1.87
0.040		TTT315	53N63	3.58	363-1760	AN53N63	1.87	818-2845	8CG40	1.87
1/16		TTT316	53N64	3.58				818-2835	8CG116	1.87
3/32		366-1891	24GLC332	3.42				818-2840	8CG332	1.87
1/16	WP-12	TTT317	85Z14	29.78						
3/32		TTT318	85Z15	29.78						
1/8		TTT319	85Z16	29.78						
5/32		366-2740	85Z17	29.78						
3/16		TTT320	85Z18	29.78						
1/4		TTT321	85Z19	29.78						
COLLET BODIES										
0.020	WP-9, WP-9V,	TTT322	13N25	3.52				818-1790	2CB20	2.12
0.040	WP-20,	366-1660	13N26	3.52	363-1145	AN13N26	1.52	818-1800	2CB40	2.12
1/16	WP-25	366-1663	13N27	3.52	363-1150	AN13N27	1.52	818-1785	2CB116	2.12
3/32		NP406	13N28	3.52	363-1155	AN13N28	1.52	818-1795	2CB332	2.12
1/8		366-1669	13N29	3.52	363-1160	AN13N29	1.52	818-1805	2CB418	2.12
0.020	WP-17, WP-17V,	366-1465	10N29	4.75	363-1115	AN10N29	2.75			
0.040	WP-18, WP-18V,	NP400	10N30	4.75	363-1120	AN10N30	2.75	818-2270	3CB40	2.75
1/16	WP-26, WP-26V	366-1471	10N31	4.75	363-1125	AN10N31	2.75	818-2255	3CB116	2.75
3/32		366-1474	10N32	4.75	363-1130	AN10N32	2.75	818-2265	3CB332	2.75
1/8		366-1462	10N28	4.75	363-1135	AN10N28	2.75	818-2275	3CB1418	2.75
5/32		366-3484	406488	4.75	363-1465	AN406488	2.15	818-2280	3CB532	2.75
0.020	WP-24, WP-24W*	TTT323	53N17	6.52	363-1715	AN53N17	2.25	818-3645	8CB20	2.25
0.040		TTT324	53N18	6.52	363-1720	AN53N18	2.25	818-3650	8CB40	2.25
1/16		366-2353	53N19	6.52	363-1725	AN53N19	2.25	818-2815	8CB116	2.25
3/32		TTT325	24CB332	4.72				818-2825	8CB332	2.25
1/16 - 1/4	WP-12	366-1564	11WP65	37.62						

* Order Wrench for WP-24, 24W Collet Body

TIG TORCHES & ACCESSORIES

GAS LENS COLLET BODIES

- Eliminates turbulence in the gas shielding stream as it emerges from the nozzle, better shielding patterns
- Long stable stream allows the electrode to be extended farther beyond the end of the nozzle for improved visibility of the weld zone



WELDCRAFT



Size"	Fits Torch Series	Model No.	Weldcraft Mfg. No.	Price /Each	Model No.	Weldmate Mfg. No.	Price /Each	Model No.	C-K Mfg. No.	Price /Each
GAS LENS COLLET BODIES (ALSO ORDER INSULATOR)										
0.020	WP-9, WP-9V,	366-2200	45V41	9.58	363-1630	AN45V41	5.62	TTT008	2GL20	5.62
0.040	WP-20,	366-2203	45V42	9.58	363-1635	AN45V42	4.03	818-1830	2GL40	5.62
1/16	WP-25	366-2206	45V43	9.58	363-1440	AN45V43	4.03	818-1820	2GL116	5.62
3/32		NP423	45V44	9.58	363-1645	AN45V44	4.03	818-1825	2GL332	5.62
1/8		366-2212	45V45	9.58	363-1650	AN45V45	4.03	818-1835	2GL418	5.62
0.020	WP-17, WP-17V,	TTT326	45V29	11.18				818-2360	3GL20	6.25
0.040	WP-18, WP-18V,				363-1600	AN45V24	4.78	818-2375	3GL40	6.25
1/16	WP-26, WP-26V	366-2185	45V25	11.18	363-1605	AN45V25	4.78	818-2345	3GL116	6.25
3/32		NP419	45V26	11.18	363-1610	AN45V26	4.78	818-2365	3GL332	6.25
1/8		366-2191	45V27	11.18	363-1615	AN45V27	4.78	818-2380	3GL418	6.25
5/32		366-2194	45V28	11.18	363-1620	AN45V28	4.78	818-2390	3GL532	6.25
0.020 - 0.040	WP-17, WP-17V,	NP424	45V0204	22.17						
1/16	WP-18, WP-18V,	NP418	45V116	22.17	363-1595	AN45V116	7.43			
3/32	WP-26, WP-26V	366-2227	45V64	22.17	363-1665	AN45V64	7.43	818-2370	3GL332LD	13.73
1/8	Large Dia. Gas Lens	366-3490	995795	22.17	363-1900	AN995795	13.73	818-2385	3GL418LD	13.73
5/32		366-2221	45V63	22.17	363-1660	AN45V63	7.43	818-2395	3G6532LD	13.73
1/16	WP-12	TTT327	11GL16	105.50						
3/32		TTT328	11GL32	105.50						
1/8		TTT329	11GL18	105.50						
5/32		TTT330	11GL53	105.50						
3/16		366-1534	11GL36	105.50						
INSULATORS										
	WP-17, WP-17V, WP-18, WP-18V, WP-26, WP-26V Gas Lens	366-2440	54N01	4.98	363-1790	AN54N01	1.27			
	Large Diameter Gas Lens (use on above torches)	366-2497	54N63	9.03	363-1840	AN54N63	5.62			
	WP-9, WP-9V, WP-20, WP-25 (supplied on torch body)	366-3487	598882	3.07	363-1885	AN598882	1.47			
	WP-24, WP-24V Gas Lens	366-2419	53N66	6.97	363-1770	AN53N66	1.52			
	WP-12 Gas Lens Stubby Collet Body	TTT331	12GLG	23.20						
		366-1756	18CG20	12.48						
BACK CAPS										
Short	WP-9, WP-9V,	366-2116	41V33	6.88	363-1310	AN41V33	1.00	818-1390	200S	3.25
Medium	WP-20,	366-2119	41V35	7.90	363-1315	AN41V35	1.22	818-1380	200M	3.12
Long		366-2083	41V24	8.08	363-1305	AN41V24	1.38	818-1375	200L	3.25
Long	WP-17, WP-17V,	366-2611	57Y02	5.57				818-1925	300L	2.62
Short	WP-18, WP-18V, WP-26, WP-26V	366-2626	57Y04	7.37				818-1940	300S	1.98
Long	WP-12	366-2548	56Y44	32.53						
Short		366-2551	56Y45	21.75						



366-2119



366-2611



366-2626

STUBBY COLLETS/COLLET BODIES

- Stubby collet system allows use of a smaller nozzle
- Reduces overall torch head length giving access to confined areas
- Eliminates the need and cost of changing to a smaller torch

WELDCRAFT



Size"	Fits Torch Series	Model No.	Weldcraft Mfg. No.	Price /Each	Model No.	C-K Mfg. No.	Price /Each
0.040	WP-17, WP-17V,	366-1438	10N22S	5.38	818-2505	4C40	2.50
1/16	WP-18, WP-18V,	366-1444	10N23S	5.38	818-2480	4C116	2.50
3/32		NP472	10N24S	5.38	818-2495	4C332	2.50
1/8		366-1459	10N25S	5.38	818-2510	4C418	2.50

POWER CABLE ADAPTERS

- Adapters are not supplied with the torch packages
- Order adapter separately if needed

WELDCRAFT



Fits Torch Series	Model No.	Weldcraft Mfg. No.	Price /Each	Model No.	Weldmate Mfg. No.	Price /Each	Model No.	C-K Mfg. No.	Price /Each
WP-18, WP-18V, WP-20, WP-24W WP-25 WP-12	366-2179	45V11	22.43	363-1590	AN45V11	11.97	818-1850	2PCA	15.07
WP-9, WP-9V*, WP-17*, WP-17V*, WP-24	366-2827	10S257	15.45	363-1365	AN10S257	9.83	818-1185	15PCA	9.83
WP-26*	366-2383	53N43	24.58				818-1315	1PCA	13.10
WP-26V*	366-2218	45V62	24.03	363-1655	AN45V62	11.97			

*Torch packages are supplied with two-piece power cable assembly. Adapters are required with optional one-piece power cable assembly only.

ACCESSORY KITS

WP-9 TORCH SERIES

- 1 Long back cap
- 2 Collets: 0.040", 1/16"
- 2 Collet bodies: 0.040", 1/16"
- 3 Alumina nozzles: 4, 5, 6
- 2 Tungsten electrodes 2%: 0.040", 1/16" x 7"

Model No. 366-3613 Mfg. No. AK-1 Price/Each \$54.00

WP-17, WP-17V TORCH SERIES

- 1 Short back cap
- 3 Collets: 0.040", 1/16", 3/32"
- 3 Collet bodies: 0.040", 1/16", 3/32"
- 3 Alumina nozzles: 4, 5, 6
- 3 Tungsten electrodes 2%: 0.040", 1/16", 3/32" x 7"

Model No. NT529 Mfg. No. AK-2 Price/Each \$73.97

WP-18, WP-18V, WP-26, WP-26V TORCH SERIES

- 1 Short back cap
- 3 Collets: 1/16", 3/32", 1/8"
- 3 Collet bodies: 1/16", 3/32", 1/8"
- 3 Alumina nozzles: 5, 6, 8
- 3 Tungsten electrodes 2%: 1/16", 3/32", 1/8" x 7"

Model No. NT530 Mfg. No. AK-3 Price/Each \$88.57

WP-20

- 1 Long back cap
- 3 Collets: 1/16", 3/32", 1/8"
- 3 Collet bodies: 1/16", 3/32", 1/8"
- 3 Alumina nozzles: 5, 6, 7
- 3 Tungsten electrodes 2%: 1/16", 3/32", 1/8" x 7"

Model No. NT531 Mfg. No. AK-4 Price/Each \$79.62

WELDCRAFT



WP-25

- 3 Collets: 1/16", 3/32", 1/8"
- 3 Collet bodies: 1/16", 3/32", 1/8"
- 3 Alumina nozzles: 5, 6, 8
- 3 Tungsten electrodes 2%: 1/16", 3/32", 1/8" x 7"

Model No. 366-3628 Mfg. No. AK-4A Price/Each \$75.95

WP-24

- 2 Collets: 0.040", 1/16"
- 2 Collet bodies: 0.040", 1/16"
- 3 Alumina nozzles: 4, 5, 6
- 1 Collet body wrench
- 2 Tungsten electrodes 2%: 0.040", 1/16" x 7"

Model No. 366-3631 Mfg. No. AK-5 Price/Each \$52.00

WP-24W

- 3 Collets: 0.040", 1/16", 3/32"
- 3 Collet bodies: 0.040", 1/16", 3/32"
- 3 Alumina nozzles: 4, 5, 6
- 1 Collet body wrench
- 3 Tungsten electrodes 2%: 0.040", 1/16", 3/32" x 7"

Model No. 366-3634 Mfg. No. AK-5W Price/Each \$81.55

TIG TORCHES & ACCESSORIES

POWER CABLES – WATER & GAS HOSES



WELDCRAFT



Description	Size'	Fits Torch Series	Model No.	Weldcraft Mfg. No.	Price /Each	Model No.	Weldmate Mfg. No.	Price /Each	Model No.	C-K Mfg. No.	Price /Each
POWER CABLES - WATER & GAS HOSES (VINYL TUBE CONSTRUCTION)											
Power Cable	12 1/2	WP-9, WP-9V,	366-2599*	57Y01	67.72						
Power Cable	25	WP-17, WP-17V	366-2614*	57Y03	101.33						
Power Cable	12 1/2	WP-18, WP-18V	366-1993	40V64	65.38				818-1965	312PC	36.80
Power Cable	25		366-2086	41V29	85.37	363-1500	AN41V29	49.65	818-1995	325PC	51.62
Water Hose	12 1/2		366-2002	40V74	21.20	363-1480	AN40V74	10.35	818-1975	312WH	10.77
Water Hose	25		366-2104	41V32	27.60	363-1520	AN41V32	11.13	818-2005	325WH	11.60
Gas Hose	12 1/2		TTT412	40V75	20.93	363-1490	AN40V75	10.35	818-1950	312AH	10.77
Gas Hose	25		366-2095	41V30	27.60	363-1510	AN41V30	11.13	818-1980	325AH	11.60
Power Cable	12 1/2	WP-20, WP-20V	366-2131	45V03	57.33	363-1530	AN45V03	33.38	818-1430	212PC	34.73
Power Cable	25	WP-25	366-2137	45V04	67.17	363-1540	AN45V04	39.17	818-1465	225PC	43.60
Water Hose	12 1/2		366-2155	45V07	20.63				818-1440	212WH	8.87
Water Hose	25		366-2161	45V08	26.92				818-1475	225WH	11.60
Gas Hose	12 1/2		366-2167	45V09	20.63				818-1415	212AH	8.87
Gas Hose	25		366-2173	45V10	21.40				818-1455	225AH	11.60
Heavy-Duty Power Cable	12 1/2		TTT333	45V03HD	96.70						
Heavy-Duty Power Cable	25		TTT334	45V04HD	119.85						
Heavy-Duty Water Hose	12 1/2		TTT335	45V07HD	32.13						
Heavy-Duty Water Hose	25		TTT336	45V08HD	50.60						
RUBBER POWER CABLES (RUBBER HOSE CONSTRUCTION)											
Power Cable	12 1/2	WP-24	TTT337	56Y38R	102.55						
Power Cable	25	WP-9, WP-9V,	TTT338	56Y97R	173.98						
Power Cable	12 1/2	WP-17, WP-17V	TTT339	57Y01R	77.75	363-1865	AN57Y01R	40.60	818-1150	1512PCHF	59.52
Power Cable	25		366-2623	57Y03R	110.58	363-1880	AN57Y03R	60.92	818-1170	1525PCHF	74.92
Power Cable	12 1/2	WP-18, WP-18V	TTT340	40V64R	80.75	363-1475	AN40V64R	45.83			
Power Cable	25		366-2092	41V29R	102.47	363-1505	AN41V29R	61.57			
Power Cable	12 1/2	WP-26, WP-26V	366-2254	46V28R	102.63	363-1670	AN26V28R	58.95			
Power Cable	25		366-2263	46V30R	151.85	363-1690	AN46V30R	86.32			
2-PIECE POWER CABLES - GAS HOSES											
Power Cable & Gas Hose	12 1/2	WP-9, WP-9V,	TTT341	57Y01-2	95.75				TTT187	1512PCN	42.23
Gas Hose only	12 1/2	WP-17, WP-17V	366-2170	45V09R	41.53	363-1575	AN45V09R	23.58			
Power Cable & Gas Hose	25		366-2617	57Y03-2	193.80				818-1180	1525PCN	63.35
Gas Hose only	25		366-2176	45V10R	63.87	363-1585	AN45V10R	30.13			
Power Cable & Gas Hose	12 1/2	WP-26, WP-26V	366-2251	46V28-2	108.53	363-1675	AN46V28-2	58.95			
Gas Hose only	12 1/2		366-2008	40V75R	41.80	363-1495	AN40V75R	23.58			
Power Cable & Gas Hose	25		366-2260	46V30-2	233.82	363-1685	AN46V30-2	86.32			
Gas Hose only	25		366-2101	41V30R	63.93	363-1515	AN41V30R	30.13			

*Rubber power cables are recommended for superior service

PYTHONRAP™ CABLE COVERS

- Nylon cover
- Full length zipper
- 22' L x 4" W

Model No. NT887
Price/Each \$33.25



CABLE PROTECTORS

- Durable leather with Kevlar® sewn seams
- Lightweight to enhance flexibility and strength
- Metal snaps every 3"
- For TIG, MIG, plasma and flux-cored torch cable/hose assembly
- 22' L x 4" W

Model No. NP520
Price/Each \$42.80



TUNGSTEN ELECTRODES

- TIG welding electrodes usually contain small quantities of metallic oxides which can offer the following benefits:
 - Facilitate arc starting
 - Increase arc stability
 - Improve current carrying capacity of the electrode
 - Reduce the risk of weld contamination
 - Increase electrode life
- Oxides used are primarily zirconium, thorium, lanthanum or cerium
- Additions are 1% – 4%, improve arc initiation, especially when direct current (DC) welding is employed
- Thorium oxide (thoria), effective in terms of long life and thermal efficiency
- Zirconium oxide (zirconia) has been commonly used for alternating (AC) TIG welding, welding aluminum
- Electrode length: 7"
- Each package contains 10 electrodes**

TYPE:

2% THORIATED:

- Good current capacity, arc stability and easy arc start on DC current
- High resistance to weld pool contamination
- Maintains sharpened tip configuration
- Not normally used on AC current because it is difficult to maintain the balled end
- Medium tendency to spit
- Medium erosion rate

1.5% LANTHANATED:

- Lowest erosion rate
- Wide current range
- No spitting
- Best DC arc starts and stability

2% CERIATED:

- Excellent arc starting, stability, long life and higher-current capacity than thoriated tungsten
- Operate successfully with AC or DC current
- Non-radioactive
- Low erosion rate
- Wide current range
- No spitting

ZIRCONIATED:

- Excellent for AC welding due to the higher arc stability
- High-resistance to weld pool contamination
- Excellent balled end retention
- Handles higher current with less spitting
- Better arc starts and arc stability than pure tungsten

PURE:

- Lowest current capacity and least expensive
- Maintains a clean balled end for welding on AC
- More prone to weld contamination than other types of tungsten electrodes
- Tends to spit at higher currents
- Used for non-critical welds only



Model No.	Mfg. No.	ISO Colour Chart	Dia."	Price /Each
2% THORIATED				
TTT403	T0207GT2	Red	0.020	2.02
NP552	T0407GT2	AWS A5.12 EWTh-2	0.040	8.07
NP544	T1167GT2	ISO 6848 WT20	1/16	18.15
NP545	T3327GT2		3/32	41.08
NP543	T187GT2		1/8	73.33
714-1150	T5327GT2		5/32	116.68
1.5% LANTHANATED				
TTT404	T0207GL	Gold	0.020	2.02
TTT405	T0407GL	AWS A5.12 EWLa-1.5	0.040	8.07
714-1200	T1167GL	ISO 6848 WL15	1/16	18.65
714-1205	T3327GL		3/32	42.08
714-1210	T187GL		1/8	75.35
TTT406	T5327GL		5/32	119.20
2% CERIATED				
TTT407	T0207GC2	Grey	0.020	2.02
NP548	T0407GC2	AWS A5.12 EWCe-2	0.040	8.07
NP549	T1167GC2	ISO 6848 WC20	1/16	18.15
NP550	T3327GC2		3/32	41.08
NP551	T187GC2		1/8	73.33
714-1177	T5327GC2		5/32	116.68
ZIRCONIATED				
TTT408	T0207GZ	White	0.020	2.27
TTT409	T0407GZ	AWS A5.12 None	0.040	8.32
NP546	T1167GZ	ISO 6848 WZ8	1/16	19.15
NP547	T3327GZ		3/32	43.10
NP553	T187GZ		1/8	77.12
714-1185	T5327GZ		5/32	122.47
PURE				
TTT410	T0207G	Green	0.020	2.02
NP539	T0407G	AWS A5.12 EWP	0.040	7.57
NP540	T1167G	ISO 6848 WP	1/16	17.13
NP542	T3327G		3/32	39.07
NP541	T187GZ		1/8	69.55
714-1060	T5327G		5/32	110.88

Sold per package

TUNGSTEN PREPARATION

SHARPENING PROCEDURE



2 1/2 Times
electrode diameter



Ideal tungsten preparation -
Stable arc



Wrong tungsten preparation -
Wandering arc

AC TIG BALL FORMATION

In AC TIG, a ball is formed on the end of the tungsten. On pure and zirconium the ball can be formed by creating an arc with AC weld output. With 2% thoriated tungsten, the power source should be set for DCEP to create the ball and AC to weld.



Maximum
2 1/2 times
electrode diameter

TIG TORCHES & ACCESSORIES

FLEX-LOC™ TORCHES

- Flex-Loc™ series torch is a variable angle torch that locks into position within a 360° rotation
- Interchangeable heads allow different size tungsten and head sizes to be quickly and efficiently changed
- Ergonomically designed to help eliminate fatigue
- Great for applications requiring a unique angle yet allowing the user a rigid torch

Applications: Cup walking on pipe root welds, welds that require a mirror to access weldment, welds requiring different tungsten sizes.

Torch packages include: Body assembly, replaceable torch head (with heat shield and back cap) and cable assembly

AIR (GAS) COOLED TORCHES

- Gas-cooled models are available with or without gas control valve and have a Hi-Flex one-piece concentric cable assembly
- Length: 7 3/4" without valve; 8 1/2" with valve

WATER COOLED TORCHES

- Water cooled models are equipped with a Tri-Flex cable assembly
- Length: 7 3/4" without valve

821-1750



821-1760



820-1905



820-1920



Model No.	Mfg. No.	Cable Size*	Amps	Cable	Head Style	Price /Each
AIR-COOLED TORCHES WITHOUT VALVE						
820-1905	FL1312	12 1/2	130	1-Piece	FL2L	190.87
TTT376	FL1325	25	130	1-Piece	FL2L	221.42
820-1920	FL1512	12 1/2	150	1-Piece	FL3L	190.87
820-1930	FL1525	25	150	1-Piece	FL3L	221.42
WITH VALVE						
TTT379	FL1312V	12 1/2	130	1-Piece	FL2L	229.05
820-1915	FL1325V	25	130	1-Piece	FL2L	259.57
820-1925	FL1512V	12 1/2	150	1-Piece	FL3L	229.05
820-1935	FL1525V	25	150	1-Piece	FL3L	259.57
WATER-COOLED TORCHES WITHOUT VALVE						
820-1940	FL2312	12 1/2	230	Tri-Flex	FL2L	213.78
820-1945	FL2325	25	230	Tri-Flex	FL2L	236.00
820-2075	FL2512	12 1/2	250	Tri-Flex	FL3L	213.78
820-1950	FL2525	25	250	Tri-Flex	FL3L	236.00

TORCH HEAD SELECTOR CHART

Model No.	Mfg. No.	Amps Gas-Cooled	Amps Water-Cooled	Head Style	Price /Each
821-1750	FL2L	130	230	2 Series	48.58
821-1760	FL3L	150	250	3 Series	48.58

AMPERAGE CONTROLS

- Remote amperage controls provide welding machine contactor on-off, activate gas and/or water solenoids, and provide full range current output control
- Fingertip controls are available in either a rotary or linear slide potentiometer configuration

ROTARY MODEL

- Handle styles include, velcro straps where one size fits all handle diameters and retrofits very easily on all makes of torches or built into the handle as original equipment
- A built-in strain-relief prevents the control cord from being pulled out or damaged
- Innovative ergonomic design fits in the welders hand comfortably
- 3 different handle configurations possible with different finger guards
- Choice of built-in handle or velcro straps
- "Plug and Play" replacement potentiometer assembly, no soldering required
- Adapts to most standard TIG power supplies
- Protected against high frequency

LINEAR MODEL

- Amptrak™ remote current control provides remote on-off control of the welding machine contactor and/or gas and water solenoid control, as well as full range remote current output control
- A built in strain-relief prevents the control cord from being pulled out or damaged
- Amptrak™ remote current control can be ordered either built into a CK torch handle as original equipment or in the velcro model where one size fits all
- Linear slide actuator for complete on/off and full amperage control
- Built-in handle or velcro strap design to fit all TIG torches
- Adapts to most standard TIG power supplies
- Protected against high frequency

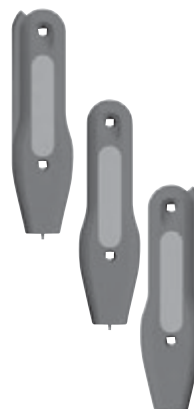
Call today for more information and custom designs.

Items are made to order and are non-returnable.



Velcro Model

Finger Guards



Built-in Model



Linear Model

TIG TORCHES & ACCESSORIES

AMPERAGE REMOTE CONTROL SELECTOR CHART

MACHINE MAKE Potentiometer Rating	AMP CONTROL TYPE	PLUG CONFIG & PIN COUNT	CONTROL CABLE LENGTH	VELCRO STRAPS One Size Fits All	BUILT IN HANDLE FOR CK TORCHES		
					Small	Medium	Large
					CK9, CK17, CK20, CK24, CK24W, CK80, CK90, CK100, CK130, CK150, CK150*, CK200, CK200, FLEX-LOC*	CK230, CKA10, CKA20, TL18, TL26, TL210, TL300	CK18, CK26, CK210, CK300, CK350, CK510
HOBART 25 K Ohm	Rotary	10 Pin Plug	15 ft. (4.6 m) 28 ft. (8.5 m) 53 ft. (16.2 m)	--- RACCV-25-2-H10 RACCV-25-3-H10	RAC2S-25-1-H10 RAC2S-25-2-H10 RAC2S-25-3-H10	RAC2M-25-1-H10 RAC2M-25-2-H10 RAC2M-25-3-H10	
	Linear	10 Pin Plug	15 ft. (4.6 m) 28 ft. (8.5 m) 53 ft. (16.2 m)	AMT CV-25-1-H10 AMT CV-25-2-H10 AMT CV-25-3-H10	AMT 2 S-25-1-H10 AMT 2 S-25-2-H10 AMT 2 S-25-3-H10	AMT 2 M-25-1-H10 AMT 2 M-25-2-H10 AMT 2 M-25-3-H10	AMT 2 L-25-1-H10 AMT 2 L-25-2-H10 AMT 2 L-25-3-H10
LINCOLN® ELECTRIC 10 K Ohm	Rotary	14 Pin Plug	14 Pin Plug 28 ft. (8.5 m) 53 ft. (16.2 m)	15 ft. (4.6 m) RACCV-10-2-L14 RACCV-10-3-L14	RAC2S-10-1-L14	RAC2S-10-1-L14	RAC2M-10-1-L14
					RAC2S-10-2-L14	RAC2M-10-2-L14	
					RAC2S-10-3-L14	RAC2M-10-3-L14	
		5 Pin Plug	15 ft. (4.6 m) 28 ft. (8.5 m) 53 ft. (16.2 m)	RACCV-10-1-L5 RACCV-10-2-L5 RACCV-10-3-L5	RAC2S-10-1-L5	RAC2M-10-1-L5	
					RAC2S-10-2-L5	RAC2M-10-2-L5	
					RAC2S-10-3-L5	RAC2M-10-3-L5	
		6 Pin Plug	15 ft. (4.6 m) 28 ft. (8.5 m) 53 ft. (16.2 m)	RACCV-10-1-L6 RACCV-10-2-L6 RACCV-10-3-L6	RAC2S-10-1-L6	RAC2M-10-1-L6	
					RAC2S-10-2-L6	RAC2M-10-2-L6	
					RAC2S-10-3-L6	RAC2M-10-3-L6	
	Linear	14 Pin Plug	15 ft. (4.6 m) 28 ft. (8.5 m) 53 ft. (16.2 m)	AMT CV-10-1-L14 AMT CV-10-2-L14 AMT CV-10-3-L14	AMT 2 S-10-1-L14 AMT 2 S-10-2-L14 AMT 2 S-10-3-L14	AMT 2 M-10-1-L14 AMT 2 M-10-2-L14 AMT 2 M-10-3-L14	AMT 2 L-10-1-L14 AMT 2 L-10-2-L14 AMT 2 L-10-3-L14
					AMT 2 S-10-1-L5 AMT 2 S-10-2-L5 AMT 2 S-10-3-L5	AMT 2 M-10-1-L5 AMT 2 M-10-2-L5 AMT 2 M-10-3-L5	AMT 2 L-10-1-L5 AMT 2 L-10-2-L5 AMT 2 L-10-3-L5
					AMT 2 S-10-1-L6 AMT 2 S-10-2-L6 AMT 2 S-10-3-L6	AMT 2 M-10-1-L6 AMT 2 M-10-2-L6 AMT 2 M-10-3-L6	AMT 2 L-10-1-L6 AMT 2 L-10-2-L6 AMT 2 L-10-3-L6
LINDE 25 K Ohm	Rotary	3 & 3 Pin Pig -Tails Hubbell	15 ft. (4.6 m) 28 ft. (8.5 m) 53 ft. (16.2 m)	RACCV-25-1-LIND RACCV-25-2-LIND RACCV-25-3-LIND	RAC2S-25-1-LIND RAC2S-25-2-LIND RAC2S-25-3-LIND	RAC2M-25-1-LIND RAC2M-25-2-LIND RAC2M-25-3-LIND	
	Linear	3 & 3 Pin Pig -Tails Hubbell	15 ft. (4.6 m) 28 ft. (8.5 m) 53 ft. (16.2 m)	AMTCV-25-1-LIND AMTCV-25-2-LIND AMTCV-25-3-LIND	AMT2 S-25-1-LIND AMT2 S-25-2-LIND AMT2 S-25-3-LIND	AMT2 M-25-1-LIND AMT2 M-25-2-LIND AMT2 M-25-3-LIND	AMT2 L-25-1-LIND AMT2 L-25-2-LIND AMT2 L-25-3-LIND
MILLER ELECTRIC® 1 K Ohm	Rotary	14 Pin Plug	15 ft. (4.6 m) 28 ft. (8.5 m) 53 ft. (16.2 m)	RACCV-1-1-M14 RACCV-1-2-M14 RACCV-1-3-M14	RAC2S-1-1-M14 RAC2S-1-2-M14 RAC2S-1-3-M14	RAC2M-1-1-M14 RAC2M-1-2-M14 RAC2M-1-3-M14	
					RAC2S-1-1-M5 RAC2S-1-2-M5 RAC2S-1-3-M5	RAC2M-1-1-M5 RAC2M-1-2-M5 RAC2M-1-3-M5	
	Linear	14 Pin Plug	15 ft. (4.6 m) 28 ft. (8.5 m) 53 ft. (16.2 m)	AMT CV-1-1-M14 AMT CV-1-2-M14 AMT CV-1-3-M14	AMT 2 S-1-1-M14	AMT 2 M-1-1-M14	AMT 2 L-1-1-M14 AMT 2 L-1-2-M14 AMT 2 L-1-3-M14
					AMT 2 S-1-2-M14	AMT 2 M-1-2-M14	
					AMT 2 S-1-3-M14	AMT 2 M-1-3-M14	
		5 Pin Plug	15 ft. (4.6 m) 28 ft. (8.5 m) 53 ft. (16.2 m)	AMT CV-1-1-M5 AMT CV-1-2-M5 AMT CV-1-3-M5	AMT 2 S-1-1-M5 AMT 2 S-1-2-M5 AMT 2 S-1-3-M5	AMT 2 M-1-1-M5 AMT 2 M-1-2-M5 AMT 2 M-1-3-M5	AMT 2 L-1-1-M5 AMT 2 L-1-2-M5 AMT 2 L-1-3-M5
THERMAL DYNAMICS 5 K Ohm	Rotary	14 Pin Plug	15 ft. (4.6 m) 28 ft. (8.5 m) 53 ft. (16.2 m)	RACCV-5-1-TD14 RACCV-5-2-TD14 RACCV-5-3-TD14	RAC2S-5-1-TD14 RAC2S-5-2-TD14 RAC2S-5-3-TD14	RAC2M-5-1-TD14 RAC2M-5-2-TD14 RAC2M-5-3-TD14	
					RAC2S-5-1-TD8 RAC2S-5-2-TD8 RAC2S-5-3-TD8	RAC2M-5-1-TD8 RAC2M-5-2-TD8 RAC2M-5-3-TD8	
	Linear	14 Pin Plug	15 ft. (4.6 m) 28 ft. (8.5 m) 53 ft. (16.2 m)	AMT CV-5-1-TD14 AMT CV-5-2-TD14 AMT CV-5-3-TD14	AMT 2 S-5-1-TD14 AMT 2 S-5-2-TD14 AMT 2 S-5-3-TD14	AMT 2 M-5-1-TD14 AMT 2 M-5-2-TD14 AMT 2 M-5-3-TD14	AMT 2 L-5-1-TD14 AMT 2 L-5-2-TD14 AMT 2 L-5-3-TD14
					AMT 2 S-5-1-TD8 AMT 2 S-5-2-TD8 AMT 2 S-5-3-TD8	AMT 2 M-5-1-TD8 AMT 2 M-5-2-TD8 AMT 2 M-5-3-TD8	AMT 2 L-5-1-TD8 AMT 2 L-5-2-TD8 AMT 2 L-5-3-TD8
		8 Pin Plug	15 ft. (4.6 m) 28 ft. (8.5 m) 53 ft. (16.2 m)	AMT CV-5-1-TD8 AMT CV-5-2-TD8 AMT CV-5-3-TD8			

*ONLY THE VELCRO MODEL WILL WORK FOR THE VALVED CKC150
AND THE VALVED FLEX-LOC TORCHES
CONTACT US FOR OTHER TIG MACHINES

TIG TORCHES & ACCESSORIES



FLEXIBLE PURGE CHAMBERS

The patented CK flexible purge chamber is used in the Gas tungsten Arc Welding (GTAW)/tungsten inert gas (TIG) process.

- Provides a completely inert atmosphere for the welding of reactive metals such as titanium, molybdenum, nickel-based and aluminum-based alloys, as well as non-reactive metals like stainless steel
- Draws a vacuum around the product to be welded by collapsing the chamber
- Chamber is then filled through a perforated hose that encircles the bottom of the chamber which allows the argon gas to expel all atmospheric gases more effectively (through the top valve port) than traditional filling methods
- Reduces the time required to reach an inert atmosphere suitable for welding, while using considerably less gas than traditional rigid purge chambers

Features:

- Less argon required
- Collapsible, easily stored
- Multiple accessory and glove ports
- Less expensive
- Less time to fill
- Vacuum drawn
- Facilitates welding grade atmosphere

Includes:

- 115 V vacuum pump
- Dual flowmeter/regulator
- 2 work stations
- 2 sets of gloves
- 4 accessory ports
- Heat blanket
- 10' (3 m) argon hose
- 10' (3 m) vacuum hose
- Repair kit
- Instructional video
- Storage container



Call today for more information and custom designs.

Items are made to order and are non-returnable.

COLD WIRE FEEDERS

For complete installation of a cold wire TIG system, you need both the cold wire feeder and a TIG torch (hand held or machine mounted) with cold wire TIG capabilities. The cold wire TIG system works independently of a standard TIG power supply using normal TIG welding parameters.

Two models of cold wire TIG feeders:

WF-1 feed unit is designed for use with CK CWH series hand torches for semi automatic welding applications. The WF-1 has an ON/OFF switch, pilot light, wire feed control, pulse/continuous feed switch, pulse wire on and off timers, and a remote switch receptacle.

WF-3 feed unit has all the features of the WF-1 feed unit plus controls for automatic operation with CK CWM series machine mounted machine torches. Additional controls include ON/OFF switches and timer controls for delay wire start and wire retract.

Please specify wire size (0.030", 0.035", 0.045" or 1/16") and type Hard (Steel) or Soft (Aluminum)

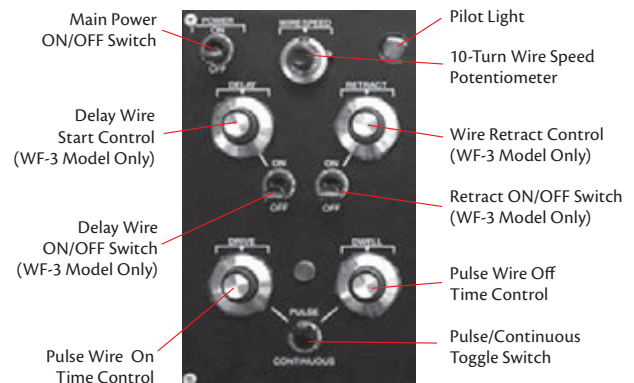


Features:

- Automates adding of filler metal in TIG Welding
- All weld parameters can be duplicated
- Dual groove drive roll system accepts multiple wire sizes
- Eliminates TIG rod stub loss
- Cabinet keeps filler wire clean
- Makes fully automatic machine TIG welding possible
- Results are consistent and high quality welds

SPECIFICATIONS

Voltage:	115 V AC (220 V AC 50 Hz – Special Item)
Phase:	Single Phase
Frequency:	50/60 Hz
Height:	15"
Width:	10"
Length:	21"
Weight:	39 lbs.
Motor Type:	DC Permanent Magnet
Motor Rating:	1/3 HP at 4000 RPM
Filler Wire Spool Size:	12"
Filler Wire Sizes:	0.023", 0.030", 0.035", 0.045", 1/16"
Wire Feed Speed Range:	0 - 500 IPM
Feed Time (Pulsed Mode):	Continuously Variable
Dwell Time (Pulsed Mode):	Continuously Variable
Delay Start Time (WF-3 Only):	Continuously Variable
Wire Retract Time (WF-3 Only):	Continuously Variable

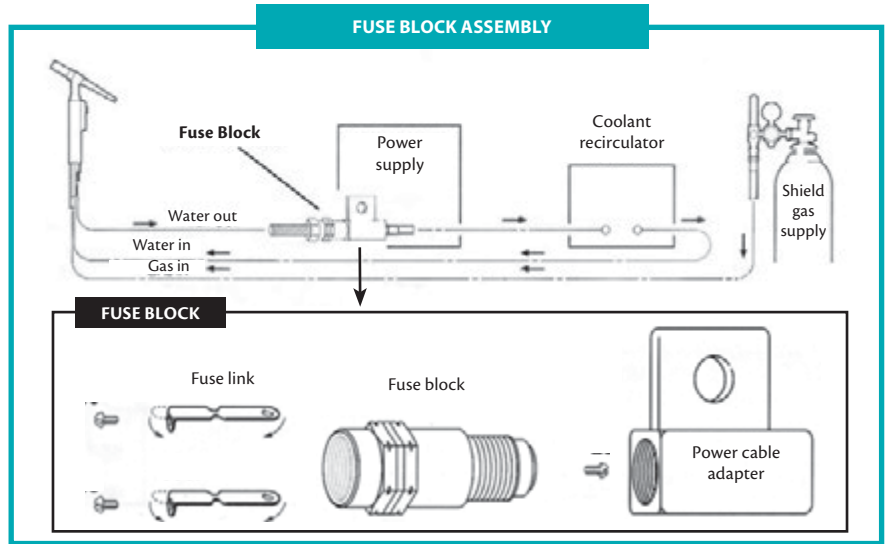


Mfg. No.	Drive Roll	Wire Size"
WF-1 – HAND HELD		
WF1-030	20 – 35DR	0.023 – 0.030
WF1-035	30 – 45DR	0.030 – 0.045
WF1-045	45 – 564DR	0.045 – 1/16
WF-3 – HAND HELD/MACHINE MOUNTED		
WF3-030	20 – 35DR	0.023 – 0.030
WF3-035	30 – 45DR	0.030 – 0.045
WF3-045	45 – 564DR	0.045 – 1/16

FUSE BLOCK ASSEMBLY

- Water-cooled power cables can burn up within seconds if water is not circulating through the cable assembly
- Fuse block adapter, fits between the power cable and power cable adapter
- If water is not present over the fuse link, it will burn up at around 6 amps
- A simple change of fuse link gets the welder back up and running
- Fuse links sold 5 per package

Model No.	Mfg. No.	Description	Price /Each
818-2675	550FA	550 Amps Fuse Block	71.37
818-2670	550F	550 Amps Fuse, 5/Pkg.	15.57



COLD WIRE FEED TORCHES

HAND HELD – WATER COOLED

- Semiautomatic TIG torches are hand torches
- Capability of delivering a continuous filler wire directly to the weld puddle
- Simplifies the skill level required as compared with manual feeding the filler rod
- Used in conjunction with the WF-1 and WF-3 wire feeders
- Cold wire torches come with rigid head without valve
- Available in 12 1/2' feet TriFlex/Superflex cable except model CWH3512 which comes with separate cables
- **Pendant Unit** has an electric switch head style with straight wire guide and is used in conjunction with TIG torch

Please specify wire size (0.030", 0.035", 0.045" or 1/16") and type Hard (Steel) or Soft (Aluminum)



Mfg. No.	Description	Amps	Length"	Head Accessories
CWH	Hand Held Pendant	-	-	-
CWH3512	Rigid Cold Wire Torch	400	9 1/2	3 Series
CWH1812	Rigid Cold Wire Torch	180	8 1/8	8 Series
CWH2312	Rigid Cold Wire Torch	300	8 1/4	2 Series



CWH



CWH2312



CWH3512



CWH1812

COLD WIRE FEED TORCHES

MACHINE MOUNTED – WATER COOLED

- Automatic TIG torches are machine torches
- Capability of delivering a continuous filler wire directly to the gas tungsten arc puddle
- Complete automatic feeding of the filler wire when torches are used in conjunction with the WF-3 wire feeder
- 12 1/2' feet
- 1 3/8" O.D. barrel

Please specify wire size (0.030", 0.035", 0.045" or 1/16") and Hard (Steel) or Soft (Aluminum)

Mfg. No.	Amps	Length"	Head Accessories	Head Style	Cable
CWM2312	300	18	2 Series	Straight Barrel	Triflex
CWM3512	350	18	3 Series	Straight Barrel	Separate
CWMT412	400	4 1/16	3 Series	Face Plate Mounted	Dual Power
CWMT512	500	7	3 Series	7" Barrel	Dual Power



CWM2312



CWM3512

TIG TORCHES & ACCESSORIES

CHEM-SHARP

CHEMICAL TUNGSTEN SHARPENERS

- Safest way to sharpen tungsten without grinding
- Chemically mills a perfect point on pure, thoriated or titanium type tungsten
- Repoint time is approximately one minute at the work station
- Extends tungsten life four times longer than that of ground tungsten
- 5 net oz. jars, over 500 sharpenings per jar



DYNAFLUX
QUALITY PRODUCTS

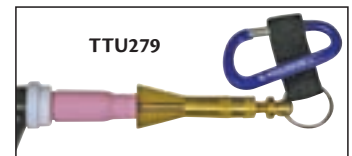
Model No.	Mfg. No.	Description	Price /Each
881-1300	DF600-6	Jar, 5 net oz.	12.89
881-1305	DF601-6	Tungsten Holder	19.04
881-1310	DF602-4	Kit w/1 Jar and Holder	31.78

TUNGSTEN STICK-OUT GAUGES

- Made of durable solid brass
- Easily lock-in, correct stick-out from the end of nozzle
- Face of gauge marked in 1/16" indications for easy calculation of required stick-out
- Consistent stick-out adds quality to every weld
- Repeatable for welder to welder



Model No.	Mfg. No.	Description	Price /Each
TTU279	TG1	For Standard Torch	35.30
TTU280	TG1-24	For 24 Series and Micro Torch	33.52



TURBO-SHARP® V TUNGSTEN ELECTRODE GRINDERS

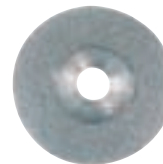
Turbo-Sharp® V is an enclosed electrode grinder, which eliminates grinding dust exposure to both the user and the environment.

- Multifunctional cover – Through a slot in the cover, one can flatten the electrode to prepare a truncated cone
- 3 position adjustment for triple lifetime of grinding disc
- Angles adjustable from 20° to 60°
- Both sides of grinding disc coated with diamond-powder, giving double wheel life
- Allows exact repetition of longitudinal grinding
- Can be connected to vacuum system, accessory included with unit
- Turbo-sharp® V can be equipped with an optional head which can grind electrodes of diameter: 0.040" (1.0 mm), 5/32" (4.0 mm), 3/16" (4.8 mm) or 1/4" (6.4 mm)
- Short tungsten kit grinds tungsten as short as 3/4" and includes 0.040" (1.0 mm), 1/16" (1.6 mm) and 3/32" (2.4 mm) collets

Model No.	Mfg. No.	Description	Price /Each
TTT401	TSS	115V Grinder	1271.52
TTT402	TSS-230	230V Grinder	1576.70
821-3707	TS3-W	Replacement Diamond Coated Disc Wheel	105.78
TTT413	TS3-HB	Grinder Head – 0.040" – 1/8" (included in TTT401)	254.30
821-3706	TS3-HR	Grinder Head – 0.040" – 5/32", 3/16", 1/4"	254.30
TTT414*	TS3-STK	Short Tungsten Kit	152.58

* For use with 821-3706 grinder head only

Both side of disc are coated with diamond-powder (double lifetime)



821-3707

3 position adjustable head!



Grinding disc last 3x longer!



TTT401

TTT414

Short tungsten kit (Sold separately)

Grinds electrodes as short as 3/4" (19 mm)



Includes: 0.040" (1.0 mm), 1/16" (1.6 mm) and 3/32" (2.4 mm) collets



METAL CARRYING CASE INCLUDES:

- Standard head for diameters: 0.040" (1.0 mm), 1/16" (1.6 mm), 3/32" (2.4 mm) and 1/8" (3.2 mm)
- Accessory for stationary mounting
- Adapter for vacuum cleaning
- Pen style electrode holder
- Multifunctional cover
- Tools for assembling and replacement of grinding wheel
- User instructions



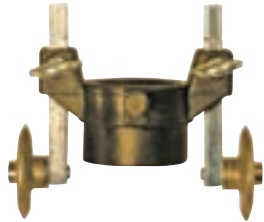
TECHNICAL DATA

Voltage:	120 V or 230 V AC
Single Phase:	60 Hz
Power:	400 W
Amp:	3.5 A
No load speed:	30 000 RPM
Weight:	3.7 lbs. (1690 g)
Guarantee:	2 years

PLASMA CUTTING GUIDES

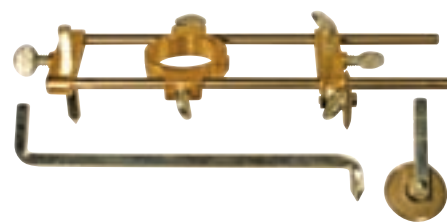
PLASMA CUTTING ROLLER GUIDES

- Guides available to suit most plasma torches
- Optimum cut and speed quality
- Prevents drag damage to tip
- Stainless steel axles and guards are non-rusting
- CNC machined quality parts
- No tools required for fitting
- Free roller wheels won't mark surface
- **Adaptor bush, where required, sold separately**



PLASMA CUTTING CIRCLE GUIDES

- Guides available to suit most plasma torches
- Cuts circles 60 mm to 700 mm in diameter
- Unique rotating bush allows circles to be cut from one position by turning guide frame
- Optimum top height at all times
- Stainless steel axles and rails
- CNC machined quality parts
- **Adaptor bush, where required, sold separately**



Manufacturer of Torch/Machine	Model of Torch	Roller Guide Model No.	Mfg. No.	Price /Each	Circle Guide Model No.	Mfg. No.	Price /Each	Bush Model No.	Mfg. No.	Price /Each
BINZEL	PSB31KK/HF	826-1075	1506	49.35	826-1050	1202+	106.00	-	-	-
BINZEL	CUT-70	TTT988	1539	49.00	826-1050	1202+	106.00	TTT993	2239	30.50
BINZEL	CUT-110/150	TTT989	1540	49.00	826-1055	1204+	109.00	TTT994	2240	30.50
ESAB PCM 500i	PT-31XL	-	-	-	826-1045	1087+	95.90	-	-	-
ESAB PCM 875/1000i	PT-23/PT-27	-	-	-	826-1050	1202+	106.00	826-1300	2225	30.50
ESAB ESP 100i/ PCM 150	PT-25	826-1085	1517	43.50	826-1050	1202+	106.00	826-1275	2230	30.70
ESAB	PT-32	TTT990	1552	49.00	826-1050	1202+	106.00	TTT995	2232	30.50
ESAB PCM70/100 (OLD)	PT-17	-	-	-	826-1050	1202+	106.00	826-1305	2226	30.50
ESAB ARISTOCUT A50	PTH-51	826-1105	1508	49.00	826-1065	1088	113.00	826-1290	2223	24.00
HOBART AIRFORCE375	ICE25C	826-1105	1508	49.00	826-1065	1088	113.00	826-1290	2223	24.00
HYPER THERM MAX43	PAC121TS	826-1105	1508	49.00	826-1065	1088	113.00	826-1290	2223	24.00
HYPER POWERMAX350	PAC 110	826-1105	1508	49.00	826-1065	1088	113.00	826-1290	2223	24.00
HYPER POWERMAX900	PAC123T/125T	826-1105	1508	49.00	826-1065	1088	113.00	826-1290	2223	24.00
HYPER THERM	T-60,T-80,T100	826-1105	1508	49.00	826-1065	1088	113.00	826-1290	2223	24.00
HYPER THERM MAX100	PAC130	-	-	-	826-1050	1202+	106.00	-	-	-
HYPER POWERMAX1100	PAC135T	826-1625	1534	49.00	826-1050	1202+	106.00	826-1362	2250	30.50
HYPER MAX100D	PAC160	826-1625	1534	49.00	826-1050	1202+	106.00	826-1362	2250	30.50
LINCOLN PRO-CUT	PCT20/25/55/80	826-1080	1509	49.35	826-1050	1202+	106.00	826-1630	2229	30.50
LINCOLN PC-60	P-70 (CEBORA)	826-1095	1527	49.35	826-1050	1202+	106.00	-	-	-
LINCOLN PC-100	P-100 (CEBORA)	826-1190	1542	49.35	826-1050	1202+	106.00	-	-	-
MLR SPECTRUM 300/375	ICE12C/25C/27C	826-1105	1508	49.00	826-1065	1088	113.00	826-1290	2223	24.00
MILLER SPECTRUM 701	ICE 40C/50C	826-1110	1510	49.00	TTT991	1090	113.00	-	-	-
MILLER SPECTRUM 1000	ICE 80T	826-1110	1510	49.00	TTT991	1090	113.00	-	-	-
MILLER SPECTRUM 2050	ICE55C	826-1110	1510	49.00	TTT991	1090	113.00	-	-	-
MILLER SPECTRUM 3080	ICE80C	826-1625	1534	49.00	826-1050	1202+	106.00	826-1362	2250	30.50
MILLER SPECTRUM 1250	ICE100	-	-	-	826-1050	1202+	106.00	-	-	-
THERMAL DRAG-GUN	PCH10/25/26/28	-	-	-	TTT992	1093	113.00	-	-	-
THERMAL PAK 50XL	PCH35/40/42	-	-	-	TTT992	1093	113.00	-	-	-
THERMAL DYN 5XR	PCH-51	826-1110	1520	49.00	TTT991	1090	113.00	-	-	-
THERMAL PAK 625	PCH-75	826-1145	1520	49.00	826-1050	1202+	106.00	-	-	-
THERMAL DYN 10XR	PCH-52	-	-	-	826-1055	1204+	109.00	826-1440	2272	30.50
THERMAL PAK 1250	PCH-100	826-1145	1520	49.00	826-1050	1202+	106.00	-	-	-
TD 50XLPLUS/ PAK75XL	PCH60/62/75/76	826-1145	1520	49.00	826-1050	1202+	106.00	-	-	-
THERMAL PAK100XL	PCH80/100/102	826-1145	1520	49.00	826-1050	1202+	106.00	-	-	-
THERMAL "I" TORCH	"I" TORCH	826-1145	1520	49.00	826-1050	1202+	106.00	TTT998	2245	30.50
TD A40i COMPACT	"I" T-SL60	826-1145	1520	49.00	826-1050	1202+	106.00	TTT998	2245	30.50
TD CUTMASTER 38	"I" T-SL60	826-1145	1520	49.00	826-1050	1202+	106.00	TTT998	2245	30.50
TD CUTMASTER 81	"I" T-SL60	826-1145	1520	49.00	826-1050	1202+	106.00	TTT998	2245	30.50
TD AP70	"I" T-SL60	826-1145	1520	49.00	826-1050	1202+	106.00	TTT998	2245	30.50
TD AP90	"I" T-SL100	826-1145	1520	49.00	826-1050	1202+	106.00	TTT998	2245	30.50
TD CUTMASTER 101	"I" T-SL100	826-1145	1520	49.00	826-1050	1202+	106.00	TTT998	2245	30.50

Note: All reference to genuine manufacturer's equipment numbers and/or trade names or trademarks are for identification and convenience only. The trademarks and trade names are the property of their respective owners.

SUB-MICRONIC COMPRESSED AIR FILTERS FOR PLASMA CUTTING SYSTEMS

- Patented concept of filtration will remove oil aerosols, condensed moisture, smoke and particulates from compressed air lines
- Installation on a plasma cutting system eliminates the "sputter" from the arc
- Helps restore plasma system to maximum cutting efficiency, and reduces the corrosive wear on the tip and electrode
- Equipped with mounting bracket and 1/4" NPT ports to match the fitting on most plasma systems
- Max flow @ 80 PSI: 2700 SCFH
- Max pressure/temp: 10 PSI/175°F
- Removal rating (Nom.): 0.01 microns

MOTOR GUARD CORPORATION



Model No.	Mfg. No.	Price /Each
394-1040	M-26	152.55
REPLACEMENT FILTER ELEMENT, SOLD PER BOX OF 4		
394-1060	M-723	55.08



PRECISION LAYOUT & MEASURING TOOLS

CONTOUR MARKER®

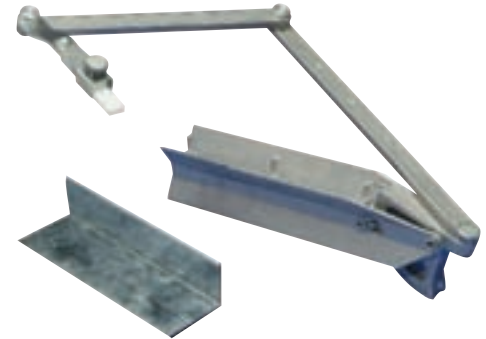
Made from durable, lightweight aluminum

- *Curv-O-Mark® Contour Maker®* is a 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 or 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 a compact tool that fits into a pocket or carrying case
- Can be used right side 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

Model No. 430-2000

Mfg No. 1

Price/Each \$184.96



CONTOUR®

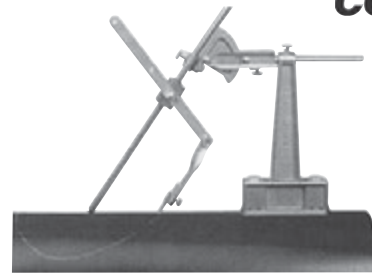
CIRCLE-ELLIPSE PROJECTORS

- Easily makes perfect circles, ellipses or oblong circles on any irregular flat or round surface
- Features a protractor with sliding rods and an adjustable lever to lock in the specified layout
- Strong, 20-lb pull magnetic base holds the projector in position during layout
- Durable web strap (included) holds the unit secure on non-magnetic surfaces and can be used on either side of the vertical column
- Lay out lateral intersections of different diameter pipes, or to project circles from 1 1/2" to 18" diameter on flat surfaces intersecting at angles from 0° to 70° from vertical
- Attachments to develop larger diameter circles are available
- Includes: Soapstone crayon and also works with chalk, pencil or steel scribe

Model No. 430-2110

Mfg. No. 14

Price/Each \$419.31



CONTOUR®

RADIUS MARKERS

- Available in four sizes for scribing circles up to 80" diameter
- Folding type design—three smaller models will fit conveniently into a shirt pocket
- All have sturdy friction joints to maintain rigidity and accuracy
- Made from lightweight, rustproof aluminum for long wear
- Soapstone crayon installed in each radius marker
- Scribe holder will accept round, square or flat soapstone crayon, pencil or steel point scribe



CONTOUR®

Model No.	Mfg. No.	Description	Radius"	Price /Each
430-2580	1208	Mini	Up to 8	29.97
430-2590	1220	Small	Up to 20	42.54
430-2600	1224	Standard	Up to 24	44.89
430-2610	1340	Jumbo	Up to 40	73.80

CENTERING HEADS

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 or larger
- Fitted with an adjustable dial bubble protractor (DSL), manually operated centering pin

Jumbo Model

- For pipe 1" diameter and up
- Includes DSL
- Spring-loaded hardened centering pin eliminates the need for a hammer
- Align and press the trigger



CONTOUR®

Model No.	Mfg. No.	Type	Head Type	Head Width"	Price /Each
430-2050	6	Standard	Y	4	97.44
430-2070	7	Jumbo	Y	8	152.44

FLANGE ALIGNER BASES

- Removes the difficulty of flange aligning and squaring
- Holds square in the needed position without tying up one's hands
- Notched at either end for ease in aligning on the centreline of the pipe and has two 25 lb.-pull, cast-in magnets for holding either a flat horizontal or vertical position
- Accepts either leg of a standard or combination square and will work on pipe diameters from 1" up, requiring only extension of the legs of the square being used to accommodate larger diameters
- Made from lightweight, durable aluminum

Model No. 430-2230

Mfg. No. 32

Price/Each \$169.78



CONTOUR®

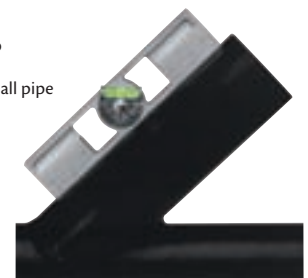
PRO-MAG LEVELS

- Made from cast aluminum
- Lightweight, easy to use tool for determining angles
- 360° adjustable DSL with two 90° quadrants graduated in 2-1/2° increments
- Cast-in tables used to convert degree-of-angle to rise-in-inches-per-foot or millimetres-per-meter
- Groove on the bottom edge permits use on a small pipe
- Ideal for pipe fitter, welder, jig builder or anyone who has to determine angles or do setup work
- Includes two cast-in 25-lb pull magnets that hold securely to any steel surface
- 9" L x 2" H x 3/4" Thick

Model No. 430-2080

Mfg. No. 8

Price/Each \$89.99



CONTOUR®

UNIVERSAL LEVELS

- Multipurpose tool
- Designed primarily for pipefitting applications, is a valuable tool for any craft required to use a level or plumb bob
- Unit features a 360° adjustable protractor dial bubble (DSL) that ensures accurate levelling and permits the following additional uses:
 - Setting a predetermined pitch of a string of pipe
 - Setting the angle of laterals to a precise degree
 - Trueing vertical runs
 - Two-holing flanges
- Permits hands-free levelling, for tight spots
- Bubble is mounted on a protractor dial allowing for the level to be used in any position and still read accurately
- One face of the level is magnetic but both faces have deep, cast-in grooves that make the level self-centering on the contour of the pipe
- Magnets are cast-in, they do not interfere with the use of the level on non-magnetic materials, such as aluminum, copper, lumber, stone or other materials requiring levelling

- Comes with a two-threaded, self-aligning conical spacer and conical nut and bolt units for aligning pipe flanges (two-holing)
- Designed to fit any size bolt hole spaced between 2-1/4" to 8" centres on flanges permitting the orientation of flange bolt holes for any size pipe
- Includes: Two cast-in 25-lb magnets (exerting a 50-lb pull) to securely hold the unit in place on any steel surface, including the underside of a pipe or beam

Model No. 430-2240

Mfg. No. 33

Price/Each \$152.44

CONTOUR®



PRO-MAG BURNING SQUARES

- Precise tool used in structural thermal cutting and layout
- Perfect square containing powerful cast-in magnets
- Permits placement in any position
- Tool surface is embossed with a protractor inscribed with two 90° quadrants graduated in 1° increments
- Top of the tool carries an 18" ruler blade divided in 1/8" increments
- Ruler can be locked in place at desired angle setting by hand tightening of the adjustment knob
- Ruler blade is on a raised plane which permits its use as a straight edge when flame cutting without distortion or marring
- Blade will also accept attachments or extensions that allow an overall length up to 72"
- Made of cast aluminum

Model No. 430-2160

Mfg. No. 22

Price/Each \$152.44



CONTOUR®

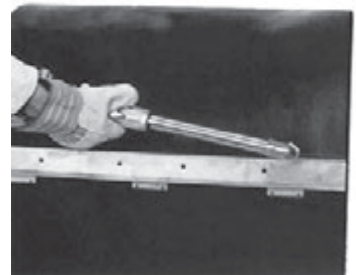
MAGNETIC BURNING GUIDES

- Designed for use with a burning torch or as a straight edge
- Cast of strong, durable material to withstand heat and spatter
- Base has three 30-lb. pull cast-in magnets for use in any position
- 24" blade on a raised plane is standard

Model No. 430-2190

Mfg. No. 28

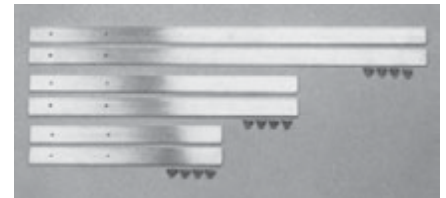
Price/Each \$97.44



CONTOUR®

ATTACHMENTS FOR PRO-MAG BURNING SQUARE & MAGNETIC BURNING GUIDE

- Each is in two sections



WRAP-A-ROUNDS

- An inexpensive tool for marking straight lines around pipe, or for use as a straight edge
- Made of flexible gasket material
- Resistant to heat and cold
- Asbestos free with service temperature of up to 350°F
- Printed with a scale in inches, pitch chart, tangent chart and other useful markings
- 3.88" and 5.00" wraps feature a metric scale and pitch chart



CONTOUR®

Model No.	Mfg. No.	Size	Dimensions			Pipe Dia."	Price /Each
			L'	x	W"		
430-2330	164B	Medium	4	x	3.88	3 to 6	16.76
430-2370	176B	Large	6	x	3.88	3 to 10	18.02
430-2410	177B	X-Large	7	x	5.0	4 to 12	24.81
430-2450	179B	X-Large	9	x	5.0	6 to 16	36.30
430-2490*	184B	Special	Length Desired	x	3.88		3.75
430-2520*	185B	Special	Length Desired	x	5.00		4.56
430-2550*	187B	Special	Length Desired	x	7.00		6.45

*Special lengths available up to a maximum of 375'

CONTOUR®

Model No.	Mfg. No.	Overall Length"	Price /Each
430-2200	29	34	95.17
430-2210	30	48	91.25
430-2220	31	72	143.36

CONTOUR® WORKER KITS

All the top sellers in one case!

- Includes: #1 Contour Marker*, #7 centering head, #8 Pro-Mag level, standard radius marker, square soapstone, holder and metal carrying case

Model No. TTT484

Mfg. No. 3014807

Price/Each \$425.50

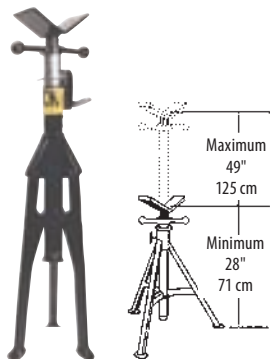


CONTOUR®

JACKS & LEVELS

FOLD-A-JACK® HI JACKS

- 1" square tube base construction
- Quick-action lock washer for quick height positioning
- Patented *Fall Guard™* feature allows 1" safety zone around lock washer
- 1 1/2" *Acme* fine adjustment thread handle, the largest in the industry
- Large, convenient adjustment handle
- Set screw for double margin of safety, can lock jack head to stand for transportation, no loose pieces
- Perfect for work height on shapes or pipes 24" in diameter or smaller
- Carrying handle for ease of transporting
- Jack independently load tested for quality assurance
- 2500-lb capacity
- CE rated



SUMNER

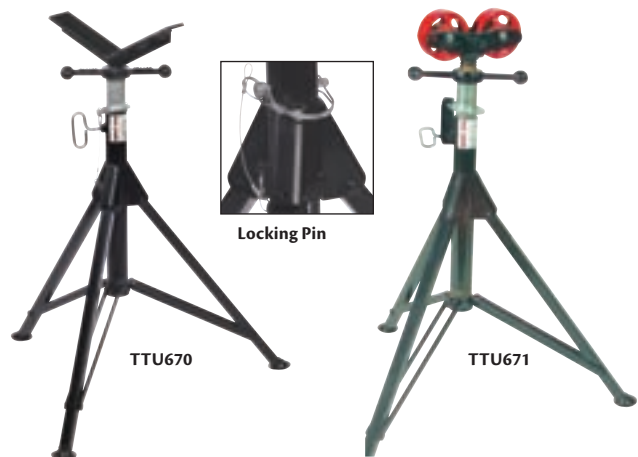
HEAD STYLES



Model No.	Mfg. No.	Description	Price /Each
432-1161	781300	ST-881 w/Vee-Head	151.43
432-1162	781301	ST-882 w/Roller Head	217.37
432-1163	781302	ST-883 w/Bar Stock Head	310.73
432-1164	781303	ST-884 w/Stainless Steel Rollers	267.43
432-1166	781304	ST-885 w/Stainless Steel Vee-Head	235.12
432-1167	781305	ST-886 w/Ball Transfer Head	312.83
432-1168	781306	ST-887 w/Rubber Wheels	238.17

FAT JACKS WITH PIN

- Large 12 1/2" wide Vee-Head
- Ribbed Vee design strengthens Vee frame
- Folding 27" wide base
- Ideal for large pipes
- Adjustable height range 32" to 52"
- Available pinned with Vee or Roller head
- Weight capacity: 2500 lbs. up to 36" pipe



SUMNER

Model No.	Mfg. No.	Description	Price /Each
TTU670	781470	W/Pin and Vee-Head	259.22
TTU671	781475	W/Pin and Roller Head	310.73

QWIK PINS

- For fast, accurate alignment of carbon steel pipe flanges
- Quick installing pins work to level flange (two-hole) for tack and weld-out
- Hardened tapered *Qwik Pins* automatically center on 5/8" to 1 5/8" (16 - 42 mm) holes
- Features *Acme* threads for maximum clamping power and hardened steel for long-lasting use
- **Sold per set**



SUMNER

Model No.	Mfg. No.	Price /Each
TTU664	781235	101.75

FLANGE LEVELERS

- Now two-hole and level in one time-saving operation
- Uses push-button *Qwik Pin* nuts for fast action
- Features stub *Acme* threads for maximum clamping and hardened steel for lasting use
- Automatically centers in flange holes 5/8" to 1 5/8"
- Easily replaceable vials in the event of breakage
- **Sold per set**



SUMNER

Model No.	Mfg. No.	Description	Price /Each
TTU665	781240	Flange Leveler	174.87
TTU666	779934	Vial Kit	24.55

POCKET LEVELS

- A twin vial level constructed of tough ABS and aluminum frame
- Strong magnetic base makes this pocket size level great for many tasks:
 - Can be used with a plumb bob
 - Level pipe for fit-up
 - Earth magnet on base and side to hold measuring tape
- Weights only 3 oz.



SUMNER

Model No.	Mfg. No.	Price /Each
TTU667	781947	11.00

VERSA LEVELS

- Featuring a tough, anodized body and a magnetic base
- Four vials - 0°, 30°, 45°, and 90°
- V-cut into the base for pipe and conduit work
- Thumb screw connects to pipe or bent conduit



SUMNER

Model No.	Mfg. No.	Price /Each
TTU668	781945	46.00

QUAD LEVELS

- Tough, anodized aluminum level with a magnetic base
- Four vials - 0°, 30°, 45°, and 90°
- V-cut into the base for pipe and conduit work
- Length: 8 1/2"



SUMNER

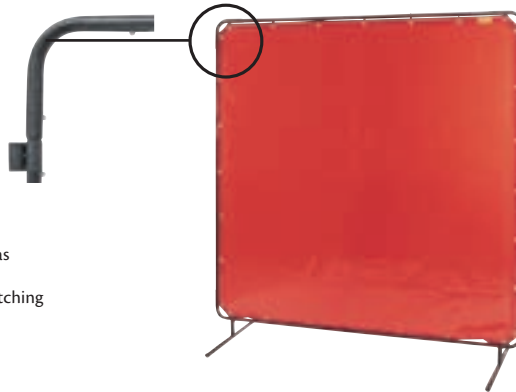
Model No.	Mfg. No.	Price /Each
TTU669	781946	50.85

WELDING SCREENS & BLANKETS

COMBOFRAME ADJUSTABLE MODULAR WELDING SCREENS

FRAMES

- Innovative COMBOframe combines high durability with extreme versatility
- Made with heavy-duty finished steel tubing and connects with spring-pins
- Assembles in less than five minutes, no tools required
- Adjustable to fit both 6' and 8'-wide welding screens
- Includes 360° swivel connectors that allow various configurations



LAVASHIELD™ CURTAINS

- Specially formulated 16 mil thick vinyl
- **NT832** and **NT833**: 28-mil thick cotton duck canvas
- Grommets every 12" interval
- Screen edges are hemmed with DuPont® Kevlar® stitching
- Resists to UV rays, flame and abrasion
- Sold per panel



CURTAINS & FRAMES

Model No.	Dimensions W' x H'			Transparency	UV Resistance	Colour	Price /Each	Curtain Only	Price /Each
NT888	6	x	6	High	Moderate	Yellow	137.00	NT826	37.60
NT889	8	x	6	High	Moderate	Yellow	146.00	NT827	47.70
NT890	6	x	6	High	Moderate	Orange	137.00	NT828	37.60
NT891	8	x	6	High	Moderate	Orange	146.00	NT829	47.70
NT892	6	x	6	Moderate	Moderate	Green	137.00	NT830	37.60
NT893	8	x	6	Moderate	Moderate	Green	146.00	NT831	47.70
NT894	6	x	6	Opaque	Maximum	Olive	152.00	NT832	71.15
NT895	8	x	6	Opaque	Maximum	Olive	172.00	NT833	93.75

FRAME ONLY

Model No.	Description	Price /Each
NT834	Modular Frame, Adjustable Width 6' or 8'	104.00

OPTIONAL CASTERS

Model No.	Description	Price /Each
SEB618*	2" Rubber Caster with Brake	5.40

*Sold individually, two casters required per frame's foot

Yellow



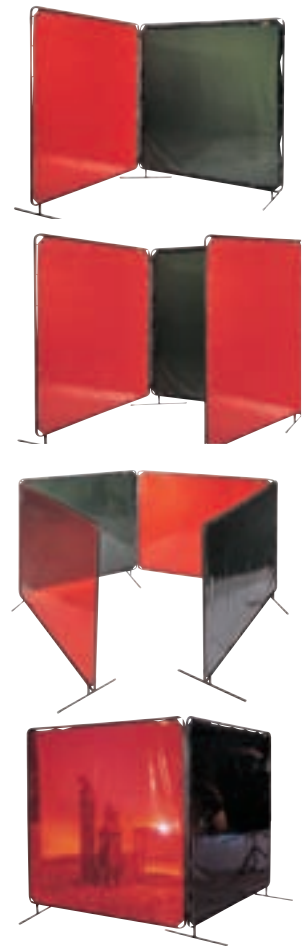
Orange



Green



Olive



SEB618



WELDING SCREENS

- Comprised of 1" square steel tubing assembled with unique corner brackets for the toughest frame product available
- Minimizes frame wobble and sway
- Offer unique combination of strength, sturdiness and safety
- Orange Spectra see thru curtain filters 100% of far UV radiation and 100% of blue light
- Heavy-duty 14-mil vinyl film minimizes arc glare
- Custom sizes available
- Sold per panel



Model No.	Mfg. No.	Dimensions W' x H'	Price /Each
CURTAINS & FRAMES			
146-1755	R1064-25	4 x 6	126.12
146-1780	R1066-25	6 x 6	143.27
146-1810	R1068-25	8 x 6	160.20
146-1720	R10610-25	10 x 6	173.65
CURTAIN ONLY			
146-3210	6424-25	4 x 6	25.94
146-1280	6636-25	6 x 6	38.93
146-1340	6848-25	8 x 6	51.89
146-1510	61060-25	10 x 6	64.86



2 Panels Shown

WELDING SCREENS & BLANKETS

24-OZ. FIBREGLASS LAVASHIELD™ WELDING BLANKETS

- 24-oz. black fiberglass with neoprene coated on both sides
- Hemmed on all sides with Kevlar® thread that has been double-locked stitched
- Large brass grommets added for extra durability and easy handling
- Temperature resistance: 1000°F (538°C)

Applications: Heavy-duty vertical curtain protection against sparks, molten metal splash, welding spatter and grinding spray. General purpose drop cloth for protection against welding spatter.



Model No.	Dimensions'			Price /Each
NT896	6	x	6	87.95
NT821	6	x	8	118.00

30-OZ. FIBREGLASS LAVASHIELD™ WELDING BLANKETS

- 30-oz. gold fibreglass with neoprene coated on both sides
- Hemmed on all sides with Kevlar® thread that has been double-locked stitched
- Large brass grommets added for extra durability and easy handling
- Temperature resistance: 1000°F (538°C)

Applications: Heavy-duty drop cloth and vertical curtain protection against sparks, molten metal splash, welding spatter and grinding spray.



Model No.	Dimensions'			Price /Each
NT822	6	x	6	99.75
NT823	6	x	8	132.00

18-OZ. SILICA LAVASHIELD™ WELDING BLANKETS

- 18-oz. Sahara brown silica fabric
- Hemmed on all sides with Kevlar® thread that has been double-locked stitched
- Large brass grommets added for extra durability and easy handling
- Temperature resistance: 2300°F (1260°C)

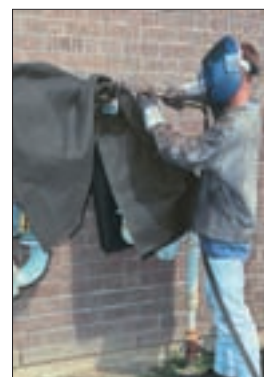
Applications: General purpose drop cloth and vertical curtain protection against extremely high temperature sparks, molten splash, welding spatter and grinding spray.



Model No.	Dimensions'			Price /Each
NT824	3	x	3	46.75
NT825	6	x	6	183.00

WELDING BLANKETS

- Weldflex specially coated cloth, combination of aramid and silica fibres
- Treated to enhance shedding of molten metal splash generated by most severe welding or furnace operations
- Highly abrasion resistant, exceptional strength and durability, good heat resistance
- Soft, pliable and non-irritating
- Sheds welding spatter and molten metal up to 3000°F on a 15°-20° incline
- Protects objects and machinery while welding



Model No.	Mfg. No.	Dimensions'			Price /Each
SF063	FB-020-0505	5	x	5	186.25
SF064	FB-020-0506	5	x	6	223.49
SF065	FB-020-0507	5	x	7	260.26
SF066	FB-020-0508	5	x	8	298.46
SF067	FB-020-0509	5	x	9	340.48
SF068	FB-020-0510	5	x	10	372.48

WELDING BLANKETS

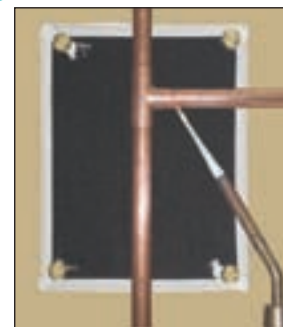
- 24-oz. black fibreglass, vermiculite coated
- Heavy-duty, general purpose welding blankets
- Provides protection from sparks, spatter and slag
- Temperature resistance: 1200°F



Model No.	Mfg. No.	Dimensions'			Price /Each
146-3100	3309-906	3	x	3	29.68
146-1312	6636-906	6	x	6	97.30
146-1367	6848-906	6	x	8	129.74

FLAMESHIELD SOLDERING & WELDING PADS

- Made of coated fibreglass
- Protects walls, joints and wall studs from burn damage associated with low-temperature soldering
- An excellent blanket for weld sparks and spatter
- A must for every toolbox and maintenance service vehicle
- One grommet in each of the top corners



Model No.	Mfg. No.	Dimensions"			Price /Each
146-1032	912FS	9	x	12	13.40

WELDING UMBRELLAS

- Provides protection from inclement weather
- Features lightweight aluminum frame and tilt mechanism
- Made of Rip-Stop vinyl which is water-resistant, fire-retardant and very tear-resistant



Model No.	Mfg. No.	Dimensions			Price /Each
		Dia'	x	H'	
146-2050	UM6500	6	x	7	130.90



ALL OPTREL® HELMETS:

- Use a combination of LCD technology and solar cells eliminating the need for On/Off switches
- Provide full time IR/UV protection at all times in the unlikely event of a cartridge failure
- Are water resistant to IP76 standards against humidity and moisture
- Meet worldwide safety standards including CSA, ANSI and DIN



OPTREL® P550 WELDING HELMETS

- Personalizable welding helmet thanks to exchangeable side covers
- Optimized cover lens for perfect protection against spatters and fumes
- Enlarged LCD provides a comfortable viewing area
- Automatic cartridge with shade selection from DIN 9 – 13 infinitely adjustable by an adjustment knob (p550)
- Offers a infinitely variable sensitivity and delay function
- Solar powered unit
- Application ranges: All electric arc welding processes; prohibited for laser welding
- Not suitable for over-head welding
- Compliant with CSA standard Z94.3
- 2-year warranty



HELMETS

Model No.	Mfg. No.	Description	Colour	Price /Each
SED542	1007.000	Unpainted (No Side Cover)	Black	284.28
SED543	1007.010	Reptile Side Cover	Black/Green	296.64
SED544	1007.020	Bulldog Side Cover	Black/White	296.64
SED545	1007.030	Tiger Side Cover	White/Black	296.64
SED546	5012.700	Replacement Auto-Darkening Filter	—	245.70

SED542



SED543



SED544



SED545



ACCESSORIES

Model No.	Mfg. No.	Description	Qty /Pkg.	Price /Each
COVER LENSES				
SAX006	K6024	Replacement Inner Cover Lenses	5	9.65
SED552	5000.250	Outside Cover Lenses	5	13.65

MAGNIFICATION LENSES

SAX008	K6041	1.00 Diopter Magnification Lens	1	27.42
SAX009	K6042	1.50 Diopter Magnification Lens	1	27.42
SAX010	K6043	2.00 Diopter Magnification Lens	1	27.42
SAX011	K6044	2.50 Diopter Magnification Lens	1	27.42

SIDE COVERS

SED553	5002.500	Side Cover, Reptile Design	2	59.67
SED554	5002.510	Side Cover, Electronic Design	2	59.67
SED555	5002.520	Side Cover, Tiger Design	2	59.67
SED556	5002.530	Side Cover, Mirror Design	2	59.67
SED557	5002.540	Side Cover, Tribal Design	2	59.67
SED558	5002.550	Side Cover, Skull Design	2	59.67
SED559	5002.560	Side Cover, Bulldog Design	2	59.67



SED553



SED554



SED555



SED556



SED557



SED558



SED559

WELDING SAFETY

OPTREL® E600 SERIES WELDING HELMETS

- Patented telescoping headgear provides maximum field of view and balance
- Sliding sensor bar is a must for production welding applications
- 2" x 4" viewing area
- Variable sensitivity control to configure arc detection sensors
- Solar powered with replaceable lithium batteries for maximum possible service life
- Exterior control panel for convenient configuration without removing your helmet
- Grind mode, a must for grinding and very handy for plasma cutting



OPTREL® E640

- Welding helmet with automatic shade cartridge; manually adjustable 4/10 or 4/11
- Ultraviolet/infrared protection (maximum at any shade setting)
- Grind mode not available on the E640



Model No.	Mfg. No.	Description	Colour	Price /Each
SED052	1006.400	Welding Helmet E640 Black Untreated	Black	322.46
SED053	1006.430	Welding Helmet E640 Titan	Titan	358.83
SED054	1006.440	Welding Helmet E640 Cosmic Green	Cosmic Green	358.83
SED055	1006.460	Welding Helmet E640 Snow White	Snow White	358.83
SED056	1006.470	Welding Helmet E640 Shiny Ruby	Shiny Ruby	358.83
SED057	1006.480	Welding Helmet E640 Medium Blue	Medium Blue	358.83
SED058	1006.490	Welding Helmet E640 Dark Blue	Dark Blue	358.83
SED059	5012.460	E640 Auto-Darkening Filter	-	288.52

OPTREL® E650

- 9 through 13 variable shade control
- Traditional green welding lens



Model No.	Mfg. No.	Description	Colour	Price/Each
SAX003	K6500	E650 Helmet	Black Unpainted	387.04
SAX004	K6501	E650 Helmet	Shiny Ruby	411.75
SAX005	K6029	Auto-Darkening Filter for Optrel® E650 models	-	380.29

OPTREL® E670

- 9 through 13 automatic and manual shade control
- Automatic control offers hands free operation, automatically changes shade based on the intensity of the arc
- Approved for overhead welding



Model No.	Mfg. No.	Description	Colour	Price/Each
SAW999	K6700	E670 Helmet	Black Unpainted	443.76
SAX001	K6701	E670 Helmet	Cosmic Green	476.88
SAX002	K6028	Auto-Darkening Filter for Optrel® E670 models	-	454.64

OPTREL® E680

- Expansive variable shade range of 5 through 13
- Approved for overhead welding



Model No.	Mfg. No.	Description	Colour	Price/Each
SAW996	K6804	E680 Helmet	Medium Blue	507.78
SAW997	K6805	E680 Helmet	Black	507.78
SAW998	K6027	Auto-Darkening Filter for Optrel® E680 models	-	486.33

ACCESSORIES

Model No.	Mfg. No.	Description	Qty /Pkg.	Price /Each
SAM897	K5910	Front Cover Lenses	2	14.63
SAM898	K5911	Front Cover Lenses	5	34.68
SAX006	K6024	Inner Cover Lenses	5	9.65
SAX008	K6041	Magnification Lens, 1.00 Dioptre	1	27.42
SAX009	K6042	Magnification Lens, 1.50 Dioptre	1	27.42
SAX010	K6043	Magnification Lens, 2.00 Dioptre	1	27.42
SAX011	K6044	Magnification Lens, 2.50 Dioptre	1	27.42
616-1570	K5821	Replacement headgear	1	34.92

Model No.	Mfg. No.	Description	Qty /Pkg.	Price /Each
SED060	K5911B	Front Cover Lens E680, E670, E650, E640	50	252.71
SED061	K6025	Control Kit E680, E670, E650, E640	1	12.84
SED062	K6026	Cover Plates Latches Set E680, E670, E650, E640	2	7.75
SED063	K6013	Helmet Shell E680 and E640 Dark Blue	1	109.56
SED064	K6014	Helmet Shell E680 and E640 White	1	109.56
SED065	K6015	Helmet Shell E680 and E640 Titan	1	109.56
SED066	K6016	Helmet Shell E680 and E640 Medium Blue	1	109.56
SED067	K6017	Helmet Shell E680 Black	1	109.56
SED068	K6018	Helmet Shell E670, E650 and E640 Black	1	82.16
SED069	K6019	Helmet Shell E670 Cosmic Green	1	109.56
SED070	K6021	Helmet Shell E650 Shiny Ruby	1	109.56

P250 SERIES WELDING HELMETS

- Nylon helmet shell
- Telescopic, fully adjustable headgear
- Front loading filter and cover plate
- Choice of passive shade 10 lens, single shade, or variable-shade auto-darkening filters
- Single shade: 3-light, 10-dark, with 1.93" x 3.86" viewing area and 2 sensors
- Variable shade: 3-light, variable 9-13 - dark, with 1.93" x 3.86" viewing area
- Solar powered with replaceable batteries
- Compliant with CSA standard Z94.3
- 2-year warranty on ADF



TTU053



TTU055



Model No.	Mfg. No.	Shade	Colour	Price/Each
TTU053	K2500	Passive Shade 10	Metallic Black	51.88
TTU054	K2501	Single Shade	Metallic Red	202.01
TTU055	K2502	Variable Shade	Metallic Red	170.59

ACCESSORIES

Model No.	Mfg. No.	Description	Price/Each
TTU059	K25012A	Outside Cover Lenses, 2/Pkg	9.65
TTU060	K25112A	Inside Cover Lenses, 2/Pkg	3.64
TTU061	K25122A	Intermediate or Inside (Passive) Cover Lenses, 2/Pkg	7.34
TTU062	K25182A	Sweatbands, 2/Pkg.	9.15

Magnifying lenses from 1.00 to 4.00 are also available

GALAXY SERIES PASSIVE WELDING HELMETS

- Features a modular viewing adapter that can be easily swapped in and out to provide multiple viewing options
- Tilting and telescoping headgear allows adjustment of the helmet position from the face and chin
- The futuristic and sleek helmet design provides extended coverage of the chest, ear and head regions from harmful spatter and fumes
- State of the art headgear design reduces neck strain through the balance and distribution of the helmet weight
- Shade 10 passive



614-K701



614-K702



Model No.	Mfg. No.	Description	Colour	Price /Each
HELMET – 2" X 4 1/4"				
614-K701	K701	Flip-Front	Black	51.63
HELMET – 4" X 5 1/4"				
614-K702	K702	Fixed Front	Black	45.75

OS100 WELDING POWERED AIR PURIFYING RESPIRATOR SYSTEMS

- Provides complete protection against dust, UV/IR radiation, flying particles and metal fumes which are emitted during the welding process
- This NIOSH approved technology utilises the High Efficiency Particulate Air (HEPA) Filter System
- Motorised blower that is powered by a rechargeable, lightweight, lithium-ion battery
- Audible and visible alarms warn the user of a missing or clogged filter and low-battery condition
- Air hose protected with a flame-retardant cover
- Ergonomically designed belt is lightweight and adjustable

Battery life: 8 hours of normal use

Battery charging time: 7-9 hours for total charge

NIOSH 42, CFR 34
ANSI Z87, CSA Z94



Model No.	Mfg. No.	Description	Colour	Price /Each
SAS074	P580000	Complete OS100 System e680	Blue	2126.92
SAS075	P570000	Complete OS100 System e670	Black	2044.04
SAS076	P560000	Complete OS100 System e640	Black	1933.12
SAS077	P169220	HE Filter	-	49.73



WELDING SAFETY

NOVA AUTO-DARKENING FILTERS

- Automatically darken to shade 10
- Fits most competitive 2" x 4 1/4" openings
- Solar powered
- 2-year warranty



Model No.	Mfg. No.	Price /Each
SAJ757	K590	186.72

HELMET ACCESSORIES

HARD HAT ADAPTERS

- Simply remove existing headgear from any Optrel® helmet and install adapter
- For use with the majority of popular hard hat orders
- Slip-on/off spring assembly for easy installation



Model No.	Mfg. No.	Description	Price /Each
SAN048	K5930	Fits all non-slotted hard hats	27.39
SED541	K5935	Fits all slotted hard hats	40.61

LEATHER CHEST PROTECTORS

- Insures the safety of welder's chest region
- Clip attachment grips the rim of helmet
- Provides secure fit while eliminating the need for velcro-type attachments on shell



Model No.	Mfg. No.	Description	Price /Each
SAN051	K5931	Fits all Optrel® helmets	56.12

MAGNIFICATION LENSES

- Eliminates the need to wear eyeglasses under your Optrel® welding helmet
- Simply remove the existing inside cover plate and insert the magnification level of your choice
- 2" x 4 1/4"
- JW Harris brand
- Designed to fit Optrel® helmets exclusively

Model No.	Mfg. No.	Diopter	Price /Each
SAM905	JOSC100	1.00	10.16
SAM907	JOSC150	1.50	10.16
SAN043	JOSC200	2.00	10.16
SAN045	JOSC250	2.50	10.16



LEATHER NECK PROTECTORS

- Coverage of the entire lower neck and back regions of head



Model No.	Mfg. No.	Description	Price /Each
SAN049	K5932	Fits all Optrel® helmets	93.85

OTHER ACCESSORIES

- Sweatbands - For use with all Optrel® helmets
- Carrying bag



Model No.	Mfg. No.	Description	Qty /Pkg.	Price /Each
SAN046	K5822	Sweatbands	2	6.60
SEF025	K908	Carrying bag	1	18.28

Look for this symbol for environmentally friendly products!



JACKSON SAFETY* WELDING HELMETS

Design to perform in a range of welding conditions, the *Jackson Safety** welding helmets brand are available in a variety of materials including fibreglass and vulcanized fibre. Choose from a selection of filters – from passive to digital ADF platforms and numerous graphic designs to reflect personal style.

W series tiers highlight increasing levels of performance within the *Jackson Safety** welding helmets product line.

W60 TRUESIGHT® WELDING HELMETS

- Variable shade 5-13, sensitivity and delay adjustments
- LED indicator for weld, torch, and grind modes
- Four independent sensors positioned to reduce possibility of blockage during weld
- Amber band pass for enhances clarity of weld puddle
- Built-in magnification lens
- No retainer for easy helmet installation and removal
- Two, easy to replace AAA batteries with low battery indicator
- Meets ANSI standard Z87.1-2010 and compliant with CSA standard Z94.3



SEC603



SEC599



SEC600



SEC601



SEC602

JACKSON
SAFETY Group

Model No.	Mfg. No.	Description	Price /Each
SEC599	30314	HLX with Truesight® Digital ADF, Tattoo	882.96
SEC600	30315	HLX with Truesight® Digital ADF, Serpent	882.96
SEC601	30316	HLX with Truesight® Digital ADF, Arc Angel	882.96
SEC602	30317	HLX with Truesight® Digital ADF, Ace of Spades	882.96
SEC603	29371	HLX with Truesight® Digital ADF, Black	818.37
SEC604	30319	Truesight® ADF cartridge 4.5" x 5.25"	760.24
SEC605	30320	Truesight® External Safety Lens	4.84
SEC606	30321	Truesight® Internal Safety Lens	3.23

W60 NEXGEN* DIGITAL ADF WELDING HELMETS

- Digital controls feature variable shade 9-13, sensitivity and delay adjustments
- Technology allows unit to detect welds less than 5 amps
- Versatile 3N1™ built-in functions: Weld, torch, grind
- Four independent sensors positioned to reduce possibility of blockage during weld
- Amber view lens allows for enhanced clarity of weld puddle
- Built-in mag lens holder
- Replaceable lithium batteries (included) with low battery indicator
- Meets ANSI standard Z87.1 and is compliant with CSA standard Z94.3



JACKSON
SAFETY Group

Model No.	Mfg. No.	Description	Price /Each
SAN169	14989	HSL100 w/NexGen*	604.26
TTT395	20497	HLX100 12 w/NexGen*	654.37
NT546	16634	HSL100 Hellraiser w/NexGen*	637.70
TTT943	16622	Cartridge Only	787.25

W50 MASTER 3N1™ VARIABLE ADF WELDING HELMETS

- Variable shade 9-12, sensitivity and delay adjustments
- Technology allows unit to detect welds less than 5 amps
- Solar assisted with two independent sensors
- Versatile 3N1™ built-in functions: Weld, torch, grind
- Manual On/Off
- Requires 2 AAA batteries included
- Low battery indicator
- Built-in mag lens holder
- Meets ANSI standard Z87.1

Model No. SED426
Mfg. No 14991
Price/Each \$668.00



370 SERIES REPLACEMENT HEADGEAR

- The removable comfort cradle is a pivoting head pad that conforms to any head size
- 3-position slider adjusts distance of the lens from your eyes for precise vision
- Crown strap adjustment allows the headgear to be raised or lowered for maximum comfort and performance
- Sweatband helps absorb perspiration
- Vertical lock-in eliminates helmet creeping
- Compatible with *Halox*®, *HSL*®, *Nitro*®, *NexGen*®, *Master 3N1*®, *Solera*®, *Truesight*® and *Boss 3N1*® welding helmets

Model No. SEA270
Mfg. No. 20696
Price/Each \$28.37



JACKSON
SAFETY Group

JACKSON
SAFETY Group

WELDING SAFETY

W50 BOSS* 3N1™ VARIABLE ADF WELDING HELMETS

- Variable shade 9-12, sensitivity and delay adjustments
- Technology allows unit to detect welds less than 5 amps
- Versatile 3N1™ built-in functions: Weld, torch, grind
- Solar assisted with two independent sensors
- Amber view lens allows for enhanced clarity of weld puddle
- Auto On/Auto Off
- Requires 2 AAA batteries (included)
- Low battery indicator
- Built-in mag lens holder
- Meets ANSI standard Z87.1 and compliant with CSA standard Z94.3



JACKSON
SAFETY GROUP

Model No.	Mfg. No.	Description	Price /Each
TTT938	20658	HS100 Gun Metal w/Boss*	604.70
TTT937	20659	GKX100 Heavy metal w/Boss*	539.26
TTT307	21277	HLX12 w/Boss*	2.43
TTT939	20657	Boss* EQC Cartridge Only	660.35

W40 ELEMENT ADF WELDING HELMETS

- Lightweight shell weighs only 6 oz. and is designed to prevent hot embers from sitting on it
- Available in two different auto-darkening filters: ADF fixed shade 10 and ADF variable shade 9-13
- 2 independent arc sensors
- Lens speed less than 0.005 microseconds with adjustable delay of 0.1-0.9 seconds
- Solar powered unit
- Meets ANSI Z87.1
- Compliant with CSA standard Z94.3



JACKSON
SAFETY GROUP

Model No.	Mfg. No.	Description	Price /Each
SEA770	3023294	Welding Helmet-Fixed Shade 10 ADF, 90X110 mm	95.96
SEA769	3023293	Welding Helmet-Variable ADF	143.50
SEA772	3023375	Fixed Shade 10 Lens ADF Kit - Includes 5 Front and 2 Rear Protective Plates	9.77
SEA771	3023295	Variable ADF Lens Kit - Includes 5 Front and 2 Rear Protective Plates	8.79

W40 NITRO* VARIABLE ADF WELDING HELMETS

- Offers welders outstanding features at an economical price point
- Variable shade 9-13, sensitivity and delay adjustments
- Lightweight – Only weighs 1 pound fully assembled
- Three independent sensors
- Solar powered
- Meets ANSI Z87.1 and compliant with CSA standard Z94.3



JACKSON
SAFETY GROUP

Model No.	Mfg. No.	Description	Price /Each
SAS083	21931	Blue Nitro*	207.06
SAS084	21947	Replacement ADF Cartridge	147.90
SEA270	20696	370 Series Headgear	28.37
SEA573	22603	Kit; Includes 5 Safety Plates, Inner Plates	9.32
SAS086	21119	24 pc Back Cover Plate, 5/Bag	22.70

W40 PROFESSIONAL VARIABLE ADF WELDING HELMETS

- Variable shade 9-12, sensitivity and delay adjustments
- Technology allows unit to detect welds less than 5 amps
- Battery powered, solar assisted with two independent sensors
- Requires 2 AAA batteries, included
- Built-in mag lens holder
- Meets ANSI standard Z87.1, compliant with CSA standard Z94.3



Model No. PB238
Mfg. No. 14988
Price/Each \$375.91

JACKSON
SAFETY GROUP

W30 PROFESSIONAL FIXED SHADE 10 ADF WELDING HELMETS

- Fixed shade 10 lens with sensitivity and delay settings
- Technology allows unit to detect welds less than 5 amps
- Two independent sensors
- Battery powered, solar assisted
- Requires 2 AAA batteries, included
- Built-in mag lens holder
- Meets ANSI standard Z87.1

Model No. SAN170
Mfg. No. 14993
Price/Each \$335.55

JACKSON
SAFETY GROUP



W30 SOLERA™ FIXED SHADE 11 ADF WELDING HELMETS

- Features an economical lens for the consumer welder
- Fixed shade 11 lens with one centered sensor
- Solar powered
- Meets ANSI standard Z87.1



JACKSON
SAFETY GROUP

Model No.	Mfg. No.	Description	Price /Each
141-300900	16376	Solera™ ADF Cartridge	155.20
SED429	30620	HSL 1 Welding Helmet with Solera™ ADF fixed shade 11	300.41

ELEMENT REPLACEMENT HEADGEARS

- Teeth are automatically disengaged during adjustment

Model No. SED982
Mfg. No. 23442
Price/Each \$17.72

JACKSON
SAFETY GROUP



WELDING HELMETS

- Lightweight design with ratchet headgear
- Comes complete with shade 10 lens
- Choice of 2" x 4 1/4" flip front or 4 1/2" x 5 1/4" wide vision fixed front

NT645



NT687



Model No.	Description	Window Size"	Price /Each
NT645	Flip Front	2 x 4 1/4	15.55
NT687	Fixed Front	4 1/2 x 5 1/4	19.50

W20 860P LEATHER WELDING HELMETS

- Ideal for use in confined spaces
- Tough, pliable, breathable leather covering
- Flip-front glass holder, 2" x 4 1/4"
- Includes adjustable headgear



Model No.	Mfg. No.	Price /Each
141-1120	14531	153.60

W10 PASSIVE WELDING HELMETS

- Narrow shell design is perfect for work in tight space
- Extended front increases throat protection against sparks, slag and other physical hazards
- Comes standard with cover plate and shade 10 polycarbonate filter plate
- Meets ANSI standard Z87.1, CSA standard Z94.3 approved

SD617



PB193



Model No.	Mfg. No.	Description	Colour	Price /Each
HSL-2 HELMETS - 2" X 4 1/2"				
PB193	14982	Flip Front	Black	67.71
SD618	14983	Flip Front	Blue	75.61
HSL-100 HELMETS - 4 1/2" X 5 1/4"				
SD617	14975	Fixed Front	Black	76.97
SAN172	14976	Fixed Front	Blue	65.16

W20 H500 FIBERGLASS HAND SHIELDS

- For quick inspection, providing guidance and monitoring robotic welds
- Designed for high-heat applications
- Features fiberglass helmet with injection-molded plastic handle
- Must purchase a filter prior to use
- Meets ANSI standard Z87.1



SAN181



Model No.	Mfg. No.	Description	Colour	Price /Each
SAN181*	14967	Fixed Front	Black	71.22

*Lens plates sold separately



WELDING SAFETY

FMX™ WELDING HELMETS

- Professional, full-wrap, heat and scratch-resistant graphics
- Packaging reflecting FMX™ quality and performance
- Superior ADF lens
- Proven "3-C" headgear for all-day comfort
- Lightest-weight, full-size helmet available
- Limited lifetime warranty on helmet shell and headgear
- Meets ANSI and CSA standards
- 2-year warranty on ADF lens

FIBRE-METAL

by Honeywell



SAQ809

SAQ810

SAQ811

Model No.	Mfg. No.	Description	Price/Each
SAQ809	2999BV913X1	FMX™ Helmet with "Flame" Graphics	407.96
SAQ810	2999BV913X2	FMX™ Helmet with "Demon" Graphics	407.96
SAQ811	2999BV913X3	FMX™ Helmet with "Wire Burner" Graphics	407.96

TIGERHOOD® FUTURA THERMOPLASTIC WELDING HELMETS

- Innovative, streamlined design combined with an exceptionally high performance material
- Features an easy-to-use front loading glass holder
- Extremely lightweight for comfort, sturdy and durable for extended service life
- Comes with shade 10 filter and polycarbonate safety plate

FIBRE-METAL

by Honeywell



SAG783

SAS117

SAS118

Model No.	Mfg. No.	Colour	Window Size"	Price /Each
STATIONARY FRONT				
SAG783	2001-BLACK	Black	2 x 4 1/4	65.44
SAS116	2001-SRCSA	Silver	2 x 4 1/4	68.17
LIFT FRONT				
SAG784	2006-BLACK	Black	2 x 4 1/4	88.08
SAS117	2006-SRCSA	Silver	2 x 4 1/4	91.75
WIDE VISION				
SAG785	2090-BLACK	Black	4 1/2 x 5 1/4	73.20
SAS118	2090-SRCSA	Silver	4 1/2 x 5 1/4	76.25

TIGERHOOD® CLASSIC THERMOPLASTIC WELDING HELMETS

- Molded from Noryl, for superior performance
- Unique design provides extended throat protection, while blocking fumes and smoke from the face
- Maintains high performance level across a wide spectrum of welding processes and working conditions
- Molded-in colours eliminate chipping, peeling and fading
- Comes with shade 10 filter and polycarbonate safety plate

SAG787

FIBRE-METAL

by Honeywell



SR856

SAS105

Model No.	Mfg. No.	Description	Window Size"	Price /Each
STATIONARY FRONT				
SAG786	910-GREY	Passive Lens	2 x 4 1/4	65.44
LIFT FRONT				
SR856	906-GREY	Passive Lens	2 x 4 1/4	88.08
WIDE VISION				
SAG787	990-GREY	Passive Lens	4 1/2 x 5 1/4	73.20
SAS105	999-GREY	Variable Shade, Auto-Darkening	4 1/2 x 5 1/4	538.05

WELDING ACCESSORIES

REPLACEMENT HEADGEAR

For Fibre-Metal® welding helmets (except Tigerhood® Ultralite). "Free-floating" arms balance and stabilise, while minimising pressure points. Strip-proof ratchet adjustable knob.

Model No. SAG808 Mfg. No. 3-C
Price/Each \$29.36

SPEEDY-LOOP

Provides easy on/off welding helmet and faceshield mounting on protective caps. Fully adjustable to fit Fibre-Metal® caps and major competitive brands.

Model No. SAG810 Mfg. No. 5000
Price/Each \$26.24



QUICK-LOK SYSTEM

Provides more permanent mounting for longer term or high activity applications. Fibre-Metal® welding helmets and faceshields equipped with Quick-Lok mounting cups, can be mounted on to Fibre-Metal® protective caps that are equipped with Quick-Lok mounting blocks.

Model No. SM865
Mfg. No. 4000 Price/Each \$25.24

QUICK-LOK MOUNTING BLADES

For quick and easy mounting of Fibre-Metal® Quick-Lok welding helmets on protective caps with mounting slots.

Model No. SAG811
Mfg. No. 6000 Price/Each \$8.04



FIBRE-METAL

by Honeywell

FILTER PLATE LENSES

- Provides ultimate protection against ultraviolet and infrared rays present during the welding process
- Attenuates varying proportions of ultraviolet, visible and infrared rays in conformance with industry standards
- Precision ground and edged to allow a proper and safe fit
- Optically correct and precisely shaded
- Hardened glass

Model No.	Mfg. No.	Shade	Price /Each
2" X 4 1/4"			
SAN061	FS-1H-4	4	0.93
SAN062	FS-1H-5	5	0.93
SAN063	FS-1H-6	6	0.93
SAN064	FS-1H-7	7	0.93
SAN065	FS-1H-8	8	0.93
SAN066	FS-1H-9	9	0.93
SAN067	FS-1H-10	10	0.93
SAN068	FS-1H-11	11	0.93
SAN069	FS-1H-12	12	0.93
SAN070	FS-1H-13	13	0.93
SAN071	FS-1H-14	14	0.93
4 1/2" X 5 1/4"			
SAN073	FS-SH-5	5	2.37
SAN074	FS-SH-6	6	2.37
SAN075	FS-SH-7	7	2.37
SAN076	FS-SH-8	8	2.37
SAN077	FS-SH-9	9	2.37
SAN078	FS-SH-10	10	2.37
SAN079	FS-SH-11	11	2.37
SAN080	FS-SH-12	12	2.37
SAN081	FS-SH-13	13	2.37
SAN082	FS-SH-14	14	2.37
50 MM			
SAN083	FL-SH-4	4	3.09
SAN084	FL-SH-5	5	3.09



CLEAR COVER LENSES

- Polycarbonate lenses are for eye protection against light impact such as sparks and small particles
- Cast resin lenses are also for eye protection and are more resistant to heat, scratching and pitting
- Clear glass lenses are not impact resistant and are only for use against spatter



NT601



NT602



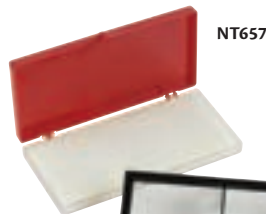
Model No.	Mfg. No.	Size	Price /Each
POLYCARBONATE			
NT601	-	2" x 4"	0.42
NT602	-	4" x 5"	0.98
CAST RESIN			
SAN055	PP-2	2" x 4"	0.59
SAN056	PP-4	4" x 5"	1.54
SAN057	PL-5	50 mm	2.16
CLEAR GLASS			
SAN058	GP-2	2" x 4"	0.40
SAN059	GP-4	4" x 5"	0.66

MAGNIFYING LENSES

- Makes a welder's work easier and more comfortable
- Useful for precision welding jobs
- Offers optically balanced magnifications in 0.25 increments
- 2" x 4 1/4"



Model No.	Diopter Strength	Price /Each
GLASS		
NT652	0.75	4.55
NT653	1.00	4.55
NT654	1.25	4.55
NT905	1.50	4.55
NT655	1.75	4.55
NT656	2.00	4.55
NT657	2.25	4.55
NT658	2.50	4.55
NT659	3.00	4.55
PLASTIC		
SAN095	1.00	7.18
SAN096	1.25	7.18
SAN097	1.50	7.18
SAN098	1.75	7.18
SAN099	2.00	7.18
SAN100	2.25	7.18
SAN101	2.50	7.18



NT657



SAN100



OMNI-VIEW® GOLD FILTER PLATES

- Allows welder to see more in clearer and natural colours
- Gold coating reflects harmful infrared generated by an arc, keeping eyes cooler and more comfortable
- Made of breakage resistant polycarbonate



SAN108



SAN120

Model No.	Mfg. No.	Shade	Price /Each
2" X 4 1/4"			
SAN106	FP2G-8	8	9.18
SAN107	FP2G-9	9	9.18
SAN108	FP2G-10	10	9.18
SAN109	FP2G-11	11	9.18
SAN110	FP2G-12	12	9.18
4 1/2" X 5 1/4"			
SAN117	FP4G-8	8	22.61
SAN118	FP4G-9	9	22.61
SAN119	FP4G-10	10	22.61
SAN120	FP4G-11	11	22.61
SAN121	FP4G-12	12	22.61

WELDING SAFETY

MILLER®/HOBART® COMPATIBLE AUTO-CHANGE COVER LENSES

- Replacement lenses provide an effective and cost efficient method of protecting investment
- Made of 100% impact-resistant polycarbonate



JACKSON SAFETY* AUTO-CHANGE COVER LENSES



Picture for reference only.
Not all sizes available.

JACKSON
SAFETY

Model No.	Mfg No.	Type of Lens	Qty /Package	For use with Helmets	Price /Each
TTU323	231410/770237	Inside/Outside	5	FS/XL/Xli/Xlix/Performance	8.00
TTU324	770240	Outside	5	XL/Xli	10.33
TTU325	770241	Outside	5	Xlix	10.33
TTU326	216327	Inside	5	Elite/Digital Elite	8.00
TTU327	216326	Outside	5	Elite/Digital Elite	11.16
TTU328	231410	Inside	5	Pro-Hobby	8.16
TTU329	231411	Outside	5	Pro-Hoby	10.49
TTU330	231921	Outside	5	Performance	10.49

Model No.	Mfg No.	Type of lens	Qty /Package	Four Use with Helmets	Price /Each
138-9063	16000	Inside	1	Nex Gen*	2.91
SAS086	21119	Inside	5	Nitro* 2-Sensor	22.70
SAS085	20755	(2 sensors - purchased pre-2010)	5	Nitro* 2-Sensor	2.36
		Outside			
SEA573	22603	(2 sensors - purchased pre-2010)	2	Nitro* 3-Sensor	9.32
		Inside and Outside			
SEA771	29127	Inside and Outside	2	Element*	8.79
		Outside	5		

Call us for all your



Welding & Metalworking requirements!

OPTREL® AUTO-CHANGE COVER LENSES

- Scratch resistant and distortion free polycarbonate with 99.9% UV protection.



optrel®

Model No.	Mfg No.	Type of Lens	Qty /Package	For Use with Helmets	Price /Each
SAM900	K5811	Outside	10	E600 Series	31.62
SAM901	K5812	Inside	5	E600 Series	9.46
SAM897	K5910	Outside	2	E600 Series	14.63
SAM898	K5911	Outside	5	E600 Series	34.68
TTU059	K25102A	Outside	2	P250/P350	9.65
TTU060	K25112A	Inside	2	P250/P350	3.64
TTU061	K25122A	Intermediate	2	P250/P350	7.34
TTU060	K25112A	Inside	2	P250/P350	3.64
TTU061	k25122A	Intermediate	2	P250/P350	7.34

FLEXIBLE FRAME GOGGLES

- Soft PVC frame seals out light leaks
- Choice of 2" x 4 1/4" fixed front or flip front design
- Comes complete with shade 5 lens



Model No.	Description	Price /Each
NT646	Fixed Front	4.80
NT647	Flip Front	6.30

CUP GOGGLES

- Rigid 2" (50 mm) round lens cup goggle
- Comes complete with shade 5 lens



Model No.	Description	Price /Each
NT648	Cup Goggles	4.85

V-MAXX™ SAFETY GOGGLES

- Sport wraparound style
- Optically correct lens provides excellent field of vision
- OTG goggle; fits over most prescription lenses
- Certified to CSA standard Z94.3



Model No.	Mfg. No.	Description	Lens Tint	Price /Each
SAI907*	11250830	Indirect Vent, Black Body	Shade 3.0	11.74
SAI908*	11250850	Indirect Vent, Black Body	Shade 5.0	13.87
SAI905*	11250800	Direct vent, Red Headband	Clear	5.34
SAI906	11250810	Indirect Vent, Black Neoprene Headband	Clear	6.29
SAI909	11250860	Goggle covers, 10/pkg	-	6.41

* Elastic Headband

V80 WILDCAT* GOGGLES

- Extreme heat resistance, will not melt, drip or ignite at 350°F for five minutes
- Adjustable side vents to help increase airflow
- Fits naturally to the contour of your face
- Lightweight and comfortable with a pivot headband that allows for optimal placement
- Meets ANSI standard Z87.1+, compliant with CSA standard Z94.3



Model No.	Mfg. No.	Lens Tint	Price /Each
TTT946	20525	Clear Anti-Fog	19.35
TTT947	20526	Smoke Anti-Fog	20.10
TTT948	20527	Amber Anti-Fog	30.38
TTT949	20528	Shade 3 Anti-Fog	28.70
TTT950	20529	Shade 5 Anti-Fog	28.70

V90 SHIELD* GOGGLES

- Features the Mono-goggle* XTR* with indirect ventilation and a polycarbonate shield for full face protection
- Shield detaches from the goggles
- Curved face shield conforms to shape of face offering added protection
- Can be used over most prescription eyeglasses
- Shade 3.0 and 5.0 models feature flame retardant headband
- Meets ANSI impact standard Z87.1+



Model No.	Mfg. No.	Lens Tint	Price /Each
TTT954	18629	Clear	29.44
TTT955	18631	Shade 3.0	38.53
TTT956	18633	Shade 5.0	39.61

WELDING CLOTHING & GLOVES

DEERSKIN TIG WELDING GLOVES

- Premium split deerskin leather construction
- Designed for precision welding applications
- Superior fit and dexterity
- Double thumb strap extends wear life
- 4" gauntlet cuff provides superior protection
- Exceptionally soft finish



Case Qty: 120

Priced per Pair

Model No.	Size	Price /Each
SM597	Small	9.85
SM598	Medium	10.20
SM599	Large	10.50
SM600	X-Large	10.95
SAP293	2X-Large	11.95

PIGSKIN TIG WELDING GLOVES

- Premium grain pigskin leather construction
- Designed for precision welding applications
- Excellent fit and dexterity
- Exceptional durability
- Double thumb strap extends wear life
- 4" gauntlet cuff provides superior protection



Case Qty: 120

Priced per Pair

Model No.	Size	Price /Each
SAN639	Small	6.90
SAN640	Medium	7.15
SAN641	Large	7.40
SAN642	X-Large	7.70

WELDER'S SOFTOUCH™ PIGSKIN TIG GLOVES

- Seamless index finger construction provides unobstructed control over small diameter welding rods and ultra light TIG torches
- Sewn with DuPont® Kevlar® thread for higher seam strength and seam flame resistance
- Extra long cuff offers wrist and forearm protection against heat
- 4" split pigskin cuff, seamless index finger
- Sold per pair



Case Qty: 72

Priced per Pair

Model No.	Size	Price /Each
610-2008M	Medium	14.65
610-2008	Large	14.95

WELDER'S STANDARD QUALITY GLOVES

- Rugged split cowhide leather construction
- Excellent abrasion resistance
- Full thermal cotton lining provides added heat protection
- Weltd seams at all critical points



Case Qty: 72

SAO130

Priced per Pair

Model No.	Description	Size	Price /Each
SAO130	Gloves	Large	4.40
SAO131	One-Finger Mitt	Large	4.40

WELDER'S SUPERIOR QUALITY GLOVES

- Top split cowhide leather construction
- Excellent abrasion resistance
- Double thumb strap extends wear life
- Full thermal cotton lining provides added heat protection
- Weltd seams at all critical points



SAO129

Priced per Pair

Model No.	Description	Size	Price /Each
SAO128	Gloves	Large	5.50
SAP352	Gloves	X-Large	6.05
SAO129	One-Finger Mitt	Large	5.50

WELDER'S COMFOFLEX™ PEARL DEERSKIN

- 14 1/2" incredibly soft, genuine North American deer hide
- Flame retardant, air cushioned, sweat absorbent lining
- A thick pliable layer of protection that easily molds to your hand for added comfort



Case Qty: 40

Priced per Pair

Model No.	Size	Price /Each
610-2850	Large	39.15

WELDING CLOTHING & GLOVES

WELDER'S PREMIUM QUALITY FOAM LINED GLOVES

- Premium split cowhide leather construction
- Excellent abrasion resistance
- Full reinforced thumb patch extends wear life
- Cotton covered foam lining provides superior heat protection
- Welded seams at all critical points
- Sewn with Kevlar® thread to avoid burning



Case Qty: 72

Priced per Pair

Model No.	Price /Each
SAN277	6.90

WELDER'S COMFOFLEX™ PREMIUM QUALITY GLOVES

- Heat and flame resistant shoulder split cowhide
- Fully sock lined for added comfort
- Kevlar® stitched welted seams
- 13 1/2" long with reinforced thumb



Case Qty: 72

Priced per Pair

Model No.	Size	Price /Each
610-0328	Large	9.90

WELDER'S PREMIUM QUALITY GLOVES

- Premium split cowhide leather construction
- Excellent abrasion resistance
- Double thumb strap extends wear life
- Full thermal cotton lining provides added heat-protection
- Welded seams at all critical points
- Sewn with Kevlar® thread to avoid burning



Case Qty: 72

Priced per Pair

Model No.	Price /Each
SAN635	5.90

WELDER'S COMFOFLEX™ PREMIUM LINED GLOVES

- Flame retardant, air cushioned, sweat absorbent lining
- Provides incomparable comfort and extra insulation
- 14" buck tan, heat resistant side split cowhide
- Kevlar® thread



Case Qty: 72

Priced per Pair

Model No.	Description	Price /Each
610-2000	Welding Gloves	16.70
610-2178	One-Finger Mitts	17.00
610-2076	Pigskin Gloves	19.15

PIPELINER WELDING GLOVES

- Premium split cowhide leather exterior construction
- Full grain cowhide leather interior provides incomparable comfort
- Protective leather patch on back of left hand
- Excellent abrasion resistance
- Sewn with Kevlar® thread to avoid burning
- Reinforced thumb extends wear life



Case Qty: 72

Priced per Pair

Model No.	Size	Price /Each
SAV008	Large	14.40
SEB930	X-Large	15.80

FABRICATOR GLOVES

- High-dexterity glove designed exclusively for intricate fabrication of sheet metal, welding and bodywork
- 100% genuine leather construction
- Three heat-resistant cowhide panels on heel, inside, and outer edge of palm
- Fingertip reinforcements on index, middle and ring fingers
- Dual-layer leather knuckle band
- Plush, suede deerskin top and fingers
- Stretch Kevlar® protective wedge insert
- Oversize, easy-entry, hook and loop closure
- Colour Black/Tan
- CE approved



Case Qty: 120

Priced per Pair

Model No.	Mfg. No.	Size	Price /Each
SAN869	MFG-05-008	Small (8)	53.84
SAN870	MFG-05-009	Medium (9)	53.84
SAN871	MFG-05-010	Large (10)	53.84
SAN872	MFG-05-011	X-Large (11)	53.84
SAN873	MFG-05-012	2X-Large (12)	53.84

R 30127E

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1077

WELDING CLOTHING & GLOVES

WELDER'S BISON TIG GLOVES

- Premium grain bison leather construction
- Bison leather is more form fitting and has a greater resistance to heat and flame than other leathers
- Unparalleled fit and dexterity with exceptional durability
- Kevlar® stitching improves seam strength and reduces seam burnout
- Weltd seams and straight thumb for expert control
- 4" gauntlet cuff provides superior protection
- Designed for precision welding applications



Case Qty: 72

Priced per Pair

Model No.	Size	Price /Each
TTU540	Medium	24.95
TTU541	Large	24.95
TTU542	X-Large	24.95

HEAVY-DUTY GENERAL PURPOSE BISON WELDER'S GLOVES

- Premium grain bison leather construction with split bison leather palm
- Bison leather is more form fitting and has a greater resistance to heat and flame than other leathers
- Unlined palm for increased comfort and dexterity
- Comfoflex® lining on back of hand provides superior heat and sweat absorption
- Fully weltd Kevlar® stitched seams improves seam strength and reduces seam burnout
- 6" gauntlet cuff for increased protection
- Reinforced thumb extends wear life



Case Qty: 72

Priced per Pair

Model No.	Size	Price /Each
TTU543	Medium	36.55
TTU544	Large	36.55
TTU545	X-Large	36.55

WELDER'S FITTER GLOVES

This glove fills a gap between a welder's and a general purpose glove.

- High quality Canadian-made cowhide leather construction, free of defects and resistant to cracking
- Grain leather palm for greater flexibility
- Split leather back with 3" gauntlet cuff provides high temperature resistance
- All seams sewn with Kevlar® thread which increases resistance to contact with heated shards
- Glove is stamped with brand and size for identification



SAK379

SAK380

Case Qty: 120

Priced per Glove

Model No.	Mfg. No.	Description	Size	Price /Each
SAK380	B7CSG-L	Left Glove	Large	12.85
SAK379	B7CSD-L	Right Glove	Large	12.85

WOMENS WELDER'S GLOVES

- High quality Canadian-made cowhide leather construction, free of defects and resistant to cracking
- This glove was conceived based on a woman's hand morphology: it has a narrower cut and longer fingers
- Grain leather palm and index finger
- Elastic back for snug fit
- Split leather back protects well against heat and grain leather palm provides excellent flexibility
- Seams are sewn with Kevlar® thread which increases resistance to contact with heated shards
- 3" cotton gauntlet is more flexible, reduces the glove's weight and moves more freely
- Glove is stamped with brand and size for identification



Case Qty: 120

Priced per Pair

Model No.	Mfg. No.	Price /Each
SAK366	B462M	30.77

HIGH HEAT HAND SHIELDS

- Aluminized PFR rayon reflects 95% radiant heat
- 5-ply DuPont® Kevlar® sewn and split cowhide backing for extra durability
- Leather and elastic strap system
- Sold individually



Case Qty: 144

Priced per Each

Model No.	Price /Each
SE549	8.85

Look for this symbol



for environmentally friendly products!

WELDING CLOTHING & GLOVES

LAVA BROWN LEATHER JACKETS

- Designed to allow complete body movement and freedom
- Heat and flame-resistant leather is made from durable side split cowhide
- Seams are double lockstitched
- Include full-sized pocket and multiple-snap adjustment cuffs
- Roll-up collar stops shooting spatter



Model No.	Size	Chest Measurements"	Price /Each
TTU398	Medium	40-42	108.00
TTU399	Large	44-46	108.00
TTU400	X-Large	48-50	108.00
TTU401	2X-Large	52-54	124.00
TTU402	3X-Large	56-58	134.00
TTU403	5X-Large	64-66	142.00

YELLOWJACKET WELDING JACKETS

COOL PROTECTION, COOL LOOK!

- Superior flame, heat and abrasion-resistant, select cowhide sleeves for heavy-duty protection
- 30" length jacket made of blue 9-oz. Proban FR-7A flame-retardant cotton sateen for safety and cool comfort
- Five-snap closure front minimizes hot shooting spatter from entering
- Inside utility pocket for safety and convenience



Model No.	Size	Chest Measurements"	Price /Each
TTU364	Medium	40-42	53.10
TTU365	Large	44-46	53.10
TTU366	X-Large	48-50	53.10
TTU367	2X-Large	52-54	60.55
TTU368	3X-Large	56-58	65.20
TTU369	5X-Large	64-66	89.95

LAVA BROWN LEATHER ACCESSORIES

- Designed to allow even weight distribution on the user to reduce fatigue
- Heat and flame-resistant leather is made from durable side split cowhide



Model No.	Size	Price /Each
A. SLEEVE		
TTU389	23" L	38.50
B. CAPE SLEEVES		
TTU407	Small	68.55
TTU405	Medium	68.55
TTU406	Large	68.55
TTU408	X-Large	68.55
TTU409	2X-Large	77.10
TTU410	3X-Large	81.80
C. BIBS		
TTU411	14" L	14.35
TTU412	20" L	18.90
D. SPLIT LEG APRONS & CHAPS		
TTU396	42" L	50.15
TTU397	48" L	60.50
TTU404	Chaps	51.30
E. BIB APRONS		
TTU392	24" L	24.45
TTU393	36" L	37.85
TTU394	42" L	42.80
TTU395	48" L	50.45
F. SPATS		
TTU390	6" L	20.75
TTU391	14" L	60.35

GOLDEN BROWN LEATHER JACKETS

- Made of heat and abrasion-resistant select split cowhide
- Sewn with Kevlar® thread for added seam strength
- Roll-up collar with velcro closure and welted shoulder seams
- Reinforced double leather snap panel



Model No.	Size	Chest Measurements"	Price /Each
TTU384	Medium	40-42	65.45
TTU385	Large	44-46	65.45
TTU386	X-Large	48-50	65.45
TTU387	2X-Large	52-54	72.70
TTU388	3X-Large	56-58	81.80

FLAME RETARDANT CLOTHING

- Manufactured from flame-retardant treated cotton sateen
- Will retain its flame-retardant properties for up to 50 normal washings
- Specially-designed underarm sport cut and hemmed collar
- 9-oz. jackets include inside pocket and five snaps
- 9-oz. cape sleeves come with six snap fasteners for bib (sold separately)



Model No.	Size	Chest Measurements"	Price /Each
JACKETS			
TTU370	Medium	40-42	31.80
TTU371	Large	44-46	31.80
TTU372	X-Large	48-50	31.80
TTU373	2X-Large	52-54	35.35
TTU374	3X-Large	56-58	38.36
TTU375	5X-Large	64-66	44.15
CAPE SLEEVES			
TTU377	Medium	40-42	24.25
TTU378	Large	44-46	24.25
TTU379	X-Large	48-50	24.25
TTU380	2X-Large	52-54	26.75
TTU381	3X-Large	56-58	28.95
BIB & SLEEVES			
TTU376	20" Length Bib	-	8.55
TTU382	18" Long Sleeve	-	8.10
TTU383	23" Long Sleeve	-	9.90

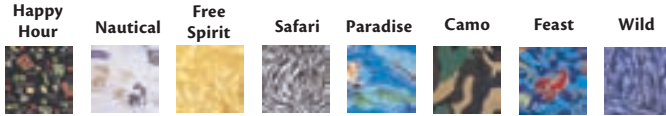
WELDING CLOTHING & GLOVES

WELDER'S CAPS

- Athletic mesh lining to allow sweat vapour to quickly evaporate
- Pre-shrunk and pre-softened lightweight fabric, flame retardant until washed
- Air cushioned front lining for comfort and sweat absorbency
- **Sold per package**

Assorted styles include:

Happy Hour, Nautical, Free Spirit, Safari, Paradise, Camo, Feast and Wild.



Model No.	Size	Qty /Pkg.	Price /Each
ASSORTED			
NT838	7 1/8	12	54.70
NT839	7 1/4	12	54.70
NT840	7 3/8	12	54.70
NT841	7 1/2	12	54.70
NT842	7 5/8	12	54.70
CAMO			
NT843	7 1/8	12	61.15
NT844	7 1/4	12	61.15
NT845	7 3/8	12	61.15
NT846	7 1/2	12	61.15
NT847	7 5/8	12	61.15

WELDER'S DOORAGS

- Athletic mesh lining to allow sweat vapour to quickly evaporate
- Pre-shrunk and pre-softened lightweight fabric, flame retardant until washed
- Air cushioned front lining for comfort and sweat absorbency
- Assorted styles
- One size fits all
- **Sold per package**



Model No.	Assorted Styles	Qty /Pkg.	Price /Each
NT835	Camo, Wild, Safari	12	68.95
NT836	Happy Hour, Feast, Free Spirit	12	65.80
NT837	Authentic Woodland Camo	12	75.95

HEADGEAR PADS & SWEATBANDS

- Field tested to improve helmet grip with maximum perspiration absorption
- Headgear pads are flame retardant for added safety
- Made of an absorbent air cushioned layer lined with 10% fleece cotton
- Velcro fastening system is designed to fit all major brands of headgear
- Sweatbands come with elastic strap
- **Sold per package of two**



Model No.	Description	Price /Each
620-3200V	Suspender Pads for Use w/Hard Hats	3.80
SAM548	Sweatbands	3.90
620-3100V	Non-Suspender Pads for Use w/Welding Helmets	3.80

WELDING KNEE PADS

- Made of fire and heat-resistant leather
- Flexible non-skid cap designed to stand up to the everyday demands of the welding environment
- Ideal for welding as well as high heat applications such as smelters and foundries
- **Sold per pair**

Model No. SM777
Mfg. No. 6991-01Q
Price/Each \$47.21



LEATHER KNEE PADS

- Tough abrasion-resistant leather for maximum protection and soft cushion back for comfort
- Elastic straps with velcro closures ensure a secure fit
- Because of its resistance to heat and fire, this is ideal for welders or any construction application such as concrete work

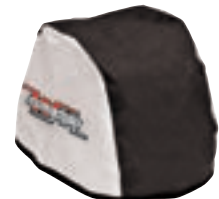
Model No. SAL218
Mfg. No. 6991
Price/Each \$32.61



COTTON WELDER'S BEANIES

- Two colours (green and white)
- One size fits all

Model No. SEE845
Price/Each \$1.57



Call us for all
your Welding &
Metalworking
requirements!



ER70S6 CARBON STEEL WELDING WIRE

- Highest combination of manganese and silicone deoxidizers
- Permits high current welding with CO₂ gas shielding
- Can also be applied with ArCO₂
- Excellent wetting
- Good for out-of-position welding using short circuiting transfer
- Layer/level wound wire
- Certified by CWB to CSA class W48 for ER49S-6
- Certified by AWS to class A5.18 for ER70S6



NT549



TTU049



Sold per Spool

Model No.	Diameter	Spool Wt.	Spools Per Master Box	Price /Each
NT549	0.023"/0.6 mm	2 lbs./0.9 kg	18	7.20
NT550	0.030"/0.8 mm	2 lbs./0.9 kg	18	5.40
NT551	0.035"/0.9 mm	2 lbs./0.9 kg	18	5.30
NT552	0.045"/1.14 mm	2 lbs./0.9 kg	18	5.10
NT553	0.023"/0.6 mm	11 lbs./5 kg	4	31.65
NT554	0.030"/0.8 mm	11 lbs./5 kg	4	22.45
NT555	0.035"/0.9 mm	11 lbs./5 kg	4	21.85
NT556	0.023"/0.6 mm	33 lbs./15 kg	1	80.90
NT557	0.030"/0.8 mm	33 lbs./15 kg	1	55.95
NT560	0.035"/0.9 mm	44 lbs./20 kg	1	68.50
NT561	0.045"/1.14 mm	44 lbs./20 kg	1	65.20

Sold per Drum

Model No.	Diameter	Drum Weight	Qty Per Pallet	Price /Each
TTU049	0.035"/0.9 mm	550 lbs./250 kg	4	810.00
TTU519	0.045"/1.14 mm	550 lbs./250 kg	4	765.00

E71T-1/1M ALL POSITION FLUX-CORED WELDING WIRE

- Gas-shielded carbon steel wire for fabrication of mild and low carbon steel; structural and pressure vessel grades
- All-position wire provides optimum welding performance with argon/carbon dioxide shielding gas but is also formulated to perform very well with 100% CO₂
- Formulated and manufactured to provide consistent chemistry, steady arc, low spatter and an excellent bead appearance



TTU512



Recommended welding position: All positions

Specification Conformance: AWS A5.20, ASME SFA 5.20 E71T-1/1M, CWB W48-06

WELD DEPOSIT CHEMICAL COMPOSITION (%)

	100% CO ₂	75% Ar/25% CO ₂
Carbon	0.04	0.04
Manganese	1.40	1.50
Silicon	0.45	0.50
Phosphorus	0.012	0.012
Sulfur	0.010	0.010
Iron	remainder	remainder

MECHANICAL PROPERTIES – AWS A5.20 TEST PROCEDURE

	100% CO ₂	75% Ar/25% CO ₂
Yield Strength (MPa)	470	500
Tensile Strength (MPa)	565	600
Elongation (%)	28	28
Charpy V-Notch (Joules)		
@ -20°C	96	100
@ -30°C	78	80

Sold per Spool

Model No.	Diameter"	Wt. lbs.	Price /Each
TTU536*	0.035	44	118.00
TTU512	0.045	44	108.00
TTU537	0.052	44	104.00
TTU538	1/16	44	104.00

* CWB approval pending

SELF-SHIELDING MILD STEEL FLUX-CORED WELDING WIRE

- Self-shielding—Welds steel without gas
- Gasless steel welding wire for single pass applications
- Excellent for use on thin gauges of galvanized and mild steels



Sold per Spool

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price /Each
TTU700	E71TGS030X2SP	0.030	2	14.73
TTU701	E71TGS035X2SP	0.035	2	13.96
TTU702	E71TGS030X10SP	0.030	10	61.97
TTU703	E71TGS035X10SP	0.035	10	58.02
TTU704	E71TGS030X25SP	0.030	25	162.30
TTU705	E71TGS035X25SP	0.035	25	158.66
TTU706	E71TGS045X25SP	0.045	25	156.50

MILD STEEL STICK ELECTRODES

• Sold per 5-lb. tube

6010

- High cellulose coated electrode designed to provide a smooth stable arc forceful enough to achieve deep penetration into the base metal
- Produce a flat weld bead with coarse ripples and a thin easily removable slag
- May be used in the flat, horizontal, vertical or overhead welding positions

6011

- A versatile, deep penetrating, all-position electrode for steel
- Offer excellent mechanical properties in the welding of mild steels, galvanised and some low alloy steels
- Operate on AC or DCEP

6013

- A general purpose, all-position electrodes for mild steel
- Establishes a smooth, quiet, medium penetrating arc that is readily maintained with minimal spatter loss
- Slag lifts easily, revealing a finely rippled bead contour
- Ideally suited for general purpose welding, even with small AC power sources having low open-circuit voltage
- Operates on AC, DCEN or DCEP

7014

- An all position electrode for mild and low alloy steels
- Iron powder covering content yields a high deposition rate in all positions
- Particularly advantageous when poor fit-up exists
- Operates on AC, DCEN or DCEP

7018

- A high deposition electrode for low and medium carbon steels
- An efficient, all-position, iron powder, low hydrogen type electrode
- Exhibits excellent mechanical properties, crack resistant, and X-ray quality welds
- Operates on AC or DCEP



36" MILD STEEL CUT LENGTH TIG RODS

• Sold per 10-lb. tube

ER70S-2

This premium quality TIG rod gives welds of the highest quality, even on rust or dirty surfaces due to the deoxidising agents in the wire.

- Can also be used for pipe, plate, and sheet applications where structural integrity is a primary consideration
- AWS A5.18-79

R45

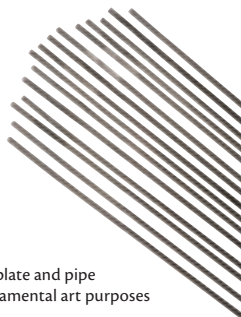
General purpose mild steel rod for TIG or gas welding.

- A general purpose rod used for welding low-carbon sheet, plate and pipe
- Widely used for automotive repair work and is ideal for ornamental art purposes
- AWS A5.2-80

R60

Recommended for gas or TIG welding plate, sheet, pipe, castings, or structural shapes.

- Produces welds of a higher tensile strength than RG45
- AWS A5.2-80



Sold per Tube

Model No.	Mfg. No.	Dia."	Wt. lbs	Price /Each
ER70S-2				
TTU722	E70S2035X36T	0.035	10	52.03
TTU723	E70S2045X36T	0.045	10	46.99
TTU724	E70S2116X36T	1/16	10	46.06
TTU725	E70S2332X36T	3/32	10	44.71
TTU726	E70S218X36T	1/8	10	44.36
TTU727	E70S2532X36T	5/32	10	44.08
R45				
TTU728	R45116X36T	1/16	10	26.97
TTU729	R45332X36T	3/32	10	26.20
TTU730	R4518X36T	1/8	10	25.71
TTU731	R45532X36T	5/32	10	25.55
TTU732	R45316X36T	3/16	10	25.55
R60				
TTU733	R60116X36T	1/16	10	34.72
TTU734	R60332X36T	3/32	10	33.75
TTU735	R6018X36T	1/8	10	33.19
TTU736	R60532X36T	5/32	10	33.00
TTU737	R60316X36T	3/16	10	33.00



Sold per Tube

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price /Each
6010				
TTU707	6010332E5	3/32	5	18.67
TTU708	601018E5	1/8	5	18.09
TTU709	6010532E5	5/32	5	18.09
6011				
TTU710	6011332E5	3/32	5	17.51
TTU711	601118E5	1/8	5	17.07
TTU712	6011532E5	5/32	5	16.93
6013				
TTU713	6013332E5	3/32	5	13.15
TTU714	601318E5	1/8	5	12.87
TTU715	6013532E5	5/32	5	12.73
7014				
TTU716	7014332E5	3/32	5	15.63
TTU717	701418E5	1/8	5	15.33
TTU718	7014532E5	5/32	5	15.19
7018				
TTU719	7018332E5	3/32	5	15.05
TTU720	701818E5	1/8	5	14.61
TTU721	7018532E5	5/32	5	14.47

MILD STEEL STICK ELECTRODES – CWB APPROVED

FLEETWELD® 35 - E6011

- Fill freeze, out-of-position mild steel stick electrodes
- A proven performer for sheet metal welding applications and AC pipe welding
- A great electrode to use on jobs where the steel isn't clean
- AC DC +/-



Sold per Tube

Model No.	Mfg. No.	Diameter"	Wt. kg	Price/Each
TTU006	EDS11006	3/32	4 (8.8 lbs.)	34.40
TTU007	EDS11007	1/8	5 (11 lbs.)	35.40
TTU008	EDS11008	5/32	5 (11 lbs.)	34.50

FLEETWELD® 37 - E6013

- Fill freeze, high speed, mild stick electrodes
- An all-position electrode for low amperage welding on sheet metal, especially in applications where appearance is important
- Ideal for jobs involving irregular or short welds that require a change in positions
- AC DC +/-



TTU010

Sold per Tube

Model No.	Mfg. No.	Diameter"	Wt. kg	Price/Each
TTU009	EDS11213	3/32	4 (8.8 lbs.)	35.00
TTU010	EDS11011	1/8	5 (11 lbs.)	35.40
TTU011	EDS11012	5/32	5 (11 lbs.)	33.70

FLEETWELD® 47 - E7014

- Fill freeze, high speed, and mild stick electrodes
- Features high deposition rates for fast performance
- Ideal for sheet metal lap joints and fillet welds, general purpose plate welding and maintenance jobs
- AC DC +/-

Sold per Tube

Model No.	Mfg. No.	Diameter"	Wt. kg	Price/Each
TTU012	EDS11016	3/32	4 (8.8 lbs.)	35.00
TTU013	EDS11017	1/8	5 (11 lbs.)	35.40
TTU014	EDS11018	5/32	5 (11 lbs.)	33.40

JETWELD® LH-70 - E7018

- Low hydrogen, mild steel stick electrodes
- Ideal for welding on thick sections and restraining joints when cracking is an issue, as well as hard-to-weld steels
- DC+ AC

Sold per Tube

Model No.	Mfg. No.	Diameter"	Wt. kg	Price/Each
TTU015	EDS11041	3/32	4 (8.8 lbs.)	32.30
TTU016	EDS11042	1/8	5 (11 lbs.)	33.30
TTU017	EDS11043	5/32	5 (11 lbs.)	32.30

ER308L, ER309L & ER316L STAINLESS STEEL WELDING WIRE

- Stainless steel spooled wires and cut lengths are precisely produced to conform to the requirements of AWS A5.9
- Manufactured to exacting standards with particular attention given to cleanliness, concentricity and helix of the finished product



Sold per Spool

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price /Each
ER308L SPOOLED WIRE				
TTU760	308L025X2SP	0.025	2	24.25
TTU751	308L025X10SP	0.025	10	110.32
TTU738	308L025X25SP	0.025	25	216.14
TTU761	308L030X2SP	0.030	2	21.81
TTU752	308L030X10SP	0.030	10	100.01
TTU739	308L030X25SP	0.030	25	201.93
TTU762	308L035X2SP	0.035	2	20.44
TTU753	308L035X10SP	0.035	10	94.37
TTU740	308L035X25SP	0.035	25	196.70
TTU741	308L045X25SP	0.045	25	192.96
TTU742	308L116X25SP	1/16	25	190.73
ER309L SPOOLED WIRE				
TTU754	309L025X10SP	0.025	10	131.30
TTU763	309L030X2SP	0.030	2	25.87
TTU755	309L030X10SP	0.030	10	120.03
TTU743	309L030X25SP	0.030	25	250.51
TTU764	309L035X2SP	0.035	2	24.43
TTU756	309L035X10SP	0.035	10	114.39
TTU744	309L035X25SP	0.035	25	244.54
TTU745	309L045X25SP	0.045	25	240.04
TTU746	309L116X25SP	1/16	25	237.81
ER316L SPOOLED WIRE				
TTU765	316L025X2SP	0.025	2	28.89
TTU757	316L025X10SP	0.025	10	133.48
TTU766	316L030X2SP	0.030	2	26.27
TTU758	316L030X10SP	0.030	10	122.21
TTU747	316L030X25SP	0.030	25	255.00
TTU767	316L035X2SP	0.035	2	24.87
TTU759	316L035X10SP	0.035	10	116.59
TTU748	316L035X25SP	0.035	25	249.77
TTU749	316L045X25SP	0.045	25	245.29
TTU750	316L116X25SP	1/16	25	243.03

36" STAINLESS STEEL CUT LENGTH TIG RODS

- 308L** - For joining 304 and 304L and other 18-8 stainless steels
- 309L** - For 309 stainless steels and joining carbon steels or low alloy steels to stainless steels
- 316L** - For joining 316L stainless steels
- Sold per 10-lb. tube**



Sold per Tube

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price /Each
308L				
TTU768	308L030X36T	0.030	10	105.33
TTU769	308L035X36T	0.035	10	100.22
TTU770	308L045X36T	0.045	10	94.51
TTU771	308L116X36T	1/16	10	76.76
TTU772	308L332X36T	3/32	10	72.23
TTU773	308L18X36T	1/8	10	70.14
TTU774	308L532X36T	5/32	10	70.14
TTU775	308L316X36T	3/16	10	70.14
309L				
TTU776	309L035X36T	0.035	10	119.17
TTU777	309L045X36T	0.045	10	113.46
TTU778	309L116X36T	1/16	10	95.71
TTU779	309L332X36T	3/32	10	91.18
TTU780	309L18X36T	1/8	10	89.09
TTU781	309L532X36T	5/32	10	89.09
316L				
TTU782	316L030X36T	0.030	10	125.79
TTU783	316L035X36T	0.035	10	120.68
TTU784	316L045X36T	0.045	10	114.97
TTU785	316L116X36T	1/16	10	97.20
TTU786	316L332X36T	3/32	10	92.69
TTU787	316L18X36T	1/8	10	90.60
TTU788	316L532X36T	5/32	10	90.60
TTU789	316L316X36T	3/16	10	90.60

STAINLESS STEEL GAS SHIELD FLUX-CORED WIRE



Precisely formulated for all-position versatility with a smooth arc, good wetting and overall operator appeal. Products conform to AWS Specification A5.22.

308LT1-1

Most frequently used for base metals of similar composition such as AISI Types 301, 302, 304, 305 and 308.

309LT1-1

Used for welding similar alloys in wrought or cast form; occasionally, to weld Type 304 base metals when severe corrosion conditions exist; and, at times, welding dissimilar steels.

316LT1-1

Used for welding similar alloys (containing about 2% molybdenum); also for high temperature service applications (the presence of molybdenum provides increased creep resistance at elevated temperatures).



TTU790



TTU793



TTU796

Sold per Spool

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price /Each
308LT1-1				
TTU790	308LT11035X25SP	0.035	25	517.94
TTU791	308LT11045X25SP	0.045	25	383.67
TTU792	308LT11116X25SP	1/16	25	369.15
309LT1-1				
TTU793	309LT11035X25SP	0.035	25	539.72
TTU794	309LT11045X25SP	0.045	25	419.95
TTU795	309LT11116X25SP	1/16	25	401.81
316LT1-1				
TTU796	316LT11035X25SP	0.035	25	550.59
TTU797	316LT11045X25SP	0.045	25	423.59
TTU798	316LT11116X25SP	1/16	25	405.43

STAINLESS STEEL ELECTRODES



- Exactly manufactured to conform to the requirements of AWS5.4
- Sold per 5 or 10-lb. tube**



Sold per Tube

Model No.	Mfg. No.	Dia." x Length"	Wt. lbs.	Price /Each
308L-16				
TTU799	308L16116E	1/16 x 10	5	65.13
TTU800	308L16332E	3/32 x 12	10	82.57
TTU801	308L1618E	1/8 x 14	10	81.10
TTU802	308L16532E	5/32 x 14	10	81.10
TTU803	308L16316E	3/16 x 14	10	81.10
309L-16				
TTU804	309L16332E	3/32 x 12	10	99.87
TTU805	309L1618E	1/8 x 14	10	98.41
TTU806	309L16532E	5/32 x 14	10	98.41
TTU807	309L16316E	3/16 x 14	10	98.41
316L-16				
TTU808	316L16332E	3/32 x 12	10	100.75
TTU809	316L1618E	1/8 x 14	10	99.29
TTU810	316L16532E	5/32 x 14	10	99.29
TTU811	316L16316E	3/16 x 14	10	99.29

ALLOYS

DEOXIDIZED COPPER WELDING WIRE

- Recommended for welding applications where joints of high copper content are involved
- Deoxidized copper contains phosphorus and silicon as de-oxidizing agents which promote sound weld joints
- Produces trouble-free welds that are a good colour match to copper and have good electrical conductivity
- Can be used with inert gas arc and oxyacetylene welding
- Each container has an identification label showing grade, size, weight and heat number
- AWS A5.7, ErCu



Sold per Spool

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price /Each
TTU812	D0C035X30SP	0.035	30	455.39
TTU813	D0C045X30SP	0.045	30	452.65
TTU814	D0C116X30SP	1/16	30	450.81
TTU815	D0C332X30SP	3/32	30	450.81
36" CUT LENGTH				
TTU827	D0C116X36T	1/16	10	150.27
TTU828	D0C332X36T	3/32	10	148.74
TTU829	D0C18X36T	1/8	10	148.74
TTU830	D0C316X36T	3/16	10	148.74

SILICON BRONZE WELDING WIRE

- Used for inert gas arc welding of copper, copper-silicone, and copper-based metals to themselves as well as to steel
- Frequently used to gas tungsten arc and gas metal arc weld coated steels
- Also used to surface areas subject to corrosion
- Each container has an identification label showing grade, size, weight and heat number
- AWS A5.27, ERCuSi-A
- Conformance certifications can be furnished upon request



Sold per Spool

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price /Each
TTU824	SIB030X2SP	0.030	2	32.79
TTU825	SIB035X2SP	0.035	2	32.49
TTU826	SIB045X2SP	0.045	2	32.49
TTU820	SIB025X10SP	0.025	10	167.04
TTU821	SIB030X10SP	0.030	10	160.93
TTU822	SIB035X10SP	0.035	10	159.42
TTU823	SIB045X10SP	0.045	10	157.29
TTU816	SIB030X30SP	0.030	30	469.11
TTU817	SIB035X30SP	0.035	30	461.80
TTU818	SIB045X30SP	0.045	30	455.39
TTU819	SIB116X30SP	1/16	30	452.65
36" CUT LENGTH				
TTU831	SIB035X36T	0.035	10	168.57
TTU832	SIB045X36T	0.045	10	165.51
TTU833	SIB116X36T	1/16	10	151.80
TTU834	SIB332X36T	3/32	10	150.27
TTU835	SIB18X36T	1/8	10	150.27
TTU836	SIB532X36T	5/32	10	150.27
TTU837	SIB316X36T	3/16	10	150.27
TTU838	SIB14X36T	1/4	10	150.27

36" BARE NICKEL SILVER CUT LENGTH TIG RODS

- Recommended for applications requiring higher mechanical properties and situations where good colour match is important
- Primarily intended for braze welding steel and cast iron
- Melting point of 1680°F (916°C)
- RBCuZn-D
- Sold per 10-lb. tube



Sold per Tube

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price /Each
TTU851	NS116X36T	1/16	10	156.38
TTU852	NS332X36T	3/32	10	144.19
TTU853	NS18X36T	1/8	10	141.12
TTU854	NS316X36T	3/16	10	139.61
TTU855	NS14X36T	1/4	10	139.61

36" LOW FUMING BRONZE CUT LENGTH TIG RODS



- Fuming qualities and good mechanical properties makes it a widely used general purpose rod
- Provides higher mechanical properties than obtainable with naval bronze
- Used extensively for braze welding steel and cast iron
- Melting point of 1620°F (882°C)
- RBCuZn-C
- Sold per 10-lb. tube



Sold per Tube

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price /Each
BARE				
TTU839	LFB116X36T	1/16	10	112.16
TTU840	LFB332X36T	3/32	10	110.65
TTU841	LFB18X36T	1/8	10	109.11
TTU842	LFB532X36T	5/32	10	107.61
TTU843	LFB316X36T	3/16	10	107.61
TTU844	LFB14X36T	1/4	10	107.61
TTU845	LFB516X36T	5/16	10	107.61
TTU846	LFB38X36T	3/8	10	107.61
FLUX-COATED				
TTU847	LFBC332X36T	3/32	10	110.65
TTU848	LFBC18X36T	1/8	10	109.11
TTU849	LFBC532X36T	5/32	10	108.51
TTU850	LFBC316X36T	3/16	10	108.51

4043 & 5356 ALUMINUM WELDING WIRE

- Cleanliness, density and temper of wires are precisely controlled
- Each container has an identification label showing grade, size, weight and heat number
- Conform to AWS A5.10 classification, CWB and ABS approvals

4043

- 5% silicon all position aluminum weld wire used to weld heat treatable alloys such as the 6XXX base metals and cast alloys
- Found in many common welding applications such as bicycles, trucks, trailers and automotive parts and equipment
- Silicon with these alloys give improved wetting action yielding a less crack sensitive bright weld bead



5356

- 5% magnesium all position non-heat treatable wire used to weld the 5XXX series alloys
- Common welding applications such as boats, ships, bicycles, trucks, pressure vessels and automotive parts and equipment

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price /Each
4043				
TTU956	40430301SP	0.030	1	9.44
TTU957	40430351SP	0.035	1	8.68
TTU958	40433641SP	3/64	1	8.28
TTU959	40430305SP	0.030	5	9.44
TTU960	40430355SP	0.035	5	8.68
TTU961	404303016SP	0.030	16	140.10
TTU962	404303516SP	0.035	16	126.06
TTU963	404336416SP	3/64	16	118.26
TTU964	404311616SP	1/16	16	116.31
5356				
TTU965	53560301SP	0.030	1	9.57
TTU966	53560351SP	0.035	1	8.82
TTU967	53563641SP	3/64	1	8.42
TTU968	53560305SP	0.030	5	9.57
TTU969	53560355SP	0.035	5	8.82
TTU970	535603016SP	0.030	16	141.28
TTU971	535603516SP	0.035	16	128.01
TTU972	535636416SP	3/64	16	120.21
TTU973	535611616SP	1/16	16	118.26

Sold per Spool

36" CUT LENGTH					Sold per Package
4043					
TTU974	404311636T	1/16	10	75.87	
TTU975	404333236T	3/32	10	69.77	
TTU976	40431836T	1/8	10	68.56	
TTU977	404353236T	5/32	10	68.56	
TTU978	404331636T	3/16	10	68.56	
5356					
TTU979	535611636T	1/16	10	77.33	
TTU980	535633236T	3/32	10	70.99	
TTU981	53561836T	1/8	10	69.04	
TTU982	535653236T	5/32	10	69.04	
TTU983	535631636T	3/16	10	69.04	

ALUMINUM 340 ELECTRODES (DC-REVERSE)

- Features a precise combination of core wire and coating, providing high speed deposition of dense, machineable welds
- Tensile strength – up to 34 000 PSI
- Good colour match and corrosion resistance
- **Sold per 5-lb. tube (5 - 1-lb. bags)**



Applications: Recommended for fabrication and repair of cast and wrought aluminum. Excellent for foundry defects, machining errors and all types of salvage work. Widely used on sheets, tubes and extrusions in thicknesses of 1/8" or more. Also well-suited to torch applications.

Sold per Tube

Model No.	Mfg. No.	Dimensions Dia." x Length"	Wt. lbs.	Price /Each
TTU856	ALSMOOTH34033ZE	3/32 x 14	5	112.53
TTU857	ALSMOOTH34018E	1/8 x 14	5	102.01
TTU858	ALSMOOTH34053ZE	5/32 x 14	5	102.01

NICKEL 55 ELECTRODES

- A general purpose, nickel-iron electrode for production, salvage and repair of all cast irons (AWS A15.15, ENiFeCl)
- Tensile strength – up to 70 000 PSI
- Suited to joining, filling and buildup of grey and alloyed cast irons
- **Sold per 10-lb. tube**



Sold per Tube

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price /Each
TTU862	NI5533ZE	3/32	10	211.24
TTU863	NI5518E	1/8	10	211.24
TTU864	NI5532ZE	5/32	10	211.24
TTU865	NI55316E	3/16	10	211.24

HIGH SILVER BRAZING ALLOYS

Weldcote 45CF - General purpose silver brazing alloy with a wide melting range and widely used in many brazing operations. Commonly used to join any combinations of copper, brass, steel and bronze. Colour is yellow white to light gold.

Chemical Composition (Wt. percent):

Silver	44.0 – 46.0
Copper	29.0 – 31.0
Zinc	23.0 – 27.0
Other Elements	0.15

Weldcote 56CF - Cadmium free silver brazing alloy with a narrow melting range and the lowest working temperature in the cad-free family yielding premium flow, wetting, ductility, penetration. Commonly used to join any combinations of copper, brass, steel, bronze and stainless steel. Great choice for food handling equipment and color match on stainless and nickel alloys while minimizing stress corrosion cracking. Colour is white to light gold.

Chemical Composition (Wt. percent):

Silver	55.0 – 57.0
Copper	21.0 – 23.0
Zinc	15.0 – 19.0
Tin	4.5 – 5.5
Other Elements	0.15



WELDCOTE 45CF

Model No.	Mfg. No.	Description	Specifications	Solidus	Liquidus	Brazing Range	Price /Each
TTU870	45CF132X1T0C	1/32" x 1 T.O.	AWS A5.8	1225°F	1370°F	1370-1550°F	P.O.A.
TTU871	45CF132X5T0C	1/32" x 5 T.O.	Bag-5	663°C	743°C	743-843°C	P.O.A.
TTU872	45CF364X1T0C	3/64" x 1 T.O.					P.O.A.
TTU873	45CF116X1T0C	1/16" x 1 T.O.					P.O.A.
TTU874	45CF116X5T0C	1/16" x 5 T.O.					P.O.A.
TTU875	45CF332X1T0C	3/32" x 1 T.O.					P.O.A.
TTU876	45CF332X5T0C	3/32" x 5 T.O.					P.O.A.
TTU877	45FCF116X18L4	Flux-Coated					P.O.A.
		1/16" x 18" x 4 oz. Tube					
TTU878	45FCF332X18L4	Flux-Coated					P.O.A.
		3/32" x 18" x 4 oz. Tube					

SUPER 120 ELECTRODES



- Ultimate electrodes for welding steel with highest strength and maximum ductility (AC-DC)
- Assures dense, non-cracking welds on problem steels such as: high carbon, tool, spring, manganese, and dissimilar steels
- Tensile strength – up to 120 000 PSI
- Yield strength – up to 85 000 PSI
- Ductility – up to 35% elongation in 2"
- **Sold per 5 or 10-lb. tube**

Applications: Particularly advantageous when the alloy content of the steel to be welded is unknown.



Sold per Tube

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price /Each
TTU859	SUPER12033ZE	3/32	5	110.37
TTU860	SUPER12018E	1/8	10	199.67
TTU861	SUPER12053ZE	5/32	10	199.67

NICKEL 99 ELECTRODES

- A general purpose, high nickel electrode for production and repair of cast iron (AWS A5.15, ENiCl)
- Tensile strength - up to 50 000 PSI
- **Sold per 10-lb. tube**

Applications: Ideal for building up, joining, filling holes, breaks and cracks in all types of cast iron. It has very-good out-of-position welding characteristics. Parts are frequently repaired without dismantling.



Sold per Tube

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price /Each
TTU866	NI9933ZE	3/32	10	287.44
TTU867	NI9918E	1/8	10	287.44
TTU868	NI9932ZE	5/32	10	287.44
TTU869	NI99316E	3/16	10	287.44

TTU870



TTU879



TTU878

WELDCOTE 56CF

Model No.	Mfg. No.	Description	Specifications	Solidus	Liquidus	Brazing Range	Price /Each
TTU879	56CF132X1T0C	1/32" x 1 T.O.	AWS A5.8	1145°F	1205°F	1205-14006°F	P.O.A.
TTU880	56CF132X5T0C	1/32" x 5 T.O.	Bag-7	618°C	652°C	652-760°C	P.O.A.
TTU881	56CF364X1T0C	3/64" x 1 T.O.					P.O.A.
TTU882	56CF116X1T0C	1/16" x 1 T.O.					P.O.A.
TTU883	56CF116X5T0C	1/16" x 5 T.O.					P.O.A.
TTU884	56CF332X1T0C	3/32" x 1 T.O.					P.O.A.
TTU885	56CF332X5T0C	3/32" x 5 T.O.					P.O.A.
TTU886	56FCF116X18L4	Flux-Coated					P.O.A.
		1/16" x 18" x 4 oz. Tube					
TTU887	56FCF332X18L4	Flux-Coated					P.O.A.
		3/32" x 18" x 4 oz. Tube					

ALLOYS

COMMON WIRE SOLDERS

- With some exceptions, the tin/lead solders can be used to solder copper and most copper alloys, lead, nickel alloys and steel
- Heat sources include soldering guns, irons and torch applications
- **Acid Core:** For soldering materials with poor solderability, stainless steel application
- **Rosin Core:** For electrical application
- **Tin/Antimony 95/5:** Useful for applications where moderately elevated temperatures is a factor. It has a high electrical conductivity and high fluidity, recommended where lead contamination must be avoided; not recommended for use on brass or HVAC connections

CAUTION: Lead-bearing solders are not to be used in potable water systems

Sold per Spool

Model No.	Mfg. No.	Description	Specifications	Solidus	Liquidus	Price /Each
40% TIN/60% LEAD SOLID						
TTU888	4060116X1SP	1/16" x 1# Spool	ASTM-B32, Sn-40A	362°F	460°F	29.38
TTU889	4060332X1SP	3/32" x 1# Spool		183°C	238°C	27.75
TTU890	406018X1SP	1/8" x 1# Spool				26.76
50% TIN/50% LEAD SOLID						
TTU891	5050116X1SP	1/16" x 1# Spool	ASTM-B32, Sn-50	362°F	420°F	34.26
TTU892	5050332X1SP	3/32" x 1# Spool		183°C	215°C	32.26
TTU893	505018X1SP	1/8" x 1# Spool				31.24
50% TIN/50% LEAD ACID CORE						
TTU894	5050AC116X1SP	1/16" x 1# Spool	ASTM-B32, Sn-50	362°F	420°F	34.47
TTU895	5050AC332X1SP	3/32" x 1# Spool		183°C	215°C	32.82
TTU896	5050AC18X1SP	1/8" x 1# Spool				31.24
TTU897	5050AC18X5SP	1/8" x 5# Spool				155.31

weldcote
metals



TTU891

Sold per Spool

Model No.	Mfg. No.	Description	Specifications	Solidus	Liquidus	Price /Each
50% TIN/50% LEAD ROSIN CORE						
TTU898	5050RC116X1SP	1/16" x 1# Spool	ASTM-B32, Sn-50	362°F	420°F	34.47
TTU899	5050RC332X1SP	3/32" x 1# Spool		183°C	215°C	32.82
TTU900	5050RC18X1SP	1/8" x 1# Spool				31.24
TTU901	5050RC18X5SP	1/8" x 5# Spool				155.31
95% TIN/5% ANTIMONY SOLID						
TTU902	955116X1SP	1/16" x 1# Spool	ASTM-B32, Sb-5	450°F	464°F	56.32
TTU903	955332X1SP	3/32" x 1# Spool		232°C	240°C	54.58
TTU904	95518X1SP	1/8" x 1# Spool				53.14

36" CUT LENGTH TIG RODS – POINT OF PURCHASE PACKAGED ALLOYS

- Convenient small package is ideal for maintenance and repair job
- MSDS are packaged in each tube
- Sold per 1-lb. tube



TTU932



TTU922



TTU938



TTU949

weldcote
metals

Sold per Tube

Model No.	Mfg. No.	Diameter"	Wt. lbs.	Price /Each
308L				
TTU921	308L116X36T1P	1/16	1	11.38
TTU922	308L332X36T1P	3/32	1	10.94
TTU923	308L18X36T1P	1/8	1	10.73
309L				
TTU924	309L116X36T1P	1/16	1	13.29
TTU925	309L332X36T1P	3/32	1	12.84
TTU926	309L18X36T1P	1/8	1	12.63
316L				
TTU927	316L116X36T1P	1/16	1	13.45
TTU928	316L332X36T1P	3/32	1	12.98
TTU929	316L18X36T1P	1/8	1	12.77
4043				
TTU930	4043116X36T1P	1/16	1	11.68
TTU931	4043332X36T1P	3/32	1	11.08
TTU932	404318X36T1P	1/8	1	10.94
5356				
TTU933	5356116X36T1P	1/16	1	11.80
TTU934	5356332X36T1P	3/32	1	11.19
TTU935	535618X36T1P	1/8	1	11.06
ER70S-2				
TTU936	ER70S2116X36T1P	1/16	1	8.31
TTU937	ER70S2332X36T1P	3/32	1	8.20
TTU938	ER70S218X36T1P	1/8	1	8.15

Sold per Tube

Model No.	Mfg. No.	Diameter"	Wt. lbs.	Price /Each
LOW FUMING BRONZE - BARE				
TTU942	LFB116X36T1P	1/16	1	14.93
TTU943	LFB332X36T1P	3/32	1	14.77
TTU944	LFB18X36T1P	1/8	1	14.63
LOW FUMING BRONZE - FLUX-COATED				
TTU945	LFBFC332X36T1P	3/32	1	14.77
TTU946	LFBFC18X36T1P	1/8	1	14.63
R45				
TTU947	R45116X36T1P	1/16	1	6.41
TTU948	R45332X36T1P	3/32	1	6.34
TTU949	R4518X36T1P	1/8	1	6.29
R60				
TTU950	R60116X36T1P	1/16	1	7.20
TTU951	R60332X36T1P	3/32	1	7.08
TTU952	R6018X36T1P	1/8	1	7.04
SIB - SILICON BRONZE				
TTU953	SIB116X36T1P	1/16	1	18.91
TTU954	SIB332X36T1P	3/32	1	18.74
TTU955	SIB18X36T1P	1/8	1	18.74

WHITE PASTE BRAZING FLUX

- For use with silver brazing alloys on all metal other than aluminum, magnesium or titanium
- Effective to 1600°F
- Meets AMS 3410, AWS A5.31-92, Type FB3A, Fed Spec. 0-F-499, Type B



Model No.	Mfg. No.	Size	Price /Each
TTU906	WPFLUX14JAR	1/4 lb.	6.76
TTU907	WPFLUX12JAR	1/2 lb.	8.52
TTU908	WPFLUX1JAR	1 lb.	10.10
TTU909*	WPFLUX6OZ	6 oz.	8.01
TTU910	WPFLUX5JAR	5 lb.	45.29

*Comes with brush cap



TTU908

GENERAL PURPOSE LIQUID SOLDERING FLUX

- Water-based, inorganic-acid flux formulated for virtually all metals other than aluminum, magnesium or titanium
- Contains Zinc Chloride, Ammonium Chloride, and Hydrochloric Acid, makes this flux active at room temperature where it begins to clean metals and remove oxides
- Pre-cleaning is not necessary under most conditions



Model No.	Mfg. No.	Size	Price /Each
TTU915	LIQUIDFLUX4OZ	4 oz.	7.08
TTU916	LIQUIDFLUX16OZ	16 oz.	13.59
TTU917	LIQUIDFLUX1GL	1 Gallon	54.91



TTU915

BLACK PASTE BRAZING FLUX

- Use with silver or other brazing alloys liquidus below 1800°F
- Recommended for stainless, heavy parts and whenever heating cycle is prolonged
- For all metals other than aluminum, magnesium or titanium
- Meets AMS 3411, AWS 5.31, Class FB3C; Fed. Spec. 0-F-499D, Type B



Model No.	Mfg. No.	Size	Price /Each
TTU911	BPFLUX12JAR	1/2 lb.	10.89
TTU912	BPFLUX1JAR	1 lb.	13.17
TTU913	BPFLUX5JAR	5 lb.	61.55



TTU911

GENERAL PURPOSE PASTE SOLDERING FLUX

- Excellent flux for joining copper to copper, and copper to brass
- Not recommended for electrical or electronic applications
- Effective to 700°F
- Meets Fed. Spec. 0-F 506C, Type 1, Form A and MIL-S-6872A



Model No.	Mfg. No.	Size	Price /Each
TTU918	PASTEFLUX4OZ	4 oz.	6.69
TTU919	PASTEFLUX16OZ	16 oz.	9.82



TTU919

WHITE ANTIBORAX FLUX

- General purpose brazing flux
- Use with low fuming bronze and nickel bronze brazing alloys
- Highly active powder flux has applications in brazing steel, cast irons and copper-base alloys
- Active in a heat range between 1400° and 2200°F
- Meets MIL-F-16136B, Types A and B, AWS 5.31-91, Type FB3J



Model No.	Mfg. No.	Size	Price /Each
TTU914	WPWDFLUX1JAR	1 lb.	10.75



TTU914

CAST IRON FLUX

- A powder flux for welding cast iron
- Use with any commercial cast iron torch welding alloy
- Specially prepared to produce better results on "problem" cast iron
- Wide active heat range of 1400° to 2200°F eliminates the necessity of several different fluxes



Model No.	Mfg. No.	Size	Price /Each
TTU920	CASTIRONFLUX1JR	1 lb.	17.00



TTU920

ACID/FLUX BRUSHES

- Perfect brushes for applying liquid or paste flux



Model No.	Mfg. No.	Width"	Trim Length"	Overall Length"	Price /Each
BY189	74059	1/4	11/16	6	0.44
BY190	74060	3/8	7/8	6 1/8	0.44
BY191	74061	7/16	7/8	6 1/8	0.47
BY192	74062	9/16	7/8	6 1/8	0.52

R34535E

Call us for
all your Welding
& Metalworking
requirements!



METAL WORKING FLUIDS & EQUIPMENT

WELD-KLEEN® ANTI-SPATTER

- Base metal and fixture applications become easier to clean and remove unwanted weld spatter
- Regular use of these products reduces the need for grinding and other clean-up tasks
- Cuts costs by reducing downtime

WELD-KLEEN® 350®

- Effective water-based product designed for use on most base metal applications
- Economical and safe
- Biodegradable, non-toxic and paintable
- Can be frozen
- Available in a safe and convenient aerosol powered by air

WELD-KLEEN® HEAVY-DUTY

- A convenient solvent based, quick-drying aerosol that allows for pre-heat, higher duty cycles and higher temperature applications
- Excellent for fixture and tooling protection
- Paintable, non-flammable, no fluorocarbons

WELD-KLEEN® 350® SPRAYERS

- Hand sprayer with 36" lead tube for gallon container



388-1165



388-1170



388-1175

Model No.	Mfg. No.	Description	Size	Price /Each
TTT437	007088	Weld-Kleen® 350®	13.64-oz. Aerosol	9.67
388-1170	007089	Weld-Kleen® 350®	1 Quart	13.48
388-1175	007090	Weld-Kleen® 350®	1 Gallon	22.33
388-1185	007091	Weld-Kleen® 350®	5 Gallons	110.28
388-1180	007092	Weld-Kleen® 350®	55-Gallon Drum	885.02
388-1165	007030	Weld-Kleen® H-D	20-oz. Aerosol	10.22
388-1155	007093	Sprayer for Weld-Kleen® 350®	--	6.40



LUBE-MATIC®

- Engineered to clean and lubricate wire, improve feedability, reduce spatter and increase tip and liner life
- Lube-Matic® pads and liquid help keep liners free of unwanted build-up and deposits inside the liner that cause wire drag
- Reduces wire drag by 60% and feeds wire more smoothly with poor cast, helix and rust
- Best when used together, as a system to clean and feed wire

LUBE-MATIC® LIQUID

- Helps feed all mild steel, fabricated, and core wires
- Cuts rust and reduces wire drag 60%
- Great for longer distance feed (over 10')

LUBE-MATIC® LUBE PADS

- Black lube pads are pre-treated with Lube-Matic® liquid
- Lubrication allows smooth feeding of wires with poor cast, helix, rust and long feed liners

LUBE-MATIC® WIRE KLEENER® PADS

- Red Kleener® pads are for all wires all the time
- Last chance to clean wire and reduce burn back 50%



Model No.	Mfg. No.	Description	Size	Price /Each
388-1015	007040	Lube-Matic® Liquid	5 oz.	9.67
388-1010	007060	Lube-Matic® Lube Pads	6/Pkg.	12.12
388-1190	007061	Lube-Matic® Wire Kleener® Pads	6/Pkg.	10.75

MIG WIRE CLEANING PADS

- Designed for use on all MIG wire feeders
- Removes dust and dirt from the wire prior to wire entry into the liner conduit
- Use of wire feed pads can decrease the coefficient of friction in the liner as much as 50%-60% and reduce erratic feed and burn backs
- Treated pads can be used on all alloyed wires except aluminum
- Sold per package



Model No.	Qty/Pkg.	Price/Each
720-1000-KIT	6	6.98
720-1010-KIT	24	27.97

SOAPSTONE HOLDERS

- Durable marking tools for holding fragile marking materials like soapstone and chalk
- Soapstone features highly visible white marking stick cut from natural stone which adheres to metal, stone, concrete and fabrics
- Available in round and flat models
- Pocket clip
- Sold with one soapstone installed
- Replacement soapstone available

ROUND HOLDERS

- Aluminum adjustable holder for 1/4" x 5" soapstone or chalk

FLAT HOLDERS

- Steel adjustable holder for 1/4" x 5" flat soapstone or chalk
- Locking nut soapstone length adjustment

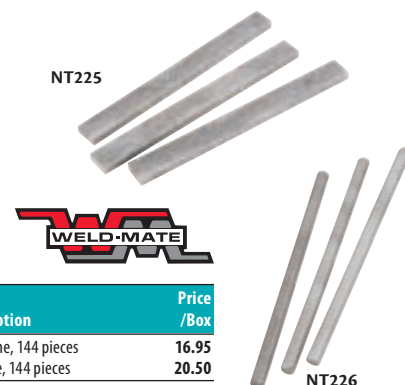


Model No.	Description	Price /Each
NT638	Round Holder	2.55
NT639	Flat Holder	2.25

SOAPSTONES

- White soapstone
- Sold in box quantity of 144

NT225



Model No.	Description	Price /Box
NT226	Round Soapstone, 144 pieces	16.95
NT225	Flat Soapstone, 144 pieces	20.50

METAL WORKING FLUIDS & EQUIPMENT

DEFENSE COOLANT ANTI-FREEZE & PUMP LUBRICANTS

- Provides year round pump protection for water coolers and closed loop water systems
- Contains a lubricant additive providing continuous pump lubrication during operation
- Prolongs seal and shaft life because of its silicate free formula
- Protects from freezing to -30°F when undiluted (a dilution of two parts *Defense* to one part water protects to -10°F) except for pre-mixed formula, protects to 10°F

Note: Although *Defense* is a permanent anti-freeze and pump lubrication solution, it should be changed annually to maintain maximum anti-freeze protection and pump lubrication.

DYNAFLUX
QUALITY PRODUCTS

Model No.	Mfg. No.	Size	Price /Each
881-1355	DF927-PM	1 Gallon, Pre-Mixed	25.40
881-1350	DF929-4x1	1 Gallon	39.93
881-1365	DF929-5	5-Gallon Pail	188.38
881-1370	DF929-55	55-Gallon Drum	1670.53



881-1355



881-1350

SPRAY GALV/COLD GALV

ZINC GALVANIZING COATING

- Produces hard zinc coating that will stop rust and corrosion on all metal surfaces
- Compounded from 95.1% metallic zinc dust
- Equal to hot dip galvanizing in cathodic protection and film durability
- Meets or exceeds military specs

DYNAFLUX
QUALITY PRODUCTS

Model No.	Mfg. No.	Description	Size	Price /Each
877-1125	DF309-16	Spray Galv	16-oz. Net Wt. Aerosol	10.11
877-1130	DF306-6x1	Cold Galv	1 Quart	83.02
877-1120	DF306-2x1	Cold Galv	1 Gallon	331.05



877-1120



877-1125

SPOTCHECK® PENETRANTS

- Red visible non-destructive test method which provides for the detection of surface discontinuities (flaws) in ferrous and non-ferrous test materials
- Ideal for applications where portability is required
- Vivid red colour permits daylight inspection

MAGNAFLUX®

SKL-SP1

- Exhibits outstanding penetrating characteristics, which provide for maximum reliability in locating surface-open flaws and discontinuities
- Can be used over the entire spectrum of industrial applications, where a visible penetrant inspection system meets the requirements for surface-open flaw detection
- Has also been successfully used on non-porous ceramics and similar materials
- Not recommended for the inspection of plastic materials, as it may stain, soften or even dissolve the base material under test
- Should be used at temperatures between 40°F-125°F



SKC-S SOLVENT CLEANERS

- Non-chlorinated cleaner/remover
- Used as a precleaner, a post cleaner and a penetrant remover
- Recommended general purpose
- Meets major requirements for special alloy and nuclear applications

Model No.	Mfg. No.	Size	Price /Each
NP703	01-5750-78	16-oz. Aerosol	13.35

SKD-S2 SOLVENT DEVELOPERS

- Ready-to-use suspension of white developing particles in a fast drying solvent
- Non-chlorinated solvent developer
- Meets major requirements for special alloy and nuclear applications

Model No.	Mfg. No.	Size	Price /Each
NP702	01-5352-78	16-oz. Aerosol	16.33

ARDROX®

9D1B NON-AQUEOUS DEVELOPERS

- Liquid product consisting of a finely divided white powder dispersed in a non-halogenated volatile solvent system
- Can be used with Type I (fluorescent) and Type II (visible) penetrants

906 WATER WASHABLE VISIBLE PENETRANTS

- Visible penetrants are not rated by sensitivity but are generally considered to be equivalent to Level 1
- Provides low cost, crisp indications, low residual background and temperature stability
- Used with non-aqueous developers or aqueous developers
- May be applied by aerosol, brushing, tank immersion, conventional, electrostatic or spraying

9PR50 CLEANERS/REMOVERS

- Quick drying, non-halogenated (non-chlorinated) solvent for removing oil, grease and similar soils from metal surfaces
- Provides a high level of cleaning efficiency with operational safety
- Corrosion safe for use on both ferrous and non-ferrous alloys
- Excellent penetrant remover



874-1150

Model No.	Mfg. No.	Size	Price /Each
9D1B NON-AQUEOUS DEVELOPERS			
874-1150	9D1B-16	16-oz. Aerosol	33.71
906 PENETRANTS			
874-1080	906-16	16-oz. Aerosol	36.45
9PR50 CLEANERS/REMOVERS			
874-1180	9PR50-16	16-oz. Aerosol	28.48

METAL WORKING FLUIDS & EQUIPMENT

SOLAR® FLUX

- Formulated to shield the back of the weld joint from oxygen, dissipate heat and unwanted oxides and to clean the surface of metal
- Will aid in the flow of filler metal over base metal and form a protective barrier to prevent re-oxidization and heat scale
- To be mixed with alcohol (methanol/methyl alcohol preferred) and brushed on the back of the weld joint
- Inert, non-flammable and non-explosive
- Type B** for welding stainless steel and alloy steels
- Type I** for welding high nickel super alloys



868-1000

SOLAR
FLUX®

Model No.	Mfg. No.	Description	Size	Price/Each
868-1000	SFB-1	Type B	1 lb	70.65
TTT435	SFI-1	Type I	1 lb	162.11

ACID/FLUX BRUSHES

- Perfect brushes for applying liquid or paste flux



Model No.	Mfg. No.	Width"	Trim Length"	Overall Length"	Price/Each
BY189	74059	1/4	11/16	6	0.44
BY190	74060	3/8	7/8	6 1/8	0.44
BY191	74061	7/16	7/8	6 1/8	0.47
BY192	74062	9/16	7/8	6 1/8	0.52

ULTRA BRIGHT ALUMINUM CLEANERS

- Ready-to-use cleaner and brightener
- Provides rapid and effortless cleaning and removal of aluminum oxides, grease and dirt from aluminum before welding
- Rinse agents provide a "sheeting" action for film-free rinsing
- Heavy accumulations may require some light brushing
- Biodegradable



NP597



NP596

DYNAFLUX
QUALITY PRODUCTS

Model No.	Mfg. No.	Size	Price/Each
NP597	DF781-12x1	1 Quart	10.05
NP596	DF781-4x1	1 Gallon	26.44
877-1190	DF781-55	55-Gallon Drum	973.78

LIQUID GASFLUX®, TYPE "W"

- Liquid Gasflux® consists of a specially compounded liquid-type flux that is automatically introduced into the fuel gas
- Manufactured under rigid test requirements to guarantee its highest quality and performance
- Recommended for both manual and automatic brazing applications and works with all fuel gases
- Standard liquid flux for most all silver and bronze brazing
- Suitable with almost all applications for the brazing of copper, brass, steel, stainless steel, cast iron and carbide
- Conforms to AWS/ANSI A5.31, American Welding Society "Specification for Brazing Fluxes" and falls under flux type FB3-K



870-1092

Model No.	Mfg. No.	Size	Price/Each
870-1092	GF-1	1 Gallon	52.24
870-1096	GF-5	5-Gallon Pail	190.55
870-1100	GF-55	53-Gallon Drum	1849.34

NOZZLE GEL

- For MIG gun nozzles and contact tips
- Suitable for use on fixtures of semi-automatic and automatic welding equipment
- Non toxic, odourless
- Not flammable, silicone free

DYNAFLUX
QUALITY PRODUCTS

Model No.	Mfg. No.	Size	Price/Each
720-1071	DF731-16	16-fl. oz. Jar	6.84



SAFE-DE-SPAT

ANTI-SPATTER & NOZZLE SHIELD

- Prevents weld spatter from adhering to MIG nozzles, contact tips and related accessories as well as weld spatter build-up on metals to be joined
- Non-flammable, non-toxic, biodegradable and silicone free
- Non-solvent based
- Paint compatible
- Designed to provide a safe welding environment

DYNAFLUX
QUALITY PRODUCTS

Model No.	Mfg. No.	Size	Price/Each
876-1005	DF390-16	16-oz. Net Wt. Aerosol	5.98
876-1000	DF390-4x1	1 Gallon	16.78
876-1020	DF390-5	5-Gallon Pail	80.04
876-1025	DF390-55	55-Gallon Drum	671.56



876-1005

BLUE LAYOUT FLUIDS

- A firm gripping, oil resistant blue pigmented layout fluid
- Designed for use on all types of metal surfaces, plastics and glass
- Dries instantly to a non-glaze smooth finish
- Provides fine lines for detail and high precision
- Contains no acids and is non-corrosive, flammable

DYNAFLUX
QUALITY PRODUCTS

Model No.	Mfg. No.	Size	Price/Each
881-1100	DF304-16	11.5-oz. Net Wt. Aerosol	13.80



METAL WORKING FLUIDS & EQUIPMENT

SOLID PAINT MARKERS FOR COLD SURFACES

B® PAINTSTIK®

THE ORIGINAL ALL PURPOSE
COLD SURFACE MARKER -50° TO 150°F



Real paint in stick form. Ideal for long-lasting, weather, fade and abrasion resistant identification. Leaves bright, highly visible marks on all materials, including asphalt, aluminum, glass, plastic, marble, lumber and steel. Writes on rough, smooth, oily, wet, icy and rusty surfaces.

Priced per Paintstik

Model No.	Colour	Price /Each
PA298	White	1.54
PA309	Yellow	1.59
PA320	Black	1.66
PA300	Orange	1.66
PA348	Blue	1.66
PA353	Grey	1.66

B-L® BLUE PAINTSTIK® -50° TO 150°F

Makes permanent marks that bleed through painted surfaces. Available in blue only. 12 dozen/case.

Priced per Paintstik

Model No.	Colour	Price /Each
PA356	Blue	5.36

F® PAINTSTIK® FLUORESCENT MARKERS -50° TO 150°F

Super visibility markers have same properties and application as B markers. 6 dozen/case.

Priced per Paintstik

Model No.	Colour	Price /Each
PA333	Yellow	2.37
PA334	Red	2.37
PA335	Orange	2.37
PA336	Blue	2.37
PA337	Green	2.37
PA338	Pink	2.37

VALVE ACTION® PAINT MARKERS



- Fast drying, lead-free paint marker, ideal for all surfaces
- Weather and fade resistant
- Replaceable fibre tip ensures full use of the marker
- Marking range -50° to 150°F
- Also available in fluorescent colours



Priced per Marker

Model No.	Colour	Price /Each
PA418	White	4.21
PA419	Yellow	4.21
PA420	Red	4.21
PA421	Blue	4.21
PA422	Green	4.21
PA423	Aluminum	4.21
PA431	Black	4.21
PE935	Fluorescent Yellow	4.23
PE936	Fluorescent Green	4.23
PE937	Fluorescent Orange	4.23
PE938	Fluorescent Pink	4.23
PA424	Replacement Tips (12/pkg.)	8.85/Pkg.

BALL PAINT MARKER® -50° TO 150°F

Produce long lasting, weather and water resistant fine line marks with real paint that dries in minutes. Writes like a pencil on metal, wood, plastics, rubber - any surface or material.

Packaged in unbreakable 2-oz. plastic bottles with cap to prevent drying or leaking.



Priced per Bottle

Model No.	Colour	Price /Each
PA339	White	8.74
PA340	Yellow	8.74
PA341	Red	8.74
PA344	Blue	8.74
PA345	Green	8.74
PA343	Orange	8.74
PA342	Black	8.74

SOLID PAINTSTIK® FOR HOT SURFACES



H PAINTSTIK® 150° TO 1200°F



- Permanent hot metal markers for coils, slabs, billets, blooms, etc.
- Identification will not run, char, flow, discolour, peel or crack even when stored outdoors
- Weather-resistant and water-resistant, visible at all times
- Marks are easily removed in a pickling bath

HT PAINTSTIK® 250° TO 1600°F



- Same applications and packaging as H

HT-34 PAINTSTIK® 400° TO 1800°F



- Highly visible marks for extremely hot surfaces
- Ideal for coils, slabs, billets or other metals under higher temperature marking conditions
- Will not run, char, discolour, peel or crack

Priced per Paintstik

Series	Model No.	Colour	Price /Each
H	PA308	White	1.79
H	PA312	Black	1.79
H	PA311	Red	1.86
H	PA314	Green	1.86
H	PA310	Yellow	1.86
H	PA313	Blue	1.86
H	PA315	Brown	1.86
HT	PA429	White	1.74
HT	PA319	Black	1.74
HT	PA317	Yellow	1.93
HT	PA318	Red	1.93
HT	PA321	Blue	1.93
HT	PA322	Green	2.94
HT-34*	PA346	White	1.86

* White only

TRADES-MARKER® ALL PURPOSE MARKERS

RETRACTABLE GREASE PENCILS SUITABLE FOR ALL SURFACES

- Retractable grease pencil offers more convenience and longevity than a standard china marker
- Marks on plastic, glass, metal, wood, cardboard and paper
- Will not rub off and are weather-resistant
- Includes handy pocket clip
- Holder comes with five assorted colour refills
- Refills come six per package
- Two dozen per case



Priced per Marker

Model No.	Mfg. No.	Colour	Price /Each
HOLDER W/S REFILLS			
434-8980	96000	-	12.22
REFILLS, 6/PKG.			
434-9915	96009	Orange	6.93
434-8985	96042	White	6.93
434-9910	96043	Yellow	6.93
434-8995	96044	Black	6.93
434-9920	96045	Red	6.93

THERMOMELT® HEAT STIK TEMPERATURE INDICATORS

ACCURATE SURFACE TEMPERATURE MEASUREMENT STICKS

- Industry's 5" long lasting stick
- 33% bigger and stronger than competitive brands
- Accurate, fast, low-cost method for measuring surface temperatures
- When desired temperature is reached, the mark quickly melts to a glossy, transparent-appearing liquid
- Accurate to +/-1% of stated temperature
- Ideal for applications such as annealing, forging, welding, bending, forming and any place where temperature measuring is necessary
- Meets ANSI/ASME guidelines



Model No.	Mfg. No.	Temperature °F/°C	Price /Each
HK819	86400	100/38	17.29
434-7050	86436	125/52	17.29
434-7100	86463	150/66	17.29
HK851	86481	175/79	17.29
HK860	86517	200/93	17.29
HK869	86544	225/107	17.29
434-7260	86562	250/121	17.29
434-7290	86589	275/135	17.29
HK887	86625	300/149	17.29
434-7370	86661	325/163	17.29
434-7410	86697	350/177	17.29
434-7430	86715	375/191	17.29
HK900	86733	400/204	17.29
434-7470	86751	425/218	17.29
HK904	86769	450/232	17.29

Model No.	Mfg. No.	Temperature °F/°C	Price /Each
434-7510	86787	475/246	17.29
HK908	86805	500/260	17.29
434-7550	86814	525/274	17.29
HM700	86823	550/288	17.29
434-7570	86832	575/302	17.29
HM702	86841	600/316	17.29
434-7590	86850	625/329	17.29
HK914	86859	650/343	17.29
HK916	86868	700/371	17.29
434-7630	86877	750/399	17.29
HK919	86886	800/427	17.29
434-7680	86895	850/454	17.29
434-7700	86904	900/482	17.29
434-7750	86931	1000/538	17.29

METAL WORKING FLUIDS & EQUIPMENT

SA-X X-TREME DEGREASER

- Water-based
- High alkalinity - pH: 12.0 - 13.0
- Super aggressive formula
- Non-flammable
- Removes greases, oil, tar, and dirt
- Economical, can be diluted with water
- Efficient, requires fewer products than traditional water-based cleaners to get the job done
- Rinses clean with no residue
- Safe on most metals
- Trigger spray bottle is ready-to-use



Model No.	Mfg. No.	Size	Price /Each
AD320	C06828	28 fl. oz. Trigger R-T-U	9.53
AD321	C06801	1 gal.	22.68
AD322	C06805	5 gal.	103.10
AD323	C06855	55 gal.	824.70

EVAPO-RUST™ RUST REMOVERS

- Removes rust quickly without scrubbing
- Dipping process
- Non-toxic, non-corrosive, non-flammable
- VOC free
- Water-soluble, biodegradable, safe on skin
- Contains no acids, bases or solvents
- Will not harm unrusted metals



Model No.	Mfg. No.	Size	Price /Each
AD048	ER8	237 ml	6.00
AD049	ER1	1 L	9.79
AD050	ER4	1 gal.	29.49
AD051	ER20	5 gal.	141.75
AD052	ER205	55 gal.	1267.61

EXTEND® RUST TREATMENTS

- Goes on white and converts rust to a durable, black, metal-protective coating in 10 minutes
- Surface rust must be present
- Use as a primer or finish coat
- Resists temperatures to 250°F intermittent, 200°F continuous

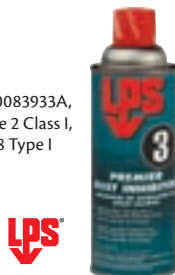


LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA632	30539	10.5 oz.	10.56
AA633	75430	1 qt.	35.96
AA634	75448	1 gal.	128.86
AC110	75465	5 gal.	543.66

LPS 3® HEAVY-DUTY INHIBITORS

- Protects up to two years
- Stops rust and corrosion
- Provides non-sling lubrication
- Non-flammable propellant
- Self-healing, waxy film
- Provides anti-seize coating
- Safe to use on rubber, fabric, plastics and paints
- Meets or exceeds these specs: Boeing BMS-3 23F Type II, MIL-C-0083933A, para.3.2-3.16, MIL-C-16173D Grade 2 Class I, DMS 2150, Airbus TN A. 007.10138 Type I Grade 2



Model No.	Mfg. No.	Size	Price /Each
AA808	C00316	11 oz.	19.91
AB559	C00322	20-oz. Trigger	26.19
AB558	C03128	1 gal.	92.92
AB556	C00305	5 gal.	414.60
AB557	C00355	55 gal.	3855.52

BRIGHT COAT COLD GALVANIZED CORROSION INHIBITORS

- Shiny zinc coating
- Prevents rust and corrosion on all metals
- Restores hot dip galvanizing
- Dries to touch in 15 to 30 minutes
- Repairs rusted, galvanized and welded surfaces
- Electrochemically protects bare metal
- Heat resistant, flexible coating
- Will not yellow, chalk, crack or peel



Model No.	Mfg. No.	Size	Price /Each
AB485	C05916	13 oz.	22.65

PROCYON CORROSION INHIBITORS

- Durable, hard, transparent, dry film
- Multi-year protection of metal surfaces
- 2500 plus hours salt spray resistance on aluminum
- Resists dirt build-up, dripping and puddling during application
- Penetrates and displaces water
- Inspectable and removable film
- Sprayable protective coating
- Excellent for use in high risk areas such as lower cargo sections and wheel wells
- Resists water, acids, alkali, salt spray and other corrosive elements
- Contains no chlorinated solvents or silicones
- Low odour



Model No.	Mfg. No.	Format	Price /Each
AD176	C04216	10 oz.	15.36
AB562	C04228	1 gal.	158.59
AB560	C04205	5 gal.	777.15
AB561	C04255	55 gal.	6633.62

HARDCOAT CORROSION INHIBITORS

- Durable, hard transparent film
- Multi-year protection of metal parts in outside storage
- 500 plus hours salt spray resistance
- Low odour and non-conductive
- Resists dripping and puddling during spray application
- Safe to use on rubber, fabric, plastics and paints
- Ready-to-use and can be applied with conventional airless or air-operated spray equipment



Model No.	Mfg. No.	Size	Price /Each
AA817	C03316	10 oz.	12.94
AB555	C03328	1 gal.	134.58
AB553	C03305	5 gal.	598.43
AB554	C03355	55 gal.	4725.95

COLD GALVANISED CORROSION INHIBITORS

- 95% zinc-rich galvanised coating
- Commonly used as a flash rust preventative on welded areas
- Works like a hot-dip on ferrous metals indoors and out
- Three-year protection
- Withstands water temperature up to 212°F (100°C) and continuous dry heat up to 750°F (400°C)
- Flexible coating will not yellow, chalk, crack or peel
- Electrochemically protect bare metal
- Meets or exceeds these specs: MIL-P-46105 Weld Through Primer, Passes Preece Test for Hot-Dip Galvanizing



Model No.	Mfg. No.	Size	Price /Each
AA807	C00516	14-oz.	23.08
AB552	C05128	1 gal.	483.03

WORKPLACE HAND CLEANER TOWELS

- Waterless hand cleaner
- Deep cleaning, non-scratching abrasives
- Leaves hands clean, conditioned and softened
- 72 towels per bucket



Model No.	Mfg. No.	Price /Each
AA841	C09200	25.91

METAL WORKING FLUIDS & EQUIPMENT

SILVER GALVANIZING COMPOUNDS

- Sacrificial coating that inhibits corrosion on ferrous metals
- Excellent touch-up for repair of galvanized substrates
- Produces a dry coating with the bright finish of hot-dip galvanizing
- Recommended dry film thickness of 1.5 to 3.0 mils VOC-compliant
- Dries to touch in 30 minutes
- May be recoated after 2-16 hours, or after 36 hours
- For food plants, automotive plants, refineries, nuclear facilities, power plants and transmission towers; fences, gutters, bridges, structural steel, wrought iron, farm equipment, damaged galvanized surfaces; highway maintenance and marine applications



Model No.	Mfg. No.	Size	Price /Each
AA185	C00739000	14 oz.	13.38

ZINC-RICH GALVANIZING COMPOUNDS

- Fast-drying, high-solids, high performance, epoxy-based coating
- Provides maximum protection to steel exposed to severe corrosive environments
- Fuses zinc to the metal substrate to protect against corrosion; equal to or better than hot-dipped galvanizing
- 97%-pure zinc dust
- May be topcoated with conventional primers or finish coats
- For fences, gutters, bridges, structural steel, wrought iron, farm equipment; ideal as a maintenance spray for highways, food plants, power plants, refineries or damaged galvanized surfaces



Model No.	Mfg. No.	Size	Price /Each
AA029	C00740000	14 oz.	8.88

WELDER'S STAINLESS STEEL PROTECTIVE COATING

- Provides maximum corrosion resistance on metal, chrome, ceramic and copper surfaces
- Formulated with 100% Type 316L stainless steel pigment
- Dries quickly to a satin sheen
- Hardens overnight and cures in just a few days
- Use to cover discolouration in weld areas
- For exhaust and steam pipes, mufflers, radiators, production equipment, engines, furnaces, plumbing fixtures, chemical processing equipment



Model No.	Mfg. No.	Size	Price /Each
AA027	C00738000	12 oz.	7.68

DRY WELD SPATTER PROTECTANTS

- Prevents spatter from sticking to metal surfaces during welding
- Easily removed by brushing or wiping
- Does not contain silicone
- Surface may be painted after use
- For all types of maintenance and production welding, construction, body shops



Model No.	Mfg. No.	Size	Price /Each
AC303	C00541000	15.5 oz.	6.41

WET WELD SPATTER PROTECTANTS

- Keeps welding tips and nozzles clean
- Prevents weld spatter from adhering
- Non-greasy
- Effective for all types of welding, especially MIG and TIG tips
- Does not contain silicone
- Surface may be painted after use
- For contact tips, weldments, electrode holders, fixtures, resistance welding tips and wheels



Model No.	Mfg. No.	Size	Price /Each
AA875	C00942000	15.5 oz.	6.07

ANTI-SPATTER

- Safe, water-based formula
- Excellent spatter protection
- Non-toxic
- Non-flammable
- Does not contain suspect carcinogens such as methylene chloride
- Does not contain silicone
- Paint compatible



Model No.	Mfg. No.	Size	Price /Each
AA816	C02116	13 oz.	15.26

E-WELD WELD SPATTER RELEASE EMULSIONS

- Effectively protects work pieces and welding equipment (such as torches, robots and jigs) eliminating costly spatter removal work
- Best for general purpose welding
- Contains temporary corrosion inhibitors
- Prevents weld spatter from sticking
- Ultrafine spray for complete coverage
- Will not harm painted surfaces
- Can be used on all weldable metals
- Green colour for a better view on work piece



Model No.	Mfg. No.	Description	Metric	Imperial	Price /Each
AA903	53-F 002	Aerosol	500 ml	16.9 fl.oz.	9.89
AC300	53-F 203	Trigger Spray	500 ml	16.9 fl.oz.	11.54
AA474	53-F 206	Liquid	5 L	1.3 gal	88.61
AA475	53-F 207	Liquid	20 L	5.2 gal	310.67
AC301	53-F 208	Liquid	208 L	55 gal	1313.78

E-WELD 3 WELD SPATTER RELEASE SOLUTIONS

- Unique, high performing anti-spatter solution that protects work pieces from adherence of high energy spatter and eliminates costly spatter removal operations
- Can also be used to clean and degrease surfaces prior to welding
- Formulated to prevent spatter adhesion for high temperature welding applications such as: stainless steel welding, multiple pass welding, thin sheet welding and welding pre-heated work pieces
- For MIG and Arc welding applications, as well as plasma cutting
- Water base formulation - biodegradable, non-flammable, odourless
- Compatible with aluminum, steel and stainless steel
- VOC free, solvent free and silicone free
- Contains corrosion inhibitors for short term corrosion protection
- Excellent paint adhesion properties - no special cleaning required for post welding coating operations



Model No.	Mfg. No.	Description	Metric	Imperial	Price /Each
AA506	53-F 253	Trigger Spray	500 ml	16.9 fl.oz.	12.94
AA507	53-F 256	Liquid	5 L	1.3 gal	100.83
AA508	53-F 257	Liquid	20 L	5.2 gal	341.25
AC309	53-F 258	Liquid	208 L	55 gal	2108.05

R31937E

OFFICE
PRODUCTS

INSTRUMENTS,
SCALES &
ELECTRICAL

SHIPPING &
PACKAGING

TOOLS &
EQUIPMENT

WELDING &
METALWORKING

SAFETY
EQUIPMENT &
SUPPLIES

JANITORIAL &
MAINTENANCE

MATERIAL
HANDLING &
STORAGE

1093

METAL WORKING FLUIDS & EQUIPMENT

CLEAR INSULATING VARNISHES

- Thoroughly penetrates old and new materials
- Air-dries faster than most insulating aerosols (10-15 min)
- Tack-free in 60 minutes
- Provides high adhesion, high arc resistance and non-tracking properties
- For use as an insulating varnish in Class F applications, as well as a finish coat
- Resists abrasion and wear
- Contains no chlorinated solvents



Model No.	Mfg. No.	Size	Price /Each
AA178	C00600000	15.25 oz.	8.28

RED INSULATING VARNISHES

- Penetrates thoroughly and forms a tough, flexible film
- High arc resistance and non-tracking properties
- Resists oil, water, acids and alkalis
- Excellent adhesion
- Oil resistant per ASTM-D-115-55



Model No.	Mfg. No.	Size	Price /Each
AA179	C00601000	15.25 oz.	9.07

BLUE LAYOUT DYES

- The economical choice for most layout projects
- VOC-compliant
- Fast-drying, non-flaking, non-etching, won't peel
- Heat resistant, non-corrosive
- Adheres to metal or glass
- For pattern-making, tool and die making, machining and maintenance mechanicals



Model No.	Mfg. No.	Size	Price /Each
AA180	C00603000	12 oz.	6.85

LAYOUT DYE REMOVERS

- Removes layout fluids quickly and efficiently
- Removes light oils, greases, lacquer and other markings on metal or glass
- Leaves no residue
- No chlorinated solvents
- For tool and die making and production departments



Model No.	Mfg. No.	Size	Price /Each
AA181	C00606000	12.75 oz.	6.44

PREMIUM BLUE LAYOUT DYES

- Deep purple-blue colour makes a sharp contrast of scribed lines against clean surface
- Thinner film results in crisper lines and easier removal
- Dries instantly; will not rub-off
- Non-glaring, non-flaking for fine, clean line drawings
- Adheres to all metals, aluminum or glass
- For tool and die-making, machining, pattern-making and maintenance mechanicals



Model No.	Mfg. No.	Size	Price /Each
AA016	C00602000	12 oz.	9.44

A-9 ALUMINUM CUTTING FLUIDS

- Designed for aluminum, non-ferrous metals
- Forms an effective extreme pressure boundary lubricant between tool and work surface
- Leaves a surface, which requires only ordinary cleaning

RELTON



Model No.	Size	Price /Each
AA149	4 oz.	4.61

COOLCUT™

- Extends cutting tool life
- Suitable for all ferrous and non-ferrous metals
- Produces a better finish
- Solvent-free, no chlorine
- For drilling, sawing, milling, turning, reaming, broaching



AA468



AA471



AA467



Model No.	Mfg. No.	Size	Price /Each
METAL CUTTING LIQUID			
AA468	53-B 003	350 ml	10.66
AA469	53-B 006	4 L	85.07
AA470	53-B 007	20 L	315.08
AB748	53-B 008	208 L	2468.70
METAL CUTTING STICKS			
AA471	53-B 013	300 g	14.54
METAL CUTTING SPRAYS			
AA467	53-B 002	350 ml	19.29

RAPID TAP™ CUTTING FLUIDS

- Effective on tough-to-drill metals and alloys such as beryllium, molybdenum, stainless steel and stellite
- Makes tapping, reaming, drilling and threading operations easier, faster and more accurate
- Not recommended for use with aluminum and its alloys

RELTON



Model No.	Size	Price /Each
AA160	4 oz.	6.13

OPTION 1® CUTTING FLUIDS

- Effective in all machining operations on all metals except those that are water reactive
- Water-based
- Biodegradable
- No oil
- No chlorine - no sulfur, no toxic chemicals

RELTON



Model No.	Size	Price /Each
AA156	4 oz.	4.61

Look for this symbol for environmentally friendly products!



METAL WORKING FLUIDS & EQUIPMENT

TAPMATIC® EDGE CREME

- Excellent for vertical applications
- Biodegradable
- Can be applied to cutting tools before tapping or reaming
- For use when drilling, tapping blind holes, forming, bending, pre-coating fasteners and lubricating rubber seals
- Does not contain any hazardous chemicals
- Safe on all metals



Model No.	Mfg. No.	Size	Price /Each
AA923	C43100	11 oz.	25.55

STAINLESSCUT™ EXTREME PRESSURE CUTTING LUBRICANTS

- Prolongs tool life in stainless and other tough alloys
- Produces a better finish
- Safe and pleasant to use



Model No.	Description	Size	Price /Each
AA509	Aerosol	400 ml	21.81
AA510	Squeeze Bottle	350 ml	13.57
AA511	Liquid	4 L	104.70

CIMTAP® II LIQUID TAPPING COMPOUNDS

- Water-soluble, formulated for blind holds, deep vertical holes and high production operations requiring quick application
- For ferrous and non-ferrous metals



Model No.	Size	Price/Each
AB792	16-oz. Bottle	12.21
AB789	4-L Jug	49.98

TAPMATIC® #1 GOLD CUTTING FLUIDS

- Great for steel and aluminum
- Excellent for low speed, high pressure applications
- Minimizes torque increases
- No chlorinated paraffins, water, solvents or inactive fillers
- Aerosol provides a pinpoint stream with foaming action
- Safe on all metals



Model No.	Mfg. No.	Size	Price /Each
AA775	C40312	11-oz. Aerosol	16.99
AA776	C40320	16 oz.	17.28
AB565	C40330	1 gal.	95.11
AB563	C40340	5 gal.	386.67
AB564	C40360	55 gal.	3194.88

TAPMATIC® TRICUT CUTTING FLUIDS

- Excellent for hard to machine metals
- Not recommended for aluminum
- Provides, smooth, accurate cutting action
- Flows directly to cutting edge
- Extends tool life
- Reduces friction
- Suitable for high and low speed applications
- Non-corrosive to steel



Model No.	Mfg. No.	Size	Price /Each
AA779	C05316	16 oz.	23.05
AB578	C05328	1 gal.	144.43

TAPMATIC® EDGE LUBE

- White, solid waxy bar
- Excellent for belt, wheel and disc grinding or sawing applications
- Eliminates heat build-up and belt loading
- No hazardous chemicals
- Extends grinding wheel life
- Low toxicity
- Safe on all metals



Model No.	Mfg. No.	Size	Price /Each
AA922	C43200	13 oz.	24.98

TAPMATIC® AQUACUT CUTTING FLUIDS

- Water-based formula
- Excellent in applications where cooling of the tool is desired
- Does not contain sulfur, chlorinated solvents, chlorine or oils
- Safe on all metals, except magnesium
- Corrosion inhibitors prevent flash rusting
- Provides fine finishes
- Cinnamon scent



Model No.	Mfg. No.	Size	Price /Each
AA778	C01216	16 oz.	12.04
AB574	C01228	1 gal.	57.28
AB572	C01205	5 gal.	311.98
AB573	C01255	55 gal.	2368.63

TAPMATIC® NATURAL CUTTING FLUIDS

- Non-toxic and non-hazardous
- Biodegradable
- Does not irritate the skin, eyes or respiratory tract
- Does not contain sulfur, chlorinated solvents, chlorine water, mineral oil or inactive fillers
- Great for steel and aluminum
- High performance lubricating ability eliminates galling and seizing
- Safe on all metals



Model No.	Mfg. No.	Size	Price /Each
AA777	C44220	16 oz.	17.28
AB577	C44230	1 gal.	93.92
AB575	C44240	5 gal.	372.42
AB576	C44260	55 gal.	2924.38





MACHINE TOOL COOLANT EQUIPMENT

METAL WORKING FLUID TANK & PUMP KITS

- Ideal for retrofitting machinery with old or non-existing system
- 5-gallon tank ideal for water soluble or light cutting oils
- 1/15 HP, 115 V pump generates 7.5 PSI
- Includes: Tank, pump, chip collector basket, 6' plastic hose, flexible nozzle and brass control valve
- Replacement Pump: **DA329**

Model No. **DB945** Price/Each \$480.31



Little GIANT
PUMP COMPANY®

5-GALLON COOLANT TANKS

- For use on single-spindle drill presses, bench mills, tool grinders, single-spindle tapping machines, cut-off saws, small lathes using water soluble or light cutting oil
- Dimensions: 10 15/16" L x 16 9/16" W x 8" H
- Weight: 5 lbs.
- Includes: 5-gallon polyethylene tank, metal chip collector basket, baffle, 6' plastic hose, plastic flex nozzle and brass control valve
- Pump not included - **DA330**

Model No. **DA343** Price/Each \$295.05



THE LOC-LINE® SYSTEMS

- Loc-Line®'s unique ball and socket design is fully hand adjustable in both position and length
- Loc-Line® is electrically non-conductive



1/4" SYSTEM - 1/4" INSIDE DIAMETER

Model No.	Mfg. No.	Description	Price/Each
AA230	40413	 1/4" Hose kit, 13" length with fittings 2 - segments, 5 3/4" long 1/4", 1/8", 1/16" nozzles, 1/4" and 1/8" male NPT connectors	17.27
AA290	41401	 1/4" Segment pack 2 - segments, 5 3/4" long	12.34
AA291	49420	Bulk 25 ft., 55 segments	271.78
AA292	49421	1/4" 50 foot coil	543.59
AA279	41473	 1/4" 90° Spray bar nozzle	12.98
AA307	49442	Pack of 20	91.98
AA277	41407	 1" Flare nozzle	12.98
AA308	49427	Pack of 20	91.98
AA275	41405	 1/8" NPT Connector	8.59
AA309	49425	Pack of 50	84.73
AA276	41406	 1/4" NPT Connector	8.59
AA312	49426	Pack of 50	84.73
AA278	41408	 1/4" Y fitting	12.98
AA315	49428	Pack of 20	91.98
AA316	41409	 1/4" Double socket	9.57
AA317	49429	Pack of 20	37.74
AA324	41415	 1/4" Elbow fitting	12.00
AA325	49435	Pack of 20	93.43

Model No.	Mfg. No.	Description	Price/Each
AA332	41481	 1/4" Swivel nozzle 40	19.25
AA333	49449	Pack of 20 • 0.040 Hole diameter	154.81
AA269	21192	 1/4" Male NPT valve*	21.66
AA338	29452	Pack of 10	96.73
AA339	21193	 1/4" Female NPT valve*	21.66
AA340	29453	Pack of 10	96.73
AA270	21194	 1/4" In-line valve*	21.66
AA341	29454	Pack of 10	96.73
AC417	41487	 1/4" Flat nozzle assortment pack Includes one each of: Flat slot 40 nozzle Flat slot 60 nozzle Flat 5 hole nozzle Flat 7 hole nozzle	13.76
AA342	78001	 1/4" Hose assembly pliers One 1/4" pliers	22.89
AC398	78003	1/4" and 1/2" pliers set	41.27

*1/4" VALVE SPECIFICATIONS:

- Full 1/4" inside diameter
- Maximum working pressures:
1/4" hose: 30 PSI
1/4" In-line valve: 30 PSI
1/4" Male and female NPT valves: 100 PSI
- **Body and stern material:** Acetal Copolymer
- **Stern seal:** Nitrile (Buna-N)
- 1/4 turn shut off (1/4" hose limits most applications to 30 PSI)

EQUIPMENT

CIMCOOL® MIX STATIONS

- Provides two dilutions of a single metalworking fluid concentrate for the "charging" or "makeup" of a machine sump
- Uses two water powered venturi proportioners
- Simple and accurate
- "Charge" mix ratio is the concentration used to initially fill an empty sump
- "Makeup" mix ratio is the concentration used to replace fluid losses due to carry-off and evaporation

Model No. AB782
Price/Each \$410.69



CIMCOOL® MIX MASTER PROPORTIONER II

- Simple, economical, and accurate method to mix fluid concentrate with water
- Maintaining the proper mix ratio is very important
- Siphons concentrated fluids from a 55-gallon drum and mixes it with a predetermined amount of water
- Provides a premixed fluid, which is used to fill an individual machine tool reservoir, central system, or premix tank

Model No. AB783
Price/Each \$291.95



CIMCHEK® TEST STRIPS

- For checking metalworking fluid concentration
- Simple and trouble-free
- Dip the test strip into your fluid mix and count the number of blue pads
- Easy and reliable concentration testing



Model No.	Description	Price /Each
AB799	50 Strips	41.52

REFRACTOMETERS

MT Series

- Provides a direct reading of the Brix Scale
- Developed for working with sugar related liquids (fruit juices, soft drinks, wine)
- Commonly used for controlling the concentration of various fluids (cutting coolants, glycol solutions, and flux rinsing compounds)



Model No.	Scale	Range	Min. Div.	Accuracy	Price/Each
HX107	Brix	0 to 32%	0.2%	±0.2%	99.00

CIMPERIAL - OIL SOLUBLE FLUIDS

Premium Soluble Oil Metalworking Fluids with heavy-duty capabilities.

CIMPERIAL® 1070

- For broaching, gear cutting, tapping, reaming, turning, drilling, internal grinding, and centerless grinding of low and high machinability
- For ferrous and non-ferrous metals
- Rancidity control provides long sump life
- Easy maintenance

Model No.	Size	Price/Each
AB375	20 L	277.42
AB458	200 L	2351.18

CIMPERIAL® 1060CF - AEROSPACE APPROVED

- Chlorine free
- For broaching, gear cutting, tapping, reaming, turning, drilling, internal grinding, and centerless grinding
- For ferrous and non-ferrous metals
- Rancidity control provides long sump life
- Easy maintenance

Model No.	Size	Price/Each
AB477	20 L	301.55
AB501	200 L	2556.19



CIMSTAR® - SEMI-SYNTHETIC FLUIDS

CIMSTAR® 60C

- For moderate-duty to heavy-duty applications
- Biostable and semi-synthetic
- For machining and grinding of aluminum, iron and steel
- A true general-purpose fluid
- Low-foaming

Model No.	Size	Price/Each
AB389	20 L	274.30
AB459	200 L	2325.23

CIMSTAR® 540 PINK

- For moderate-duty applications
- Clear, water-soluble and biostable
- Has good rust and rancidity control
- For machining and grinding
- For ferrous and some non-ferrous metals

Model No.	Size	Price/Each
AB377	20 L	207.09
AB775	200 L	1754.30



CIMSTAR® QUAL STAR C

- For moderate-duty applications
- For machining and grinding
- For carbon/cast steel, cast iron, stainless steel, and high alloy steels
- For non-ferrous metals

Model No.	Size	Price/Each
AB387	20 L	229.93
AB773	200 L	1948.94

For hard water applications use *Cimstar 60*.

CIMTECH® - SYNTHETIC FLUIDS

CIMTECH® 95 BLUE

- For light-duty ferrous applications
- For machining and grinding of carbon steel
- Ideal where foam control is critical, such as double disc and Blanchard grinding
- Corrosion protection on ferrous metals
- Low-foaming

Model No.	Size	Price/Each
AB460	20 L	144.03
AB461	200 L	1219.71

CIMTECH® 46C

- For carbide grinding
- Maintains very low dissolved cobalt levels
- Low foaming, rancidity control and excellent settling properties

Model No.	Size	Price/Each
AB378	20 L	471.01
AB771	200 L	3991.30



CIMTECH® 310- AEROSPACE APPROVED

- For moderate to heavy-duty applications
- Clear and water-based containing a unique synthetic lubricant
- For grinding and machining
- For ferrous and non-ferrous metals

Model No.	Size	Price/Each
AB785	20 L	339.96
AB772	200 L	2880.58

CUTTING TOOLS

DRILL SETS

JOBBER LENGTH HSS, 118° POINT

- For general-purpose drilling and maintenance applications
- Black oxide finish for increased wear resistance and improved lubricity
- Designed for cast iron and carbon steel applications

TGC060



VALUE

Model No.	Mfg. No.	No. of Pieces	Size Range	Case	Price /Each
TGC059	C69034	13	1/16" - 1/4" x 1/64"	Metal	18.56
TGC060	C69035	15	1/16" - 1/2" x 1/32"	Plastic	47.62
TGC061	C69036	21	1/16" - 3/8" x 1/64"	Metal	44.30
TGC062	C69037	29	1/16" - 1/2" x 1/64"	Plastic	89.00
TGJ519	C69038	25	1mm - 13mm x 0.5mm	Plastic	92.14

JOBBER LENGTH HSS, 118° POINT

- For general-purpose drilling and maintenance applications
- Black oxide finish for increased wear resistance and improved lubricity
- Designed for cast iron and carbon steel applications

TU203



INDUSTRIAL

Model No.	Mfg. No.	No. of Pieces	Size Range	Case	Price /Each
TU202	57711	13	1/16" - 1/4" x 1/64"	Metal	36.50
TU995	57713	15	1/16" - 1/2" x 1/32"	Metal	91.41
TU203	57712	21	1/16" - 3/8" x 1/64"	Metal	84.89
TK155	57714	29	1/16" - 1/2" x 1/64"	Metal	164.92
TU204	57718	26	A - Z	Metal	164.03
TU471	57716	60	#1 - #60	Metal	133.66
TGJ561	57720	20	#61 - #80	Metal	56.49
WU799	57717	80	#1 - #80	Metal	230.71
TK158	57728	115	1/16" - 1/2" x 1/64"; A - Z; #1 - #60	Metal	478.64
TGJ562	57726	114	1/16" - 1/2" x 1/64"; #1 - #60; 1mm - 13mm x 0.5mm	Metal	523.36
TU205	57723	11	1mm - 6mm x 0.5mm	Metal	36.61
TGJ563	57729	13	1mm - 7mm x 0.5mm	Metal	47.85
TK157	57725	25	1mm - 13mm x 0.5mm	Metal	161.07
WU802	57727	118	1mm - 13mm	Metal	651.87

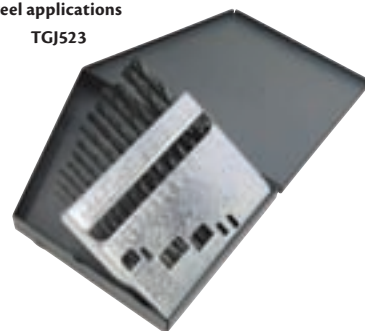
- Bright finish is designed for non ferrous and low tensile steel applications

Model No.	Mfg. No.	No. of Pieces	Size Range	Case	Price /Each
TU197	49911	13	1/16" - 1/4" x 1/64"	Metal	35.22
TU209	49913	15	1/16" - 1/2" x 1/32"	Metal	88.25
TU198	49912	21	1/16" - 3/8" x 1/64"	Metal	78.62
TU196	49914	29	1/16" - 1/2" x 1/64"	Metal	162.19
TU201	49918	26	A - Z	Metal	161.26
TU200	49916	60	#1 - #60	Metal	132.09
TU199	57715	20	#61 - #80	Metal	52.93
TU210	49928	115	1/16" - 1/2" x 1/64"; A - Z; #1 - #60	Metal	482.23

JOBBER LENGTH HSS, 118° POINT

- For general-purpose and maintenance applications
- Black oxide finish for increased wear resistance and improved lubricity
- Designed for cast iron and carbon steel applications

TGJ523



GENERAL PURPOSE MRO

Model No.	Mfg. No.	No. of Pieces	Size Range	Case	Price /Each
TGJ521	C21101	11	1/16" - 3/8" x 1/32"	Metal	32.65
TGJ523	C21105	13	1/16" - 1/4" x 1/64"	Metal	24.75
TGJ529	C21109	15	1/16" - 1/2" x 1/32"	Metal	63.49
TGJ534	C21114	21	1/16" - 3/8" x 1/64"	Metal	59.05
TGJ537	C21118	29	1/16" - 1/2" x 1/64"	Metal	118.67
TGJ541	C21158	26	A - Z	Metal	116.27
TGJ543	C21123	60	#1 - #60	Metal	105.64
TGJ547	C21127	115	1/16" - 1/2" x 1/64"; #1 - #60; A - Z	Metal	356.32
TGJ552	C21130	11	1mm - 6mm x 0.5mm	Metal	26.19
TGJ555	C21131	25	1mm - 13mm x 0.5mm	Metal	122.85

- Bright finish is designed for non ferrous and low tensile steel applications

Model No.	Mfg. No.	No. of Pieces	Size Range	Case	Price /Each
TGJ520	C21100	11	1/16" - 3/8" x 1/32"	Metal	32.65
TGJ522	C21104	13	1/16" - 1/4" x 1/64"	Metal	24.75
TGJ528	C21108	15	1/16" - 1/2" x 1/32"	Metal	63.49
TGJ533	C21113	21	1/16" - 3/8" x 1/64"	Metal	59.05
TGJ536	C21117	29	1/16" - 1/2" x 1/64"	Metal	118.67
TGJ542	C21122	60	#1 - #60	Metal	105.64
TGJ546	C21126	115	1/16" - 1/2" x 1/64"; #1 - #60; A - Z	Metal	356.32
TGJ553	C18127	25	1mm - 13mm x 0.5mm	Metal	122.85

JOBBER LENGTH HSS, 135° SPLIT POINT

- 135° split point is self-centering, for reduced thrust and easier penetration
- Black and gold finish for enhanced operation and long drill life
- Designed for tool and alloy steel application

TGC154



VALUE

Model No.	Mfg. No.	No. of Pieces	Size Range	Case	Price /Each
TGC150	C69030	13	1/16" - 1/4" x 1/64"	Metal	24.15
TGC151	C69031	15	1/16" - 1/2" x 1/32"	Plastic	57.99
TGC152	C69032	29	1/16" - 1/2" x 1/64"	Plastic	106.05

- Available with three flats on shank for tighter chucking in portable drills.

Model No.	Mfg. No.	No. of Pieces	Size Range	Case	Price /Each
TGC153	C68343	13	1/16" - 1/4" x 1/64"	Metal	27.77
TGC154	C68461	15	1/16" - 1/2" x 1/32"	Plastic	66.70
TGC155	C69368	29	1/16" - 1/2" x 1/64"	Plastic	121.96

DRILL SETS (CONT'D)

JOBBER LENGTH HSS, 135° SPLIT POINT

- 135° split point is self-centering, for reduced thrust and easier penetration
- Black oxide finish for increased wear resistance and improved lubricity
- **Designed for tool and alloy steel application**



TGJ538



GENERAL PURPOSE MRO

Model No.	Mfg. No.	No. of Pieces	Size Range	Case	Price /Each
TGJ524	C21157	13	1/16" - 1/4" x 1/64"	Metal	27.93
TGJ530	C21110	15	1/16" - 1/2" x 1/32"	Metal	73.74
TGJ535	C21115	21	1/16" - 3/8" x 1/64"	Metal	68.68
TGJ538	C21119	29	1/16" - 1/2" x 1/64"	Metal	133.31
TGJ544	C21124	60	#1 - #60	Metal	122.87
TGJ549	C21128	115	1/16" - 1/2" x 1/64"; #1 - #60; A-Z	Metal	427.91

- Black and gold finish for enhanced operation and long drill life

Model No.	Mfg. No.	No. of Pieces	Size Range	Case	Price /Each
TGJ525	C18123	13	1/16" - 1/4" x 1/64"	Metal	32.20
TGJ531	C18124	15	1/16" - 1/2" x 1/32"	Metal	77.32
TGJ539	C18125	29	1/16" - 1/2" x 1/64"	Metal	141.40
TGJ545	C21125	60	#1 - #60	Metal	186.76

JOBBER LENGTH COBALT, 135° SPLIT POINT

- M35, 8% cobalt HSS construction
- Straw finish adds lubricity and easily identifies cobalt drills
- **Designed to drill tough, high-tensile materials and work-hardening materials like high-strength alloy steels, stainless steel, titanium, manganese steel, armor plate and inconel**



TGJ532



GENERAL PURPOSE MRO

Model No.	Mfg. No.	No. of Pieces	Size Range	Case	Price /Each
TGJ526	C21107	13	1/16" - 1/4" x 1/64"	Metal	48.60
TGJ532	C21112	15	1/16" - 1/2" x 1/32"	Metal	134.08
TGJ540	C21121	29	1/16" - 1/2" x 1/64"	Metal	248.93
TGJ550	C21129	115	1/16" - 1/2" x 1/64"; #1 - #60; A-Z	Metal	694.92

SCREW MACHINE LENGTH HSS, 135° SPLIT POINT

- Shorter flute and overall length provide superior rigidity to minimize deflection when using heavy feed rates in hand or machine drilling application
- Black oxide finish for increased wear resistance and improved lubricity; reduces chip welding and galling
- **Designed to drill through tool steel, alloy steel, carbon steel and cast iron**



TGJ556

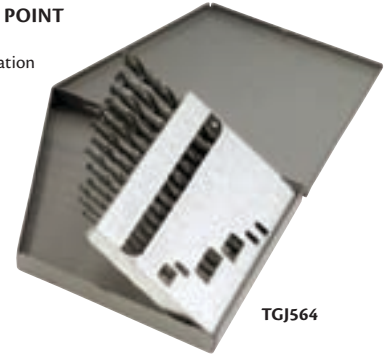


GENERAL PURPOSE MRO

Model No.	Mfg. No.	No. of Pieces	Size Range	Case	Price /Each
TGJ556	C21133	29	1/16" - 1/2" x 1/64"	Metal	127.84
TGJ557	C21947	60	#1 - #60	Metal	122.34

JOBBER LENGTH HSS, 135° SPLIT POINT

- 135° split point is self-centering, for reduced thrust and easier penetration
- Black oxide finish for increased wear resistance and improved lubricity
- **Designed for tool and alloy steel application**



TGJ564



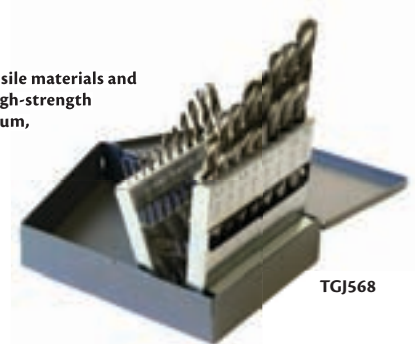
Chicago-Latrobe®

INDUSTRIAL

Model No.	Mfg. No.	No. of Pieces	Size Range	Case	Price /Each
TGJ564	69847	13	1/16" - 1/4" x 1/64"	Metal	40.61
TU293	69850	15	1/16" - 1/2" x 1/32"	Metal	99.61
TU294	69851	21	1/16" - 3/8" x 1/64"	Metal	90.38
TH426	45640	29	1/16" - 1/2" x 1/64"	Metal	181.44
TU298	45638	26	A - Z	Metal	178.27
TH425	45639	60	#1 - #60	Metal	156.77
WS226	45656	20	#61 - #80	Metal	68.28
TH427	45650	115	1/16" - 1/2" x 1/64"; A - Z; #1 - #60	Metal	548.44
TGJ565	45925	25	1mm - 13mm x 0.5mm	Metal	193.39

JOBBER LENGTH COBALT, 135° SPLIT POINT

- M35, 8% cobalt HSS construction
- Straw finish adds lubricity and easily identifies cobalt drills
- **Designed to drill tough, high-tensile materials and work-hardening materials like high-strength alloy steels, stainless steel, titanium, manganese steel, armor plate and inconel**



TGJ568



Chicago-Latrobe®

INDUSTRIAL

Model No.	Mfg. No.	No. of Pieces	Size Range	Case	Price /Each
TGJ566	47796	29	1/16" - 1/2" x 1/64"	Metal	277.29
TGJ568	47924	19	1mm - 10mm x 0.5mm	Metal	128.12
TGJ569	47925	25	1mm - 13mm x 0.5mm	Metal	259.68

SCREW MACHINE LENGTH HSS, 135° SPLIT POINT

- Shorter flute and overall length provide superior rigidity to minimize deflection when using heavy feed rates in hand or machine drilling application
- Black oxide finish for increased wear resistance and improved lubricity; reduces chip welding and galling
- **Designed to drill through tool steel, alloy steel, carbon steel and cast iron**



TGJ570



Chicago-Latrobe®

INDUSTRIAL

Model No.	Mfg. No.	No. of Pieces	Size Range	Case	Price /Each
TGJ570	69889	15	1/16" - 1/2" x 1/32"	Metal	95.25
TU287	69852	21	1/16" - 3/8" x 1/64"	Metal	93.06
TU288	57719	29	1/16" - 1/2" x 1/64"	Metal	159.97

CUTTING TOOLS

DRILL SETS (CONT'D)

SCREW MACHINE LENGTH COBALT, 135° SPLIT POINT

- Shorter flute and overall length provide superior rigidity to minimize deflection when using heavy feed rates in hand or machine drilling application
- Straw finish for added lubricity
- Designed to drill through tool steel, alloy steel, carbon steel and cast iron



TU289

C-L
Chicago-Latrobe®
INDUSTRIAL

Model No.	Mfg. No.	No. of Pieces	Size Range	Case	Price /Each
TU290	69856	15	1/16" - 1/2" x 1/32"	Metal	170.38
TU289	69853	29	1/16" - 1/2" x 1/64"	Metal	281.85

1/2" REDUCED SHANK HSS, 118° POINT

- Features 6" overall length and 3 1/8" flute length for increased rigidity, less deflection, and better hole accuracy
- Black oxide finish for increased wear resistance and added lubricity, black and gold finish for enhanced operation and long drill life
- Available with round shank or shank with three flats for a more positive grip in the drill chuck



TGJ559

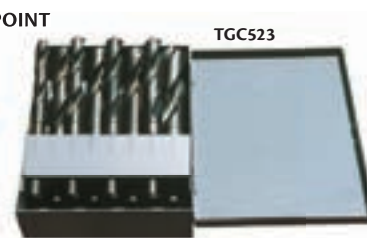
CLE-LINE

GENERAL PURPOSE MRO

Model No.	Mfg. No.	No. of Pieces	Size Range	Description	Case	Price /Each
TGJ558	C21135	8	9/16" - 1" x 1/16"	Black Oxide, Round Shank	Metal	243.39
TGJ559	C22761	8	9/16" - 1" x 1/16"	Black Oxide, Shank with flats	Metal	246.88
TGJ560	C21164	8	9/16" - 1" x 1/16"	Black & Gold, Shank with flats	Metal	261.30

1/2" REDUCED SHANK HSS, 118° POINT

- Features 6" overall length and 3 1/8" flute length for increased rigidity, less deflection and better hole accuracy
- Black oxide finish for increased wear resistance and added lubricity
- Available with round shank or shank with three flats for a more positive grip in the drill chuck



TGC523

CLE-FORCE
VALUE

Model No.	Mfg. No.	No. of Pieces	Size Range	Case	Price /Each
TGC523	C69039	8	9/16" - 1" x 1/16" - Round Shank	Metal	182.54
TGC524	C69040	8	9/16" - 1" x 1/16" - Shank with Flats	Metal	185.16

1/2" REDUCED SHANK HSS, 118° POINT

- Features 6" overall length and 3 1/8" flute length for increased rigidity, less deflection, and better hole accuracy
- Black oxide finish for increased wear resistance and added lubricity
- Available with round shank or shank with three flats for a more positive grip in the drill chuck



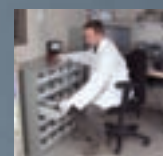
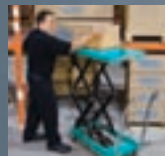
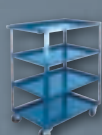
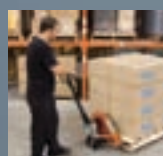
WV913

C-L
Chicago-Latrobe®
INDUSTRIAL

Model No.	Mfg. No.	No. of Pieces	Size Range	Description	Case	Price /Each
WV886	69857	8	9/16" - 1" x 1/16"	Round Shank	Metal	374.15
WV913	69890	16	17/32" - 1" x 1/32"	Round Shank	Wood	717.45
WV887	69858	33	1/2" - 1" x 1/64"	Round Shank	Metal	1411.98
WV888	69859	8	9/16" - 1" x 1/16"	Flatted Shank	Metal	445.41
TGJ571	69849	16	17/32" - 1" x 1/32"	Flatted Shank	Wood	803.65
TGJ572	69848	33	1/2" - 1" x 1/64"	Flatted Shank	Metal	1571.68

KLETON

Canada's Leading
Material Handling Manufacturer



TECH TIPS

CHOOSING THE PROPER LENGTH DRILL:

Always select the shortest drill possible for an application. The increased rigidity will dramatically enhance the number of holes per grind, as well as hole concentricity and location.

Drills over 1" diameter have reduced shanks:

1 1/16" to 1 1/4" sizes have 1" shank

1 5/16" to 1 1/2" have 1 1/4" shank

1 9/16" to 2" have 1 1/2" shank

CHOOSING BETWEEN 118° AND 135° DRILL POINTS:

118° point angles are used primarily in softer materials such as mild steels and cast irons.

135° split points should be used to cut harder steel materials and especially in deep holes over 4 times the drill diameter. With a 135° drill point, cutting harder materials will produce thicker chips, minimizing work hardening of the cavity. The length of the lips on a 135° point drill, measured from the axis to the outer corners, is relatively short. This enables quicker penetration into the workpiece and reduces thrust and abrasion along the cutting edges.



TGC001

JOBBER LENGTH HSS DRILLS, 118°

- Manufactured from premium high-speed steel
- Black Oxide finish increases wear resistance and add lubricity while improving chip flow, ideal for cast iron and carbon steel applications
- Bright finish is ideal for non ferrous and low tensile steel applications
- Sold per pack of 12
- Designed to drill through medium steel, soft steel, magnesium and magnesium alloys, in sheet metal and portable drilling application



VALUE

For general-purpose drilling



GENERAL PURPOSE MRO

For maintenance application



INDUSTRIAL

Manufactured from premium high-speed steel

FRACTIONAL

					Cle-Force					Cle-Line					Chicago-Latrobe				
					Black Oxide Finish		Bright Finish		Price /Each	Black Oxide Finish		Bright Finish		Price /Each	Black Oxide Finish		Bright Finish		Price /Each
Dia	Dec	Metric	OAL	Flute Length	Model No.	Mfg. No.	Model No.	Mfg. No.		Model No.	Mfg. No.	Model No.	Mfg. No.		Model No.	Mfg. No.	Model No.	Mfg. No.	
1/64	0.0156	0.40	3/4	3/16	—	—	—	—	—	—	—	—	—	—	TGH183	44001	WR922	44201	3.86
1/32	0.0312	0.79	1-3/8	1/2	—	—	—	—	—	TGC733	C22643	—	—	1.26	TGH195	44002	WR923	44202	1.62
3/64	0.0469	1.19	1-3/4	3/8	—	—	—	—	—	TGC734	C22644	—	—	1.22	TH145	44003	WR924	44203	1.61
1/16	0.0625	1.59	1-7/8	7/8	TGC001	C68000	TGC030	C68114	0.72	TGC735	C22653	TGF021	C22995	0.95	TH146	44004	WR925	44204	1.56
5/64	0.0781	1.98	2	1	TGC002	C68001	TGC031	C68115	0.74	TGC736	C22659	TGF022	C22996	0.98	TH147	44005	WR926	44205	1.61
3/32	0.0938	2.38	2-1/4	1-1/4	TGC003	C68002	TGC032	C68116	0.77	TGC737	C22666	TGF023	C22997	1.03	TH148	44006	WR927	44206	1.63
7/64	0.1094	2.78	2-5/8	1-1/2	TGC004	C68003	TGC033	C68117	0.80	TGC738	C22673	TGF024	C22998	1.08	TH149	44007	WR928	44207	1.64
1/8	0.1250	3.18	2-3/4	1-5/8	TGC005	C68004	TGC034	C68118	0.88	TGC739	C22679	TGF025	C22999	1.17	TH150	44008	WR929	44208	1.68
9/64	0.1406	3.57	2-7/8	1-3/4	TGC006	C68005	TGC035	C68119	0.99	TGC740	C22683	TGF026	C23000	1.32	TH151	44009	WR930	44209	1.80
5/32	0.1562	3.97	3-1/8	2	TGC007	C68006	TGC036	C68120	1.04	TGC741	C22689	TGF027	C23001	1.38	TH152	44010	WR931	44210	2.08
11/64	0.1719	4.37	3-1/4	2-1/8	TGC008	C68007	TGC037	C68121	1.10	TGC742	C22695	TGF028	C23002	1.47	TH153	44011	WR932	44211	2.16
3/16	0.1875	4.76	3-1/2	2-5/16	TGC009	C68008	TGC038	C68122	1.23	TGC743	C22701	TGF029	C23003	1.63	TH154	44012	WR933	44212	2.43
13/64	0.2031	5.16	3-5/8	2-7/16	TGC010	C68009	TGC039	C68123	1.41	TGC744	C22708	TGF030	C23004	1.88	TH155	44013	WR934	44213	2.67
7/32	0.2188	5.56	3-3/4	2-1/2	TGC011	C68010	TGC040	C68124	1.50	TGC745	C22713	TGF031	C23005	2.01	TH156	44014	WR935	44214	2.76
15/64	0.2344	5.95	3-7/8	2-5/8	TGC012	C68011	TGC041	C68125	1.68	TGC746	C22717	TGF032	C23006	2.25	TH157	44015	WR936	44215	3.03
1/4	0.2500	6.35	4	2-3/4	TGC013	C68012	TGC042	C68126	1.81	TGC747	C22721	TGF033	C23007	2.42	TH158	44016	WR937	44216	3.25
17/64	0.2656	6.75	4-1/8	2-7/8	TGC014	C68013	TGC043	C68127	1.97	TGC748	C22724	TGF034	C23008	2.62	TH159	44017	WR938	44217	3.68
9/32	0.2812	7.14	4-1/4	2-15/16	TGC015	C68014	TGC044	C68128	2.23	TGC749	C22729	TGF035	C23009	2.98	TH160	44018	WR939	44218	3.93
19/64	0.2969	7.54	4-3/8	3-1/16	TGC016	C68015	TGC045	C68129	2.49	TGC750	C22732	TGF036	C23010	3.31	TH161	44019	WR940	44219	4.56
5/16	0.3125	7.94	4-1/2	3-3/16	TGC017	C68016	TGC046	C68130	2.68	TGC751	C22734	TGF037	C23011	3.57	TH162	44020	WR941	44220	4.89
21/64	0.3281	8.33	4-5/8	3-5/16	TGC018	C68017	TGC047	C68131	3.01	TGC752	C22737	TGF038	C23012	4.01	TH163	44021	WR942	44221	5.50
11/32	0.3438	8.73	4-3/4	3-7/16	TGC019	C68018	TGC048	C68132	3.35	TGC753	C22740	TGF039	C23013	4.45	TH164	44022	WR943	44222	6.14
23/64	0.3594	9.13	4-7/8	3-1/2	TGC020	C68019	TGC049	C68133	3.77	TGC754	C22743	TGF040	C23014	5.02	TH165	44023	WR944	44223	6.81
3/8	0.3750	9.53	5	3-5/8	TGC021	C68020	TGC050	C68134	3.95	TGC755	C22745	TGF041	C23015	5.27	TH166	44024	WR945	44224	7.19
25/64	0.3906	9.92	5-1/8	3-3/4	TGC022	C68021	TGC051	C68135	4.44	TGC756	C22505	TGF042	C23016	5.93	TH167	44025	WR946	44225	8.17
13/32	0.4062	10.32	5-1/4	3-7/8	TGC023	C68022	TGC052	C68136	4.65	TGC757	C22506	TGF043	C23017	6.20	TH168	44026	WR947	44226	8.48
27/64	0.4219	10.72	5-3/8	3-15/16	TGC024	C68023	TGC053	C68137	5.17	TGC758	C22507	TGF044	C23018	6.90	TH169	44027	WR948	44227	9.37
7/16	0.4375	11.11	5-1/2	4-1/16	TGC025	C68024	TGC054	C68138	5.43	TGC759	C22751	TGF045	C23019	7.23	TH170	44028	WR949	44228	9.74
29/64	0.4531	11.51	5-5/8	4-3/16	TGC026	C68025	TGC055	C68139	5.76	TGC760	C22508	TGF046	C23020	7.67	TH171	44029	WR950	44229	11.05
15/32	0.4688	11.91	5-3/4	4-5/16	TGC027	C68026	TGC056	C68140	6.28	TGC761	C22753	TGF047	C23021	8.36	TH172	44030	WR951	44230	11.97
31/64	0.4844	12.3	5-7/8	4-3/8	TGC028	C68027	TGC057	C68141	6.77	TGC762	C22755	TGF048	C23022	9.03	TU508	44031	WR952	44231	12.40
1/2	0.5000	12.7	6	4-1/2	TGC029	C68028	TGC058	C68142	7.09	TGC763	C22757	TGF049	C23023	9.45	TH176	44032	WR953	44232	12.91
33/64	0.5156	13.10	6-5/8	4-13/16	—	—	—	—	—	—	—	—	—	—	TH177	44033	TGH151	44233	32.63
17/32	0.5312	13.49	6-5/9	4-13/16	—	—	—	—	—	—	—	—	—	—	TH178	44034	TGH153	44234	33.68
35/64	0.5469	13.89	6-5/8	4-13/16	—	—	—	—	—	—	—	—	—	—	TU314	44035	TGH156	44235	36.31
9/16	0.5625	14.29	6-5/9	4-13/16	—	—	—	—	—	—	—	—	—	—	TH180	44036	TGH159	44236	36.94
37/64	0.5781	14.68	6-5/8	4-13/16	—	—	—	—	—	—	—	—	—	—	TH181	44037	TGH161	44237	37.85
19/32	0.5938	15.08	7-1/8	5-3/16	—	—	—	—	—	—	—	—	—	—	TH182	44038	TGH164	44238	39.74
39/64	0.6094	15.48	7-1/8	5-3/16	—	—	—	—	—	—	—	—	—	—	TH183	44039	TGH166	44239	40.94
5/8	0.6250	15.88	7-1/8	5-3/16	—	—	—	—	—	—	—	—	—	—	TH184	44040	TGH169	44240	41.85
41/64	0.6406	16.27	7-1/8	5-3/16	—	—	—	—	—	—	—	—	—	—	TH185	44041	TGH172	44241	43.56
21/32	0.6562	16.67	7-1/8	5-3/16	—	—	—	—	—	—	—	—	—	—	TH186	44042	TGH174	44242	44.53
43/64	0.6719	17.07	7-1/8	5-3/16	—	—	—	—	—	—	—	—	—	—	TH187	44043	TGH177	44243	52.99
11/16	0.6875	17.46	7-1/8	5-3/16	—	—	—	—	—	—	—	—	—	—	TH188	44044	TGH179	44244	54.38

CUTTING TOOLS

JOBBER LENGTH HSS DRILLS, 118° (CONT'D)



VALUE

For general-purpose drilling

GENERAL PURPOSE MRO

For maintenance application

INDUSTRIAL

Manufactured from premium high-speed steel

METRIC

				Cle-Force				Cle-Line				Chicago-Latrobe			
Dia	Decimal	OAL	Flute Length	Black Oxide Finish		Bright Finish		Black Oxide Finish		Bright Finish		Black Oxide Finish		Bright Finish	
				Model No.	Mfg. No.	Model No.	Mfg. No.	Model No.	Mfg. No.	Model No.	Mfg. No.	Model No.	Mfg. No.	Model No.	Mfg. No.
1.0	0.0394	34	12	TGC708	C68606	—	—	0.92	TGC862	C22793	TGF144	C62793	1.23	TH527	47223
1.50	0.0591	40	18	TGC709	C68607	—	—	0.91	TGC872	C22803	TGF154	C62803	1.21	TH537	47233
2.00	0.0787	49	24	TGC710	C68608	—	—	0.85	TGC882	C22813	TGF164	C62813	1.13	TH547	47243
2.50	0.0984	57	30	TGC711	C68609	—	—	0.87	TGC892	C22823	TGF174	C62823	1.16	TH556	47253
3.00	0.1181	61	33	TGC712	C68610	—	—	0.96	TGC898	C22828	TGF179	C62828	1.28	TH561	47259
3.50	0.1378	70	39	TGC713	C68611	—	—	0.98	TGC903	C22833	TGF184	C62833	1.30	TH566	47265
4.00	0.1575	75	43	TGC714	C68612	—	—	1.08	TGC908	C22838	TGF189	C62838	1.44	TH571	47271
4.50	0.1772	80	47	TGC715	C68613	—	—	1.22	TGC914	C22843	TGF194	C62843	1.62	TH576	47277
5.00	0.1969	86	52	TGC716	C68614	—	—	1.44	TGC919	C22848	TGF199	C62848	1.92	TH581	47283
5.50	0.2165	93	57	TGC717	C68615	—	—	1.64	TGC925	C22853	TGF204	C62853	2.18	TH590	47289
6.00	0.2362	93	57	TGC718	C68616	—	—	1.77	TGC931	C22858	TGF209	C62858	2.36	TH591	47295
6.50	0.2559	101	63	TGC719	C68617	—	—	2.03	TGC937	C22863	TGF214	C62863	2.72	TH593	47301
7.00	0.2756	109	69	TGC720	C68618	—	—	2.29	TGC943	C22868	TGF219	C62868	3.05	TH597	47307
7.50	0.2953	109	69	TGC721	C68619	—	—	2.74	TGC949	C22873	TGF224	C62873	3.66	TH601	47313
8.00	0.3150	117	75	TGC722	C68620	—	—	3.04	TGC955	C22878	TGF229	C62878	4.06	TH605	47319
8.50	0.3346	117	75	TGC723	C68621	—	—	3.60	TGC961	C22883	TGF234	C62883	4.80	TH617	47325
9.00	0.3543	125	81	TGC724	C68622	—	—	4.11	TGC967	C22888	TGF239	C62888	5.46	TH622	47331
9.50	0.3740	125	81	TGC725	C68623	—	—	4.48	TGC973	C22893	TGF244	C62893	5.96	TH627	47337
10.00	0.3937	133	87	TGC726	C68624	—	—	4.83	TGC978	C22898	TGF249	C62898	6.45	TH632	47343
10.50	0.4134	133	87	TGC727	C68625	—	—	5.26	TGC983	C22900	TGF251	C62900	7.02	TH633	47344
11.00	0.4331	142	94	TGC728	C68626	—	—	5.51	TGC986	C22902	TGF254	C62902	7.34	TH634	47345
11.50	0.4528	142	94	TGC729	C68627	—	—	6.28	TGC990	C22904	TGF257	C62904	8.37	TH635	47346
12.00	0.4724	151	101	TGC730	C68628	—	—	6.96	TGC992	C22906	TGF259	C62906	9.29	TH636	47347
12.50	0.4921	151	101	TGC731	C68629	—	—	7.58	TGC994	C22908	TGF261	C62908	10.11	TH637	47348
13.00	0.5118	151	101	TGC732	C68630	—	—	12.93	TGC996	C22910	TGF263	C62910	17.23	TH638	47349
13.50	0.5315	160	108	—	—	—	—	—	TGC998	C22912	TGF265	C62912	21.80	TH638	47349
14.00	0.5512	160	108	—	—	—	—	—	TGF001	C22914	TGF267	C62914	21.80	TH646	47362
14.50	0.5709	169	114	—	—	—	—	—	TGF003	C22916	TGF269	C62916	23.49	TH650	47366
15.00	0.5906	169	114	—	—	—	—	—	TGF005	C22918	TGF271	C62918	24.70	TH653	47369
15.50	0.6102	178	120	—	—	—	—	—	TGF007	C22920	TGF272	C62920	26.69	TH652	47368
16.00	0.6299	178	120	—	—	—	—	—	TGF009	C22922	TGF274	C62922	30.16	TH656	47372
16.50	0.6496	184	125	—	—	—	—	—	TGF011	C22924	TGF276	C62924	33.40	TH658	47374
17.00	0.6693	184	125	—	—	—	—	—	TGF013	C22926	TGF278	C62926	34.95	TH661	47377
17.50	0.6890	191	130	—	—	—	—	—	TGF015	C22928	TGF279	C62928	35.45	TH659	47375
18.00	0.7086	191	130	—	—	—	—	—	TGF016	C22929	TGF280	C62929	51.66	—	—
18.5	0.7283	198	135	—	—	—	—	—	TGF017	C22930	—	—	51.66	—	—
19	0.7480	198	135	—	—	—	—	—	TGF018	C22931	TGF281	C62931	55.13	—	—
19.5	0.7677	205	140	—	—	—	—	—	TGF019	C22932	—	—	59.85	—	—
20	0.7874	205	140	—	—	—	—	—	TGF020	C22933	—	—	63.78	—	—

WIRE GAUGE

					Cle-Force					Cle-Line					Chicago-Latrobe				
					Black Oxide Finish		Bright Finish		Price /Each	Black Oxide Finish		Bright Finish		Price /Each	Black Oxide Finish		Bright Finish		Price /Each
Dia	Dec	Metric	OAL	Flute Length	Model No.	Mfg. No.	Model No.	Mfg. No.		Model No.	Mfg. No.	Model No.	Mfg. No.		Model No.	Mfg. No.	Model No.	Mfg. No.	
60	0.0400	1.02	1-5/8	11/16	—	—	—	—	—	TGC789	C22645	TGF050	C23024	1.23	TU326	44130	WS014	44330	1.62
59	0.0410	1.04	1-5/8	11/16	—	—	—	—	—	TGC790	C22646	TGF051	C23025	1.23	TU325	44129	WS013	44329	1.62
58	0.0420	1.07	1-5/8	11/16	—	—	—	—	—	TGC791	C22647	TGF052	C23026	1.23	TH246	44128	WS012	44328	1.62
57	0.0430	1.09	1-3/4	3/4	—	—	—	—	—	TGC792	C22648	TGF053	C23027	1.23	TH245	44127	WS011	44327	1.62
56	0.0465	1.18	1-3/4	3/4	—	—	—	—	—	TGC793	C22649	TGF054	C23028	1.22	TH244	44126	WS010	44326	1.62
55	0.0520	1.32	1-7/8	7/8	—	—	—	—	—	TGC794	C22650	TGF055	C23029	1.22	TH243	44125	WS009	44325	1.62
54	0.0550	1.40	1-7/8	7/8	—	—	—	—	—	TGC795	C22651	TGF056	C23030	1.22	TU324	44124	WS008	44324	1.62
53	0.0595	1.51	1-7/8	7/8	—	—	—	—	—	TGC796	C22652	TGF057	C23031	1.22	TH241	44123	WS007	44323	1.62
52	0.0635	1.61	1-7/8	7/8	—	—	—	—	—	TGC797	C22654	TGF058	C23032	1.13	TU323	44122	WS006	44322	1.60
51	0.0670	1.70	2	1	—	—	—	—	—	TGC798	C22655	TGF059	C23033	1.13	TU322	44121	WS005	44321	1.60
50	0.0700	1.78	2	1	—	—	—	—	—	TGC799	C22656	TGF060	C23034	1.13	TU321	44120	WS004	44320	1.60
49	0.0730	1.85	2	1	—	—	—	—	—	TGC800	C22657	TGF061	C23035	1.13	TU320	44119	WS003	44319	1.60
48	0.0760	1.93	2	1	—	—	—	—	—	TGC801	C22658	TGF062	C23036	1.17	TU319	44118 ^a	WS002	44318	1.60
47	0.0785	1.99	2	1	—	—	—	—	—	TGC802	C22660	TGF063	C23037	1.17	TU318	44117	WS001	44317	1.60
46	0.0810	2.06	2-1/8	1-1/8	—	—	—	—	—	TGC803	C22661	TGF064	C23038	1.17	TU317	44116	WR999	44316	1.60
45	0.0820	2.08	2-1/8	1-1/8	—	—	—	—	—	TGC804	C22662	TGF065	C23039	1.17	TH233	44115	WR998	44315	1.60
44	0.0860	2.18	2-1/8	1-1/8	—	—	—	—	—	TGC805	C22663	TGF066	C23040	1.17	TU316	44114	WR997	44314	1.60
43	0.0890	2.26	2-1/4	1-1/4	—	—	—	—	—	TGC806	C22664	TGF067	C23041	1.19	TH231	44113	WR996	44313	1.61
42	0.0935	2.37	2-1/4	1-1/4	—	—	—	—	—	TGC807	C22665	TGF068	C23042	1.19	TH230	44112	WR995	44312	1.61
41	0.0960	2.44	2-3/8	1-3/8	—	—	—	—	—	TGC808	C22667	TGF069	C23043	1.23	TH229	44111	WR994	44311	1.61
40	0.0980	2.49	2-3/8	1-3/8	—	—	—	—	—	TGC809	C22668	TGF070	C23044	1.23	TH228	44110	WR993	44310	1.61
39	0.0995	2.53	2-3/8	1-3/8	—	—	—	—	—	TGC810	C22669	TGF071	C23045	1.23	TH227	44109	WR992	44309	1.64
38	0.1015	2.58	2-1/2	1-7/16	—	—	—	—	—	TGC811	C22670	TGF072	C23046	1.24	TU509	44108	WR991	44308	1.64
37	0.1040	2.64	2-1/2	1-7/16	—	—	—	—	—	TGC812	C22671	TGF073	C23047	1.24	TH225	44107	WR990	44307	1.69
36	0.1065	2.71	2-1/2	1-7/16	—	—	—	—	—	TGC813	C22672	TGF074	C23048	1.24	TH224	44106	WR989	44306	1.69

JOBBER LENGTH HSS DRILLS, 118° (CONT'D)



VALUE

For general-purpose drilling



GENERAL PURPOSE MRO

For maintenance application



Chicago-Latrobe®

INDUSTRIAL

Manufactured from premium high-speed steel

Metric sizes are manufactured to DIN 338 specifications

WIRE GAUGE (CONT'D)

					Cle-Force					Cle-Line					Chicago-Latrobe				
Dia	Dec	Metric	OAL	Flute Length	Black Oxide Finish		Bright Finish		Price /Each	Black Oxide Finish		Bright Finish		Price /Each	Black Oxide Finish		Bright Finish		Price /Each
					Model No.	Mfg. No.	Model No.	Mfg. No.		Model No.	Mfg. No.	Model No.	Mfg. No.		Model No.	Mfg. No.	Model No.	Mfg. No.	
35	0.1100	2.79	2-5/8	1-1/2	—	—	—	—	—	TGC814	C22674	TGF075	C23049	1.29	TH223	44105	WR988	44305	1.75
34	0.1110	2.82	2-5/8	1-1/2	—	—	—	—	—	TGC815	C22675	TGF076	C23050	1.34	TH222	44104	WR987	44304	1.75
33	0.1130	2.87	2-5/8	1-1/2	—	—	—	—	—	TGC816	C22676	TGF077	C23051	1.34	TH221	44103	WR986	44303	1.75
32	0.1160	2.95	2-3/4	1-5/8	—	—	—	—	—	TGC817	C22677	TGF078	C23052	1.34	TH220	44102	WR985	44302	1.75
31	0.1200	3.05	2-3/4	1-5/8	—	—	—	—	—	TGC818	C22678	TGF079	C23053	1.34	TH219	44101	WR984	44301	1.77
30	0.1285	3.26	2-3/4	1-5/8	—	—	—	—	—	TGC819	C22680	TGF080	C23054	1.34	TH218	44100	WR983	44300	1.81
29	0.1360	3.45	2-7/8	1-3/4	—	—	—	—	—	TGC820	C22681	TGF081	C23055	1.38	TH217	44099	WR982	44299	1.87
28	0.1405	3.57	2-7/8	1-3/4	—	—	—	—	—	TGC821	C22682	TGF082	C23056	1.42	TH216	44098	WR981	44298	1.87
27	0.1440	3.66	3	1-7/8	—	—	—	—	—	TGC822	C22684	TGF083	C23057	1.47	TH215	44097	WR980	44297	2.09
26	0.1470	3.73	3	1-7/8	—	—	—	—	—	TGC823	C22685	TGF084	C23058	1.47	TH214	44096	WR979	44296	2.09
25	0.1495	3.80	3	1-7/8	—	—	—	—	—	TGC824	C22686	TGF085	C23059	1.47	TH213	44095	WR978	44295	2.07
24	0.1520	3.86	3-1/8	2	—	—	—	—	—	TGC825	C22687	TGF086	C23060	1.47	TH212	44094	WR977	44294	2.13
23	0.1540	3.91	3-1/8	2	—	—	—	—	—	TGC826	C22688	TGF087	C23061	1.47	TH211	44093	WR976	44293	2.13
22	0.1570	3.99	3-1/8	2	—	—	—	—	—	TGC827	C22690	TGF088	C23062	1.56	TH210	44092	WR975	44292	2.13
21	0.1590	4.04	3-1/4	2-1/8	—	—	—	—	—	TGC828	C22691	TGF089	C23063	1.55	TH209	44091	WR974	44291	2.13
20	0.1610	4.09	3-1/4	2-1/8	—	—	—	—	—	TGC829	C22692	TGF090	C23064	1.64	TH208	44090	WR973	44290	2.35
19	0.1660	4.22	3-1/4	2-1/8	—	—	—	—	—	TGC830	C22693	TGF091	C23065	1.73	TH207	44089	WR972	44289	2.35
18	0.1695	4.31	3-1/4	2-1/8	—	—	—	—	—	TGC831	C22694	TGF092	C23066	1.73	TH206	44088	WR971	44288	2.35
17	0.1730	4.39	3-3/8	2-3/16	—	—	—	—	—	TGC832	C22696	TGF093	C23067	1.88	TH205	44087	WR970	44287	2.53
16	0.1770	4.50	3-3/8	2-3/16	—	—	—	—	—	TGC833	C22697	TGF094	C23068	1.82	TH204	44086	WR969	44286	2.53
15	0.1800	4.57	3-3/8	2-3/16	—	—	—	—	—	TGC834	C22698	TGF095	C23069	1.91	TH203	44085	WR968	44285	2.64
14	0.1820	4.62	3-3/8	2-3/16	—	—	—	—	—	TGC835	C22699	TGF096	C23070	1.91	TH202	44084	WR967	44284	2.64
13	0.1850	4.70	3-1/2	2-5/16	—	—	—	—	—	TGC836	C22700	TGF097	C23071	1.91	TH201	44083	WR966	44283	2.64
12	0.1890	4.80	3-1/2	2-5/16	—	—	—	—	—	TGC837	C22702	TGF098	C23072	1.99	TH200	44082	WR965	44282	2.64
11	0.1910	4.85	3-1/2	2-5/16	—	—	—	—	—	TGC838	C22703	TGF099	C23073	1.94	TH199	44081	WR964	44281	2.64
10	0.1935	4.91	3-5/8	2-7/16	—	—	—	—	—	TGC839	C22704	TGF100	C23074	1.99	TH198	44080	WR963	44280	2.73
9	0.1960	4.98	3-5/8	2-7/16	—	—	—	—	—	TGC840	C22705	TGF101	C23075	2.05	TH197	44079	WR962	44279	2.73
8	0.1990	5.05	3-5/8	2-7/16	—	—	—	—	—	TGC841	C22706	TGF102	C23076	2.07	TH196	44078	WR961	44278	2.73
7	0.2010	5.11	3-5/8	2-7/16	—	—	—	—	—	TGC842	C22707	TGF103	C23077	2.01	TH195	44077	WR960	44277	2.71
6	0.2040	5.18	3-3/4	2-1/2	—	—	—	—	—	TGC843	C22709	TGF104	C23078	2.28	TU315	44076	WR959	44276	2.92
5	0.2055	5.22	3-3/4	2-1/2	—	—	—	—	—	TGC844	C22710	TGF105	C23079	2.28	TH193	44075	WR958	44275	2.92
4	0.2090	5.31	3-3/4	2-1/2	—	—	—	—	—	TGC845	C22711	TGF106	C23080	2.31	TH192	44074	WR957	44274	2.92
3	0.2130	5.41	3-3/4	2-1/2	—	—	—	—	—	TGC846	C22712	TGF107	C23081	2.31	TH191	44073	WR956	44273	2.92
2	0.2210	5.61	3-7/8	2-5/8	—	—	—	—	—	TGC847	C22714	TGF108	C23082	2.35	TH190	44072	WR955	44272	3.12
1	0.2280	5.79	3-7/8	2-5/8	—	—	—	—	—	TGC848	C22715	TGF109	C23083	2.37	TH189	44071	WR954	44271	3.12

LETTER

					Cle-Force				Cle-Line				Chicago-Latrobe						
Dia	Dec	Metric	OAL	Flute Length	Black Oxide Finish		Bright Finish		Price /Each	Black Oxide Finish		Bright Finish		Price /Each	Black Oxide Finish		Bright Finish		Price /Each
					Model No.	Mfg. No.	Model No.	Mfg. No.		Model No.	Mfg. No.	Model No.	Mfg. No.		Model No.	Mfg. No.			
A	0.2340	5.94	3-7/8	2-5/8	—	—	—	—	—	TGC764	C22716	TGF110	C22970	2.72	TU327	44171	WS052	44371	3.54
B	0.2380	6.05	4	2-3/4	—	—	—	—	—	TGC765	C22718	TGF111	C22971	2.72	TH250	44172	WS053	44372	3.54
C	0.2420	6.15	4	2-3/4	—	—	—	—	—	TGC766	C22719	TGF112	C22972	2.72	TH251	44173	WS054	44373	3.54
D	0.2460	6.25	4	2-3/4	—	—	—	—	—	TGC767	C22720	TGF113	C22973	2.79	TH252	44174	WS055	44374	3.64
E	0.2500	6.35	4	2-3/4	—	—	—	—	—	TGC747	C22721	TGF033	C23007	2.42	TH158	44016	WR937	44216	3.25
F	0.2570	6.53	4-1/8	2-7/8	—	—	—	—	—	TGC768	C22722	TGF114	C22974	2.99	TH253	44176	WS056	44376	3.74
G	0.2610	6.63	4-1/8	2-7/8	—	—	—	—	—	TGC769	C22723	TGF115	C22975	3.15	TH254	44177	WS057	44377	4.24
H	0.2660	6.76	4-1/8	2-7/8	—	—	—	—	—	TGC770	C22725	TGF116	C22976	3.24	TH255	44178	WS058	44378	4.24
I	0.2720	6.91	4-1/8	2-7/8	—	—	—	—	—	TGC771	C22726	TGF117	C22977	3.32	TH256	44179	WS059	44379	4.24
J	0.2770	7.04	4-1/8	2-7/8	—	—	—	—	—	TGC772	C22727	TGF118	C22978	3.44	TH257	44180	WS060	44380	4.55
K	0.2810	7.14	4-1/4	2-15/16	—	—	—	—	—	TGC773	C22728	TGF119	C22979	3.57	TH258	44181	WS061	44381	4.90
L	0.2900	7.37	4-1/4	2-15/16	—	—	—	—	—	TGC774	C22730	TGF120	C22980	3.66	TU328	44182	WS062	44382	4.92
M	0.2950	7.49	4-3/8	3-1/16	—	—	—	—	—	TGC775	C22731	TGF121	C22981	3.98	TH260	44183	WS063	44383	5.25
N	0.3020	7.67	4-3/8	3-1/16	—	—	—	—	—	TGC776	C22733	TGF122	C22982	4.01	TU329	44184	WS064	44384	5.30
O	0.3160	8.03	4-1/2	3-3/16	—	—	—	—	—	TGC777	C22735	TGF123	C22983	4.09	TH262	44185	WS065	44385	5.40
P	0.3230	8.20	4-5/8	3-5/16	—	—	—	—	—	TGC778	C22736	TGF124	C22984	4.42	TH263	44186	WS066	44386	5.86
Q	0.3320	8.43	4-3/4	3-7/16	—	—	—	—	—	TGC779	C22738	TGF125	C22985	4.59	TH264	44187	WS067	44387	6.01
R	0.3390	8.61	4-3/4	3-7/16	—	—	—	—	—	TGC780	C22739	TGF126	C22986	4.88	TH265	44188	WS068	44388	6.34
S	0.3480	8.84	4-7/8	3-1/2	—	—	—	—	—	TGC781	C22741	TGF127	C22987	5.11	TH266	44189	WS069	44389	6.87
T	0.3580	9.09	4-7/8	3-1/2	—	—	—	—	—	TGC782	C22742	TGF128	C22988	5.64	TU330	44190	WS070	44390	7.68
U	0.3680	9.35	5	3-5/8	—	—	—	—	—	TGC783	C22744	TGF129	C22989	5.75	TH268	44191	WS071	44391	7.75
V	0.3770	9.58	5	3-5/8	—	—	—	—	—	TGC784	C22746	TGF130	C22990	6.05	TH269	44192	WS072	44392	8.06
W	0.3860	9.80	5-1/8	3-3/4	—	—	—	—	—	TGC785	C22747	TGF131	C22991	6.39	TH270	44193	WS073	44393	8.53
X	0.3970	10.08	5-1/8	3-3/4	—	—	—	—	—	TGC786	C22748	TGF132	C22992	7.41	TH271	44194	WS074	44394	10.29
Y	0.4040	10.26	5-1/4	3-7/8	—	—	—	—	—	TGC787	C22749	TGF133	C22993	7.92	TU331	44195	WS075	44395	11.75
Z	0.4130	10.49	5-1/4	3-7/8	—	—	—	—	—	TGC788	C22750	TGF134	C22994	8.19	TU332	44196	WS076	44396	12.33

CUTTING TOOLS

JOBBER LENGTH HSS DRILLS, 135° SPLIT POINT

- 135° split point is self-centering, for reduced thrust and easier penetration; preferred for stainless steels
- Black Oxide finish increases wear resistance and add lubricity while improving chip flow, ideal for tool and alloy steel application
- Black and gold finish for enhanced operation and long drill life
- Sold per pack of 12
- Designed for use on stainless steel, tool steel, alloy steel, titanium and cast iron



VALUE

For general-purpose drilling



Black & Gold

Black Oxide



GENERAL PURPOSE MRO

For maintenance application



Industrial

Manufactured from premium high-speed steel

FRACTIONAL

					Cle-Force			Cle-Line			Chicago-Latrobe		
Dia	Decimal	Metric	OAL	Flute Length	Black Oxide Finish		Price /Each	Black & Gold Finish		Price /Each	Black Oxide Finish		Price /Each
					Model No.	Mfg. No.		Model No.	Mfg. No.		Model No.	Mfg. No.	
1/64	0.0156	0.40	3/4	3/16	—	—	—	—	—	—	—	—	—
1/32	0.0312	0.79	1 3/8	1/2	—	—	—	—	—	—	—	—	—
3/64	0.0469	1.19	1-3/4	3/4	—	—	—	—	—	—	—	—	—
1/16	0.0625	1.59	1-7/8	7/8	TGC063	C68229	0.90	TGC092	C69042	1.05	TGF287	C23214	1.75
5/64	0.0781	1.98	2	1	TGC064	C68230	1.01	TGC093	C69043	1.12	TGF291	C23125	1.19
3/32	0.0938	2.38	2-1/4	1-1/4	TGC065	C68231	1.02	TGC094	C69044	1.16	TGF297	C23126	1.34
7/64	0.1094	2.78	2-5/8	1-1/2	TGC066	C68232	1.05	TGC095	C69045	1.23	TGF304	C23127	1.36
1/8	0.1250	3.18	2-3/4	1-5/8	TGC067	C68233	1.08	TGC096	C69046	1.28	TGF311	C23128	1.39
9/64	0.1406	3.57	2-7/8	1-3/4	TGC068	C68234	1.18	TGC097	C69047	1.44	TGF317	C23129	1.44
5/32	0.1562	3.97	3-1/8	2	TGC069	C68235	1.31	TGC098	C69048	1.51	TGF321	C23130	1.57
11/64	0.1719	4.37	3-1/4	2-1/8	TGC070	C68236	1.38	TGC099	C69049	1.60	TGF327	C23131	1.75
3/16	0.1875	4.76	3-1/2	2-5/16	TGC071	C68237	1.50	TGC100	C69050	1.64	TGF333	C23132	1.84
13/64	0.2031	5.16	3-5/8	2-7/16	TGC072	C68238	1.63	TGC101	C69051	1.77	TGF339	C23133	2.00
7/32	0.2188	5.56	3-3/4	2-1/2	TGC073	C68239	1.75	TGC102	C69052	1.84	TGF346	C23134	2.17
15/64	0.2344	5.95	3-7/8	2-5/8	TGC074	C68240	1.93	TGC103	C69053	2.02	TGF351	C23135	2.32
1/4	0.2500	6.35	4	2-3/4	TGC075	C68241	2.07	TGC104	C69054	2.13	TGF355	C23136	2.58
17/64	0.2656	6.75	4-1/8	2-7/8	TGC076	C68242	2.32	TGC105	C69055	2.42	TGF359	C23137	2.76
9/32	0.2812	7.14	4-1/4	2-15/16	TGC077	C68243	2.69	TGC106	C69056	2.73	TGF362	C23138	3.11
19/64	0.2969	7.54	4-3/8	3-1/16	TGC078	C68244	2.92	TGC107	C69057	3.01	TGF367	C23139	3.58
5/16	0.3125	7.94	4-1/2	3-3/16	TGC079	C68245	3.11	TGC108	C69058	3.15	TGF370	C23140	3.89
21/64	0.3281	8.33	4-5/8	3-5/16	TGC080	C68246	3.43	TGC109	C69059	3.33	TGF372	C23141	4.14
11/32	0.3438	8.73	4-3/4	3-7/16	TGC081	C68247	3.80	TGC110	C69060	3.65	TGF375	C23142	4.57
23/64	0.3594	9.13	4-7/8	3-1/2	TGC082	C68248	4.07	TGC111	C69061	3.89	TGF378	C23143	5.06
3/8	0.3750	9.53	5	3-5/8	TGC083	C68249	4.41	TGC112	C69062	4.19	TGF381	C23144	5.43
25/64	0.3906	9.92	5-1/8	3-3/4	TGC084	C68250	4.90	TGC113	C69063	4.80	TGF383	C23145	5.87
13/32	0.4062	10.32	5-1/4	3-7/8	TGC085	C68251	5.07	TGC114	C69064	5.17	TGF386	C23146	6.53
27/64	0.4219	10.72	5-3/8	3-15/16	TGC086	C68252	5.59	TGC115	C69065	5.71	TGF389	C23147	6.77
7/16	0.4375	11.11	5-1/2	4-1/16	TGC087	C68253	6.05	TGC116	C69066	6.22	TGF391	C23148	7.46
29/64	0.4531	11.51	5-5/8	4-3/16	TGC088	C68254	6.83	TGC117	C69067	6.95	TGF392	C23149	8.06
15/32	0.4688	11.91	5-3/4	4-5/16	TGC089	C68255	7.09	TGC118	C69068	7.21	TGF393	C23150	9.11
31/64	0.4844	12.3	5-7/8	4-3/8	TGC090	C68256	7.48	TGC119	C69069	7.79	TGF394	C23151	9.45
1/2	0.5000	12.7	6	4-1/2	TGC091	C68257	7.89	TGC120	C69070	8.11	TGF395	C23152	9.97
											TGF396	C23153	10.50
											TGF500	C18021	6.39
											TGF503	C18022	6.90
											TGF505	C18023	7.62
											TGF506	C18024	8.30
											TGF507	C18025	9.28
											TGF508	C18026	9.60
											TGF509	C18027	10.39
											TGF510	C18028	10.82

METRIC

				Cle-Force			Cle-Line			Chicago-Latrobe		
				Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Black Oxide Finish		
MM	Decimal	OAL	Flute Length							Model No.	Mfg. No.	Price /Each
1.00	0.0394	34	12	—	—	—	—	—	—	TGH225	45800	1.81
1.50	0.0591	40	18	—	—	—	—	—	—	TGH229	45805	1.83
2.00	0.0787	49	24	—	—	—	—	—	—	TGH233	45811	1.83
2.50	0.0984	57	30	—	—	—	—	—	—	TGH237	45817	1.94
3.00	0.1181	61	33	—	—	—	—	—	—	TGH242	45822	2.38
3.50	0.1378	70	39	—	—	—	—	—	—	TGH247	45828	2.61
4.00	0.1575	75	43	—	—	—	—	—	—	TGH252	45833	2.74
4.50	0.1772	80	47	—	—	—	—	—	—	TGH256	45838	2.92
5.00	0.1969	86	52	—	—	—	—	—	—	TGH260	45843	3.16
5.50	0.2165	93	57	—	—	—	—	—	—	TGH264	45850	3.64
5.60	0.2205	93	57	—	—	—	—	—	—	TGH265	45851	4.42
5.70	0.2244	93	57	—	—	—	—	—	—	TGH266	45852	4.06
6.00	0.2362	93	57	—	—	—	—	—	—	TGH267	45855	3.77
6.50	0.2559	101	63	—	—	—	—	—	—	TGH271	45860	4.24
7.00	0.2756	109	69	—	—	—	—	—	—	TGH276	45865	5.31
7.50	0.2953	109	69	—	—	—	—	—	—	TGH277	45870	6.17
8.00	0.3150	117	75	—	—	—	—	—	—	TGH278	45875	6.41
8.50	0.3346	117	75	—	—	—	—	—	—	TGH279	45880	7.12
9.00	0.3543	125	81	—	—	—	—	—	—	TGH280	45885	8.15
9.50	0.3740	125	81	—	—	—	—	—	—	TGH281	45890	9.24
10.00	0.3937	133	87	—	—	—	—	—	—	TGH282	45895	9.59
10.50	0.4134	133	87	—	—	—	—	—	—	TGH284	45897	11.41
11.00	0.4331	142	94	—	—	—	—	—	—	TGH285	45899	12.23
11.50	0.4527	142	94	—	—	—	—	—	—	TGH286	45900	13.49
12.00	0.4724	151	101	—	—	—	—	—	—	TGH287	45902	14.41
12.50	0.4921	151	101	—	—	—	—	—	—	TGH288	45904	14.93
13.00	0.5118	151	101	—	—	—	—	—	—	TGH289	45905	25.48

JOBBER LENGTH HSS DRILLS, 135° SPLIT POINT (CONT'D)



VALUE

For general-purpose drilling



GENERAL PURPOSE MRO

For maintenance application



Industrial

Manufactured from
premium high-speed steel

WIRE GAUGE

					Cle-Force			Cle-Line						Chicago-Latrobe		
Dia	Decimal	Metric	OAL	Flute Length	Model No.	Mfg. No.	Price /Each	Black Oxide Finish Model No.	Mfg. No.	Price /Each	Black & Gold Finish Model No.	Mfg. No.	Price /Each	Black Oxide Finish Model No.	Mfg. No.	Price /Each
60	0.0400	1.02	1-5/8	11/16	—	—	—	TGF282	C23154	1.41	TGF397	C18113	1.35	TU334	44730	1.81
59	0.0410	1.04	1-5/8	11/16	—	—	—	TGF283	C23155	1.41	TGF398	C18112	1.43	TH298	44729	1.81
58	0.0420	1.07	1-5/8	11/16	—	—	—	TGF284	C23156	1.41	TGF399	C18111	1.43	TH297	44728	1.81
57	0.0430	1.09	1-3/4	3/4	—	—	—	TGF285	C23157	1.43	TGF400	C18110	1.47	TH296	44727	1.87
56	0.0465	1.18	1-3/4	3/4	—	—	—	TGF286	C23158	1.34	TGF401	C18109	1.47	TU333	44726	1.87
55	0.0520	1.32	1-7/8	7/8	—	—	—	TGF288	C23159	1.34	TGF402	C18108	1.47	TH294	44725	1.87
54	0.0550	1.4	1-7/8	7/8	—	—	—	TGF289	C23160	1.34	TGF403	C18107	1.47	TH293	44724	1.87
53	0.0595	1.51	1-7/8	7/8	—	—	—	TGF290	C23161	1.34	TGF404	C18106	1.47	TH292	44723	1.87
52	0.0635	1.61	1-7/8	7/8	—	—	—	TGF292	C23162	1.34	TGF406	C18105	1.86	TH479	45722	1.77
51	0.0670	1.7	2	1	—	—	—	TGF293	C23163	1.34	TGF407	C18104	1.86	TH478	45721	1.77
50	0.0700	1.78	2	1	—	—	—	TGF294	C23164	1.34	TGF408	C18103	1.86	TH477	45720	1.77
49	0.0730	1.85	2	1	—	—	—	TGF295	C23165	1.35	TGF409	C18102	1.94	TH476	45719	1.78
48	0.0760	1.93	2	1	—	—	—	TGF296	C23166	1.35	TGF410	C18101	1.94	TH475	45718	1.78
47	0.0785	1.99	2	1	—	—	—	TGF298	C23167	1.35	TGF412	C18100	1.94	TH474	45717	1.78
46	0.0810	2.06	2-1/8	1-1/8	—	—	—	TGF299	C23168	1.35	TGF413	C18099	1.94	TH473	45716	1.78
45	0.0820	2.08	2-1/8	1-1/8	—	—	—	TGF300	C23169	1.35	TGF414	C18098	1.94	TH472	45715	1.78
44	0.0860	2.18	2-1/8	1-1/8	—	—	—	TGF301	C23170	1.35	TGF415	C18097	1.94	TH471	45714	1.79
43	0.0890	2.26	2-1/4	1-1/4	—	—	—	TGF302	C23171	1.35	TGF416	C18096	1.94	TH470	45713	1.79
42	0.0935	2.37	2-1/4	1-1/4	—	—	—	TGF303	C23172	1.35	TGF417	C18095	1.94	TH469	45712	1.79
41	0.0960	2.44	2-3/8	1-3/8	—	—	—	TGF305	C23173	1.37	TGF419	C18094	1.99	TH468	45711	1.82
40	0.0980	2.49	2-3/8	1-3/8	—	—	—	TGF306	C23174	1.41	TGF420	C18093	1.99	TH467	45710	1.82
39	0.0995	2.53	2-3/8	1-3/8	—	—	—	TGF307	C23175	1.43	TGF421	C18092	2.01	TH466	45709	1.86
38	0.1015	2.58	2-1/2	1-7/16	—	—	—	TGF308	C23176	1.43	TGF422	C18091	2.01	TH465	45708	1.86
37	0.1040	2.64	2-1/2	1-7/16	—	—	—	TGF309	C23177	1.43	TGF423	C18090	2.01	TH464	45707	1.86
36	0.1065	2.71	2-1/2	1-7/16	—	—	—	TGF310	C23178	1.46	TGF424	C18089	2.01	TH463	45706	1.86
35	0.1100	2.79	2-5/8	1-1/2	—	—	—	TGF312	C23179	1.51	TGF426	C18088	2.03	TH462	45705	1.94
34	0.1110	2.82	2-5/8	1-1/2	—	—	—	TGF313	C23180	1.53	TGF427	C18087	2.03	TH461	45704	1.94
33	0.1130	2.87	2-5/8	1-1/2	—	—	—	TGF314	C23181	1.53	TGF428	C18086	2.03	TH460	45703	1.94
32	0.1160	2.95	2-3/4	1-5/8	—	—	—	TGF315	C23182	1.53	TGF429	C18085	2.01	TH459	45702	1.94
31	0.1200	3.05	2-3/4	1-5/8	—	—	—	TGF316	C23183	1.57	TGF430	C18084	2.01	TH458	45701	1.96
30	0.1285	3.26	2-3/4	1-5/8	—	—	—	TGF318	C23184	1.57	TGF432	C18083	1.94	TH457	45700	1.96
29	0.1360	3.45	2-7/8	1-3/4	—	—	—	TGF319	C23185	1.64	TGF433	C18082	2.15	TH456	45699	2.02
28	0.1405	3.57	2-7/8	1-3/4	—	—	—	TGF320	C23186	1.75	TGF434	C18081	2.15	TH455	45698	2.03
27	0.1440	3.66	3	1-7/8	—	—	—	TGF322	C23187	1.75	TGF436	C18080	2.22	TH454	45697	2.26

LETTER

					Cle-Force			Cle-Line						Chicago-Latrobe		
Dia	Decimal	Metric	OAL	Flute Length	Model No.	Mfg. No.	Price /Each	Black Oxide Finish Model No.	Mfg. No.	Price /Each	Black & Gold Finish Model No.	Mfg. No.	Price /Each	Black Oxide Finish Model No.	Mfg. No.	Price /Each
A	0.2340	5.94	3-7/8	2-5/8	—	—	—	TGF354	C23100	3.28	TGF468	C18029	3.58	TH480	45771	4.15
B	0.2380	6.05	4	2-3/4	—	—	—	TGF356	C23101	3.28	TGF470	C18030	3.58	TH481	45772	4.15
C	0.2420	6.15	4	2-3/4	—	—	—	TGF357	C23102	3.36	TGF471	C18031	3.58	TH482	45773	4.27
D	0.2460	6.25	4	2-3/4	—	—	—	TGF358	C23103	3.36	TGF472	C18032	3.64	TH483	45774	4.27
E	0.2500	6.35	4	2-3/4	—	—	—	TGF359	C23137	2.76	TGF473	C18012	2.83	TH408	45616	3.51
F	0.2570	6.53	4-1/8	2-7/8	—	—	—	TGF360	C23104	3.37	TGF474	C18033	3.64	TH484	45776	4.35
G	0.2610	6.63	4-1/8	2-7/8	—	—	—	TGF361	C23105	3.57	TGF475	C18034	3.68	TH485	45777	4.67
H	0.2660	6.76	4-1/8	2-7/8	—	—	—	TGF363	C23106	3.65	TGF477	C18035	3.71	TH486	45778	4.97
I	0.2720	6.91	4-1/8	2-7/8	—	—	—	TGF364	C23107	3.74	TGF478	C18036	3.79	TH487	45779	4.97
J	0.2770	7.04	4-1/8	2-7/8	—	—	—	TGF365	C23108	4.25	TGF479	C18037	3.99	TH488	45780	5.10
K	0.2810	7.14	4-1/4	2-15/16	—	—	—	TGF366	C23109	4.28	TGF480	C18038	4.03	TU339	45781	5.48
L	0.2900	7.37	4-1/4	2-15/16	—	—	—	TGF368	C23110	4.76	TGF482	C18039	4.37	TU340	45782	5.54
M	0.2950	7.49	4-3/8	3-1/16	—	—	—	TGF369	C23111	5.03	TGF483	C18040	4.65	TU341	45783	6.04
N	0.3020	7.67	4-3/8	3-1/16	—	—	—	TGF371	C23112	5.03	TGF485	C18041	4.77	TH492	45784	6.09
O	0.3160	8.03	4-1/2	3-3/16	—	—	—	TGF373	C23113	5.12	TGF487	C18042	4.92	TH493	45785	6.36
P	0.3230	8.2	4-5/8	3-5/16	—	—	—	TGF374	C23114	5.20	TGF488	C18043	5.29	TH494	45786	6.71
Q	0.3320	8.43	4-3/4	3-7/16	—	—	—	TGF376	C23115	5.39	TGF490	C18044	5.42	TH495	45787	6.91
R	0.3390	8.61	4-3/4	3-7/16	—	—	—	TGF377	C23116	5.67	TGF491	C18045	5.79	TH496	45788	7.51
S	0.3480	8.84	4-7/8	3-1/2	—	—	—	TGF379	C23117	6.38	TGF493	C18046	6.08	TH497	45789	7.90
T	0.3580	9.09	4-7/8	3-1/2	—	—	—	TGF380	C23118	6.51	TGF494	C18047	6.28	TH498	45790	8.60
U	0.3680	9.35	5	3-5/8	—	—	—	TGF382	C23119	6.64	TGF496	C18048	6.50	TH499	45791	8.78
V	0.3770	9.58	5	3-5/8	—	—	—	TGF384	C23120	7.04	TGF498	C18049	6.65	TH500	45792	9.12
W	0.3860	9.8	5-1/8	3-3/4	—	—	—	TGF385	C23121	7.39	TGF499	C18050	7.20	TH501	45793	9.66
X	0.3970	10.08	5-1/8	3-3/4	—	—	—	TGF387	C23122	8.52	TGF501	C18051	8.10	TH502	45794	11.52
Y	0.4040	10.26	5-1/4	3-7/8	—	—	—	TGF388	C23123	8.81	TGF502	C18052	8.47	TH503	45795	12.81
Z	0.4130	10.49	5-1/4	3-7/8	—	—	—	TGF390	C23124	9.42	TGF504	C18053	8.73	TH504	45796	13.09

CUTTING TOOLS

135° SPLIT POINT HSS JOBBER LENGTH DRILLS WITH 3-FLAT SHANK

Application Information

- 135° split point is self-centering, for reduced thrust and easier penetration; preferred for stainless steels
- Black and gold finish for enhanced operation and long drill life
- 3 flats on shank for tighter chucking in portable drills
- Sold per pack of 12
- Designed for general purpose drilling and maintenance applications in steel and alloys



TGC121



VALUE

For general-purpose drilling



GENERAL PURPOSE MRO

For maintenance application



INDUSTRIAL

Manufactured from premium high-speed steel

FRACTIONAL

Dia	Decimal	Metric	OAL	Flute Length	Cle-Force			Cle-Line			Chicago-Latrobe		
					Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each
1/16	0.0625	1.59	1-7/8	7/8	TGC121	C69339	1.17	—	—	—	—	—	—
5/64	0.0781	1.98	2	1	TGC122	C69340	1.24	—	—	—	—	—	—
3/32	0.0938	2.38	2-1/4	1 1/4	TGC123	C69341	1.29	—	—	—	—	—	—
7/64	0.1094	2.78	2-5/8	1-1/2	TGC124	C69342	1.35	—	—	—	—	—	—
1/8	0.1250	3.18	2-3/4	1-5/8	TGC125	C69343	1.40	—	—	—	—	—	—
9/64	0.1406	3.57	2-7/8	1-3/4	TGC126	C69344	1.60	—	—	—	—	—	—
5/32	0.1562	3.97	3 1/8	2	TGC127	C69345	1.65	—	—	—	—	—	—
11/64	0.1719	4.37	3-1/4	2-1/8	TGC128	C69346	1.75	—	—	—	—	—	—
3/16	0.1875	4.76	3-1/2	2-5/16	TGC129	C69347	2.06	—	—	—	—	—	—
13/64	0.2031	5.16	3-5/8	2-7/16	TGC130	C69348	2.21	—	—	—	—	—	—
7/32	0.2188	5.56	3-3/4	2-1/2	TGC131	C69349	2.30	—	—	—	—	—	—
15/64	0.2344	5.95	3-7/8	2-5/8	TGC132	C69350	2.53	—	—	—	—	—	—
1/4	0.2500	6.35	4	2-3/4	TGC133	C69351	2.68	—	—	—	—	—	—
17/64	0.2656	6.75	4-1/8	2-7/8	TGC134	C69352	3.03	—	—	—	—	—	—
9/32	0.2812	7.14	4-1/4	2-15/16	TGC135	C69353	3.41	—	—	—	—	—	—
19/64	0.2969	7.54	4-3/8	3-1/16	TGC136	C69354	3.79	—	—	—	—	—	—
5/16	0.3125	7.94	4-1/2	3-3/16	TGC137	C69355	3.95	—	—	—	—	—	—
21/64	0.3281	8.33	4-5/8	3-5/16	TGC138	C69356	4.16	—	—	—	—	—	—
11/32	0.3438	8.73	4-3/4	3-7/16	TGC139	C69357	4.56	—	—	—	—	—	—
23/64	0.3594	9.13	4-7/8	3-1/2	TGC140	C69358	4.88	—	—	—	—	—	—
3/8	0.3750	9.53	5	3-5/8	TGC141	C69359	5.25	—	—	—	—	—	—
25/64	0.3906	9.92	5-1/8	3-3/4	TGC142	C69360	6.01	—	—	—	—	—	—
13/32	0.4062	10.32	5-1/4	3-7/8	TGC143	C69361	6.48	—	—	—	—	—	—
27/64	0.4219	10.72	5-3/8	3-15/16	TGC144	C69362	7.17	—	—	—	—	—	—
7/16	0.4375	11.11	5-1/2	4-1/16	TGC145	C69363	7.78	—	—	—	—	—	—
29/64	0.4531	11.51	5-5/8	4-3/16	TGC146	C69364	8.70	—	—	—	—	—	—
15/32	0.4688	11.91	5-3/4	4-5/16	TGC147	C69365	9.02	—	—	—	—	—	—
31/64	0.4844	12.3	5-7/8	4-3/8	TGC148	C69366	9.77	—	—	—	—	—	—
1/2	0.5000	12.7	6	4-1/2	TGC149	C69367	10.15	—	—	—	—	—	—

JOBBER LENGTH COBALT DRILLS, 135° SPLIT POINT

Application Information

- 135° split point for faster, easier drill penetration
- M35, 8% cobalt HSS construction
- Straw finish adds lubricity and easily identifies cobalt drills
- Sold per pack of 12
- Designed to drill tough, high-tensile materials and work-hardening materials like high-strength alloy steels, stainless steel, titanium, manganese steel, armor plate, and inconel



TGH354



VALUE

For general-purpose drilling



GENERAL PURPOSE MRO

For maintenance application



INDUSTRIAL

Manufactured from premium cobalt high-speed steel, heavy-duty construction for drilling tougher materials

FRACTIONAL - STRAW FINISH

Dia	Decimal	Metric	OAL	Flute Length	Cle-Force			Cle-Line			Chicago-Latrobe		
					Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each
1/16	0.0625	1.59	1-7/8	7/8	TGC156	C68344	1.35	TGF555	C23345	1.80	TGH354	47704	2.03
5/64	0.0781	1.98	2	1	TGC157	C68345	1.38	TGF561	C23346	1.85	TGH364	47705	2.08
3/32	0.0938	2.38	2-1/4	1 1/4	TGC158	C68346	1.46	TGF568	C23347	1.93	TGH375	47706	2.16
7/64	0.1094	2.78	2-5/8	1-1/2	TGC159	C68347	1.61	TGF575	C23348	2.15	TGH386	47707	2.37
1/8	0.1250	3.18	2-3/4	1-5/8	TGC160	C68351	1.80	TGF581	C23349	2.40	TGH396	47708	2.58
9/64	0.1406	3.57	2-7/8	1-3/4	TGC161	C68352	1.89	TGF585	C23350	2.52	TGH404	47709	2.77
5/32	0.1562	3.97	3 1/8	2	TGC162	C68353	2.14	TGF591	C23351	2.86	TGH414	47710	3.16
11/64	0.1719	4.37	3-1/4	2-1/8	TGC163	C68354	2.34	TGF597	C23352	3.12	TGH424	47711	3.36
3/16	0.1875	4.76	3-1/2	2-5/16	TGC164	C68355	2.59	TGF603	C23353	3.44	TGH434	47712	3.76
13/64	0.2031	5.16	3-5/8	2-7/16	TGC165	C68356	2.91	TGF610	C23354	3.88	TGH445	47713	4.06
7/32	0.2188	5.56	3-3/4	2-1/2	TGC166	C68357	3.16	TGF615	C23355	4.23	TGH454	47714	4.45
15/64	0.2344	5.95	3-7/8	2-5/8	TGC167	C68358	3.47	TGF619	C23356	4.63	TGH461	47715	4.75
1/4	0.2500	6.35	4	2-3/4	TGC168	C68359	3.66	TGF623	C23357	4.88	TGH466	47716	5.14
17/64	0.2656	6.75	4-1/8	2-7/8	TGC169	C68360	4.28	TGF626	C23358	5.71	TGH471	47717	5.83
9/32	0.2812	7.14	4-1/4	2-15/16	TGC170	C68361	4.74	TGF631	C23359	6.32	TGH476	47718	6.68
19/64	0.2969	7.54	4-3/8	3-1/16	TGC171	C68362	5.54	TGF633	C23360	7.39	TGH480	47719	7.79
5/16	0.3125	7.94	4-1/2	3-3/16	TGC172	C68363	5.85	TGF634	C23361	7.81	TGH483	47720	8.31
21/64	0.3281	8.33	4-5/8	3-5/16	TGC173	C68364	6.55	TGF635	C23362	8.73	TGH487	47721	9.45

JOBBER LENGTH COBALT DRILLS, 135° SPLIT POINT (CONT'D)



Manufactured from premium
cobalt high-speed steel, heavy-duty
construction for drilling
tougher materials



VALUE

For general-purpose drilling



GENERAL PURPOSE MRO

For maintenance application

FRACTIONAL - STRAW FINISH (CONT'D)

					Cle-Force			Cle-Line			Chicago-Latrobe		
Dia	Decimal	Metric	OAL	Flute Length	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each
11/32	0.3438	8.73	4-3/4	3-7/16	TGC174	C68365	7.18	TGF638	C23363	9.57	TGH491	47722	10.19
23/64	0.3594	9.13	4-7/8	3-1/2	TGC175	C68366	7.93	TGF639	C23364	10.57	TGH495	47723	11.33
3/8	0.3750	9.53	5	3-5/8	TGC176	C68367	8.49	TGF641	C23365	11.33	TGH497	47724	12.16
25/64	0.3906	9.92	5-1/8	3-3/4	TGC177	C68368	9.25	TGF644	C23366	12.34	TGH500	47725	13.40
13/32	0.4062	10.32	5-1/4	3-7/8	TGC178	C68369	9.94	TGF645	C23367	13.25	TGH503	47726	14.07
27/64	0.4219	10.72	5-3/8	3-15/16	TGC179	C68370	10.82	TGF646	C23368	14.42	TGH505	47727	14.99
7/16	0.4375	11.11	5-1/2	4-1/16	TGC180	C68371	11.43	TGF647	C23369	15.24	TGH507	47728	16.52
29/64	0.4531	11.51	5-5/8	4-3/16	TGC181	C68372	12.81	TGF648	C23370	17.09	TGH509	47729	17.91
15/32	0.4688	11.91	5-3/4	4-5/16	TGC182	C68373	13.60	TGF649	C23371	18.13	TGH510	47730	19.01
31/64	0.4844	12.30	5-7/8	4-3/8	TGC183	C68374	14.24	TGF650	C23372	18.99	TGH512	47731	20.53
1/2	0.5000	12.70	6	4-1/2	TGC184	C68375	14.71	TGF651	C23373	19.61	TGH514	47732	21.72

METRIC - STRAW FINISH

					Cle-Force			Cle-Line			Chicago-Latrobe		
MM	DEC EQ	OAL	Flute Length		Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each
1.00	0.0394	34	12		—	—	—	TGJ475	C18900	2.58	TGH348	47820	3.29
1.50	0.0591	40	18		—	—	—	TGJ477	C18905	2.47	TGH353	47825	3.15
2.00	0.0787	49	24		—	—	—	TGJ479	C18910	1.67	TGH366	47830	2.13
2.50	0.0984	57	30		—	—	—	TGJ481	C18915	1.75	TGH379	47835	2.23
3.00	0.1181	61	33		—	—	—	TGJ483	C18920	1.93	TGH393	47840	2.47
3.50	0.1378	70	39		—	—	—	TGJ487	C18925	2.14	TGH402	47845	2.73
4.00	0.1575	75	43		—	—	—	TGJ491	C18930	2.48	TGH416	47850	3.16
4.50	0.1772	80	47		—	—	—	TGJ494	C18935	2.82	TGH428	47855	3.61
5.00	0.1969	86	52		—	—	—	TGJ498	C18940	3.11	TGH441	47860	3.96
5.50	0.2165	93	57		—	—	—	TGJ501	C18945	3.69	TGH453	47865	4.70
6.00	0.2362	93	57		—	—	—	TGJ502	C18950	4.03	TGH462	47870	5.14
6.50	0.2559	101	63		—	—	—	TGJ503	C18955	4.45	TGH468	47875	5.69
7.00	0.2756	109	69		—	—	—	TGJ505	C18960	5.20	TGH474	47880	6.63
7.50	0.2953	109	69		—	—	—	TGJ506	C18965	6.59	TGH479	47885	8.41
8.00	0.3150	117	75		—	—	—	TGJ507	C18970	7.18	TGH484	47890	9.16
8.50	0.3346	117	75		—	—	—	TGJ508	C18975	8.48	TGH489	47895	10.84
9.00	0.3543	125	81		—	—	—	TGJ509	C18980	9.58	TGH494	47900	12.22
9.50	0.3740	125	81		—	—	—	TGJ510	C18985	10.00	TGH496	47905	12.76
10.00	0.3937	133	87		—	—	—	TGJ511	C18990	11.43	TGH501	47910	14.60
10.50	0.4134	133	87		—	—	—	TGJ513	C18992	11.74	TGH504	47912	14.99
11.00	0.4331	142	94		—	—	—	TGJ514	C18993	13.65	TGH506	47913	17.42
11.50	0.4527	142	94		—	—	—	TGJ515	C18995	15.04	TGH508	47914	19.19
12.00	0.4724	151	101		—	—	—	TGJ516	C18996	16.28	TGH511	47915	20.78
12.50	0.4921	151	101		—	—	—	TGJ517	C18998	17.10	TGH513	47916	21.81
13.00	0.5118	151	101		—	—	—	TGJ518	C18999	30.52	TGH515	47917	38.96

WIRE GAUGE - STRAW FINISH

					Cle-Force			Cle-Line			Chicago-Latrobe		
Dia	Decimal	Metric	OAL	Flute Length	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each
60*	0.0400	1.02	1-5/8	11/16	TGC185	C68460	1.47	TGF547	C23374	1.96	—	—	—
59*	0.0410	1.04	1-5/8	11/16	TGC186	C68459	1.50	TGF548	C23375	1.99	—	—	—
58*	0.0420	1.07	1-5/8	11/16	TGC187	C68458	1.50	TGF549	C23376	1.99	—	—	—
57*	0.0430	1.09	1-3/4	3/4	TGC188	C68457	1.50	TGF550	C23377	1.99	—	—	—
56*	0.0465	1.18	1-3/4	3/4	TGC189	C68456	1.50	TGF551	C23378	1.99	—	—	—
55*	0.0520	1.32	1-7/8	7/8	TGC190	C68455	1.50	TGF552	C23379	1.99	—	—	—
54*	0.0550	1.40	1-7/8	7/8	TGC191	C68454	1.50	TGF553	C23380	1.99	—	—	—
53*	0.0595	1.51	1-7/8	7/8	TGC192	C68453	1.50	TGF554	C23381	1.99	—	—	—
52	0.0635	1.61	1-7/8	7/8	TGC193	C68452	1.47	TGF556	C23382	1.97	TGH356	47786	2.41
51	0.0670	1.70	2	1	TGC194	C68451	1.47	TGF557	C23383	1.97	TGH358	47785	2.41
50	0.0700	1.78	2	1	TGC195	C68450	1.47	TGF558	C23384	1.93	TGH359	47784	2.41
49	0.0730	1.85	2	1	TGC196	C68449	1.52	TGF559	C23385	2.00	TGH361	47783	2.41
48	0.0760	1.93	2	1	TGC197	C68448	1.52	TGF560	C23386	2.00	TGH363	47782	2.41
47	0.0785	1.99	2	1	TGC198	C68447	1.56	TGF562	C23387	2.07	TGH365	47781	2.41
46	0.0810	2.06	2-1/8	1 1/8	TGC199	C68446	1.56	TGF563	C23388	2.07	TGH367	47780	2.41
45	0.0820	2.08	2-1/8	1 1/8	TGC200	C68445	1.56	TGF564	C23389	2.07	TGH368	47779	2.41
44	0.0860	2.18	2-1/8	1 1/8	TGC201	C68444	1.56	TGF565	C23390	2.07	TGH370	47778	2.41
43	0.0890	2.26	2-1/4	1 1/4	TGC202	C68443	1.56	TGF566	C23391	2.07	TGH372	47777	2.41
42	0.0935	2.37	2-1/4	1 1/4	TGC203	C68442	1.56	TGF567	C23392	2.07	TGH374	47776	2.44
41	0.0960	2.44	2-3/8	1-3/8	TGC204	C68441	1.60	TGF569	C23393	2.11	TGH377	47775	2.44
40	0.0980	2.49	2-3/8	1-3/8	TGC205	C68440	1.54	TGF570	C23394	2.03	TGH378	47774	2.44
39	0.0995	2.53	2-3/8	1-3/8	TGC206	C68439	1.72	TGF571	C23395	2.27	TGH380	47773	2.45

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JOBBER LENGTH COBALT DRILLS, 135° SPLIT POINT (CONT'D)



Manufactured from premium cobalt high-speed steel, heavy-duty construction for drilling tougher materials



VALUE

For general-purpose drilling



GENERAL PURPOSE MRO

For maintenance application

WIRE GAUGE - STRAW FINISH (CONT'D)

					Cle-Force			Cle-Line			Chicago-Latrobe		
Dia	Decimal	Metric	OAL	Flute Length	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each
38	0.1015	2.58	2-1/2	1-7/16	TGC207	C68438	1.72	TGF572	C23396	2.27	TGH381	47772	2.50
37	0.1040	2.64	2-1/2	1-7/16	TGC208	C68437	1.72	TGF573	C23397	2.27	TGH383	47771	2.59
36	0.1065	2.71	2-1/2	1-7/16	TGC209	C68436	1.72	TGF574	C23398	2.27	TGH385	47770	2.59
35	0.1100	2.79	2-5/8	1-1/2	TGC210	C68435	1.88	TGF576	C23399	2.49	TGH387	47769	2.64
34	0.1110	2.82	2-5/8	1-1/2	TGC211	C68434	1.89	TGF577	C23400	2.52	TGH389	47768	2.64
33	0.1130	2.87	2-5/8	1-1/2	TGC212	C68433	1.89	TGF578	C23401	2.52	TGH390	47767	2.64
32	0.1160	2.95	2-3/4	1-5/8	TGC213	C68432	1.89	TGF579	C23402	2.52	TGH392	47766	2.73
31	0.1200	3.05	2-3/4	1-5/8	TGC214	C68431	1.80	TGF580	C23403	2.40	TGH394	47765	2.76
30	0.1285	3.26	2-3/4	1-5/8	TGC215	C68430	1.80	TGF582	C23404	2.40	TGH398	47764	2.76
29	0.1360	3.45	2-7/8	1-3/4	TGC216	C68429	1.97	TGF583	C23405	2.61	TGH401	47763	2.98
28	0.1405	3.57	2-7/8	1-3/4	TGC217	C68428	2.02	TGF584	C23406	2.69	TGH403	47762	3.02
27	0.1440	3.66	3	1-7/8	TGC218	C68427	2.09	TGF586	C23407	2.77	TGH406	47761	3.17
26	0.1470	3.73	3	1-7/8	TGC219	C68426	2.18	TGF587	C23408	2.89	TGH408	47760	3.20
25	0.1495	3.80	3	1-7/8	TGC220	C68425	2.16	TGF588	C23409	2.86	TGH409	47759	3.17
24	0.1520	3.86	3 1/8	2	TGC221	C68424	2.38	TGF589	C23410	3.15	TGH411	47758	3.45
23	0.1540	3.91	3 1/8	2	TGC222	C68423	2.38	TGF590	C23411	3.15	TGH413	47757	3.47
22	0.1570	3.99	3 1/8	2	TGC223	C68422	2.38	TGF592	C23412	3.15	TGH415	47756	3.47
21	0.1590	4.04	3-1/4	2-1/8	TGC224	C68421	2.23	TGF593	C23413	2.94	TGH417	47755	3.47
20	0.1610	4.09	3-1/4	2-1/8	TGC225	C68420	2.28	TGF594	C23414	3.02	TGH418	47754	3.52
19	0.1660	4.22	3-1/4	2-1/8	TGC226	C68419	2.40	TGF595	C23415	3.19	TGH421	47753	3.73
18	0.1695	4.31	3-1/4	2-1/8	TGC227	C68418	2.53	TGF596	C23416	3.37	TGH423	47752	3.81
17	0.1730	4.39	3-3/8	2-3/16	TGC228	C68417	2.73	TGF598	C23417	3.62	TGH425	47751	3.96
16	0.1770	4.50	3-3/8	2-3/16	TGC229	C68416	2.65	TGF599	C23418	3.53	TGH427	47750	3.91
15	0.1800	4.57	3-3/8	2-3/16	TGC230	C68415	2.91	TGF600	C23419	3.86	TGH429	47749	4.17
14	0.1820	4.62	3-3/8	2-3/16	TGC231	C68414	2.91	TGF601	C23420	3.86	TGH431	47748	4.17
13	0.1850	4.70	3-1/2	2-5/16	TGC232	C68413	2.85	TGF602	C23421	3.78	TGH432	47747	4.17
12	0.1890	4.80	3-1/2	2-5/16	TGC233	C68412	3.03	TGF604	C23422	4.03	TGH435	47746	4.42
11	0.1910	4.85	3-1/2	2-5/16	TGC234	C68411	2.91	TGF605	C23423	3.86	TGH437	47745	4.42
10	0.1935	4.91	3-5/8	2-7/16	TGC235	C68410	2.91	TGF606	C23424	3.86	TGH439	47744	4.42
9	0.1960	4.98	3-5/8	2-7/16	TGC236	C68409	3.11	TGF607	C23425	4.13	TGH440	47743	4.65
8	0.1990	5.05	3-5/8	2-7/16	TGC237	C68408	3.11	TGF608	C23426	4.13	TGH442	47742	4.65
7	0.2010	5.11	3-5/8	2-7/16	TGC238	C68407	2.91	TGF609	C23427	3.86	TGH444	47741	4.63
6	0.2040	5.18	3-3/4	2-1/2	TGC239	C68406	3.41	TGF611	C23428	4.54	TGH446	47740	5.30
5	0.2055	5.22	3-3/4	2-1/2	TGC240	C68405	3.41	TGF612	C23429	4.54	TGH448	47739	5.30
4	0.2090	5.31	3-3/4	2-1/2	TGC241	C68404	3.60	TGF613	C23430	4.79	TGH450	47738	5.30
3	0.2130	5.41	3-3/4	2-1/2	TGC242	C68403	3.48	TGF614	C23431	4.63	TGH452	47737	5.30
2	0.2210	5.61	3-7/8	2-5/8	TGC243	C68402	3.79	TGF616	C23432	5.03	TGH456	47736	5.63
1	0.2280	5.79	3-7/8	2-5/8	TGC244	C68401	3.79	TGF617	C23433	5.03	TGH458	47735	5.76

LETTER - STRAW FINISH

					Cle-Force			Cle-Line			Chicago-Latrobe		
Dia	Decimal	Metric	OAL	Flute Length	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each
A	0.2340	5.94	3-7/8	2-5/8	TGC245	C68376	4.28	TGF618	C23320	5.71	—	—	—
B	0.2380	6.05	4	2-3/4	TGC246	C68377	4.28	TGF620	C23321	5.71	—	—	—
C	0.2420	6.15	4	2-3/4	TGC247	C68378	4.28	TGF621	C23322	5.71	—	—	—
D	0.2460	6.25	4	2-3/4	TGC248	C68379	4.42	TGF622	C23323	5.88	—	—	—
E	0.2500	6.35	4	2-3/4	TGC168	C68359	3.66	TGF623	C23357	4.88	—	—	—
F	0.2570	6.53	4-1/8	2-7/8	TGC249	C68380	4.36	TGF624	C23324	5.80	—	—	—
G	0.2610	6.63	4-1/8	2-7/8	TGC250	C68381	4.62	TGF625	C23325	6.14	—	—	—
H	0.2660	6.76	4-1/8	2-7/8	TGC251	C68382	4.92	TGF627	C23326	6.54	—	—	—
I	0.2720	6.91	4-1/8	2-7/8	TGC252	C68383	5.04	TGF628	C23327	6.72	—	—	—
J	0.2770	7.04	4-1/8	2-7/8	TGC253	C68384	5.46	TGF629	C23328	7.28	—	—	—
K	0.2810	7.14	4-1/4	2-15/16	TGC254	C68385	5.50	TGF630	C23329	7.31	—	—	—
L	0.2900	7.37	4-1/4	2-15/16	TGC255	C68386	5.99	TGF632	C23330	7.98	—	—	—
M	0.2950	7.49	4-3/8	3-1/16	TGC256	C68387	6.48	—	—	—	—	—	—
N	0.3020	7.67	4-3/8	3-1/16	TGC257	C68388	6.53	—	—	—	—	—	—
O	0.3160	8.03	4-1/2	3-3/16	TGC258	C68389	6.89	—	—	—	—	—	—
P	0.3230	8.20	4-5/8	3-5/16	TGC259	C68390	7.17	—	—	—	—	—	—
Q	0.3320	8.43	4-3/4	3-7/16	TGC260	C68391	7.21	TGF636	C23335	9.61	—	—	—
R	0.3390	8.61	4-3/4	3-7/16	TGC261	C68392	7.67	TGF637	C23336	10.21	—	—	—
S	0.3480	8.84	4-7/8	3-1/2	TGC262	C68393	8.36	—	—	—	—	—	—
T	0.3580	9.09	4-7/8	3-1/2	TGC263	C68394	8.75	—	—	—	—	—	—
U	0.3680	9.35	5	3-5/8	TGC264	C68395	9.30	TGF640	C23339	12.38	—	—	—
V	0.3770	9.58	5	3-5/8	TGC265	C68396	9.77	TGF642	C23340	13.02	—	—	—
W	0.3860	9.80	5-1/8	3-3/4	TGC266	C68397	10.07	TGF643	C23341	13.43	—	—	—
X	0.3970	10.08	5-1/8	3-3/4	TGC267	C68398	10.47	—	—	—	—	—	—
Y	0.4040	10.26	5-1/4	3-3/4	TGC268	C68399	10.63	—	—	—	—	—	—
Z	0.4130	10.49	5-1/4	3-7/8	TGC269	C68400	10.79	—	—	—	—	—	—

SCREW MACHINE LENGTH HSS DRILLS, 135° SPLIT POINT

- Shorter flute and overall length provide superior rigidity to minimize deflection when using heavy feed rates in hand or machine drilling application
- 135° split point for faster, easier drill penetration
- Black Oxide finish for increased wear resistance and improved lubricity; reduces chip welding and galling
- Sold per pack of 12
- Designed to drill through tool steel, alloy steel, carbon steel and cast iron



TGC270



VALUE

For general-purpose drilling



GENERAL PURPOSE MRO

For maintenance application



INDUSTRIAL

Manufactured from premium high-speed steel

FRACTIONAL

					Cle-Force			Cle-Line			Chicago-Latrobe		
Dia	Decimal	Metric	OAL	Flute Length	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each
1/16	0.0625	1.59	1-5/8	5/8	TGC270	C68491	0.97	TGF660	C23460	1.29	TU371	49204	1.90
5/64	0.0781	1.98	1-11/16	11/16	TGC271	C68492	1.00	TGF666	C23461	1.33	TH697	49205	1.92
3/32	0.0938	2.38	1-3/4	3/4	TGC272	C68493	1.04	TGF673	C23462	1.38	TH692	49206	1.93
7/64	0.1094	2.78	1-13/16	13/16	TGC273	C68494	1.05	TGF680	C23463	1.40	TH699	49207	1.94
1/8	0.1250	3.18	1-7/8	7/8	TGC274	C68495	1.08	TGF686	C23464	1.43	TH700	49208	1.95
9/64	0.1406	3.57	1-15/16	15/16	TGC275	C68496	1.16	TGF690	C23465	1.54	TH701	49209	2.04
5/32	0.1562	3.97	2-1/16	1	TGC276	C68497	1.27	TGF696	C23466	1.69	TH702	49210	2.11
11/64	0.1719	4.37	2-1/8	1 1/16	TGC277	C68498	1.37	TGF702	C23467	1.82	TH703	49211	2.17
3/16	0.1875	4.76	2-3/16	1 1/8	TGC278	C68499	1.43	TGF708	C23468	1.90	TH704	49212	2.29
13/64	0.2031	5.16	2-1/4	1 3/16	TGC279	C68500	1.60	TGF715	C23469	2.12	TH705	49213	2.49
7/32	0.2188	5.56	2-3/8	1 1/4	TGC280	C68501	1.72	TGF720	C23470	2.29	TH706	49214	2.93
15/64	0.2344	5.95	2-7/16	1 5/16	TGC281	C68502	1.79	TGF723	C23471	2.39	TH707	49215	3.03
1/4	0.2500	6.35	2-1/2	1-3/8	TGC282	C68503	1.86	TGF724	C23472	2.47	TH708	49216	3.20
17/64	0.2656	6.75	2-5/8	1-7/16	TGC283	C68504	2.23	TGF725	C23473	2.97	TH709	49217	3.59
9/32	0.2812	7.14	2-11/16	1-1/2	TGC284	C68505	2.29	TGF726	C23474	3.05	TH710	49218	3.79
19/64	0.2969	7.54	2-3/4	1-9/16	TGC285	C68506	2.56	TGF727	C23475	3.41	TH711	49219	4.45
5/16	0.3125	7.94	2-13/16	1-5/8	TGC286	C68507	2.62	TGF728	C23476	3.49	TU373	49220	4.57
21/64	0.3281	8.33	2-15/16	1-11/16	TGC287	C68508	3.16	TGF729	C23477	4.23	TH713	49221	5.11
11/32	0.3438	8.73	3	1-11/16	TGC288	C68509	3.42	TGF730	C23478	4.55	TU374	49222	5.62
23/64	0.3594	9.13	3-1/16	1-3/4	TGC289	C68510	3.72	TGF731	C23479	4.96	TU375	49223	6.36
3/8	0.3750	9.53	3 1/8	1-13/16	TGC290	C68511	3.87	TGF732	C23480	5.16	TH716	49224	6.66
25/64	0.3906	9.92	3-1/4	1-7/8	TGC291	C68512	4.41	TGF733	C23481	5.88	TH717	49225	7.59
13/32	0.4062	10.32	3-5/16	1-15/16	TGC292	C68513	4.53	TGF734	C23482	6.04	TH718	49226	7.90
27/64	0.4219	10.72	3-3/8	2	TGC293	C68514	4.95	TGF735	C23483	6.59	TH719	49227	8.72
7/16	0.4375	11.11	3-7/16	2-1/16	TGC294	C68515	5.07	TGF736	C23484	6.77	TH720	49228	8.81
29/64	0.4531	11.51	3-9/16	2-1/8	TGC295	C68516	5.91	TGF737	C23485	7.87	TU376	49229	10.55
15/32	0.4688	11.91	3-5/8	2-1/8	TGC296	C68517	6.28	TGF738	C23486	8.37	TH722	49230	11.12
31/64	0.4844	12.3	3-11/16	2-3/16	TGC297	C68518	6.51	TGF739	C23487	8.68	TH723	49231	11.47
1/2	0.5000	12.7	3-3/4	2-1/4	TGC298	C68519	6.58	TGF740	C23488	8.77	TH724	49232	11.57

METRIC

					Cle-Force			Cle-Line			Chicago-Latrobe		
Dia	Decimal	OAL	Flute Length		Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each
1*	0.0394	26	6		—	—	—	TGF741	C23885	1.47	—	—	—
1.5	0.0591	32	9		—	—	—	TGF743	C23887	1.50	—	—	—
2	0.0787	38	12		—	—	—	TGF745	C23888	1.57	—	—	—
2.5	0.0984	43	14		—	—	—	TGF749	C23892	1.57	—	—	—
3	0.1181	46	16		—	—	—	TGF752	C23895	1.60	—	—	—
3.5	0.1378	52	20		—	—	—	TGF757	C23901	1.61	—	—	—
4	0.1575	55	22		—	—	—	TGF761	C23904	1.73	—	—	—
4.5	0.1772	58	24		—	—	—	TGF765	C23908	1.84	—	—	—
5	0.1969	62	26		—	—	—	TGF770	C23913	2.07	—	—	—
5.5	0.2165	66	28		—	—	—	TGF774	C23917	2.40	—	—	—
6	0.2362	66	28		—	—	—	TGF778	C23920	2.52	—	—	—
6.5	0.2559	70	31		—	—	—	TGF781	C23923	2.81	—	—	—
7	0.2756	74	34		—	—	—	TGF785	C23927	3.06	—	—	—
7.5	0.2953	74	34		—	—	—	TGF788	C23930	3.73	—	—	—
8	0.3150	79	37		—	—	—	TGF789	C23931	3.84	—	—	—
8.5	0.3346	79	37		—	—	—	TGF790	C23932	4.46	—	—	—
9	0.3543	84	40		—	—	—	TGF791	C23933	5.25	—	—	—
9.5	0.3740	84	40		—	—	—	TGF792	C23934	5.58	—	—	—
10	0.3937	89	43		—	—	—	TGF793	C23935	6.28	—	—	—
10.5	0.4134	89	43		—	—	—	TGF795	C23937	6.86	—	—	—
11	0.4331	95	47		—	—	—	TGF796	C23938	7.28	—	—	—
11.5	0.4528	95	47		—	—	—	TGF797	C23939	8.69	—	—	—
12	0.4724	102	51		—	—	—	TGF798	C23940	9.27	—	—	—
12.5	0.4921	102	51		—	—	—	TGF800	C23942	9.63	—	—	—
13	0.5118	102	51		—	—	—	TGF801	C23943	14.67	—	—	—
13.5	0.5315	107	54		—	—	—	TGF802	C23964	24.56	—	—	—
14	0.5512	107	54		—	—	—	TGF803	C23965	24.56	—	—	—
14.5	0.5709	111	56		—	—	—	TGF804	C23966	27.16	—	—	—
15	0.5906	111	56		—	—	—	TGF805	C23967	28.08	—	—	—
16	0.6299	115	58		—	—	—	TGF806	C23969	29.40	—	—	—
17	0.6693	119	60		—	—	—	TGF807	C23971	34.08	—	—	—

*Not split point

CUTTING TOOLS

SCREW MACHINE LENGTH HSS DRILLS, 135° SPLIT POINT (CONT'D)



VALUE

For general-purpose drilling



GENERAL PURPOSE MRO

For maintenance application



Manufactured from
premium high-speed steel

WIRE GAUGE

					Cle-Force			Cle-Line			Chicago-Latrobe		
Dia	Decimal	Metric	OAL	Flute Length	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each
60*	0.0400	1.02	1-3/8	1/2	—	—	—	TGF652	C23500	1.32	TH784	49430	1.75
59*	0.0410	1.04	1-3/8	1/2	—	—	—	TGF653	C23501	1.34	TH783	49429	1.81
58*	0.0420	1.07	1-3/8	1/2	—	—	—	TGF654	C23502	1.34	TH782	49428	1.81
57*	0.0430	1.09	1-3/8	1/2	—	—	—	TGF655	C23503	1.35	TH781	49427	1.81
56*	0.0465	1.18	1-3/8	1/2	—	—	—	TGF656	C23504	1.35	TH780	49426	1.81
55*	0.0520	1.32	1-5/8	5/8	—	—	—	TGF657	C23505	1.35	TH779	49425	1.81
54*	0.0550	1.4	1-5/8	5/8	—	—	—	TGF658	C23506	1.35	TH778	49424	1.81
53*	0.0595	1.51	1-5/8	5/8	—	—	—	TGF659	C23507	1.35	TH777	49423	1.81
52	0.0635	1.61	1-11/16	11/16	—	—	—	TGF661	C23508	1.39	TH776	49422	1.88
51	0.0670	1.7	1-11/16	11/16	—	—	—	TGF662	C23509	1.39	TH775	49421	1.88
50	0.0700	1.78	1-11/16	11/16	—	—	—	TGF663	C23510	1.39	TH774	49420	1.88
49	0.0730	1.85	1-11/16	11/16	—	—	—	TGF664	C23511	1.43	TH773	49419	1.88
48	0.0760	1.93	1-11/16	11/16	—	—	—	TGF665	C23512	1.43	TH772	49418	1.88
47	0.0785	1.99	1-3/4	3/4	—	—	—	TGF667	C23513	1.43	TH771	49417	1.88
46	0.0810	2.06	1-3/4	3/4	—	—	—	TGF668	C23514	1.43	TH770	49416	1.88
45	0.0820	2.08	1-3/4	3/4	—	—	—	TGF669	C23515	1.43	TH769	49415	1.88
44	0.0860	2.18	1-3/4	3/4	—	—	—	TGF670	C23516	1.43	TH768	49414	1.88
43	0.0890	2.26	1-3/4	3/4	—	—	—	TGF671	C23517	1.43	TH767	49413	1.88
42	0.0935	2.37	1-3/4	3/4	—	—	—	TGF672	C23518	1.43	TH766	49412	1.88
41	0.0960	2.44	1-13/16	13/16	—	—	—	TGF674	C23519	1.43	TH765	49411	1.88
40	0.0980	2.49	1-13/16	13/16	—	—	—	TGF675	C23520	1.43	TH764	49410	1.88
39	0.0995	2.53	1-13/16	13/16	—	—	—	TGF676	C23521	1.47	TH763	49409	1.89
38	0.1015	2.58	1-13/16	13/16	—	—	—	TGF677	C23522	1.47	TH762	49408	1.89
37	0.1040	2.64	1-13/16	13/16	—	—	—	TGF678	C23523	1.47	TH761	49407	1.89
36	0.1065	2.71	1-13/16	13/16	—	—	—	TGF679	C23524	1.47	TH760	49406	1.89
35	0.1100	2.79	1-7/8	7/8	—	—	—	TGF681	C23525	1.47	TH759	49405	1.89
34	0.1110	2.82	1-7/8	7/8	—	—	—	TGF682	C23526	1.47	TH758	49404	1.89
33	0.1130	2.87	1-7/8	7/8	—	—	—	TGF683	C23527	1.47	TH757	49403	1.89
32	0.1160	2.95	1-7/8	7/8	—	—	—	TGF684	C23528	1.47	TH756	49402	1.89
31	0.1200	3.05	1-7/8	7/8	—	—	—	TGF685	C23529	1.47	TH755	49401	1.89
30	0.1285	3.26	1-15/16	15/16	—	—	—	TGF687	C23530	1.47	TH754	49400	1.89
29	0.1360	3.45	1-15/16	15/16	—	—	—	TGF688	C23531	1.54	TH753	49399	1.89
28	0.1405	3.57	1-15/16	15/16	—	—	—	TGF689	C23532	1.54	TH752	49398	1.89
27	0.1440	3.66	2-1/16	1	—	—	—	TGF691	C23533	1.72	TH751	49397	2.08
26	0.1470	3.73	2-1/16	1	—	—	—	TGF692	C23534	1.74	TH750	49396	2.08
25	0.1495	3.8	2-1/16	1	—	—	—	TGF693	C23535	1.74	TH749	49395	2.07
24	0.1520	3.86	2-1/16	1	—	—	—	TGF694	C23536	1.75	TU381	49394	2.08
23	0.1540	3.91	2-1/16	1	—	—	—	TGF695	C23537	1.78	TU380	49393	2.09
22	0.1570	3.99	2-1/8	1 1/16	—	—	—	TGF697	C23538	1.78	TU379	49392	2.09
21	0.1590	4.04	2-1/8	1 1/16	—	—	—	TGF698	C23539	1.74	TH745	49391	2.08
20	0.1610	4.09	2-1/8	1 1/16	—	—	—	TGF699	C23540	1.75	TH744	49390	2.19
19	0.1660	4.22	2-1/8	1 1/16	—	—	—	TGF700	C23541	1.78	TH743	49389	2.19
18	0.1695	4.31	2-1/8	1 1/16	—	—	—	TGF701	C23542	1.92	TH742	49388	2.21
17	0.1730	4.39	2-3/16	1 1/8	—	—	—	TGF703	C23543	2.07	TH741	49387	2.53
16	0.1770	4.5	2-3/16	1 1/8	—	—	—	TGF704	C23544	2.07	TH740	49386	2.51
15	0.1800	4.57	2-3/16	1 1/8	—	—	—	TGF705	C23545	2.16	TH739	49385	2.54
14	0.1820	4.62	2-3/16	1 1/8	—	—	—	TGF706	C23546	2.16	TH738	49384	2.54
13	0.1850	4.70	2-3/16	1 1/8	—	—	—	TGF707	C23547	2.16	TH737	49383	2.54
12	0.1890	4.80	2-1/4	1 3/16	—	—	—	TGF709	C23548	2.16	TH736	49382	2.54
11	0.1910	4.85	2-1/4	1 3/16	—	—	—	TGF710	C23549	2.12	TH735	49381	2.52
10	0.1935	4.91	2-1/4	1 3/16	—	—	—	TGF711	C23550	2.12	TH734	49380	2.52
9	0.1960	4.98	2-1/4	1 3/16	—	—	—	TGF712	C23551	2.16	TH733	49379	2.54
8	0.1990	5.05	2-1/4	1 3/16	—	—	—	TGF713	C23552	2.16	TU378	49378	2.54
7	0.2010	5.11	2-1/4	1 3/16	—	—	—	TGF714	C23553	2.12	TU377	49377	2.50
6	0.2040	5.18	2-3/8	1 1/4	—	—	—	TGF716	C23554	2.48	TH730	49376	3.08
5	0.2055	5.22	2-3/8	1 1/4	—	—	—	TGF717	C23555	2.48	TH729	49375	3.08
4	0.2090	5.31	2-3/8	1 1/4	—	—	—	TGF718	C23556	2.48	TH728	49374	3.08
3	0.2130	5.41	2-3/8	1 1/4	—	—	—	TGF719	C23557	2.48	TH727	49373	3.08
2	0.2210	5.61	2-7/16	1 5/16	—	—	—	TGF721	C23558	2.55	TH726	49372	3.08
1	0.2280	5.79	2-7/16	1 5/16	—	—	—	TGF722	C23559	2.55	TH725	49371	3.08

TAPER LENGTH HSS DRILLS, BLACK OXIDE, 118° POINT

- Taper length provides longer overall length and flute length for deeper drilling
- Black Oxide finish provided increased wear resistance and added lubricity
- Sold per pack quantity
- Design for use on carbon steel, alloy steel and cast iron



TGH205



VALUE

For general-purpose drilling



GENERAL PURPOSE MRO

For maintenance application



Chicago-Latrobe®

INDUSTRIAL

Manufactured from premium high-speed steel

FRACTIONAL

					Cle-Force			Cle-Line			Chicago-Latrobe			
FRACT	DEC EQ	MM EQ	OAL IN	FL L IN	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Pack Qty	Price /Each
1/32	0.0312	0.79	2	3/4	—	—	—	—	—	—	TGH217	49702	12	5.81
1/16	0.0625	1.59	3	1 3/4	—	—	—	—	—	—	WT241	49704	12	4.93
3/32	0.0938	2.38	4 1/4	2 1/4	—	—	—	—	—	—	WT243	49706	12	6.38
1/8	0.1250	3.18	5 1/8	2 3/4	—	—	—	—	—	—	WT245	49708	12	7.52
5/32	0.1562	3.97	5 3/8	3	—	—	—	—	—	—	WT247	49710	12	8.22
3/16	0.1875	4.76	5 3/4	3 3/8	—	—	—	—	—	—	WT249	49712	12	8.28
7/32	0.2188	5.56	6	3 5/8	—	—	—	—	—	—	WT251	49714	12	9.69
1/4	0.2500	6.35	6 1/8	3 3/4	—	—	—	—	—	—	TT768	49716	12	10.57
9/32	0.2812	7.14	6 1/4	3 7/8	—	—	—	—	—	—	WT253	49718	12	12.30
5/16	0.3125	7.94	6 3/8	4	—	—	—	—	—	—	WT255	49720	6	13.19
11/32	0.3438	8.73	6 1/2	4 1/8	—	—	—	—	—	—	WT257	49722	6	15.17
3/8	0.3750	9.53	6 3/4	4 1/4	—	—	—	—	—	—	WT259	49724	6	17.76
13/32	0.4062	10.32	7	4 3/8	—	—	—	—	—	—	WT261	49726	1	20.79
7/16	0.4375	11.11	7 1/4	4 5/8	—	—	—	—	—	—	WT263	49728	1	22.19
15/32	0.4688	11.91	7 1/2	4 3/4	—	—	—	—	—	—	WT265	49730	1	25.90
1/2	0.5000	12.70	7 3/4	4 3/4	—	—	—	—	—	—	WT267	49732	1	27.53
17/32	0.5312	13.49	8	4 3/4	—	—	—	—	—	—	WT269	49734	1	38.57
9/16	0.5625	14.29	8 1/4	4 7/8	—	—	—	—	—	—	WT271	49736	1	42.84
19/32	0.5938	15.08	8 3/4	4 7/8	—	—	—	—	—	—	WT273	49738	1	50.50
5/8	0.6250	15.88	8 3/4	4 7/8	—	—	—	—	—	—	WT274	49740	1	51.34
21/32	0.6562	16.67	9	5 1/8	—	—	—	—	—	—	WT276	49742	1	56.43
11/16	0.6875	17.46	9 1/4	5 3/8	—	—	—	—	—	—	WT278	49744	1	65.25
23/32	0.7188	18.26	9 1/2	5 5/8	—	—	—	—	—	—	VE119	49746	1	68.13
3/4	0.7500	19.05	9 3/4	5 7/8	—	—	—	—	—	—	VE118	49748	1	70.77
25/32	0.7812	19.84	9 7/8	6	—	—	—	—	—	—	WT282	49750	1	75.20
13/16	0.8125	20.64	10	6 1/8	—	—	—	—	—	—	VE113	49752	1	84.49
27/32	0.8438	21.43	10	6 1/8	—	—	—	—	—	—	WT285	49754	1	89.18
7/8	0.8750	22.23	10	6 1/8	—	—	—	—	—	—	VE112	49756	1	89.55
29/32	0.9062	23.02	10	6 1/8	—	—	—	—	—	—	WT288	49758	1	102.25
15/16	0.9375	23.81	10 3/4	6 1/8	—	—	—	—	—	—	VE117	49760	1	110.95
31/32	0.9688	24.61	11	6 3/8	—	—	—	—	—	—	WT291	49762	1	125.62
1	1.0000	25.40	11	6 3/8	—	—	—	—	—	—	WT293	49764	1	127.15

WIRE GAUGE

					Cle-Force			Cle-Line			Chicago-Latrobe			
WIR/LET	DEC EQ	MM EQ	OAL IN	FL L IN	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Pack Qty	Price /Each
60	0.0400	1.02	2 1/4	1 1/8	—	—	—	—	—	—	WT460	50350	12	6.08
59	0.0410	1.04	2 1/4	1 1/8	—	—	—	—	—	—	WT459	50349	12	6.08
58	0.0420	1.07	2 1/4	1 1/8	—	—	—	—	—	—	WT458	50348	12	6.08
57	0.0430	1.09	2 1/4	1 1/8	—	—	—	—	—	—	WT457	50347	12	6.08
56	0.0465	1.18	2 1/4	1 1/8	—	—	—	—	—	—	WT456	50346	12	6.08
55	0.0520	1.32	3	1 3/4	—	—	—	—	—	—	WT455	50345	12	6.08
54	0.0550	1.40	3	1 3/4	—	—	—	—	—	—	WT454	50344	12	6.08
53	0.0595	1.51	3	1 3/4	—	—	—	—	—	—	WT453	50343	12	6.08
52	0.0635	1.61	3 3/4	2	—	—	—	—	—	—	WT452	50342	12	6.08
51	0.0670	1.70	3 3/4	2	—	—	—	—	—	—	WT451	50341	12	6.08
50	0.0700	1.78	3 3/4	2	—	—	—	—	—	—	WT450	50340	12	6.08
49	0.0730	1.85	3 3/4	2	—	—	—	—	—	—	WT449	50339	12	6.08
48	0.0760	1.93	3 3/4	2	—	—	—	—	—	—	WT448	50338	12	6.08
47	0.0785	1.99	4 1/4	2 1/4	—	—	—	—	—	—	WT447	50337	12	7.55
46	0.0810	2.06	4 1/4	2 1/4	—	—	—	—	—	—	WT446	50336	12	7.55
45	0.0820	2.08	4 1/4	2 1/4	—	—	—	—	—	—	WT445	50335	12	7.55
44	0.0860	2.18	4 1/4	2 1/4	—	—	—	—	—	—	WT444	50334	12	7.55
43	0.0890	2.26	4 1/4	2 1/4	—	—	—	—	—	—	WT443	50333	12	7.55
42	0.0935	2.37	4 1/4	2 1/4	—	—	—	—	—	—	WT442	50332	12	7.55
41	0.0960	2.44	4 5/8	2 1/2	—	—	—	—	—	—	WT441	50331	12	9.12
40	0.0980	2.49	4 5/8	2 1/2	—	—	—	—	—	—	WT440	50330	12	9.12
39	0.0995	2.53	4 5/8	2 1/2	—	—	—	—	—	—	WT439	50329	12	9.12
38	0.1015	2.58	4 5/8	2 1/2	—	—	—	—	—	—	WT438	50328	12	9.73
37	0.1040	2.64	4 5/8	2 1/2	—	—	—	—	—	—	WT437	50327	12	9.73
36	0.1065	2.71	4 5/8	2 1/2	—	—	—	—	—	—	WT436	50326	12	9.73
35	0.1100	2.79	5 1/8	2 3/4	—	—	—	—	—	—	WT435	50325	12	11.27
34	0.1110	2.82	5 1/8	2 3/4	—	—	—	—	—	—	WT434	50324	12	11.27
33	0.1130	2.87	5 1/8	2 3/4	—	—	—	—	—	—	WT433	50323	12	11.27
32	0.1160	2.95	5 1/8	2 3/4	—	—	—	—	—	—	WT432	50322	12	11.27
31	0.1200	3.05	5 1/8	2 3/4	—	—	—	—	—	—	WT431	50321	12	11.27
30	0.1285	3.26	5 3/8	3	—	—	—	—	—	—	WT430	50320	12	11.30

R34466E

OFFICE
PRODUCTS

INSTRUMENTS,
SCALES &
ELECTRICAL

SHIPPING &
PACKAGING

TOOLS &
EQUIPMENT

WELDING &
METALWORKING

SAFETY
EQUIPMENT &
SUPPLIES

JANITORIAL &
MAINTENANCE

MATERIAL
HANDLING &
STORAGE

1111

CUTTING TOOLS

TAPER LENGTH HSS DRILLS, BLACK OXIDE, 118° POINT (CONT'D)



VALUE

For general-purpose drilling



GENERAL PURPOSE MRO

For maintenance application



INDUSTRIAL

Manufactured from premium high-speed steel

WIRE GAUGE (CONT'D)

WIR/LET	DEC EQ	MM EQ	OAL IN	FL L IN	Cle-Force			Cle-Line			Chicago-Latrobe			
					Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Pack Qty	Price /Each
29	0.1360	3.45	5 3/8	3	—	—	—	—	—	—	WT429	50319	12	11.30
28	0.1405	3.57	5 3/8	3	—	—	—	—	—	—	WT428	50318	12	11.41
27	0.1440	3.66	5 3/8	3	—	—	—	—	—	—	WT427	50317	12	11.41
26	0.1470	3.73	5 3/8	3	—	—	—	—	—	—	WT426	50316	12	11.41
25	0.1495	3.80	5 3/8	3	—	—	—	—	—	—	WT425	50315	12	11.41
24	0.1520	3.86	5 3/8	3	—	—	—	—	—	—	WT424	50314	12	11.84
23	0.1540	3.91	5 3/8	3	—	—	—	—	—	—	WT423	50313	12	11.84
22	0.1570	3.99	5 3/4	3 3/8	—	—	—	—	—	—	WT422	50312	12	11.84
21	0.1590	4.04	5 3/4	3 3/8	—	—	—	—	—	—	WT421	50311	12	11.84
20	0.1610	4.09	5 3/4	3 3/8	—	—	—	—	—	—	WT420	50310	12	11.84
19	0.1660	4.22	5 3/4	3 3/8	—	—	—	—	—	—	WT419	50309	12	11.95
18	0.1695	4.31	5 3/4	3 3/8	—	—	—	—	—	—	WT418	50308	12	11.95
17	0.1730	4.39	5 3/4	3 3/8	—	—	—	—	—	—	WT417	50307	12	11.95
16	0.1770	4.50	5 3/4	3 3/8	—	—	—	—	—	—	WT416	50306	12	11.95
15	0.1800	4.57	5 3/4	3 3/8	—	—	—	—	—	—	WT415	50305	12	11.95
14	0.1820	4.62	5 3/4	3 3/8	—	—	—	—	—	—	WT414	50304	12	11.95
13	0.1850	4.70	5 3/4	3 3/8	—	—	—	—	—	—	WT413	50303	12	11.95
12	0.1890	4.80	6	3 5/8	—	—	—	—	—	—	WT412	50302	12	12.57
11	0.1910	4.85	6	3 5/8	—	—	—	—	—	—	WT411	50301	12	12.57
10	0.1935	4.91	6	3 5/8	—	—	—	—	—	—	WT410	50300	12	12.29
9	0.1960	4.98	6	3 5/8	—	—	—	—	—	—	WT409	50299	12	12.57
8	0.1990	5.05	6	3 5/8	—	—	—	—	—	—	WT408	50298	12	12.57
7	0.2010	5.11	6	3 5/8	—	—	—	—	—	—	WT407	50297	12	12.57
6	0.2040	5.18	6	3 5/8	—	—	—	—	—	—	WT406	50296	12	12.88
5	0.2055	5.22	6	3 5/8	—	—	—	—	—	—	WT405	50295	12	12.88
4	0.2090	5.31	6	3 5/8	—	—	—	—	—	—	WT404	50294	12	12.88
3	0.2130	5.41	6	3 5/8	—	—	—	—	—	—	WT403	50293	12	12.88
2	0.2210	5.61	6 1/8	3 3/4	—	—	—	—	—	—	WT402	50292	12	13.04
1	0.2280	5.79	6 1/8	3 3/4	—	—	—	—	—	—	WT401	50291	12	13.04

LETTER

WIR/LET	DECEQ	MM EQ	OAL IN	FL L IN	Cle-Force			Cle-Line			Chicago-Latrobe			
					Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Pack Qty	Price /Each
A	0.2340	5.94	6 1/8	3 3/4	—	—	—	—	—	—	WT461	50401	12	15.18
B	0.2380	6.05	6 1/8	3 3/4	—	—	—	—	—	—	WT462	50402	12	15.29
C	0.2420	6.15	6 1/8	3 3/4	—	—	—	—	—	—	WT463	50403	12	15.29
D	0.2460	6.25	6 1/8	3 3/4	—	—	—	—	—	—	WT464	50404	12	15.29
E	0.2500	6.35	6 1/8	3 3/4	—	—	—	—	—	—	TT768	49716	12	10.57
F	0.2570	6.53	6 1/8	3 3/4	—	—	—	—	—	—	WT465	50406	12	15.54
G	0.2610	6.63	6 1/8	3 3/4	—	—	—	—	—	—	WT466	50407	12	16.40
H	0.2660	6.76	6 1/4	3 7/8	—	—	—	—	—	—	WT467	50408	12	16.50
I	0.2720	6.91	6 1/4	3 7/8	—	—	—	—	—	—	WT468	50409	12	16.52
J	0.2770	7.04	6 1/4	3 7/8	—	—	—	—	—	—	WT469	50410	12	16.71
K	0.2812	7.14	6 1/4	3 7/8	—	—	—	—	—	—	WT470	50411	12	16.81
L	0.2900	7.37	6 1/4	3 7/8	—	—	—	—	—	—	WT471	50412	12	16.83
M	0.2950	7.49	6 3/8	4	—	—	—	—	—	—	WT472	50413	6	17.48
N	0.3020	7.67	6 3/8	4	—	—	—	—	—	—	WT473	50414	6	17.52
O	0.3160	8.03	6 3/8	4	—	—	—	—	—	—	WT474	50415	6	17.63
P	0.3230	8.20	6 3/8	4	—	—	—	—	—	—	WT475	50416	6	17.88
Q	0.3320	8.43	6 1/2	4 1/8	—	—	—	—	—	—	WT476	50417	6	17.94
R	0.3390	8.61	6 1/2	4 1/8	—	—	—	—	—	—	WT477	50418	6	18.75
S	0.3480	8.84	6 3/4	4 1/4	—	—	—	—	—	—	WT478	50419	6	22.47
T	0.3580	9.09	6 3/4	4 1/4	—	—	—	—	—	—	WT479	50420	6	22.66
U	0.3680	9.35	6 3/4	4 1/4	—	—	—	—	—	—	WT480	50421	6	22.88
V	0.3770	9.58	6 3/4	4 1/4	—	—	—	—	—	—	WT481	50422	1	23.61
W	0.3860	9.80	6 3/4	4 1/4	—	—	—	—	—	—	WT482	50423	1	23.68
X	0.3970	10.08	7	4 3/8	—	—	—	—	—	—	WT483	50424	1	23.80
Y	0.4040	10.26	7	4 3/8	—	—	—	—	—	—	WT484	50425	1	25.38
Z	0.4130	10.49	7 1/4	4 5/8	—	—	—	—	—	—	WT485	50426	1	26.44

1/2" REDUCED SHANK HSS DRILL, 118° POINT

- Round shank or shank with three flats for a more positive grip in the drill chuck; flats reduce drill slippage under high load
- Features 6" overall length and 3 1/8" flute length for increased rigidity, less deflection, and better hole accuracy
- Sold per pack of 1
- Black oxide finish for increase wear resistance and improves lubricity
- Design for use on carbon steel, cast iron, alloy steel, wood and wherever max chuck cap is 1/2"



Black Oxide



VALUE

For general-purpose drilling



GENERAL PURPOSE MRO

For maintenance application



INDUSTRIAL

Manufactured from premium high-speed steel, heavy-duty construction for drilling tougher materials

FRACTIONAL			Cle-Force			Cle-Line			Chicago-Latrobe		
			Round Shank			Flat Shank			Round Shank		
Dia	Decimal	Metric	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each
1/2	0.5000	12.7	TGC416	C68631	13.65	TGC459	C68674	14.31	TGF892	C20732	18.19
33/64	0.5156	13.1	TGC417	C68632	13.65	TGC460	C68675	14.31	TGF893	C20733	18.19
17/32	0.5312	13.49	TGC418	C68633	13.71	TGC461	C68676	14.49	TGF894	C20734	18.27
35/64	0.5469	13.89	TGC419	C68634	14.27	TGC462	C68677	15.07	TGF895	C20735	19.03
9/16	0.5625	14.29	TGC420	C68635	14.27	TGC463	C68678	15.07	TGF896	C20736	19.03
37/64	0.5781	14.68	TGC421	C68636	15.33	TGC464	C68679	16.32	TGF897	C20737	20.43
19/32	0.5938	15.08	TGC422	C68637	15.33	TGC465	C68680	16.32	TGF898	C20738	20.43
39/64	0.6094	15.48	TGC423	C68638	15.84	TGC466	C68681	16.80	TGF899	C20739	21.12
5/8	0.6250	15.88	TGC424	C68639	15.84	TGC467	C68682	16.80	TGF900	C20740	21.12
41/64	0.6406	16.27	TGC425	C68640	16.97	TGC468	C68683	18.00	TGF901	C20741	22.62
21/32	0.6562	16.67	TGC426	C68641	16.97	TGC469	C68684	18.00	TGF902	C20742	22.62
43/64	0.6719	17.07	TGC427	C68642	17.92	TGC470	C68685	18.98	TGF903	C20743	23.90
11/16	0.6875	17.46	TGC428	C68643	17.92	TGC471	C68686	18.98	TGF904	C20744	23.90
45/64	0.7031	17.86	TGC429	C68644	18.92	TGC472	C68687	19.67	TGF905	C20745	25.23
23/32	0.7188	18.26	TGC430	C68645	18.92	TGC473	C68688	19.67	TGF906	C20746	25.23
47/64	0.7344	18.65	TGC431	C68646	19.95	TGC474	C68689	20.74	TGF907	C20747	26.59
3/4	0.7500	19.05	TGC432	C68647	19.95	TGC475	C68690	20.74	TGF908	C20748	26.59
49/64	0.7656	19.45	TGC433	C68648	21.07	TGC476	C68691	22.16	TGF909	C20749	28.10
25/32	0.7812	19.84	TGC434	C68649	21.43	TGC477	C68692	22.16	TGF910	C20750	28.57
51/64	0.7969	20.24	TGC435	C68650	22.29	TGC478	C68693	23.55	TGF911	C20669	29.72
13/16	0.8125	20.64	TGC436	C68651	22.34	TGC479	C68694	23.57	TGF912	C20751	29.79
53/64	0.8281	21.03	TGC437	C68652	23.36	TGC480	C68695	24.40	TGF913	C20752	31.15
27/32	0.8438	21.43	TGC438	C68653	23.36	TGC481	C68696	24.33	TGF914	C20753	31.15
55/64	0.8594	21.83	TGC439	C68654	24.03	TGC482	C68697	25.15	TGF915	C20754	34.69
7/8	0.8750	22.23	TGC440	C68655	24.03	TGC483	C68698	25.34	TGF916	C20755	34.69
57/64	0.8906	22.62	TGC441	C68656	26.03	TGC484	C68699	26.79	TGF917	C20756	37.65
29/32	0.9062	23.02	TGC442	C68657	26.03	TGC485	C68700	26.99	TGF918	C20757	37.65
59/64	0.9219	23.42	TGC443	C68658	28.77	TGC486	C68701	28.42	TGF919	C20758	38.36
15/16	0.9375	23.81	TGC444	C68659	28.23	TGC487	C68702	28.07	TGF920	C20759	39.12
61/64	0.9531	24.21	TGC445	C68660	29.34	TGC488	C68703	30.64	TGF921	C20760	64.34
31/32	0.9688	24.61	TGC446	C68661	29.34	TGC489	C68704	30.41	TGF922	C20761	72.12
63/64	0.9844	25.00	TGC447	C68662	31.77	TGC490	C68705	32.23	TGF923	C20762	111.63
1	1.0000	25.4	TGC448	C68663	31.73	TGC491	C68706	32.20	TGF924	C20763	116.95
1-1/64	1.0156	25.80	—	—	—	TGC492	C68707	42.63	—	—	—
1-1/32	1.0312	26.19	TGC449	C68664	39.81	TGC493	C68708	42.79	TGF925	C20764	130.90
1-3/64	1.0469	26.59	—	—	—	TGC494	C68709	44.30	—	—	—
1-1/16	1.0625	26.99	TGC450	C68665	40.62	TGC495	C68710	42.28	TGF926	C20765	135.10
1-5/64	1.0781	27.38	—	—	—	TGC496	C68711	48.58	—	—	—
1-3/32	1.0938	27.78	—	—	—	TGC497	C68712	49.05	—	—	—
1-7/64	1.1094	28.18	—	—	—	TGC498	C68713	49.85	—	—	—
1-1/8	1.1250	28.58	TGC451	C68666	44.35	TGC499	C68714	45.98	TGF927	C20766	153.06
1-9/64	1.1406	28.97	—	—	—	TGC500	C68715	51.43	—	—	—
1-5/32	1.1562	29.37	TGC452	C68667	48.97	TGC501	C68716	51.58	TGF928	C20767	158.56
1-11/64	1.1719	29.77	—	—	—	TGC502	C68717	52.06	—	—	—
1-3/16	1.1875	30.16	TGC453	C68668	48.25	TGC503	C68718	50.35	TGF929	C20768	163.06
1-13/64	1.2031	30.56	—	—	—	TGC504	C68719	57.03	—	—	—
1-7/32	1.2188	30.96	—	—	—	TGC505	C68720	57.33	—	—	—
1-15/64	1.2344	31.35	—	—	—	TGC506	C68721	58.31	—	—	—
1-1/4	1.2500	31.75	TGC454	C68669	54.09	TGC507	C68722	54.59	TGF930	C20769	168.06
1-17/64	1.2656	32.15	—	—	—	TGC508	C68723	86.26	—	—	—
1-9/32	1.2812	32.54	—	—	—	TGC509	C68724	87.73	—	—	—
1-19/64	1.2969	32.94	—	—	—	TGC510	C68725	88.10	—	—	—
1-5/16	1.3125	33.34	TGC455	C68670	83.72	TGC511	C68726	88.91	TGF931	C20770	173.18
1-21/64	1.3281	33.73	—	—	—	TGC512	C68727	94.61	—	—	—
1-11/32	1.3438	34.13	—	—	—	TGC513	C68728	95.25	—	—	—
1-23/64	1.3594	34.53	—	—	—	TGC514	C68729	95.88	—	—	—
1-3/8	1.3750	34.93	TGC456	C68671	87.71	TGC515	C68730	96.52	TGF932	C20771	178.01
1-25/64	1.3906	35.32	—	—	—	TGC516	C68731	103.37	—	—	—
1-13/32	1.4062	35.72	—	—	—	TGC517	C68732	103.82	—	—	—
1-27/64	1.4219	36.12	—	—	—	TGC518	C68733	104.54	—	—	—
1-7/16	1.4375	36.51	TGC457	C68672	98.18	TGC519	C68734	104.86	TGF933	C20772	182.02
1-29/64	1.4531	36.91	—	—	—	TGC520	C68735	109.99	—	—	—
1 15/32	1.4688	37.31	—	—	—	—	—	—	—	—	—
1-31/64	1.4844	37.70	—	—	—	TGC521	C68736	111.23	—	—	—
1-1/2	1.5000	38.1	TGC458	C68673	101.32	TGC522	C68737	111.91	TGF934	C20773	187.01

R34467E

OFFICE PRODUCTS

INSTRUMENTS, SCALES & ELECTRICAL

SHIPPING & PACKAGING

TOOLS & EQUIPMENT

WELDING & METALWORKING

SAFETY EQUIPMENT & SUPPLIES

JANITORIAL & MAINTENANCE

MATERIAL HANDLING & STORAGE

CUTTING TOOLS

1/2" REDUCED SHANK HSS DRILLS, 118° POINT (CONT'D)



VALUE

For general-purpose drilling



GENERAL PURPOSE MRO

For maintenance application



INDUSTRIAL

Manufactured from premium high-speed steel, heavy-duty construction for drilling tougher materials

		Cle-Force						Cle-Line						Chicago-Latrobe					
		Round Shank		Flat Shank				Round Shank		Flat Shank				Round Shank		Flat Shank			
Dia	Decimal	Model No.	Mfg. No.	Model No.	Mfg. No.	Price /Each		Model No.	Mfg. No.	Model No.	Mfg. No.	Price /Each		Model No.	Mfg. No.	Model No.	Mfg. No.	Price /Each	
13.00	0.5118	—	—	—	—	—		TGF935	C21070	23.47	TGF995	C21170	25.83	—	—	—	—	—	—
13.50	0.5315	—	—	—	—	—		TGF936	C21071	23.47	TGF996	C21171	25.83	—	—	—	—	—	—
14.00	0.5512	—	—	—	—	—		TGF937	C21072	23.47	TGF997	C21172	25.83	—	—	—	—	—	—
14.50	0.5709	—	—	—	—	—		TGF938	C21073	27.71	TGF998	C21173	30.27	—	—	—	—	—	—
15.00	0.5906	—	—	—	—	—		TGF939	C21074	27.71	TGF999	C21174	30.27	—	—	—	—	—	—
15.50	0.6102	—	—	—	—	—		TGF940	C21075	29.83	TGH001	C21175	32.39	—	—	—	—	—	—
16.00	0.6299	—	—	—	—	—		TGF941	C21076	29.83	TGH002	C21176	32.39	—	—	—	—	—	—
16.50	0.6496	—	—	—	—	—		TGF942	C21077	32.03	TGH003	C21177	34.60	—	—	—	—	—	—
17.00	0.6693	—	—	—	—	—		TGF943	C21078	32.03	TGH004	C21178	34.60	—	—	—	—	—	—
17.50	0.6890	—	—	—	—	—		TGF944	C21079	33.01	TGH005	C21179	35.57	—	—	—	—	—	—
18.00	0.7087	—	—	—	—	—		TGF945	C21080	33.01	TGH006	C21180	35.57	—	—	—	—	—	—
18.50	0.7283	—	—	—	—	—		TGF946	C21081	35.70	TGH007	C21181	38.26	—	—	—	—	—	—
19.00	0.7480	—	—	—	—	—		TGF947	C21082	35.70	TGH008	C21182	38.26	—	—	—	—	—	—
19.50	0.7677	—	—	—	—	—		TGF948	C21083	39.78	TGH009	C21183	42.34	—	—	—	—	—	—
20.00	0.7874	—	—	—	—	—		TGF949	C21084	39.78	TGH010	C21184	42.34	—	—	—	—	—	—
21.00	0.8268	—	—	—	—	—		TGF950	C21085	42.47	TGH011	C21185	45.02	—	—	—	—	—	—
22.00	0.8661	—	—	—	—	—		TGF951	C21086	42.47	TGH012	C21186	45.02	—	—	—	—	—	—
23.00	0.9055	—	—	—	—	—		TGF952	C21087	48.17	TGH013	C21187	50.74	—	—	—	—	—	—
24.00	0.9449	—	—	—	—	—		TGF953	C21088	48.25	TGH014	C21188	50.81	—	—	—	—	—	—
25.00	0.9843	—	—	—	—	—		TGF954	C21089	49.31	TGH015	C21189	51.87	—	—	—	—	—	—

1/2" REDUCED ROUND SHANK COBALT DRILLS, 118° SPLIT POINT

- For use in highly abrasive applications and Straw finish adds lubricity
- Features 6" overall length and 3 1/8" flute length for increased rigidity, less deflection, and better hole accuracy
- Sold per pack of 1
- Design for use on carbon steel, alloy steel, cast iron and wherever max chuck cap is 1/2"



VALUE

For general-purpose drilling



GENERAL PURPOSE MRO

For maintenance application



INDUSTRIAL

Manufactured from premium cobalt high-speed steel

						Cle-Force			Cle-Line			Chicago-Latrobe		
						Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each
FRCT	DEC EQ	MM EQ	SHNK INCH	OAL IN	FL L IN	—	—	—	—	—	—	WU021	53432	47.10
33/64	0.5156	13.10	1/2	6	3 1/8	—	—	—	—	—	—	WU022	53433	47.10
17/32	0.5312	13.49	1/2	6	3 1/8	—	—	—	—	—	—	WU023	53434	47.68
35/64	0.5469	13.89	1/2	6	3 1/8	—	—	—	—	—	—	WU024	53435	47.68
9/16	0.5625	14.29	1/2	6	3 1/8	—	—	—	—	—	—	WU025	53436	48.18
37/64	0.5781	14.68	1/2	6	3 1/8	—	—	—	—	—	—	WU026	53437	58.07
19/32	0.5938	15.08	1/2	6	3 1/8	—	—	—	—	—	—	WU027	53438	58.07
39/64	0.6094	15.48	1/2	6	3 1/8	—	—	—	—	—	—	WU028	53439	57.38
5/8	0.6250	15.88	1/2	6	3 1/8	—	—	—	—	—	—	WU029	53440	57.38
41/64	0.6406	16.27	1/2	6	3 1/8	—	—	—	—	—	—	WU030	53441	62.23
21/32	0.6562	16.67	1/2	6	3 1/8	—	—	—	—	—	—	WU031	53442	62.23
43/64	0.6719	17.07	1/2	6	3 1/8	—	—	—	—	—	—	WU032	53443	63.02
11/16	0.6875	17.46	1/2	6	3 1/8	—	—	—	—	—	—	WU033	53444	63.02
45/64	0.7031	17.86	1/2	6	3 1/8	—	—	—	—	—	—	WU034	53445	69.75
23/32	0.7188	18.26	1/2	6	3 1/8	—	—	—	—	—	—	WU035	53446	69.75
47/64	0.7344	18.65	1/2	6	3 1/8	—	—	—	—	—	—	WU036	53447	70.44
3/4	0.7500	19.05	1/2	6	3 1/8	—	—	—	—	—	—	WU037	53448	70.44
49/64	0.7656	19.45	1/2	6	3 1/8	—	—	—	—	—	—	WU038	53449	80.73
25/32	0.7812	19.84	1/2	6	3 1/8	—	—	—	—	—	—	WU039	53450	80.73
51/64	0.7969	20.24	1/2	6	3 1/8	—	—	—	—	—	—	WU040	53451	81.42
13/16	0.8125	20.64	1/2	6	3 1/8	—	—	—	—	—	—	WU041	53452	81.42
53/64	0.8281	21.03	1/2	6	3 1/8	—	—	—	—	—	—	WU042	53453	87.75
27/32	0.8438	21.43	1/2	6	3 1/8	—	—	—	—	—	—	WU043	53454	89.73
55/64	0.8594	21.83	1/2	6	3 1/8	—	—	—	—	—	—	WU044	53455	88.05
7/8	0.8750	22.23	1/2	6	3 1/8	—	—	—	—	—	—	WU045	53456	85.47
57/64	0.8906	22.62	1/2	6	3 1/8	—	—	—	—	—	—	WU046	53457	97.65
29/32	0.9062	23.02	1/2	6	3 1/8	—	—	—	—	—	—	WU047	53458	97.65
59/64	0.9219	23.42	1/2	6	3 1/8	—	—	—	—	—	—	WU048	53459	98.63
15/16	0.9375	23.81	1/2	6	3 1/8	—	—	—	—	—	—	WU049	53460	98.63
61/64	0.9531	24.21	1/2	6	3 1/8	—	—	—	—	—	—	WU050	53461	110.21
31/32	0.9688	24.61	1/2	6	3 1/8	—	—	—	—	—	—	WU051	53462	110.21
63/64	0.9844	25.00	1/2	6	3 1/8	—	—	—	—	—	—	WU052	53463	110.21
1	1.0000	25.40	1/2	6	3 1/8	—	—	—	—	—	—	WU053	53464	110.21

MORSE TAPER SHANK HSS DRILLS, 118° POINT

- Taper shank made to American National Standard (Morse) dimensions for use in corresponding Morse taper holders
- Black Oxide finish for increased wear resistance and improved lubricity, reduced chip welding, and galling
- Sold per pack of 1
- **Designed for use on carbon steel, tool steel, alloy steel and cast iron**



TGF808



INDUSTRIAL

Manufactured from premium high-speed steel, heavy-duty construction for drilling in tougher materials



VALUE

For general-purpose drilling



GENERAL PURPOSE MRO

For maintenance application

FRACTIONAL

						Cle-Force			Cle-Line			Chicago-Latrobe		
Dia	Decimal	Metric	OAL	Flute Length	Taper No.	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each
1/8	0.1250	3.18	5 1/8	1 7/8	1	—	—	—	TGF808	C20049	17.30	TGH516	53108	19.49
9/64	0.1406	3.57	5 1/8	1 7/8	1	—	—	—	TGF809	C20050	17.30	—	—	—
5/32	0.1562	3.97	5 3/8	2 1/8	1	—	—	—	TGF810	C20051	17.30	TGH517	53310	18.11
11/64	0.1719	4.37	5 3/4	2 1/2	1	—	—	—	TGF811	C20052	17.30	—	—	—
3/16	0.1875	4.76	5 3/4	2 1/2	1	—	—	—	TGF812	C20053	17.30	TH920	53112	19.49
13/64	0.2031	5.16	6	2 3/4	1	—	—	—	TGF813	C20054	17.63	TH921	53113	20.88
7/32	0.2188	5.56	6	2 3/4	1	—	—	—	TGF814	C20055	17.63	TH922	53114	20.88
15/64	0.2344	5.95	6 1/8	2 7/8	1	—	—	—	TGF815	C20056	17.63	TH923	53115	21.57
1/4	0.2500	6.35	6 1/8	2 7/8	1	—	—	—	TGF816	C20057	17.77	TH924	53116	21.37
17/64	0.2656	6.75	6 1/4	3	1	—	—	—	TGF817	C20058	17.94	TH925	53117	22.26
9/32	0.2812	7.14	6 1/4	3	1	—	—	—	TGF818	C20059	17.94	TH926	53118	22.26
19/64	0.2969	7.54	6 3/8	3 1/8	1	—	—	—	TGF819	C20060	18.42	TH927	53119	24.14
5/16	0.3125	7.94	6 3/8	3 1/8	1	TGC299	C68779	13.82	TGF820	C20061	18.42	TH928	53120	23.05
21/64	0.3281	8.33	6 1/2	3 1/4	1	TGC300	C68780	14.78	TGF821	C20062	19.71	TH929	53121	28.99
11/32	0.3438	8.73	6 1/2	3 1/4	1	TGC301	C68781	15.10	TGF822	C20063	20.13	TH930	53122	29.98
23/64	0.3594	9.13	6 3/4	3 1/2	1	TGC302	C68782	15.46	TGF823	C20064	20.61	TH931	53123	31.76
3/8	0.3750	9.53	6 3/4	3 1/2	1	TGC303	C68794	15.20	TGF824	C20524	20.26	TH932	53124	32.15
3/8	0.3750	9.53	7 3/8	3 1/2	2	TGC304	C68738	19.62	TGF825	C20020	26.15	—	—	—
25/64	0.3906	9.92	7	3 5/8	1	TGC305	C68795	15.92	TGF826	C20525	21.22	TH933	53125	33.44
25/64	0.3906	9.92	7	3 5/8	2	TGC306	C68739	20.04	—	—	—	—	—	—
13/32	0.4062	10.32	7	3 5/8	1	TGC307	C68796	15.92	TGF827	C20526	21.22	TH934	53126	32.95
13/32	0.4063	10.32	7 1/2	3 5/8	2	TGC308	C68740	20.04	TGF828	C20022	26.72	—	—	—
27/64	0.4219	10.72	7 1/4	3 7/8	1	TGC309	C68797	16.60	TGF829	C20527	22.14	TH935	53127	35.91
27/64	0.4219	10.72	7 1/4	3 7/8	2	TGC310	C68741	20.99	—	—	—	—	—	—
7/16	0.4375	11.11	7 1/4	3 7/8	1	TGC311	C68798	16.60	TGF830	C20528	22.14	TH936	53128	35.91
7/16	0.4375	11.11	7 3/4	3 7/8	2	TGC312	C68742	20.99	TGF831	C20024	27.98	—	—	—
29/64	0.4531	11.51	7 1/2	4 1/8	1	TGC313	C68799	18.89	TGF832	C20529	25.18	TH937	53129	39.77
29/64	0.4531	11.51	7 1/2	4 1/8	2	TGC314	C68743	24.15	—	—	—	—	—	—
15/32	0.4688	11.91	7 1/2	4 1/8	1	TGC315	C68800	19.11	TGF833	C20530	25.47	TH938	53130	40.07
31/64	0.4844	12.30	8 1/4	4 3/8	2	TGC316	C68801	20.31	—	—	—	TH939	53131	40.67
1/2	0.5000	12.70	7 3/4	4 3/8	1	TGC317	C68744	24.64	TGF834	C20026	32.85	TH940	53132	40.95
1/2	0.5000	12.70	7 3/4	4 3/8	2	TGC318	C68802	20.31	—	—	—	—	—	—
33/64	0.5156	13.10	8 1/2	4 5/8	2	TGC319	C68803	20.92	—	—	—	—	—	—
17/32	0.5312	13.49	8	4 5/8	1	TGC320	C68745	27.21	—	—	—	—	—	—
17/32	0.5312	13.49	8 1/2	4 5/8	2	TGC321	C68804	21.73	—	—	—	TH942	53134	43.33
35/64	0.5469	13.89	8 3/4	4 7/8	2	TGC322	C68805	22.42	TGF835	C20535	29.89	TH941	53133	41.85
9/16	0.5625	14.29	8 3/4	4 7/8	2	TGC323	C68806	23.64	—	—	—	TH944	53136	47.68
37/64	0.5781	14.68	8 3/4	4 7/8	2	TGC324	C68807	25.33	—	—	—	TH945	53137	50.85
19/32	0.5938	15.08	8 3/4	4 7/8	2	TGC325	C68808	25.50	—	—	—	TH946	53138	51.34
39/64	0.6094	15.48	8 3/4	4 7/8	2	TGC326	C68809	26.15	—	—	—	TH947	53139	52.33
5/8	0.6250	15.88	8 3/4	4 7/8	2	TGC327	C68810	26.15	TGF836	C20540	34.87	TH948	53140	52.43
41/64	0.6406	16.27	9	4 7/8	2	TGC328	C68811	26.72	TGF837	C20543	36.87	TH949	53141	55.60
21/32	0.6562	16.67	9	5 1/8	2	TGC329	C68812	26.72	—	—	—	TH950	53142	55.60
21/32	0.6562	16.67	9 3/4	5 1/8	2	TGC330	C68746	37.91	—	—	—	—	—	—
43/64	0.6719	17.07	9 1/4	5 3/8	2	TGC331	C68813	27.65	—	—	—	TH951	53143	57.38
11/16	0.6875	17.46	9 1/4	5 3/8	2	TGC332	C68814	27.65	—	—	—	TH952	53144	58.07
11/16	0.6875	17.46	10	5 3/8	3	TGC333	C68747	40.87	TGF838	C20029	54.51	—	—	—
45/64	0.7031	17.86	9 1/2	5 5/8	2	TGC334	C68815	29.28	TGF839	C20545	39.04	TH953	53145	61.94
23/32	0.7188	18.26	9 1/2	5 5/8	2	TGC335	C68816	29.56	—	—	—	TH954	53146	62.13
47/64	0.7344	18.65	9 3/4	5 7/8	2	TGC336	C68817	32.27	—	—	—	TH955	53147	68.56
3/4	0.7500	19.05	9 3/4	5 7/8	2	TGC337	C68818	32.43	—	—	—	—	—	—
3/4	0.7500	19.05	10 1/2	5 7/8	3	TGC338	C68748	47.53	TGF840	C20030	63.38	TH956	53148	69.45
49/64	0.7656	19.45	9 7/8	6	2	TGC339	C68819	35.03	TGF841	C20549	46.70	TH957	53149	75.29
49/64	0.7656	19.45	10 5/8	6	3	TGC340	C68749	55.21	—	—	—	—	—	—
25/32	0.7812	19.84	9 7/8	6	2	TGC341	C68820	35.66	TGF842	C20550	47.54	TH958	53150	77.36
25/32	0.7812	19.84	10 5/8	6	3	TGC342	C68750	55.21	—	—	—	—	—	—
51/64	0.7969	20.24	10 3/4	6 1/8	3	TGC343	C68821	38.21	TGF843	C20551	50.94	TH959	53151	80.43
13/16	0.8125	20.64	10	6 1/8	2	TGC344	C68751	55.35	—	—	—	—	—	—
13/16	0.8125	20.64	10 3/4	6 1/8	3	TGC345	C68822	38.21	TGF844	C20552	50.94	TH960	53152	80.53
53/64	0.8281	21.03	10 3/4	6 1/8	3	TGC346	C68823	41.44	TGF845	C20553	55.24	TH961	53153	86.27
27/32	0.8438	21.43	10	6 1/8	2	TGC347	C68752	57.05	—	—	—	—	—	—
27/32	0.8438	21.43	10 3/4	6 1/8	3	TGC348	C68824	41.44	TGF846	C20554	55.24	TH962	53154	86.46
55/64	0.8594	21.83	10 3/4	6 1/8	3	TGC349	C68825	42.11	TGF847	C20555	56.15	TH963	53155	88.84
7/8	0.8750	22.23	10	6 1/8	2	TGC350	C68753	57.05	TGF848	C20035	76.08	—	—	—
7/8	0.8750	22.23	10 3/4	6 1/8	3	TGC351	C68826	42.11	TGF849	C20556	56.15	TH964	53156	90.03
57/64	0.8906	22.62	10 3/4	6 1/8	3	TGC352	C68827	44.00	TGF850	C20557	58.67	TH965	53157	94.68

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MORSE TAPER SHANK HSS DRILLS, 118° POINT (CONT'D)



Chicago-Latrobe®
INDUSTRIAL

Manufactured from premium
high-speed steel, heavy-duty
construction for drilling
in tougher materials



VALUE

For general-purpose drilling



GENERAL PURPOSE MRO

For maintenance application

FRACTIONAL (CONT'D)

						Cle-Force			Cle-Line			Chicago-Latrobe		
Dia	Decimal	Metric	OAL	Flute Length	Taper No.	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each
29/32	0.9062	23.02	10 3/4	6 1/8	3	TGC353	C68828	44.00	TGF851	C20558	58.67	TH966	53158	95.08
59/64	0.9219	23.42	10 3/4	6 1/8	3	TGC354	C68829	44.84	TGF852	C20559	59.78	TH967	53159	96.07
15/16	0.9375	23.81	10 3/4	6 1/8	3	TGC355	C68830	44.84	TGF853	C20560	59.78	TH968	53160	97.25
61/64	0.9531	24.21	11	6 3/8	3	TGC356	C68831	47.89	TGF854	C20561	63.85	—	—	—
31/32	0.9688	24.61	11	6 3/8	3	TGC357	C68832	47.89	TGF855	C20562	63.85	TH970	53162	102.00
63/64	0.9844	25	11	6 3/8	3	TGC358	C68833	48.59	TGF856	C20563	64.77	TH971	53163	103.09
1	1.0000	25.4	11	6 3/8	3	TGC359	C68834	48.59	TGF857	C20564	64.77	TH972	53164	104.48
1	1.0000	25.4	12	6 3/8	4	TGC360	C68754	71.84	—	—	—	—	—	—
1 1/64	1.0156	25.8	11 1/8	6 1/2	3	TGC361	C68835	60.38	TGF858	C20565	80.51	TH973	53165	118.12
1 1/32	1.0312	26.19	11 1/8	6 1/2	3	TGC362	C68836	60.38	TGF859	C20566	80.51	TH974	53166	118.42
1 3/64	1.0469	26.59	11 1/4	6 5/8	3	TGC363	C68837	62.11	TGF860	C20567	82.81	—	—	—
1 1/16	1.0625	26.99	11 1/4	6 5/8	3	TGC364	C68838	63.43	TGF861	C20568	84.58	TH976	53168	123.67
1 1/16	1.0625	26.99	12 1/4	6 5/8	4	TGC365	C68755	81.55	—	—	—	—	—	—
1 5/64	1.0781	27.38	12 1/2	6 7/8	4	TGC366	C68839	66.28	TGF862	C20569	88.36	—	—	—
1 3/32	1.0938	27.78	11 1/2	6 7/8	3	TGC367	C68756	81.55	—	—	—	—	—	—
1 3/32	1.0938	27.78	12 1/2	6 7/8	4	TGC368	C68840	70.78	TGF863	C20570	94.38	—	—	—
1 7/64	1.1094	28.18	11 3/4	7 1/8	3	TGC369	C68757	90.30	—	—	—	—	—	—
1 7/64	1.1094	28.18	12 3/4	7 1/8	4	TGC370	C68841	71.83	TGF864	C20571	95.77	—	—	—
1 1/8	1.1250	28.58	11 3/4	7 1/8	3	TGC371	C68758	90.30	TGF865	C20040	120.40	—	—	—
1 1/8	1.1250	28.58	12 3/4	7 1/8	4	TGC372	C68842	71.83	TGF866	C20572	95.77	TH980	53172	148.10
1 9/64	1.1406	28.97	12 7/8	7 1/4	4	TGC373	C68843	74.60	TGF867	C20573	99.47	—	—	—
1 5/32	1.1562	29.37	11 7/8	7 1/4	3	TGC374	C68759	98.94	—	—	—	—	—	—
1 5/32	1.1562	29.37	12 7/8	7 1/4	4	TGC375	C68844	78.08	TGF868	C20574	104.10	—	—	—
1 11/64	1.1719	29.77	13	7 3/8	4	TGC376	C68845	78.42	TGF869	C20575	104.56	—	—	—
1 3/16	1.1875	30.16	12	7 3/8	3	TGC377	C68760	106.71	—	—	—	—	—	—
1 3/16	1.1875	30.16	13	7 3/8	4	TGC378	C68846	81.89	TGF870	C20576	109.19	TH984	53176	162.05
1 13/64	1.2031	30.56	13 1/8	7 1/2	4	TGC379	C68847	84.66	TGF871	C20577	112.89	—	—	—
1 7/32	1.2188	30.96	13 1/8	7 1/2	4	TGC380	C68848	84.66	TGF872	C20578	112.89	—	—	—
1 15/64	1.2344	31.35	13 1/2	7 7/8	4	TGC381	C68849	86.74	TGF873	C20579	115.67	—	—	—
1 1/4	1.2500	31.75	12 1/2	7 7/8	3	TGC382	C68761	111.35	TGF874	C20043	148.46	—	—	—
1 1/4	1.2500	31.75	13 1/2	7 7/8	4	TGC383	C68850	90.23	TGF875	C20580	120.30	TH988	53180	180.25
1 11/64	1.2656	32.15	14 1/8	8 1/2	4	TGC384	C68851	151.76	TGF876	C20581	202.35	—	—	—
1 9/32	1.2812	32.54	14 1/8	8 1/2	4	TGC385	C68852	151.76	TGF877	C20582	202.35	—	—	—
1 19/64	1.2969	32.94	14 1/4	8 5/8	4	TGC386	C68853	152.82	TGF878	C20583	203.77	—	—	—
1 5/16	1.3125	33.34	14 1/4	8 5/8	4	TGC387	C68854	152.82	TGF879	C20584	203.77	TH992	53184	257.92
1 21/64	1.3281	33.73	14 3/8	8 3/4	4	TGC388	C68855	163.19	TGF880	C20585	217.59	—	—	—
1 11/32	1.3438	34.13	14 3/8	8 3/4	4	TGC389	C68856	163.19	TGF881	C20586	217.59	TH994	53186	268.11
1 23/64	1.3594	34.53	14 1/2	8 7/8	4	TGC390	C68857	163.59	TGF882	C20587	218.12	—	—	—
1 3/8	1.3750	34.93	14 1/2	8 7/8	4	TGC391	C68858	163.59	TGF883	C20588	218.12	TH996	53188	272.95
1 25/64	1.3906	35.32	14 5/8	9	4	TGC392	C68859	177.61	TGF884	C20589	236.81	—	—	—
1 13/32	1.4062	35.72	14 5/8	9	4	TGC393	C68860	177.61	TGF885	C20590	236.81	—	—	—
1 27/64	1.4219	36.12	14 3/4	9 1/8	4	TGC394	C68861	178.68	TGF886	C20591	238.23	—	—	—
1 7/16	1.4375	36.51	14 3/4	9 1/8	4	TGC395	C68862	178.68	TGF887	C20592	238.23	TU382	53192	289.87
1 29/64	1.4531	36.91	14 7/8	9 1/4	4	TGC396	C68863	183.86	—	—	—	—	—	—
1 15/32	1.4688	37.31	14 7/8	9 1/4	4	TGC397	C68864	183.86	—	—	—	—	—	—
1 31/64	1.4844	37.70	15	9 3/8	4	TGC398	C68865	192.15	—	—	—	—	—	—
1 1/2	1.5000	38.1	15	9 3/8	4	TGC399	C68866	192.15	TGF888	C20596	256.20	TK005	53196	321.04
1 17/32	1.5312	38.89	15	9 3/8	4	TGC400	C68762	235.49	—	—	—	—	—	—
1 9/16	1.5625	39.69	16 5/8	9 5/8	5	TGC402	C68784	218.44	TGF889	C20068	291.24	TU387	53200	405.13
1 19/32	1.5938	40.48	16 7/8	9 7/8	5	TGC403	C68785	234.71	—	—	—	—	—	—
1 5/8	1.6250	41.28	15 5/8	10	4	TGC404	C68763	273.21	TGF890	C20045	364.27	—	—	—
1 5/8	1.6250	41.28	17	10	5	TGC405	C68786	238.40	TGF891	C20072	317.87	TU389	53204	434.51
1 21/32	1.6562	42.07	17 1/8	10 1/8	5	TGC406	C68787	259.03	—	—	—	—	—	—
1 11/16	1.6875	42.86	17 1/8	10 1/8	5	TGC407	C68788	263.43	—	—	—	—	—	—
1 23/32	1.7188	43.66	17 1/8	10 1/8	5	TGC408	C68764	312.30	—	—	—	—	—	—
1 3/4	1.7500	44.45	16 1/4	10 3/8	4	TGC409	C68765	319.43	—	—	—	—	—	—
1 3/4	1.7500	44.45	17 1/8	10 3/8	5	TGC410	C68789	281.89	—	—	—	—	—	—
1 13/16	1.8125	46.04	17 1/8	10 1/8	5	TGC411	C68790	295.92	—	—	—	—	—	—
1 7/8	1.8750	47.63	17 3/8	10 1/8	5	TGC412	C68791	323.81	—	—	—	—	—	—
1 15/16	1.9375	49.21	17 3/8	10 3/8	5	TGC413	C68792	344.93	—	—	—	—	—	—
2	2.0000	50.80	16 5/8	10 5/8	4	TGC414	C68766	373.44	—	—	—	—	—	—
2	2.0000	50.80	17 3/8	10 3/8	5	TGC415	C68793	356.96	—	—	—	—	—	—

COMBINATION TAPS & DRILLS

- Drill and tap in one operation without changing tools
- Ground thread, HSS, Bright finish
- Two flutes run length of the tool
- Drill length dictates thickness of material to be worked

TGJ623



Tap Size	Thread Series	Decimal Equiv.	OAL	Thread Length	Drill Length	Drill Size	Model No.	Mfg. No.	Price /Each
6-32	UNF	0.138	2	11/16	5/16	0.1095	TGJ623	C64937	53.32
8-32	UNC	0.164	2-1/8	3/4	3/8	0.1360	TGJ624	C64960	43.95
10-32	UNF	0.19	2-3/8	7/8	13/32	0.1610	TGJ625	C64961	38.34
1/4-20	UNC	0.25	2-1/2	15/16	17/32	0.2010	TGJ626	C64949	54.59
5/16-18	UNC	0.3125	3	1-1/8	11/16	0.2570	TGJ627	C64952	58.91
3/8-16	UNC	0.375	3-1/2	1-1/4	13/16	0.3125	TGJ628	C64955	68.58

COMBINED DRILLS & COUNTERSINKS, HSS, BRIGHT FINISH

- Used to produce center hole that serves as the seat or bearing surface for center on a machine
- Plain type produces a 60° included angle center
- Sold per pack of 12
- Designed for use on carbon steel, tool steel and alloys steel

TGJ605



Size	Drill Dia	Decimal Equiv	Metric Equiv.	Body Dia	OAL	Model No.	Mfg. No.	Price /Each
0	1/32	0.0312	0.79	3/32	1-1/8	TGJ605	C20891	8.30
1	3/64	0.0469	1.19	1/8	1-1/4	TGJ606	C20892	6.94
2	5/64	0.0781	1.98	3/16	1-7/8	TGJ607	C20893	6.94
3	7/64	0.1094	2.78	1/4	2	TGJ608	C20894	7.03
4	1/8	0.1250	3.18	5/16	2-1/8	TGJ609	C20895	7.36
5	3/16	0.1875	4.76	7/16	2-3/4	TGJ610	C20896	10.64
6	7/32	0.2188	5.56	1/2	3	TGJ611	C20897	14.26
7	1/4	0.2500	6.35	5/8	3-1/4	TGJ612	C20898	22.27
8	5/16	0.2344	5.95	3/4	3-1/2	TGJ613	C20899	30.47

COUNTERSINKS

Single-flute - used on softer metals

Six-flute - hardened steels, alloys & metals

- Solid carbide
- Right-hand cut
- 60°, 82° & 90° point angles



SINGLE FLUTE

Size"	Shank dia. "	Overall Length"	60° Model No.	82° Model No.	90° Model No.	Price /Each
1/8	1/8	1 1/2	TG0709	TG0754	TG0762	9.07
3/16	3/16	2	TG0710	TG0755	TG0763	13.92
1/4	1/4	2	TG0711	TG0756	TG0764	15.52
3/8	1/4	2 13/16	TG0749	TG0757	TG0765	29.48
1/2	1/4	2 7/8	TG0750	TG0758	TG0766	41.44
5/8	3/8	3	TG0751	TG0759	TG0767	57.63
3/4	1/2	3	TG0752	TG0760	TG0768	75.00
1	1/2	3 1/4	TG0753	TG0761	TG0769	111.18

SIX FLUTE

Size"	Shank Dia. "	Overall Length"	60° Model No.	82° Model No.	90° Model No.	Price /Each
1/4	1/4	2	TG0770	TGS284	TGS290	16.68
3/8	1/4	2 13/16	TG0771	TGS285	TGS291	27.56
1/2	1/4	2 7/8	TG0772	TGS286	TGS292	36.65
5/8	3/8	3	TG0773	TGS287	TGS293	51.75
3/4	1/2	3	TG0774	TGS288	TGS294	75.82
1	1/2	3 1/4	TG0775	TGS289	TGS295	104.51

STEP DRILLS

- 118 split point for faster, easier drill penetration



TGJ604



TGJ591



INCH

Step Description	FROM	TO	BY	Decimal Equiv.	Shank Dia	OAL	Bright Finish Model No.	Mfg. No.	Price /Each	TiN Coated Model No.	Mfg. No.	Price /Each
1/8	1/2	1/32		0.1250 - 0.7500	1/4	3 1/8	TGJ591	C20286	29.19	TGJ597	C20296	47.72
3/16	1/2	1/16		0.1875 - 0.5000	1/4	3 1/8	TGJ589	C20285	27.47	TGJ595	C20295	39.28
1/4	3/4	1/16		0.2500 - 0.7500	3/8	2 3/4	TGJ592	C20287	36.60	TGJ598	C20297	63.50
3/16	7/8	1/16		0.1875 - 0.8750	3/8	3 1/4	TGJ590	C20288	58.03	TGJ596	C20298	102.45
7/8	13/8	-		0.8750 - 1.3750	3/8	3 1/4	TGJ593	C20290	82.65	-	-	-
7/8	1 1/8	-		0.8750 - 1.1250	3/8	3 7/64	TGJ594	C20293	62.67	-	-	-

METRIC

Step Description	Hole Sizes	Decimal Equiv.	Shank Dia	OAL	Bright Finish Model No.	Mfg. No.	Price /Each	TiN Coated Model No.	Mfg. No.	Price /Each
4.0 - 12.0 X 1.0	4.0 - 12.0	0.1575 - 0.4724	6	65	TGJ599	C20305	27.05	TGJ602	C20315	39.36
4.0 - 20.0 X 2.0	4.0 - 20.0	0.1525 - 0.7874	6	67	TGJ600	C20306	44.85	-	-	-
6.0 - 30.0 X 2.0	6.0 - 30.0	0.2362 - 1.181	6	98	TGJ601	C20307	70.05	-	-	-

SET

Drilling Dia range	No. of Pieces	Bright Finish Model No.	Mfg. No.	Price /Each	TiN Coated Model No.	Mfg. No.	Price /Each
3/16 - 3/4	3	TGJ603	C20325	115.02	TGJ604	C20326	169.96

STEP DRILLS

- Multiple steps eliminate the need for a tool box of drill bits
- Holds firmly in place with 3 flat sided shank
- SpeedPoint™ tip eliminates skidding and need for centre-punching
- Industrial grade high speed steel
- Easily resharpenable



Size"	Number of holes	Cutting Ø"	Increments"	Shank Ø	Model No.	Price /Each
#1	13	1/8 to 1/2	1/32	1/4	TQ651	31.41
#2	6	3/16 to 1/2	1/16	1/4	TH080	32.12
#3	9	1/4 to 3/4	1/16	3/8	TH094	56.85
#4	12	3/16 to 7/8	1/16	3/8	TH113	65.67

COMBINED DRILLS & COUNTERSINKS

- Solid carbide
- 118° point angle
- 60° countersink angle
- Bright finish

Applications:

Designed to produce accurate centre holes in components which require machining between centres.



Size" No.	Small Dia."	Large Dia."	Overall Length"	Model No.	Price /Each
1	3/64	1/8	1 1/2	TG0703	13.41
2	5/64	3/16	1 7/8	TG0704	20.91
3	7/64	1/4	2	TG0705	24.95
4	1/8	5/16	2 1/8	TG0706	34.20
5	3/16	7/16	2 3/4	TG0707	51.83
6	7/32	1/2	3"	TG0708	70.74

CUTTING TOOLS

SCREW EXTRACTORS

- Removes broken cap screws, set screws, studs, bolts, pipe fittings and other threaded parts without damaging the threads in the hole



Extractor Size	Small End Dia	Large End Dia	Length of Taper	OAL	Model No.	Mfg. No.	Price /Each
1	0.0625	0.1562	3/4	2	TGJ614	C17170	2.13
2	0.0862	0.1800	3/4	2-3/8	TGJ615	C17171	2.23
3	0.1250	0.2500	1	2-3/4	TGJ616	C17172	2.40
4	0.1875	0.3125	1	3	TGJ617	C17173	2.83
5	0.2500	0.4375	1-1/2	3-3/8	TGJ618	C17174	4.11
6	0.3750	0.5938	1-3/4	3-3/4	TGJ619	C17176	7.26
7	0.5000	0.7812	2-1/4	4-1/8	TGJ620	C17178	15.62
8	0.7500	1.0312	2-1/4	4-3/8	TGJ621	C17180	21.26

SPC SCREW EXTRACTOR SET IN FOLD UP POUCH

- Includes sizes #1 to #5

Model No. TGJ622

Mfg. No. C21149

Price/Each \$17.84

TAP & DRILL SETS

- 118° Point Bright HSS Jobber Length drills with HSS Plug Chamfer Hand Tap sets, in index case

Includes the following sizes:

Drill Sizes			Tap Sizes	
#36	F		6-32 NC	1/4-20 NC
#29	U		8-32 NC	5/16-18 NC
#25	5/16		10-24 NC	7/16-14 NC
#21	27/64		10-32 NF	1/2-13 NC
#7			3/8-16 NC	

Model No. TN776 Mfg. No. 52580 Price/Each \$163.67

Drill Sizes			Tap Sizes		
#36	#15	U	6-32 NC	12-24 NC	3/8-16 NC
#33	#7	5/16	6-40 NF	12-28 NF	3/8-24 NF
#29 (2 pcs)	#3	25/64	8-32 NC	1/4-20 NC	7/16-14 NC
#25	F	27/64	8-36 NF	1/4-28 NF	7/16-20 NF
#21	I	29/64	10-24 NC	5/16-18 NC	1/2-13 NC
#16	Q		10-32 NF	5/16-24 NF	1/2-20 NF

Model No. TGJ633 Mfg No 55305 Price/Each \$373.09

- 118° Point Black Oxide HSS Jobber Length drills with HSS Plug Chamfer Hand Tap sets, in index case

Includes the following sizes:

Drill Sizes			Tap Sizes	
2.05	5.0		M2.5 x 0.45	M6 x 1
2.5	6.7		M3 x 0.5	M8 x 1.25
2.9	8.5		M3.5 x 0.6	M10 x 1.5
3.3	10.2		M4 x 0.7	M12 x 1.75
4.2			M5 x 0.8	

Model No. TGJ634 Mfg. No. 52541 Price/Each \$183.80

- 118° Point Bright Screw Machine Length drills with HSS Plug Chamfer Hand Tap sets, packaged in special case with moisture- and oil-resistant Ethafoam liner

Includes the following sizes:

Drill Sizes			Tap Sizes	
#44	#7		4-40	1/4-20
#39	F		5-40	5/16-18
#36	5/16		6-32	3/8-16
#29	U		8-32	7/16-14
#25	27/64		10-24	1/2-13

Model No. TGJ635 Mfg. No. 12910 Price/Each \$200.90

TECH TIPS

HOW TO USE SCREW EXTRACTORS

To remove broken screws:

- Drill a hole into the broken screw using the recommended drill size from the table:

Extractor Size	Use on this size		Use Drill
	Screw or Bolt	Pipe	
1	#8 to 1/4	-	5/64
2	12 to 5/16	-	7/64
3	5/16 to 7/16	-	5/32
4	7/16 to 9/16	1/8	1/4
5	9/16 to 3/4	1/8	17/64
6	3/4 to 1	3/8	13/32
7	1 to 1-3/8	-	17/32
8	1-3/8 to 1-3/8	3/4	13/16

- Insert the proper screw extractor into the hole and start a counter-clockwise (left-hand) rotation using a tap wrench on the square on the shank
- The extractor will grip the wall of the hole in the screw and back the screw out without damaging the thread
- A penetrating oil can be helpful in removing rusty or corroded parts

- 118° Point Bright HSS Jobber Length drills with HSS Plug Chamfer Spiral Point Tap sets, in index case

Includes the following sizes:

Drill Sizes			Tap Sizes	
#36	F		6-32 NC	5/16-18 NC
#29	5/16		8-32 NC	3/8-16 NC
#25	U		10-24 NC	7/16-14 NC
#21	27/64		10-32 NF	1/2-13 NC
#7			1/4-20 NC	

Model No. TGJ632 Mfg No. 52581 Price/Each \$172.34



TN776



TGJ632



TGJ634



TGJ633

TAP & DRILL CHARTS

To Tap This Screw Or Bolt	Use This Drill Bit	Closest Fractional	Decimal Inches
0-80 NF	3/64"	3/64"	0.0469
1-64 NC	#53	-	0.0595
1-72 NF	#53	1/16"	0.0595
2-56 NC	#50	-	0.07
2-64 NF	#50	-	0.07
3-48 NC	#47	5/64"	0.0785
3-56 NF	#45	-	0.082
4-36 NS	#44	-	0.086
4-40 NC	#43	3/32"	0.089
4-48 NF	#42	3/32"	0.0935
3mm-0.060mm	2.5mm	-	0.0984
1/8-40 NS	#38	-	0.1015
5-40 NC	#38	-	0.1015
5-44 NF	#37	-	0.104
6-32 NC	#35	7/64"	0.11
6-36 NS	#34	-	0.111
6-40 NF	#33	-	0.113
6-48 NS	#31	-	0.12
4mm-0.70mm	3.4mm	-	0.1338
4mm-0.075mm	3.4mm	-	0.1338
8-32 NC	#29	-	0.136
8-36 NF	#29	9/64"	0.136
8-40 NS	#28	-	0.1405
3/16-24 NS	#26	-	0.147
10-24 NC	#25	5/32"	0.1495
3/16-32 NS	#22	-	0.157
10-32 NF	#21	5/32"	0.159
5mm-0.090mm	4.2mm	-	0.1653
5mm-0.080mm	4.3mm	-	0.1693
12-24 NC	#16	11/64"	0.177
12-28 NF	#14	3/16"	0.182
12-32 NEF	#13	-	0.185
14-20 NS	#10	-	0.1935
1/4-20 NC	#7	13/64"	0.201
14-24 NS	#7	-	0.201
6mm-1.00mm	5.2mm	-	0.2047
1/4-24 NS	#4	-	0.209
1/4-28 NF	#3	7/32"	0.213
1/4-32 NEF	7/32"	7/32"	0.2188
1/4-40 NS	#1	-	0.228
7mm-1.00mm	6.1mm	15/64"	0.2401
5/16-18 NC	Ltr.F	17/64"	0.257
8mm-1.25mm	6.9mm	17/64"	0.2716
5/16-24 NF	Ltr.L	-	0.272
8mm-1.00mm	7.1mm	-	0.2795
5/16-32 NEF	9/32"	9/32"	0.2812
9mm-1.25mm	7.9mm	-	0.311
3/8-16 NC	5/16"	5/16"	0.3125

*Spark Plug Taps

To Tap This Screw Or Bolt	Use This Drill Bit	Closest Fractional	Decimal Inches
9mm-1.00mm	8.1mm	-	0.3189
9mm-0.75mm	8.3mm	-	0.3268
3/8-24 NF	Q	21/64"	0.332
10mm-1.50mm	8.7mm	-	0.3425
10mm-1.25mm	8.9mm	11/32"	0.3503
10mm-1.00mm*	9.1mm	-	0.3583
7/16-14 NC	Ltr.U	23/64"	0.368
11mm-1.50mm	9.7mm	-	0.3818
7/16-20 NF	25/64"	25/64"	0.3906
12mm-1.75mm	10.5mm	-	0.4133
12mm-1.50mm	10.7mm	27/64"	0.4212
1/2-13 NC	27/64"	27/64"	0.4219
12mm-1.25mm*	10.9mm	27/64"	0.4291
1/2-20 NF	29/64"	29/64"	0.4531
1/2-24 NS	29/64"	29/64"	0.4531
14mm-2.00mm	12.2mm	-	0.4803
9/16-12 NC	31/64"	31/64"	0.4844
14mm-1.50mm	12.7mm	-	0.4999
14mm-1.25mm*	12.8mm	-	0.5039
9/16-18 NF	33/64"	33/64"	0.5156
5/8-11 NC	17/32"	17/32"	0.5312
16mm-2.00mm	14.2mm	35/64"	0.559
5/8-18 NF	37/64"	37/64"	0.5781
16mm-1.50mm	14.7mm	-	0.5787
11/16-11 NS	19/32"	19/32"	0.5938
18mm-2.50mm	15.8mm	39/64"	0.522
11/16-16 NS	5/8"	5/8"	0.625
3/4-10 NC	21/32"	21/32"	0.6562
18mm-1.50mm*	16.8mm	-	0.6614
3/4-16 NF	11/16"	11/16"	0.6875
20mm-2.50mm	17.8mm	11/16"	0.7008
7/8-9 NC	49/64"	49/64"	0.7656
7/8-14 NF	13/16"	13/16"	0.8125
22mm-1.50mm	20.9mm	-	0.8228
7/8-18 NS*	53/64"	53/64"	0.8281
24mm-3.00mm	21.4mm	53/64"	0.8425
1.8 NC	7/8"	7/8"	0.875
24mm-2.00mm	22.3mm	-	0.8779
1.12 NF	59/64"	59/64"	0.9219
1-14 NS	15/16"	15/16"	0.9375
1 1/8-7 NC	63/64"	63/64"	0.9844
1 1/8-12 NF	1 3/64"	1 3/64"	1.0469
1 1/4-7 NC	1 7/64"	1 7/64"	1.1094
1 1/4-12 NF	1 11/64"	1 11/64"	1.1719
1 3/8-6 NC	1 7/32"	1 7/32"	1.2188
1 3/8-12 NF	1 19/64"	1 19/64"	1.2969
1 1/2-6 NC	1 11/32"	1 11/32"	1.3438
1 1/2-12 NF	1 27/64"	1 27/64"	1.4219

NATIONAL PIPE TAPERED TAP CHART

(Recommended tap drill to use for 75% thread depth)

To Tap This Pipe:	Use This Drill Bit:	Closest Fractional	Decimal Inches
1/16-27 NPT	Ltr.D	-	0.246
1/8-27 NPT	Ltr.R	-	0.339
1/4-18 NPT	7/16"	7/16"	0.4375
3/8-18 NPT	37/64"	67/64"	0.5781
1/2-14 NPT	45/64"	45/64"	0.7031
3/4-14 NPT	59/64"	59/64"	0.9219
1-11 1/2 NPT	1 5/32"	1 5/32"	1.1562
1 1/4-11 1/2 NPT	1 1/2"	1 1/2"	1.5
1 1/2-11 1/2 NPT	1 47/64"	1 47/64"	1.7344
2-11 1/2 NPT	2 7/32"	2 7/32"	2.2188

CUTTING TOOLS



TYPES OF TAPS

STRAIGHT FLUTED HAND TAPS

These are general purpose taps used for a wide variety of hand and machine tapping applications. They are available, in most cases, in taper, plug, semi-bottoming, and bottoming chamfers and in various numbers of flutes.

SPIRAL POINTED TAPS

These taps have a special angular grind at the point which shears chips and drives them ahead of the tap. Advantages are reduced tapping torque and increased speed in through hole tapping.

SPIRAL FLUTED TAPS

These taps are manufactured with spiral flutes for increased chip clearing efficiency in soft materials in which stringy chips are generated. Especially useful in tapping deep or blind holes, and in bridging keyways, these taps are available with regular or high helix flutes.

FLUTELESS OR FORMING TAPS

Forming taps generate threads by displacing rather than cutting metal, thereby eliminating or greatly reducing chips. They are especially useful for applications in which chips cannot be tolerated. CNC Forming taps are designed to allow tapping harder and tougher materials than have been successfully tapped with other forming taps.

CHAMFER STYLES

All taps have a certain number of threads at the starting end chamfer ground and relieved. This chamfer helps to guide the tap into the hole and also serves to distribute the cutting action over as many threads as possible. There are three standard styles of tap chamfer — taper, plug and bottoming — with a different number of threads chamfered in each case. Each is designed for a different type of hole situation.

- Taper taps have 7 to 10 threads chamfered and are designed for threading through holes
- Plug taps have 3 to 5 threads chamfered and are most widely used in through holes and in blind holes that do not have to be threaded all the way to the bottom
- Bottoming taps have 1 to 2 threads chamfered, and are designed to thread blind holes close to the bottom

HAND TAPS, HSS, BRIGHT FINISH

- Ground thread for economical tapping
- Taper chamfer generally used for hand operations in through holes
- Plug chamfer for general purpose applications in through or blind holes
- Bottoming chamfer used to thread close to an obstruction or blind hole
- Set of three, one each Taper, Plug, Bottoming Chamfer



INCH SIZES

Tap Size	Series	Dec Equiv.	# Flutes	OAL	Thread Length	Taper Model No.	Plug Model No.	Bottoming Model No.	Price /Each	Sets	Price /Each
4-40	UNC	0.1120	3	1 7/8	9/16	TGI233	TGI261	TGI289	7.46	TGI317	22.35
5-40	UNC	0.1250	3	1 15/16	5/8	TGI234	TGI262	TGI290	7.35	TGI318	22.04
6-32	UNC	0.1380	3	2	11/16	TGI235	TGI263	TGI291	5.63	TGI319	17.01
8-32	UNC	0.1640	4	2 1/8	3/4	TGI236	TGI264	TGI292	5.91	TGI320	17.86
10-24	UNC	0.1900	4	2 3/8	7/8	TGI237	TGI265	TGI293	6.12	TGI321	18.42
10-32	UNF	0.1900	4	2 3/8	7/8	TGI238	TGI266	TGI294	6.12	TGI322	18.42
12-24	UNC	0.2160	4	2 3/8	15/16	TGI239	TGI267	TGI295	6.31	TGI323	19.05
1/4-20	UNC	0.2500	4	2 1/2	1	TGI240	TGI268	TGI296	6.31	TGI324	19.05
1/4-28	UNF	0.2500	4	2 1/2	1	TGI241	TGI269	TGI297	6.67	TGI325	19.88
5/16-18	UNC	0.3125	4	2 23/32	1 1/8	TGI242	TGI270	TGI298	7.53	TGI326	22.43
5/16-24	UNF	0.3125	4	2 23/32	1 1/8	TGI243	TGI271	TGI299	7.84	TGI327	23.77
3/8-16	UNC	0.3750	4	2 15/16	1 1/4	TGI244	TGI272	TGI300	9.91	TGI328	29.86
3/8-24	UNF	0.3750	4	2 15/16	1 1/4	TGI245	TGI273	TGI301	9.91	TGI329	29.86
7/16-14	UNC	0.4375	4	3 5/32	1 7/16	TGI246	TGI274	TGI302	13.12	TGI330	39.56
7/16-20	UNF	0.4375	4	3 5/32	1 7/16	TGI247	TGI275	TGI303	13.12	TGI331	39.56
1/2-13	UNC	0.5000	4	3 3/8	1 3/4	TGI248	TGI276	TGI304	15.47	TGI332	46.74
1/2-20	UNF	0.5000	4	3 3/8	1 3/4	TGI249	TGI277	TGI305	15.89	TGI333	47.77
9/16-12	UNC	0.5625	4	3 19/32	1 21/32	TGI250	TGI278	TGI306	21.41	TGI334	65.23
9/16-18	UNF	0.5625	4	3 19/32	1 21/32	TGI251	TGI279	TGI307	21.41	TGI335	65.23
5/8-11	UNC	0.6250	4	3 13/16	1 13/16	TGI252	TGI280	TGI308	26.44	TGI336	81.70
5/8-18	UNF	0.6250	4	3 13/16	1 13/16	TGI253	TGI281	TGI309	26.85	TGI337	82.53
3/4-10	UNC	0.7500	4	4 1/4	2	TGI254	TGI282	TGI310	36.03	TGI338	108.08
3/4-16	UNF	0.7500	4	4 1/4	2	TGI255	TGI283	TGI311	36.55	TGI339	109.65
7/8-9	UNC	0.8750	4	4 11/16	2 7/32	TGI256	TGI284	TGI312	49.19	TGI340	148.95
7/8-14	UNF	0.8750	4	4 11/16	2 7/32	TGI257	TGI285	TGI313	49.19	TGI341	148.95
1-8	UNC	1.0000	4	5 1/8	2 1/2	TGI258	TGI286	TGI314	66.90	TGI342	202.12
1-12	UNF	1.0000	4	5 1/8	2 1/2	TGI259	TGI287	TGI315	66.90	TGI343	202.12
1-14	UNS	1.0000	4	5 1/8	2 1/2	TGI260	TGI288	TGI316	66.90	TGI344	202.12

HAND TAPS, HSS, BRIGHT FINISH (CONT'D)



METRIC SIZES

Tap Size	Decimal Equiv	# Flutes	OAL	Thread Length	Taper Model No.	Plug Model No.	Bottoming Model No.	Price /Each	Sets	Price /Each
M3X0.5	0.1181	3	1 15/16	5/8	TGI345	TGI357	TGI369	6.77	TGI381	20.57
M4X0.7	0.1575	3	2 1/8	3/4	TGI346	TGI358	TGI370	7.50	TGI382	22.76
M5X0.8	0.1968	4	2 3/8	7/8	TGI347	TGI359	TGI371	7.96	TGI383	24.23
M6X1	0.2362	4	2 1/2	1	TGI348	TGI360	TGI372	8.36	TGI384	25.43
M7X1	0.2756	4	2 23/32	1 1/8	TGI349	TGI361	TGI373	10.83	TGI385	32.59
M8X1.25	0.3150	4	2 23/32	1 1/8	TGI350	TGI362	TGI374	10.04	TGI386	30.12
M10X1.5	0.3937	4	2 15/16	1 1/4	TGI351	TGI363	TGI375	12.48	TGI387	37.42
M12X1.75	0.4724	4	3 3/8	1 21/32	TGI352	TGI364	TGI376	17.15	TGI388	51.73
M14X2	0.5512	4	3 19/32	1 21/32	TGI353	TGI365	TGI377	22.59	TGI389	69.97
M16X2	0.6299	4	3 13/16	1 13/16	TGI354	TGI366	TGI378	28.55	TGI390	86.29
M18X2.5	0.7087	4	4 1/32	1 13/16	TGI355	TGI367	TGI379	34.80	TGI391	104.37
M20X2.5	0.7874	4	4 15/32	2	TGI356	TGI368	TGI380	36.82	TGI392	110.89

SPIRAL POINT TAPS, HSS, BRIGHT FINISH

- Ground thread for economical tapping
- Spiral point pushes chips forward for through hole applications
- **Plug chamfer for general purpose applications**

TGC685



INCH SIZES

Tap Size	UNC /UNF	Decimal Equiv.	MM Equiv.	# Flutes	OAL in	OAL mm	Thread in	Thread mm	Model No.	Mfg. No.	Price /Each
4-40	UNC	0.1120	2.84	2	1 7/8	47.63	9/16	14.29	TGI393	C62151	7.62
5-40	UNC	0.1250	3.18	2	1 15/16	49.21	5/8	15.88	TGI394	C62152	7.62
6-32	UNC	0.1380	3.51	2	2	50.80	11/16	17.46	TGI395	C62153	7.03
8-32	UNC	0.1640	4.17	2	2 1/8	53.98	3/4	19.05	TGI396	C62154	6.83
10-24	UNC	0.1900	4.83	2	2 3/8	60.33	7/8	22.23	TGI397	C62155	6.83
10-32	UNF	0.1900	4.83	2	2 3/8	60.33	7/8	22.23	TGI398	C62156	6.83
12-24	UNC	0.2160	5.49	2	2 3/8	60.33	15/16	23.81	TGI399	C62157	7.22
1/4-20	UNC	0.2500	6.35	2	2 1/2	63.50	1	25.40	TGI400	C62158	6.96
1/4-28	UNF	0.2500	6.35	2	2 1/2	63.50	1	25.40	TGI401	C62159	6.96
5/16-18	UNC	0.3125	7.94	2	2 23/32	69.06	1 1/8	28.58	TGI402	C62160	8.77
5/16-24	UNF	0.3125	7.94	2	2 23/32	69.06	1 1/8	28.58	TGI403	C62161	8.77
3/8-16	UNC	0.3750	9.53	3	2 15/16	74.61	1 1/4	31.75	TGI404	C62162	11.41
3/8-24	UNF	0.3750	9.53	3	2 15/16	74.61	1 1/4	31.75	TGI405	C62163	11.41

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CUTTING TOOLS

SPIRAL POINT TAPS, HSS, BRIGHT FINISH (CONT'D)



METRIC SIZES

Tap Size	Decimal Equiv.	MM Equiv.	# Flutes	OAL in	OAL mm	Thread in	Thread mm	Model No.	Mfg. No.	Price /Each
M2X0.4	0.0787	2.00	2	1 3/4	44.45	7/16	11.11	TGI407	C62172	12.32
M3X0.5	0.1181	3.00	2	1 15/16	49.21	5/8	15.88	TGI408	C62175	8.70
M4X0.7	0.1575	4.00	2	2 1/8	53.98	3/4	19.05	TGI409	C62177	8.22
M5X0.8	0.1968	5.00	2	2 3/8	60.33	7/8	22.23	TGI410	C62179	8.16
M6X1	0.2362	6.00	2	2 1/2	63.50	1	25.40	TGI411	C62180	8.40
M8X1.25	0.3150	8.00	2	2 23/32	69.06	1 1/8	28.58	TGI412	C62183	10.19
M10X1.5	0.3937	10.00	3	2 15/16	74.61	1 1/4	31.75	TGI413	C62185	12.00
M12X1.75	0.4724	12.00	3	3 3/8	85.73	1 1/2	42.07	TGI414	C62187	21.75
M16X2	0.6299	16.00	3	3 13/16	96.84	1 3/4	46.04	TGI415	C62191	30.50

TAPER PIPE TAPS, NPT, HSS, BRIGHT FINISH

- Ground thread for economical tapping
- NPT thread design
- 3-1/2 thread chamfer
- Offered in regular NPT thread design or interrupted thread for better lubrication and chip clearance



TGI416



Tap Size	Series	Dec Equiv	# Flutes	Shank Dia.	OAL	Thread Length	Regular Model No.	Mfg. No.	Price/Each	Interrupted Model No.	Mfg. No.	Price/Each
1/8-27	NPT	0.1250	4	0.3125	2-1/8	3/4	TGI416	C64213	23.97	TGI426	C64223	42.89
1/8*-27	NPT	0.1250	4	0.4375	2-1/8	3/4	TGI417	C64214	23.97	TGI427	C64224	41.89
1/4-18	NPT	0.2500	4	0.5626	2-7/16	1-1/16	TGI418	C64215	25.43	TGI428	C64225	45.26
3/8-18	NPT	0.3750	4	0.7000	2-9/16	1-1/16	TGI419	C64216	34.48	TGI429	C64226	53.23
1/2-14	NPT	0.5000	4	0.6875	3-1/8	1-3/8	TGI420	C64217	53.55	TGI430	C64227	76.87
3/4-14	NPT	0.7500	4	0.9063	3-1/4	1-3/8	TGI421	C64218	78.13	TGI431	C64228	104.65
1-11-1/2	NPT	1.0000	4	1.1250	3-3/4	1-3/8	TGI422	C64219	133.67	TGI432	C64229	177.87
1-1/4-11-1/2	NPT	1.2500	4	1.3125	4	1-3/4	TGI423	C64220	183.87	TGI433	C64230	235.13

STRAIGHT PIPE TAPS, NPSC THREAD DESIGN, HSS, BRIGHT FINISH

- Ground thread for economical tapping
- NPSC, NPSM thread design
- 3-1/2 thread chamfer



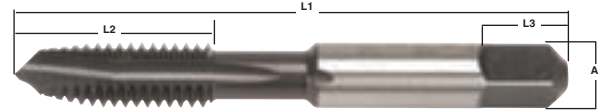
TGI434



Tap Size	Series	Dec Equiv	# Flutes	Shank Dia.	OAL	Thread Length	Regular Model No.	Mfg. No.	Price/Each
1/8-27	NPSC	0.1250	4	0.4375	2-1/8	3/4	TGI434	C64231	39.93
1/4-18	NPSC	0.2500	4	0.5626	2-7/16	1-1/16	TGI435	C64232	45.73
3/8-18	NPSC	0.3750	4	0.7000	2-9/16	1-1/16	TGI436	C64233	57.08
1/2-14	NPSC	0.5000	4	0.6875	3-1/8	1-3/8	TGI437	C64234	80.74
3/4-14	NPSC	0.7500	5	0.9063	3-1/4	1-3/8	TGI438	C64235	115.95
1-11-1/2	NPSC	1.0000	5	1.1250	3-3/4	1-3/8	TGI439	C64236	180.22

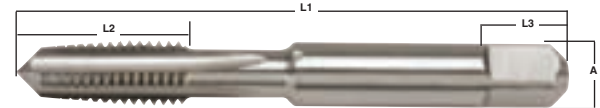


WIZARD SPIRAL POINT MACHINE TAPS - NC & NF

CLARKSON  OSBORN

							Blue Wizard						Gold		
							Model	Mfg.	Price	White Wizard	Mfg.	Price	Wizard	Mfg.	Price
Size		L2 "	L1 "	L3 "	A "	Flutes	No.	No.	/Each	Model No.	No.	/Each	Model No.	No.	/Each
0-80	NF	3/8	1 5/8	3/16	0.110	2	BF370	CT72100	27.66	BF396	CT73100	31.64	TBM048	CT79100	36.92
1-64	NC	7/16	1 11/16	3/16	0.110	2	BF367	CT72001	27.66	BF387	CT73001	31.64	TBM049	CT79001	36.92
1-72	NF	7/16	1 11/16	3/16	0.110	2	BF371	CT72101	27.66	BF397	CT73101	31.64	TBM050	CT79101	36.92
2-56	NC	1/2	1 3/4	3/16	0.110	2	BF368	CT72002	16.28	BF388	CT73002	19.55	BF544	CT79002	25.09
2-64	NF	1/2	1 3/4	3/16	0.110	2	BF372	CT72102	16.28	BF398	CT73102	19.55	TBM051	CT79102	25.09
3-48	NC	9/16	1 13/16	3/16	0.110	2	BF369	CT72003	16.28	BF389	CT73003	19.55	TBM052	CT79003	25.09
3-56	NF	9/16	1 13/16	3/16	0.110	2	BF373	CT72103	16.28	BF399	CT73103	19.55	TBM053	CT79103	25.09
4-40	NC	5/8	1 7/8	3/16	0.110	2	QD614	CT72004	14.67	BF390	CT73004	17.63	TBM054	CT79004	23.42
4-48	NF	5/8	1 7/8	3/16	0.110	2	BF374	CT72104	14.67	BF400	CT73104	17.63	BF550	CT79104	23.42
5-40	NC	11/16	1 15/16	3/16	0.110	2	QD615	CT72005	14.67	BF391	CT73005	17.63	BF545	CT79005	23.42
5-44	NF	11/16	1 15/16	3/16	0.110	2	BF375	CT72105	14.67	BF401	CT73105	17.63	BF551	CT79105	23.42
6-32	NC	11/16	2	3/16	0.110	2	QD616	CT72006	9.68	BF392	CT73006	11.61	BF546	CT79006	18.21
6-40	NF	11/16	2	3/16	0.110	2	BF376	CT72106	9.68	BF402	CT73106	11.61	TBM055	CT79106	18.21
8-32	NC	3/4	2 1/8	1/4	0.131	2	QD617	CT72008	9.68	BF393	CT73008	11.61	BF547	CT79008	18.21
8-36	NF	3/4	2 1/8	1/4	0.131	2	BF377	CT72108	9.68	BF403	CT73108	11.61	TBM056	CT79108	18.21
10-24	NC	11/16	2 3/8	1/4	0.152	2	QD618	CT72010	9.68	BF394	CT73010	11.61	BF548	CT79010	18.21
10-32	NF	11/16	2 3/8	1/4	0.152	2	-	-	-	BF404	CT73110	11.61	BF552	CT79110	18.21
12-24	NC	11/16	2 3/8	9/32	0.165	2	QD619	CT72012	12.81	BF395	CT73012	15.36	BF549	CT79012	21.47
12-28	NF	11/16	2 3/8	9/32	0.165	2	QD621	CT72120	12.81	BF405	CT73120	15.36	TBM057	CT79120	21.47
1/4-20	NC	13/16	2 1/2	5/16	0.191	2	QD622	CT72404	10.39	BF406	CT73404	12.48	BF553	CT79404	18.97
1/4-28	NF	13/16	2 1/2	5/16	0.191	2	QD631	CT72504	10.39	BF416	CT73504	12.48	BF561	CT79504	18.97
5/16-18	NC	7/8	2 23/32	3/8	0.238	3	QD623	CT72405	11.23	BF407	CT73405	13.49	BF554	CT79405	24.82
5/16-24	NF	7/8	2 23/32	3/8	0.238	3	QD632	CT72505	11.23	BF417	CT73505	13.49	BF562	CT79505	24.82
3/8-16	NC	1	2 15/16	7/16	0.286	3	QD624	CT72406	15.16	BF408	CT73406	18.15	BF555	CT79406	28.74
3/8-24	NF	1	2 15/16	7/16	0.286	3	QD633	CT72506	15.16	BF418	CT73506	18.15	BF563	CT79506	28.74
7/16-14	NC	1 1/16	3 5/32	13/32	0.242	3	QD625	CT72407	20.36	BF409	CT73407	24.43	BF556	CT79407	37.59
7/16-20	NF	1 1/16	3 5/32	13/32	0.242	3	QD634	CT72507	20.36	BF419	CT73507	24.43	BF564	CT79507	37.59
1/2-13	NC	13/16	3 3/8	7/16	0.275	3	QD626	CT72408	22.30	BF410	CT73408	26.80	BF557	CT79408	39.53
1/2-20	NF	13/16	3 3/8	7/16	0.275	3	QD635	CT72508	22.30	BF420	CT73508	26.80	BF565	CT79508	39.53
9/16-12	NC	13/16	3 19/32	1/2	0.322	3	-	-	-	BF411	CT73409	46.69	BF558	CT79409	57.04
9/16-18	NF	13/16	3 19/32	1/2	0.322	3	QR181	CT72509	38.92	BF421	CT73509	46.69	BF566	CT79509	57.04
5/8-11	NC	1 3/8	3 13/16	9/16	0.360	3	QD627	CT72410	38.92	BF412	CT73410	46.69	BF559	CT79410	68.84
5/8-18	NF	1 3/8	3 13/16	9/16	0.360	3	QD636	CT72510	38.92	BF422	CT73510	46.69	TBM058	CT79510	68.84
3/4-10	NC	1 7/16	4 1/4	11/16	0.442	3	QD628	CT72412	56.39	BF413	CT73412	67.68	TBM059	CT79412	97.18
3/4-16	NF	1 7/16	4 1/4	11/16	0.442	3	QD637	CT72512	56.39	BF423	CT73512	67.68	BF567	CT79512	97.18
7/8-9	NC	1 5/8	4 11/16	3/4	0.523	3	QD629	CT72414	74.67	BF414	CT73414	89.62	TBM060	CT79414	119.06
7/8-14	NF	1 5/8	4 11/16	3/4	0.523	3	QR186	CT72514	74.67	BF424	CT73514	89.62	TBM061	CT79514	119.06
1-8	NC	1 3/4	5 1/8	13/16	0.600	4	QD630	CT72416	95.56	BF415	CT73416	114.65	BF560	CT79416	139.97
1-12	NF	1 3/4	5 1/8	13/16	0.600	4	QR161	CT72516	95.56	BF425	CT73516	114.65	TBM062	CT79516	139.97

WIZARD SPIRAL POINT MACHINE TAPS - METRIC

CLARKSON  OSBORN

Size	L2 mm	L1 mm	L3 mm	A mm	Flutes	Blue Wizard Model No.	Mfg. No.	Price/Each	White Wizard Model No.	Mfg. No.	Price/Each	Gold Wizard Model No.	Mfg. No.	Price/Each
M1.6 x 0.35	8.0	41.0	4.0	2.00	2	BF349	CT71016	47.42	-	-	-	TBM034	CT78016	57.62
M2.0 x 0.40	8.0	41.0	4.0	2.00	2	BF350	CT71020	21.26	-	-	-	TBM035	CT78020	30.39
M2.5 x 0.45	9.5	44.5	5.0	2.24	2	BF351	CT71025	17.63	-	-	-	TBM036	CT78025	26.62
M3.0 x 0.50	15.0	48.0	5.0	2.50	2	QR162	CT71030	13.74	-	-	-	BF535	CT78030	22.57
M3.5 x 0.60	17.0	50.0	5.0	2.80	2	QR163	CT71035	13.74	-	-	-	TBM037	CT78035	22.57
M4.0 x 0.70	17.0	53.0	6.0	3.15	2	QR164	CT71040	11.35	-	-	-	BF536	CT78040	20.09
M4.5 x 0.75	17.0	53.0	6.0	3.55	2	BF352	CT71045	15.26	-	-	-	TBM038	CT78045	24.16
M5.0 x 0.80	16.0	58.0	7.0	4.00	3	QR165	CT71050	12.72	-	-	-	BF537	CT78050	21.54
M6.0 x 1.00	19.0	66.0	8.0	5.00	3	QR166	CT71060	13.08	-	-	-	BF538	CT78060	21.89
M7.0 x 1.00	19.0	66.0	8.0	5.60	3	BF353	CT71070	16.90	-	-	-	TBM039	CT78070	31.51
M8.0 x 1.25	22.0	72.0	9.0	6.30	3	QR167	CT71080	14.23	-	-	-	BF539	CT78080	28.72
M10.0 x 1.50	24.0	80.0	11.0	8.00	3	QR168	CT71100	19.58	-	-	-	BF540	CT78100	37.59
M12.0 x 1.75	29.0	89.0	10.0	7.10	3	QR101	CT71120	31.20	-	-	-	BF541	CT78120	49.66
M14.0 x 2.00	30.0	95.0	12.0	9.00	3	QR172	CT71140	40.23	-	-	-	BF542	CT78140	59.92
M16.0 x 2.00	32.0	102.0	13.0	10.00	3	QR112	CT71160	50.11	-	-	-	BF543	CT78160	82.13
M18.0 x 2.50	37.0	112.0	14.0	11.20	3	BF354	CT71180	67.75	-	-	-	TBM040	CT78180	100.46
M20.0 x 2.50	37.0	112.0	14.0	11.20	3	QR160	CT71200	87.54	-	-	-	TBM041	CT78200	132.26
M22.0 x 2.50	38.0	118.0	16.0	12.50	3	BF355	CT71220	102.37	-	-	-	TBM042	CT78220	151.56
M24.0 x 3.00	45.0	130.0	18.0	14.00	3	QR183	CT71240	115.27	-	-	-	TBM043	CT78240	164.99

R34369E

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CUTTING TOOLS

ROUND ADJUSTABLE DIES, HSS, BRIGHT FINISH

- Chamfer on both sides to extend life
- Adjustable for wear and size
- Cuts external threads when held in a die stock
- Produces UN thread form
- Can be used for close to shoulder work



TGI466



INCH SIZES

Die Size	Series	Dec Equiv	13/16" OD - 1/4" THK			1" OD - 3/8" THK			1-1/2" OD - 1/2" THK			2" OD - 5/8" THK		
			Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each
5-40	UNC	0.1250	TGI466	C65729	36.19	—	—	—	—	—	—	—	—	—
5-44	UNF	0.1250	TGI467	C65730	36.19	—	—	—	—	—	—	—	—	—
6-32	UNC	0.1380	TGI468	C65733	36.19	TGI487	C65785	38.75	—	—	—	—	—	—
6-40	UNF	0.1380	TGI469	C65734	36.19	—	—	—	—	—	—	—	—	—
8-32	UNC	0.1640	TGI470	C65739	36.19	TGI488	C65789	38.75	—	—	—	—	—	—
8-36	UNF	0.1640	TGI471	C65740	36.19	—	—	—	—	—	—	—	—	—
10-24	UNC	0.1900	TGI472	C65743	36.19	TGI489	C65792	38.75	—	—	—	—	—	—
10-32	UNF	0.1900	TGI473	C65744	36.19	TGI490	C65793	38.75	—	—	—	—	—	—
12-24	UNC	0.2160	TGI474	C65751	36.19	TGI491	C65798	38.75	—	—	—	—	—	—
12-28	UNF	0.2160	TGI475	C65752	36.19	—	—	—	—	—	—	—	—	—
1/4-20	UNC	0.2500	TGI476	C65760	36.19	TGI492	C65804	38.71	TGI505	C65839	71.14	—	—	—
1/4-28	UNF	0.2500	TGI477	C65761	36.19	TGI493	C65805	38.71	TGI506	C65840	71.14	—	—	—
5/16-18	UNC	0.3125	TGI478	C65766	36.19	TGI494	C65808	38.71	TGI507	C65844	71.14	—	—	—
5/16-24	UNF	0.3125	TGI479	C65767	36.19	TGI495	C65809	38.71	TGI508	C65845	71.14	—	—	—
3/8-16	UNC	0.3750	—	—	—	TGI496	C65816	38.71	TGI509	C65855	71.14	—	—	—
3/8-24	UNF	0.3750	—	—	—	TGI497	C65817	38.71	TGI510	C65856	71.14	—	—	—
7/16-14	UNC	0.4375	—	—	—	TGI498	C65828	38.71	TGI511	C65865	71.14	—	—	—
7/16-20	UNF	0.4375	—	—	—	TGI499	C65829	38.71	TGI512	C65866	71.14	—	—	—
1/2-13	UNC	0.5000	—	—	—	—	—	—	TGI513	C65875	71.14	—	—	—
1/2-20	UNF	0.5000	—	—	—	—	—	—	TGI514	C65876	71.14	—	—	—
9/16-12	UNC	0.5625	—	—	—	—	—	—	TGI515	C65881	71.14	—	—	—
9/16-18	UNF	0.5625	—	—	—	—	—	—	TGI516	C65882	71.14	—	—	—
5/8-11	UNC	0.6250	—	—	—	—	—	—	TGI517	C65884	71.14	TGI522	C65946	89.62
5/8-18	UNF	0.6250	—	—	—	—	—	—	TGI518	C65885	71.14	TGI523	C65947	89.62
3/4-10	UNC	0.7500	—	—	—	—	—	—	—	—	—	TGI524	C65957	89.62
3/4-16	UNF	0.7500	—	—	—	—	—	—	—	—	—	TGI525	C65958	89.62
7/8-9	UNC	0.8750	—	—	—	—	—	—	—	—	—	TGI526	C65966	89.62
7/8-14	UNF	0.8750	—	—	—	—	—	—	—	—	—	TGI527	C65967	89.62

METRIC SIZES

Die Size	Dec Equiv	13/16" OD - 1/4" THK			1" OD - 3/8" THK			1-1/2" OD - 1/2" THK			2" OD - 5/8" THK		
		Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each
M2.5 x 0.45	0.0984	TGI480	C65721	32.83	—	—	—	—	—	—	—	—	—
M3 x 0.5	0.1181	TGI481	C65724	35.46	—	—	—	—	—	—	—	—	—
M3.5 x 0.6	0.1378	TGI482	C65732	35.46	—	—	—	—	—	—	—	—	—
M4 x 0.7	0.1575	TGI483	C65737	35.46	—	—	—	—	—	—	—	—	—
M4.5 x 0.75	0.1772	TGI484	C65742	35.46	—	—	—	—	—	—	—	—	—
M5 x 0.8	0.1969	TGI485	C65747	35.46	—	—	—	—	—	—	—	—	—
M6 x 1	0.2362	TGI486	C65757	35.46	TGI500	C65801	38.71	—	—	—	—	—	—
M7 x 1	0.2756	—	—	—	TGI501	C65807	38.71	—	—	—	—	—	—
M8 x 1.25	0.3150	—	—	—	TGI502	C65813	38.71	—	—	—	—	—	—
M10 x 1.5	0.3937	—	—	—	TGI503	C65824	38.71	—	—	—	—	—	—
M12 x 1.75	0.4724	—	—	—	TGI504	C65833	38.71	—	—	—	—	—	—
M14 x 2	0.5512	—	—	—	—	—	—	TGI519	C65880	71.14	—	—	—
M16 x 2	0.6300	—	—	—	—	—	—	TGI520	C65889	71.14	—	—	—
M20 x 2.5	0.7874	—	—	—	—	—	—	TGI521	C65901	71.14	—	—	—

HEXAGON RETHREADING DIES, HSS, BRIGHT FINISH

- Used in repair work for dressing over bruised and rusty threads
- Can be used in free machining materials



TGI440



Die Size	Series	Dec Equiv	Length /Flats	Thickness	Model No.	Mfg. No.	Price /Each
1/4-20	UNC	0.2500	19/32	1/4	TGI440	C77600	37.66
1/4-28	UNF	0.2500	19/32	1/4	TGI441	C77602	37.66
5/16-18	UNC	0.3125	11/16	5/16	TGI442	C77604	42.96
5/16-24	UNF	0.3125	11/16	5/16	TGI443	C77606	42.96
3/8-16	UNC	0.3750	25/32	3/8	TGI444	C77608	48.37
3/8-24	UNF	0.3750	25/32	3/8	TGI445	C77610	48.37
7/16-14	UNC	0.4375	7/8	7/16	TGI446	C77612	59.87
7/16-20	UNF	0.4375	7/8	7/16	TGI447	C77614	59.87
1/2-13	UNC	0.5000	1-1/16	1/2	TGI448	C77616	61.38
1/2-20	UNF	0.5000	1-1/16	1/2	TGI449	C77618	60.81
9/16-12	UNC	0.5625	1-1/16	1/2	TGI450	C77620	79.05
9/16-18	UNF	0.5625	1-1/16	1/2	TGI451	C77622	79.05
5/8-11	UNC	0.6250	1-1/4	5/8	TGI452	C77624	81.82

Die Size	Series	Dec Equiv	Length /Flats	Thickness	Model No.	Mfg. No.	Price /Each
5/8-18	UNF	0.6250	1-1/4	5/8	TGI453	C77626	81.82
3/4-10	UNC	0.7500	1-7/16	3/4	TGI454	C77628	90.51
3/4-16	UNF	0.7500	1-7/16	3/4	TGI455	C77630	90.51
7/8-9	UNC	0.8750	1-5/8	7/8	TGI456	C77632	105.30
7/8-14	UNF	0.8750	1-5/8	7/8	TGI457	C77634	107.80
1-8	UNC	1.0000	1-13/16	1	TGI458	C77636	142.84
1-12	UNF	1.0000	1-13/16	1	TGI459	C77638	142.84
1-14	NS	1.0000	1-13/16	1	TGI460	C77640	148.97
1-1/8-7	UNC	1.1250	2	1	TGI461	C77642	196.24
1-1/8-12	UNF	1.1250	2	1	TGI462	C77644	196.24
1-1/4-7	UNC	1.2500	2-3/16	1	TGI463	C77646	257.07
1-3/8-6	UNC	1.4100	2-3/8	1	TGI464	C77648	307.37
1-1/2-6	UNC	1.5000	2-9/16	1	TGI465	C77650	330.59

CUTTING TOOLS

TAP & DIE SETS WITH PRODUCTION HAND TAPS AND CARBON STEEL ROUND ADJUSTABLE DIES

- Combination UNC/UNF metric sizes
- 1 each of tap and die sizes listed in a metal case



TGJ636



INCH SIZES

Model No.	Mfg. No.	Number of sizes	Tap & Die Sizes	Price /Each
TGJ636	C67271	8	2-56 UNC	456.33
			3-48 UNC	
			4-40 UNC	
			6-32 UNC	
			8-32 UNC	
TGJ637	C67292	10	10-24 UNC - 10-32 UNF	665.08
			12-24 UNC	
			1/4-20 UNC - 1/4-28 UNF	
			5/16-18 UNC - 5/16-24 UNF	
			3/8-16 UNC - 3/8-24 UNF	
TGJ638	C67293	20	7/16-14 UNC - 7/16-20 UNF	2118.71
			1/2-13 UNC - 1/2-20 UNF	
			9/16-12 UNC - 9/16-18 UNF	
			5/8-11 UNC - 5/8-18 UNF	
			3/4 - 10 UNC - 3/4-16 UNF	
TGJ639	C67311	7	1-8 UNC - 1-12 UNF	366.74
			M2.5 X 0.45	
			M3 X 0.5	
			M3.5 X 0.6	
			M4 X 0.7	
TGJ540	C67312	5	M4.5 X 0.75	453.77
			M5 X 0.8	
			M6 X 1	
			M7 X 1	
			M8 X 1.25	
TGJ540	C67312	5	M10 X 1.5	453.77
			M12 X 1.75	

METRIC SIZES

Model No.	Mfg. No.	Number of sizes	Tap & Die Sizes	Price /Each
TGJ539	C67311	7	M2.5 X 0.45	366.74
			M3 X 0.5	
			M3.5 X 0.6	
			M4 X 0.7	
			M4.5 X 0.75	
TGJ540	C67312	5	M5 X 0.8	453.77
			M6 X 1	
			M7 X 1	
			M8 X 1.25	
			M10 X 1.5	
TGJ540	C67312	5	M12 X 1.75	453.77
			M12 X 1.75	

DIE STOCKS FOR ROUND ADJUSTABLE DIES

- Holds round adjustable dies with three adjusting screws



TGI528

Number	Die OD	OAL	Model No.	Mfg. No.	Price /Each
2	13/16	7	TGI528	C67223	37.28
3	1	10-1/2	TGI529	C67224	38.43
5	1-1/2	14-1/2	TGI530	C67226	57.99
6	2	23	TGI531	C67227	84.13
7	2-1/2	29	TGI532	C67228	118.22
8	3	40	TGI533	C67229	173.19

STANDARD STRAIGHT TAP WRENCHES

- Used for hand tapping



TGI534

Number	MS Size	Frac Size	MM Size	Pipe Size	OAL	Model No.	Mfg. No.	Price /Each
00	0 to 14	1/16 to 1/4	M1.5 to M6.3	—	5	TGI534	C67201	60.29
5	8 to 14	5/32 to 1/2	M4 to M12.5	1/8	11	TGI535	C67202	87.67
6	8 to 14	5/32 to 3/4	M4 to M19	1/8 to 1/4	15	TGI536	C67203	89.60
7	—	1/4 to 1-1/8	M12 to M28	1/8 to 3/4	19	TGI537	C67204	112.77
8	—	3/4 to 1-5/8	M19 to M40	3/8 to 1-1/4	40	TGI538	C67205	330.05

SLIP T-HANDLE TAP WRENCHES

- Used for hand tapping or in difficult spaces requiring a slip handle



QF687

Number	MS Size	Frac Size	MM Size	OAL	Model No.	Mfg. No.	Price /Each
SLIP HANDLE							
T11	0 to 14	1/16 to 1/4	M1.5 to M6.3	2-3/4	QF687	C67208	33.02
T12	12 to 14	7/32 to 1/2	M5.5 to M12.5	3-5/8	QG514	C67209	43.84
COMBINATION RATCHET & SLIP HANDLE							
T13	0 to 14	1/16 to 1/4	M1.5 to M6.3	3-3/4	QG947	C67210	83.83
T14	12 to 14	7/32 to 1/2	M5.5 to M12.5	5	QH754	C67211	83.83

Can't find what
you're looking for?
Call us today!



CHOOSING A REAMER WITH THE PROPER HAND CUT AND NUMBER OF FLUTES:

Reamer flute choices vary from straight flutes to flutes having a right-hand spiral (RHS) or left-hand spiral (LHS) orientation. For all practical purposes, all flutes are right-hand cut (RHC) regardless of flute spiral direction. Here are some guidelines for choosing the correct reamer:

- Straight-fluted RHC reamers are used for general-purpose applications in a wide range of materials. They are best in through holes less than 2 diameters deep.
- RHS/RHC reamers are normally chosen for blind holes or deep holes because they carry cut chips back up out of the hole. They are free-cutting and normally produce a better finish. RHS reamers are particularly well adapted to cutting aluminum alloys, copper, and other free-cutting, non-ferrous material.
- LHS/RHC reamers are an advantage in through holes because they push troublesome chips ahead of the tool. They are most often used in steels and irons. They do use more torque to operate but can reduce chatter in less than-ideal setups.

HIGH SPIRAL SPIREX® TAPER PIN REAMERS, BRIGHT FINISH

- General purpose geometry high spiral LH flutes
- 1/4" taper per 12" flute
- Straight shank
- Designed for use in alloy and tool steels, carbon steel, plastic, and aluminum



TGJ389

SIZE	Small End Dia		Large End Dia		Shank Dia		Flute Length		OAL		Model No.	Mfg. No.	Price /Each
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM			
#8/0	0.0351	0.89	2/39	1.31	1/16	1.59	25/32	19.84	1 5/8	41.28	TGJ389	C24228	59.60
#7/0	0.0497	1.26	1/15	1.69	5/64	1.98	13/16	20.64	1 13/16	46.04	TGJ390	C24229	49.75
#6/0	0.0611	1.55	5/62	2.05	3/32	2.38	15/16	23.81	1 15/16	49.21	TGJ391	C24230	48.46
#5/0	0.0719	1.83	3/31	2.45	7/64	2.78	1 3/16	30.16	2 3/16	55.56	TGJ392	C24231	47.92
#4/0	0.0869	2.21	4/35	2.90	1/8	3.18	1 5/16	33.34	2 5/16	58.74	TGJ393	C24232	47.04
#3/0	0.1029	2.61	3/23	3.31	9/64	3.57	1 5/16	33.34	2 5/16	58.74	TGJ394	C24233	41.91
#2/0	0.1137	2.89	6/41	3.71	5/32	3.97	1 9/16	39.69	2 9/16	65.09	TGJ395	C24234	43.19
#0	0.1287	3.27	10/61	4.16	11/64	4.37	1 11/16	42.86	2 15/16	74.61	TGJ396	C24235	43.84
#1	0.1447	3.68	16/89	4.57	3/16	4.76	1 11/16	42.86	2 15/16	74.61	TGJ397	C24236	44.58
#2	0.1605	4.08	1/5	5.10	13/64	5.16	1 15/16	49.21	3 3/16	80.96	TGJ398	C24237	52.21
#3	0.1813	4.61	14/61	5.83	15/64	5.95	2 5/16	58.74	3 11/16	93.66	TGJ399	C24238	53.63
#4	0.2071	5.26	25/96	6.61	17/64	6.75	2 9/16	65.09	4 1/16	103.19	TGJ400	C24239	62.05
#5	0.2409	6.12	3/10	7.60	5/16	7.94	2 13/16	71.44	4 5/16	109.54	TGJ401	C24240	66.50
#6	0.2773	7.04	17/48	8.99	23/64	9.13	3 11/16	93.66	5 7/16	138.11	TGJ402	C24241	78.10
#7	0.3297	8.37	27/64	10.72	13/32	10.32	4 7/16	112.71	6 5/16	160.34	TGJ403	C24242	95.10
#8	0.3971	10.09	50/99	12.83	7/16	11.11	5 3/16	131.76	7 3/16	182.56	TGJ404	C24243	112.56
#9	0.4805	12.20	37/61	15.41	9/16	14.29	6 1/16	153.99	8 5/16	211.14	TGJ405	C24244	125.87
#10	0.5799	14.73	70/97	15.41	5/8	15.88	6 13/16	173.04	9 5/16	236.54	TGJ406	C24245	155.68

STRAIGHT SHANK, SPIRAL FLUTE CHUCKING REAMERS, BRIGHT FINISH

- General purpose geometry
- Straight shank, RH spiral flutes
- Designed for blind hole reaming
- Designed for use in alloy and tool steels, cast iron, plastic, aluminum, and free-machining stainless steel



TGJ328



DIA FRAC	DIA DEC	DIA MM	FLUTE IN	Flutes MM	OAL IN	OAL MM	NO FLTS	Model No.	Mfg. No.	Price /Each
1/16	0.0625	1.59	1/2	12.70	2 1/2	63.50	4	TGJ328	C29273	19.44
5/64	0.0781	1.98	3/4	19.05	3	76.20	4	TGJ329	C29311	19.81
3/32	0.0938	2.38	3/4	19.05	3	76.20	4	TGJ330	C29350	19.81
7/64	0.1094	2.78	7/8	22.23	3 1/2	88.90	4	TGJ331	C29386	19.81
1/8	0.1250	3.18	7/8	22.23	3 1/2	88.90	6	TGJ332	C29421	18.43
9/64	0.1406	3.57	1	25.40	4	101.60	6	TGJ333	C29457	24.43
5/32	0.1562	3.97	1	25.40	4	101.60	6	TGJ334	C29493	24.85
3/16	0.1875	4.76	1 1/8	28.58	4 1/2	114.30	6	TGJ335	C29565	24.85
13/64	0.2031	5.16	1 1/4	31.75	5	127.00	6	TGJ336	C29601	28.12
7/32	0.2188	5.56	1 1/4	31.75	5	127.00	6	TGJ337	C29637	28.12
1/4	0.2500	6.35	1 1/2	38.10	6	152.40	6	TGJ338	C29709	28.12
17/64	0.2656	6.75	1 1/2	38.10	6	152.40	6	TGJ339	C29745	32.49
9/32	0.2812	7.14	1 1/2	38.10	6	152.40	6	TGJ340	C29803	32.76
5/16	0.3125	7.94	1 1/2	38.10	6	152.40	6	TGJ341	C29853	31.75
21/64	0.3281	8.33	1 1/2	38.10	6	152.40	6	TGJ342	C29890	34.94
11/32	0.3438	8.73	1 1/2	38.10	6	152.40	6	TGJ343	C29925	34.94
23/64	0.3594	9.13	1 3/4	44.45	7	177.80	6	TGJ344	C29960	34.94
3/8	0.3750	9.53	1 3/4	44.45	7	177.80	6	TGJ345	C29997	34.94
25/64	0.3906	9.92	1 3/4	44.45	7	177.80	6	TGJ346	C30033	38.61
13/32	0.4062	10.32	1 3/4	44.45	7	177.80	6	TGJ347	C30067	38.61
7/16	0.4375	11.11	1 3/4	44.45	7	177.80	6	TGJ348	C30134	38.79

DIA FRAC	DIA DEC	DIA MM	FLUTE IN	Flutes MM	OAL IN	OAL MM	NO FLTS	Model No.	Mfg. No.	Price /Each
29/64	0.4531	11.51	1 3/4	44.45	7	177.80	6	TGJ349	C30168	43.05
15/32	0.4688	11.91	1 3/4	44.45	7	177.80	6	TGJ350	C30201	43.05
31/64	0.4844	12.30	2	50.80	8	203.20	6	TGJ351	C30235	43.05
1/2	0.5000	12.70	2	50.80	8	203.20	6	TGJ352	C30268	43.05
17/32	0.5312	13.49	2	50.80	8	203.20	8	TGJ353	C30335	48.87
9/16	0.5625	14.29	2	50.80	8	203.20	8	TGJ354	C30402	49.63
19/32	0.5938	15.08	2	50.80	8	203.20	8	TGJ355	C30469	54.72
5/8	0.6250	15.88	2 1/4	57.15	9	228.60	8	TGJ356	C30536	55.16
21/32	0.6562	16.67	2 1/4	57.15	9	228.60	8	TGJ357	C30603	67.54
11/16	0.6875	17.46	2 1/4	57.15	9	228.60	8	TGJ358	C30670	69.08
23/32	0.7188	18.26	2 1/4	57.15	9	228.60	8	TGJ359	C30735	73.70
3/4	0.7500	19.05	2 1/2	63.50	9 1/2	241.30	8	TGJ360	C30800	70.26
25/32	0.7812	19.84	2 1/2	63.50	9 1/2	241.30	8	TGJ361	C30865	81.62
13/16	0.8125	20.64	2 1/2	63.50	9 1/2	241.30	8	TGJ362	C30931	84.00
7/8	0.8750	22.23	2 5/8	66.68	10	254.00	8	TGJ363	C31061	94.71
15/16	0.9375	23.81	2 5/8	66.68	10	254.00	8	TGJ364	C31191	105.22
1 1/8	1.0000	25.40	3 1/4	82.55	10 1/2	266.70	8	TGJ365	C31322	112.19
1-1/8	1.1250	28.58	2 7/8	73.03	11	279.40	10	TGJ366	C31337	142.31
1-1/4	1.2500	31.75	3	76.20	11 1/2	292.10	10	TGJ367	C31351	155.67
1-3/8	1.3750	34.93	3 1/4	82.55	12	304.80	10	TGJ368	C31365	199.39
1-1/2	1.5000	38.10	3 1/2	88.90	12 1/2	317.50	12	TGJ369	C31380	232.26

STRAIGHT SHANK, STRAIGHT FLUTE CHUCKING REAMERS, BRIGHT FINISH

- General purpose geometry
- Straight shank, straight flutes
- Designed for through hole reaming
- Designed for use in alloy and tool steels, cast iron, plastic, aluminum, and free-machining stainless steel



FRACTIONAL

DIA FRAC	DIA DEC	DIA MM	FLUTE IN	Flutes MM	OAL IN	OAL MM	NO FLTS	Model No.	Mfg. No.	Price /Each
3/64	0.0469	1.19	1/2	12.70	2 1/2	63.50	4	TGJ154	C25020	18.52
1/16	0.0625	1.59	1/2	12.70	2 1/2	63.50	4	TGJ159	C25060	19.14
5/64	0.0781	1.98	3/4	19.05	3	76.20	4	TGJ165	C25100	18.96
3/32	0.0938	2.38	3/4	19.05	3	76.20	4	TGJ173	C25140	16.95
7/64	0.1094	2.78	7/8	22.23	3 1/2	88.90	4	TGJ180	C25178	18.96
1/8	0.1250	3.18	7/8	22.23	3 1/2	88.90	6	TGJ190	C25216	16.29
9/64	0.1406	3.57	1	25.40	4	101.60	6	TGJ195	C25254	21.63
5/32	0.1562	3.97	1	25.40	4	101.60	6	TGJ201	C25290	21.89
11/64	0.1719	4.37	1 1/8	28.58	4 1/2	114.30	6	TGJ208	C25327	23.09
3/16	0.1875	4.76	1 1/8	28.58	4 1/2	114.30	6	TGJ217	C25366	21.83
13/64	0.2031	5.16	1 1/4	31.75	5	127.00	6	TGJ226	C25402	24.34
7/32	0.2188	5.56	1 1/4	31.75	5	127.00	6	TGJ231	C25438	25.13
15/64	0.2344	5.95	1 1/2	38.10	6	152.40	6	TGJ235	C25474	26.05
1/4	0.2500	6.35	1 1/2	38.10	6	152.40	6	TGJ243	C25513	24.72
17/64	0.2656	6.75	1 1/2	38.10	6	152.40	6	TGJ247	C25550	30.02
9/32	0.2812	7.14	1 1/2	38.10	6	152.40	6	TGJ253	C25608	30.66
19/64	0.2969	7.54	1 1/2	38.10	6	152.40	6	TGJ256	C25622	32.49
5/16	0.3125	7.94	1 1/2	38.10	6	152.40	6	TGJ261	C25661	28.96
21/64	0.3281	8.33	1 1/2	38.10	6	152.40	6	TGJ266	C25698	33.95
11/32	0.3438	8.73	1 1/2	38.10	6	152.40	6	TGJ269	C25733	33.95
23/64	0.3594	9.13	1 3/4	44.45	7	177.80	6	TGJ273	C25768	33.95
3/8	0.3750	9.53	1 3/4	44.45	7	177.80	6	TGJ278	C25807	32.28
25/64	0.3906	9.92	1 3/4	44.45	7	177.80	6	TGJ282	C25844	36.39
13/32	0.4062	10.32	1 3/4	44.45	7	177.80	6	TGJ286	C25878	37.04
27/64	0.4219	10.72	1 3/4	44.45	7	177.80	6	TGJ288	C25911	38.27
7/16	0.4375	11.11	1 3/4	44.45	7	177.80	6	TGJ293	C25947	36.56

METRIC

DIA MM	DIA DEC	DIA MM	FLUTE IN	Flutes MM	OAL IN	OAL MM	NO FLTS	Model No.	Mfg. No.	Price /Each
1.5	0.0591	1.50	1/2	12.70	2 1/2	63.50	4	TGJ157	C25059	21.16
2.0	0.0787	2.00	3/4	19.05	3	76.20	4	TGJ167	C25095	20.51
3.0	0.1181	3.00	7/8	22.23	3 1/2	88.90	4	TGJ185	C25185	20.51
4.0	0.1575	4.00	1	25.40	4	101.60	6	TGJ203	C25291	22.84
5.0	0.1969	5.00	1 1/4	31.75	5	127.00	6	TGJ223	C25314	25.42
6.0	0.2362	6.00	1 1/2	38.10	6	152.40	6	TGJ236	C25475	28.44
7.0	0.2756	7.00	1 1/2	38.10	6	152.40	6	TGJ250	C25567	32.49
8.0	0.3150	8.00	1 1/2	38.10	6	152.40	6	TGJ263	C25668	33.95

WIRE GAUGE

DIA WIRE	DIA DEC	DIA MM	FLUTE IN	Flutes MM	OAL IN	OAL MM	NO FLTS	Model No.	Mfg. No.	Price /Each
60	0.0400	1.02	1/2	12.70	2 1/2	63.50	4	TGJ149	C25003	21.77
59	0.0410	1.04	1/2	12.70	2 1/2	63.50	4	TGJ150	C25005	21.77
58	0.0420	1.07	1/2	12.70	2 1/2	63.50	4	TGJ151	C25008	21.77
57	0.0430	1.09	1/2	12.70	2 1/2	63.50	4	TGJ152	C25010	21.77
56	0.0465	1.18	1/2	12.70	2 1/2	63.50	4	TGJ153	C25019	21.63
55	0.0520	1.32	1/2	12.70	2 1/2	63.50	4	TGJ155	C25034	21.16
54	0.0550	1.40	1/2	12.70	2 1/2	63.50	4	TGJ156	C25041	21.16
53	0.0595	1.51	1/2	12.70	2 1/2	63.50	4	TGJ158	C25053	21.16
52	0.0635	1.61	1/2	12.70	2 1/2	63.50	4	TGJ160	C25063	20.15
51	0.0670	1.70	3/4	19.05	3	76.20	4	TGJ161	C25072	18.96
50	0.0700	1.78	3/4	19.05	3	76.20	4	TGJ162	C25079	18.96
49	0.0730	1.85	3/4	19.05	3	76.20	4	TGJ163	C25087	18.96
48	0.0760	1.93	3/4	19.05	3	76.20	4	TGJ164	C25094	18.96
47	0.0785	1.99	3/4	19.05	3	76.20	4	TGJ166	C25101	18.96
46	0.0810	2.06	3/4	19.05	3	76.20	4	TGJ168	C25108	18.96
45	0.0820	2.08	3/4	19.05	3	76.20	4	TGJ169	C25110	18.96
44	0.0860	2.18	3/4	19.05	3	76.20	4	TGJ170	C25120	18.96
43	0.0890	2.26	3/4	19.05	3	76.20	4	TGJ171	C25128	18.96
42	0.0935	2.37	3/4	19.05	3	76.20	4	TGJ172	C25139	18.96
41	0.0960	2.44	7/8	22.23	3 1/2	88.90	4	TGJ174	C25146	18.96
40	0.0980	2.49	7/8	22.23	3 1/2	88.90	4	TGJ175	C25151	18.96
39	0.0995	2.53	7/8	22.23	3 1/2	88.90	4	TGJ176	C25155	18.96
38	0.1015	2.58	7/8	22.23	3 1/2	88.90	4	TGJ177	C25159	18.96
37	0.1040	2.64	7/8	22.23	3 1/2	88.90	4	TGJ178	C25165	18.96
36	0.1065	2.71	7/8	22.23	3 1/2	88.90	4	TGJ179	C25171	18.96
35	0.1100	2.79	7/8	22.23	3 1/2	88.90	4	TGJ181	C25180	18.96
34	0.1110	2.82	7/8	22.23	3 1/2	88.90	4	TGJ182	C25183	18.96
33	0.1130	2.87	7/8	22.23	3 1/2	88.90	4	TGJ183	C25187	18.96
32	0.1160	2.95	7/8	22.23	3 1/2	88.90	4	TGJ184	C25194	18.96
31	0.1200	3.05	7/8	22.23	3 1/2	88.90	6	TGJ186	C25203	18.96

FRACTIONAL (CONT'D)

DIA FRAC	DIA DEC	DIA MM	FLUTE IN	Flutes MM	OAL IN	OAL MM	NO FLTS	Model No.	Mfg. No.	Price /Each
29/64	0.4531	11.51	1 3/4	44.45	7	177.80	6	TGJ295	C25981	41.73
15/32	0.4688	11.91	1 3/4	44.45	7	177.80	6	TGJ296	C26014	42.11
31/64	0.4844	12.30	2	50.80	8	203.20	6	TGJ298	C26048	42.25
1/2	0.5000	12.70	2	50.80	8	203.20	6	TGJ300	C26083	39.16
17/32	0.5312	13.49	2	50.80	8	203.20	8	TGJ303	C26150	46.84
9/16	0.5625	14.29	2	50.80	8	203.20	8	TGJ305	C26217	47.88
19/32	0.5938	15.08	2	50.80	8	203.20	8	TGJ307	C26284	52.22
5/8	0.6250	15.88	2 1/4	57.15	9	228.60	8	TGJ308	C26351	52.86
21/32	0.6562	16.67	2 1/4	57.15	9	228.60	8	TGJ310	C26418	61.44
11/16	0.6875	17.46	2 1/4	57.15	9	228.60	8	TGJ311	C26485	61.95
23/32	0.7188	18.26	2 1/4	57.15	9	228.60	8	TGJ312	C26550	68.36
3/4	0.7500	19.05	2 1/2	63.50	9 1/2	241.30	8	TGJ313	C26615	68.36
25/32	0.7812	19.84	2 1/2	63.50	9 1/2	241.30	8	TGJ314	C26680	74.69
13/16	0.8125	20.64	2 1/2	63.50	9 1/2	241.30	8	TGJ315	C26746	76.96
27/32	0.8438	21.43	2 1/2	63.50	9 1/2	241.30	8	TGJ316	C26811	87.24
7/8	0.8750	22.23	2 5/8	66.68	10	254.00	8	TGJ317	C26876	87.49
29/32	0.9062	23.02	2 5/8	66.68	10	254.00	8	TGJ318	C26941	95.48
15/16	0.9375	23.81	2 5/8	66.68	10	254.00	8	TGJ319	C27006	96.11
31/32	0.9688	24.61	2 5/8	66.68	10	254.00	8	TGJ320	C27072	100.96
1	1.0000	25.40	3 1/4	69.85	10 1/2	266.70	8	TGJ321	C27137	101.97
1-1/16	1.0625	26.99	2 3/4	69.85	10 1/2	266.70	10	TGJ322	C27144	120.06
1-1/8	1.1250	28.58	2 7/8	73.03	11	279.40	10	TGJ323	C27152	131.86
1-3/16	1.1875	30.16	2 7/8	73.03	11	279.40	10	TGJ324	C27159	147.85
1-1/4	1.2500	31.75	3	76.20	11 1/2	292.10	10	TGJ325	C27166	158.35
1-3/8	1.3750	34.93	3 1/4	82.55	12	304.80	10	TGJ326	C27180	191.59
1-1/2	1.5000	38.10	3 1/2	88.90	12 1/2	317.50	12	TGJ327	C27195	224.18

METRIC (CONT'D)

DIA MM	DIA DEC	DIA MM	FLUTE IN	Flutes MM	OAL IN	OAL MM	NO FLTS	Model No.	Mfg. No.	Price /Each
9.0	0.3543	9.00	1 3/4	44.45	7	177.80	6	TGJ271	C25743	35.22
10.0	0.3937	10.00	1 3/4	44.45	7	177.80	6	TGJ283	C25845	37.04
11.0	0.4331	11.00	1 3/4	44.45	7	177.80	6	TGJ289	C25912	38.74
12.0	0.4724	12.00	1 3/4	44.45	7	177.80	6	TGJ297	C26015	41.93
13.0	0.5118	13.00	2	50.80	8	203.20	8	TGJ302	C26086	47.84
14.0	0.5512	14.00	2	50.80	8	203.20	8	TGJ304	C26151	48.86
15.0	0.5906	15.00	2	50.80	8	203.20	8	TGJ306	C26218	51.98
16.0	0.6299	16.00	2 1/4	57.15	9	228.60	8	TGJ309	C26352	54.32

WIRE GAUGE (CONT'D)

DIA WIRE	DIA DEC	DIA MM	FLUTE IN	Flutes MM	OAL IN	OAL MM	NO FLTS	Model No.	Mfg. No.	Price /Each
30	0.1285	3.26	7/8	22.23	3 1/2	88.90	6	TGJ192	C25226	18.96
29	0.1360	3.45	1	25.40	4	101.60	6	TGJ193	C25243	21.76
28	0.1405	3.57	1	25.40	4	101.60	6	TGJ194	C25253	21.76
27	0.1440	3.66	1	25.40	4	101.60	6	TGJ196	C25262	22.42
26	0.1470	3.73	1	25.40	4	101.60	6	TGJ197	C25269	22.42

CUTTING TOOLS

STRAIGHT SHANK, STRAIGHT FLUTE CHUCKING REAMERS, BRIGHT FINISH (CONT'D)

LETTER

DIA WIR/ LET	DIA DEC	DIA MM	FLUTE IN	Flutes MM	OAL IN	OAL MM	NO FLTS	Model No.	Mfg. No.	Price /Each
A	0.2340	5.94	1 1/2	38.10	6	152.40	6	TGJ234	C25473	27.64
B	0.2380	6.05	1 1/2	38.10	6	152.40	6	TGJ237	C25483	28.44
C	0.2420	6.15	1 1/2	38.10	6	152.40	6	TGJ238	C25492	28.44
D	0.2460	6.25	1 1/2	38.10	6	152.40	6	TGJ239	C25501	28.44
E	0.2500	6.35	1 1/2	38.10	6	152.40	6	TGJ243	C25513	24.72
F	0.2570	6.53	1 1/2	38.10	6	152.40	6	TGJ245	C25530	30.42
G	0.2610	6.63	1 1/2	38.10	6	152.40	6	TGJ246	C25539	30.42
H	0.2660	6.76	1 1/2	38.10	6	152.40	6	TGJ248	C25552	32.49
I	0.2720	6.91	1 1/2	38.10	6	152.40	6	TGJ249	C25566	32.49
J	0.2770	7.04	1 1/2	38.10	6	152.40	6	TGJ251	C25577	32.49
K	0.2810	7.14	1 1/2	38.10	6	152.40	6	TGJ252	C25585	32.49
L	0.2900	7.37	1 1/2	38.10	6	152.40	6	TGJ254	C25605	32.49
M	0.2950	7.49	1 1/2	38.10	6	152.40	6	TGJ255	C25617	32.49

LETTER (CONT'D)

DIA WIR/ LET	DIA DEC	DIA MM	FLUTE IN	Flutes MM	OAL IN	OAL MM	NO FLTS	Model No.	Mfg. No.	Price /Each
N	0.3020	7.67	1 1/2	38.10	6	152.40	6	TGJ257	C25634	32.49
O	0.3160	8.03	1 1/2	38.10	6	152.40	6	TGJ264	C25669	33.95
P	0.3230	8.20	1 1/2	38.10	6	152.40	6	TGJ265	C25685	33.95
Q	0.3320	8.43	1 1/2	38.10	6	152.40	6	TGJ267	C25707	33.95
R	0.3390	8.61	1 1/2	38.10	6	152.40	6	TGJ268	C25723	33.95
S	0.3480	8.84	1 3/4	44.45	7	177.80	6	TGJ270	C25742	33.95
T	0.3580	9.09	1 3/4	44.45	7	177.80	6	TGJ272	C25764	33.95
U	0.3680	9.35	1 3/4	44.45	7	177.80	6	TGJ274	C25789	33.95
V	0.3770	9.58	1 3/4	44.45	7	177.80	6	TGJ280	C25811	35.21
W	0.3860	9.80	1 3/4	44.45	7	177.80	6	TGJ281	C25833	36.39
X	0.3970	10.08	1 3/4	44.45	7	177.80	6	TGJ284	C25858	37.04
Y	0.4040	10.26	1 3/4	44.45	7	177.80	6	TGJ285	C25873	37.04
Z	0.4130	10.49	1 3/4	44.45	7	177.80	6	TGJ287	C25892	37.87



STRAIGHT SHANK, STRAIGHT FLUTE REAMERS

- General purpose geometry with straight flutes
- 1/4" taper per 12" flute • Straight shank
- Designed for use in alloy and tool steels, carbon steel, plastic, and cast iron

TGJ407



SIZE	Small End Dia		Large End Dia		Shank Dia		Flute Length		OAL		Model No.	Mfg. No.	Price /Each
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM			
#6/0	0.0611	1.55	0.0806	2.05	0.0938	2.38	0.9375	23.81	1.9375	49.21	TGJ407	C24250	55.05
#5/0	0.0719	1.83	0.0966	2.45	0.1094	2.78	1.1875	30.16	2.1875	55.56	TGJ408	C24251	49.63
#4/0	0.0869	2.21	0.1142	2.90	0.1250	3.18	1.3125	33.34	2.3125	58.74	TGJ409	C24252	49.63
#3/0	0.1029	2.61	0.1302	3.31	0.1406	3.57	1.3125	33.34	2.3125	58.74	TGJ410	C24253	48.33
#2/0	0.1137	2.89	0.1462	3.71	0.1562	3.97	1.5625	39.69	2.5625	65.09	TGJ411	C24254	43.68
#0	0.1287	3.27	0.1638	4.16	0.1719	4.37	1.6875	42.86	2.9375	74.61	TGJ412	C24255	41.22
#1	0.1447	3.68	0.1798	4.57	0.1875	4.76	1.6875	42.86	2.9375	74.61	TGJ413	C24256	40.57
#2	0.1605	4.08	0.2008	5.10	0.2031	5.16	1.9375	49.21	3.1875	80.96	TGJ414	C24257	40.57
#3	0.1813	4.61	0.2294	5.83	0.2344	5.95	2.3125	58.74	3.6875	93.66	TGJ415	C24258	40.57
#4	0.2071	5.26	0.2604	6.61	0.2656	6.75	2.5625	65.09	4.0625	103.19	TGJ416	C24259	44.58
#5	0.2409	6.12	0.2994	7.60	0.3125	7.94	2.8125	71.44	4.3125	109.54	TGJ417	C24260	48.08
#6	0.2773	7.04	0.3540	8.99	0.3594	9.13	3.6875	93.66	5.4375	138.11	TGJ418	C24261	58.41
#7	0.3297	8.37	0.4220	10.72	0.4062	10.32	4.4375	112.71	6.3125	160.34	TGJ419	C24262	72.75
#8	0.3971	10.09	0.5050	12.83	0.4375	11.11	5.1875	131.76	7.1875	182.56	TGJ420	C24263	94.52
#9	0.4805	12.20	0.6066	15.41	0.5625	14.29	6.0625	153.99	8.3125	211.14	TGJ421	C24264	114.10
#10	0.5799	14.73	0.7216	18.33	0.6250	15.88	6.8125	173.04	9.3125	236.54	TGJ422	C24265	123.92

TAPER SHANK BRIDGE REAMERS, BLACK OXIDE

- General purpose geometry • Standard Morse taper shanks
- LHH/RHC flute design
- Designed for use in carbon steel and cast iron

TGJ370



DIA FRAC	DIA DEC	DIA MM	FLUTE IN	FLUTE MM	OAL IN	OAL MM	POINT DIA IN	POINT DIA MM	MORSE TPR	Flutes	Model No.	Mfg. No.	Price /Each
7/16	0.4375	11.11	4 3/8	111.13	8 1/4	209.55	0.2656	6.75	2	4	TGJ370	C23812	94.19
1/2	0.5000	12.70	5 1/8	130.18	9	228.60	0.3125	7.94	2	4	TGJ371	C23813	97.26
9/16	0.5625	14.29	5 1/8	130.18	9	228.60	0.3750	9.53	2	4	TGJ372	C23814	102.00
5/8	0.6250	15.88	6 1/8	155.58	10	254.00	0.3906	9.92	2	4	TGJ373	C23815	114.98
11/16	0.6875	17.46	7 1/8	180.98	11 3/4	298.45	0.4062	10.32	3	4	TGJ374	C23816	141.20
3/4	0.7500	19.05	7 3/8	187.33	12	304.80	0.4688	11.91	3	4	TGJ375	C23817	142.09
13/16	0.8125	20.64	7 3/8	187.33	12	304.80	0.5469	13.89	3	4	TGJ376	C23818	146.46
7/8	0.8750	22.23	7 3/8	187.33	12	304.80	0.6094	15.48	3	4	TGJ377	C23819	165.37
15/16	0.9375	23.81	7 3/8	187.33	12	304.80	0.6719	17.07	3	4	TGJ378	C23820	166.43
1IN	1.0000	25.40	7 3/8	187.33	12	304.80	0.7344	18.65	3	4	TGJ379	C23821	193.83
1-1/16	1.0625	26.99	7 3/8	187.33	12	304.80	0.8125	20.64	3	4	TGJ380	C23822	202.34
1-1/8	1.1250	28.58	7 3/8	187.33	12	304.80	0.8594	21.83	3	4	TGJ381	C23823	270.00
1-3/16	1.1875	30.16	7 3/8	187.33	12	304.80	0.9219	23.42	3	4	TGJ382	C23824	298.60

TAPER SHANK CAR REAMERS

- General purpose geometry • Standard Morse taper shanks
- LHH/RHC flute design
- Designed for use in carbon steel and cast iron

TGJ383



DIA FRAC	DIA DEC	DIA MM	FLUTE IN	FLUTE MM	OAL IN	OAL MM	POINT DIA IN	POINT DIA MM	MORSE TPR	Flutes	Model No.	Mfg. No.	Price /Each
9/16	0.5625	14.290	3 15/16	100.01	7 9/16	192.09	0.3125	7.94	2	5	TGJ383	C23957	87.40
5/8	0.6250	15.880	4 7/16	112.71	8 1/16	204.79	0.3281	8.33	2	5	TGJ384	C23958	95.61
11/16	0.6875	17.460	4 7/16	112.71	8 13/16	223.84	0.3594	9.13	3	5	TGJ385	C23959	106.30
3/4	0.7500	19.050	5	127.00	9 1/2	241.30	0.4219	10.72	3	5	TGJ386	C23960	110.48
13/16	0.8125	20.640	5	127.00	9 1/2	241.30	0.4688	11.91	3	5	TGJ387	C23961	114.91
15/16	0.9375	23.810	5	127.00	9 1/2	241.30	0.5625	14.29	3	5	TGJ388	C23962	130.83

SINGLE END FINISHERS, HSS, 2-FLUTE CENTER CUTTING, SQUARE END

- General-purpose geometry
- 30° helix angle, right-hand cut
- Ideal for slotting operations
- Designed for use in alloy steel, tool steel, carbon steel, and cast iron

QM889



DIA FRA	DIA IN	DIA MM	ShankDia IN	ShankDia MM	FluteLength IN	FluteLength MM	OAL IN	OAL MM	Flutes	Model No.	Mfg. No.	Price /Each
1/8	0.1250	3.18	3/8	9.53	3/8	9.53	25/16	58.74	2	QM889	C41602	16.53
5/32	0.1562	3.97	3/8	9.53	7/16	11.11	23/8	60.33	2	TGI866	C33730	16.53
11/64	0.1719	4.37	3/8	9.53	7/16	11.11	23/8	60.33	2	TGI867	C33731	16.53
3/16	0.1875	4.76	3/8	9.53	7/16	11.11	23/8	60.33	2	QM956	C41604	16.53
13/64	0.2031	5.16	3/8	9.53	1/2	12.70	27/16	61.91	2	TGI869	C33732	24.08
7/32	0.2188	5.56	3/8	9.53	1/2	12.70	27/16	61.91	2	TGI870	C33733	18.70
15/64	0.2344	5.95	3/8	9.53	1/2	12.70	27/16	61.91	2	TGI872	C33734	24.08
1/4	0.2500	6.35	3/8	9.53	1/2	12.70	27/16	61.91	2	QM918	C41607	16.53
17/64	0.2656	6.75	3/8	9.53	9/16	14.29	21/2	63.50	2	TGI874	C33735	24.93
9/32	0.2812	7.14	3/8	9.53	9/16	14.29	21/2	63.50	2	TGI875	C33736	19.37
19/64	0.2969	7.54	3/8	9.53	9/16	14.29	21/2	63.50	2	TGI877	C33737	24.93
5/16	0.3125	7.94	3/8	9.53	9/16	14.29	21/2	63.50	2	QM894	C41609	17.12
21/64	0.3281	8.33	3/8	9.53	9/16	14.29	21/2	63.50	2	TGI879	C33738	24.93
11/32	0.3438	8.73	3/8	9.53	9/16	14.29	21/2	63.50	2	TGI880	C33739	19.37
23/64	0.3594	9.13	3/8	9.53	9/16	14.29	21/2	63.50	2	TGI882	C33740	24.93
3/8	0.3750	9.53	3/8	9.53	9/16	14.29	21/2	63.50	2	QM896	C41612	17.12
25/64	0.3906	9.92	3/8	9.53	13/16	20.64	211/16	68.26	2	TGI884	C33741	34.67
13/32	0.4062	10.32	3/8	9.53	13/16	20.64	211/16	68.26	2	TGI885	C33742	25.08
27/64	0.4219	10.72	3/8	9.53	13/16	20.64	211/16	68.26	2	TGI887	C33743	32.20
7/16	0.4375	11.11	3/8	9.53	13/16	20.64	211/16	68.26	2	QM924	C41615	24.13
29/64	0.4531	11.51	1/2	12.70	13/16	20.64	31/4	82.55	2	TGI889	C33744	34.23
15/32	0.4688	11.91	1/2	12.70	13/16	20.64	31/4	82.55	2	TGI890	C33745	27.76
31/64	0.4844	12.30	1/2	12.70	13/16	20.64	31/4	82.55	2	TGI892	C33746	33.89
1/2	0.5000	12.70	1/2	12.70	1	25.40	31/4	82.55	2	TGI893	C41618	25.05
17/32	0.5312	13.49	5/8	15.88	2	50.80	41/8	104.78	2	TGI897	C39073	52.38
9/16	0.5625	14.29	5/8	15.88	2	50.80	41/8	104.78	2	TGI899	C39074	54.86
5/8	0.6250	15.88	5/8	15.88	15/16	33.34	31/4	82.55	2	QM921	C41623	41.24
11/16	0.6875	17.46	1/2	12.70	15/16	33.34	35/8	92.08	2	TGI905	C41625	42.37
3/4	0.7500	19.05	1/2	12.70	15/16	33.34	31/4	82.55	2	TGI907	C41628	46.62
13/16	0.8125	20.64	7/8	22.23	21/2	63.50	43/4	120.65	2	TGI910	C39076	61.27
7/8	0.8750	22.23	3/4	19.05	11/2	38.10	41/8	104.78	2	QM917	C41636	56.27
15/16	0.9375	23.81	7/8	22.23	11/2	38.10	41/8	104.78	2	TGI914	C33753	62.93
1"	1.0000	25.40	3/4	19.05	11/2	38.10	4	101.60	2	TGI917	C41642	64.58
1"	1.0000	25.40	1	25.40	15/8	41.28	41/2	114.30	2	QM934	C41644	73.05
1-1/8	1.1250	28.58	1	25.40	15/8	41.28	41/2	114.30	2	QM906	C41648	100.88
1-1/4	1.2500	31.75	1	25.40	15/8	41.28	41/2	114.30	2	QM958	C41651	110.84
1-3/8	1.3750	34.93	1	25.40	3	76.20	51/2	139.70	2	TGI927	C41741	212.73
1-1/2	1.5000	38.10	1 1/4	31.75	1 5/8	41.28	41/2	114.30	2	TGI929	C41660	143.98
1-5/8	1.6250	41.28	1 1/4	31.75	3	76.20	51/2	139.70	2	TGI931	C41747	233.51
1-3/4	1.7500	44.45	1 1/4	31.75	1 5/8	41.28	41/2	114.30	2	TGI932	C41662	174.40
1-7/8	1.8750	47.63	1 1/4	31.75	3	76.20	51/2	139.70	2	TGI934	C41750	257.49
2	2.0000	50.80	2	50.80	2	50.80	53/4	146.05	2	TGI937	C43478	220.88
2-1/2	2.5000	63.50	2	50.80	4	101.60	73/4	196.85	2	TGI941	C43487	486.63

SINGLE END FINISHERS, HSS, 2-FLUTE CENTER CUTTING, BALL NOSE

- General-purpose geometry
- 30° helix angle, right-hand cut
- Ideal for slotting and contouring operations
- Designed for use in alloy steel, tool steel, carbon steel, and cast iron

QM904



DIA FRA	DIA IN	DIA MM	ShankDia IN	ShankDia MM	Flute Length IN	Flute Length MM	OAL IN	OAL MM	Flutes	Model No.	Mfg. No.	Price /Each
1/8	0.1250	3.18	3/8	9.53	3/8	9.53	2 5/16	58.74	2	QM904	C42109	24.21
3/16	0.1875	4.76	3/8	9.53	1/2	12.70	2 3/8	60.33	2	QM903	C42111	24.21
1/4	0.2500	6.35	3/8	9.53	5/8	15.88	2 7/16	61.91	2	QM902	C42114	23.12
5/16	0.3125	7.94	3/8	9.53	3/4	19.05	2 1/2	63.50	2	QM901	C42116	23.92
3/8	0.3750	9.53	3/8	9.53	3/4	19.05	2 1/2	63.50	2	QM900	C42119	23.92
7/16	0.4375	11.11	1/2	12.70	1	25.40	3 1/4	82.55	2	QM899	C42122	36.71
1/2	0.5000	12.70	1/2	12.70	1	25.40	3 1/4	82.55	2	QM888	C42124	36.72
9/16	0.5625	14.29	1/2	12.70	1 1/8	28.58	3 3/8	85.73	2	QM897	C42126	54.13
5/8	0.6250	15.88	1/2	12.70	1 1/8	28.58	3 3/8	85.73	2	TGI943	C42128	61.91
5/8	0.6250	15.88	5/8	15.88	1 3/8	34.93	3 1/4	82.55	2	QM891	C42129	61.91
3/4	0.7500	19.05	1/2	12.70	1 5/16	33.34	3 5/8	92.08	2	TGI944	C42132	73.05
3/4	0.7500	19.05	3/4	19.05	1 5/8	41.28	3 7/8	98.43	2	QM890	C42133	73.05
7/8	0.8750	22.23	7/8	22.23	2	50.80	4 1/4	107.95	2	QM892	C42137	91.72
1"	1.0000	25.40	1	25.40	2 1/4	57.15	4 1/2	114.30	2	QM893	C42141	108.29
1-1/8	1.1250	28.58	1	25.40	2 1/4	57.15	4 1/2	114.30	2	TGI945	C42144	134.26
1-1/4	1.2500	31.75	1 1/4	31.75	2 1/2	63.50	4 1/2	114.30	2	TGI946	C42146	114.81
1-1/2	1.5000	38.10	1 1/4	31.75	2 1/2	63.50	4 1/2	114.30	2	TGI947	C42152	145.48

CUTTING TOOLS

SINGLE END FINISHERS, COBALT, 2 FLUTE CENTER CUTTING, SQUARE END

- M42 cobalt substrate
- General-purpose geometry
- 30° helix angle, right-hand cut
- High red hardness for high heat conditions
- Ideal for slotting operations
- **Designed for use in titanium alloys, nickel alloys, cobalt alloys, and stainless steel**

TGI740



DIA FRA	DIA IN	DIA MM	Shank Dia		Flute Length		OAL		Flutes	Model No.	Mfg. No.	Price /Each
IN	MM	IN	MM	IN	MM	IN	MM					
1/8	0.1250	3.18	3/8	9.53	3/8	9.53	2 5/16	58.74	2	TGI740	C42602	15.65
5/32	0.1562	3.97	3/8	9.53	7/16	11.11	2 3/8	60.33	2	TGI741	C32480	15.65
11/64	0.1719	4.37	3/8	9.53	7/16	11.11	2 3/8	60.33	2	TGI742	C32481	15.65
3/16	0.1875	4.76	3/8	9.53	7/16	11.11	2 3/8	60.33	2	TGI743	C42604	15.65
13/64	0.2031	5.16	3/8	9.53	1/2	12.70	2 7/16	61.91	2	TGI744	C32482	22.80
7/32	0.2188	5.56	3/8	9.53	1/2	12.70	2 7/16	61.91	2	TGI745	C32483	17.71
15/64	0.2344	5.95	3/8	9.53	1/2	12.70	2 7/16	61.91	2	TGI746	C32484	22.80
1/4	0.2500	6.35	3/8	9.53	1/2	12.70	2 7/16	61.91	2	TGI747	C42607	15.65
17/64	0.2656	6.75	3/8	9.53	9/16	14.29	2 1/2	63.50	2	TGI748	C32485	23.23
9/32	0.2812	7.14	3/8	9.53	9/16	14.29	2 1/2	63.50	2	TGI749	C32486	18.04
19/64	0.2969	7.54	3/8	9.53	9/16	14.29	2 1/2	63.50	2	TGI750	C32487	23.23
5/16	0.3125	7.94	3/8	9.53	9/16	14.29	2 1/2	63.50	2	TGI751	C42609	15.94
21/64	0.3281	8.33	3/8	9.53	9/16	14.29	2 1/2	63.50	2	TGI752	C32488	23.23
11/32	0.3438	8.73	3/8	9.53	9/16	14.29	2 1/2	63.50	2	TGI753	C32489	18.04
23/64	0.3594	9.13	3/8	9.53	9/16	14.29	2 1/2	63.50	2	TGI754	C32490	23.23
3/8	0.3750	9.53	3/8	9.53	9/16	14.29	2 1/2	63.50	2	TGI755	C42612	15.94
25/64	0.3906	9.92	3/8	9.53	13/16	20.64	2 11/16	68.26	2	TGI756	C32491	32.33
13/32	0.4062	10.32	3/8	9.53	13/16	20.64	2 11/16	68.26	2	TGI757	C32492	23.39
27/64	0.4219	10.72	3/8	9.53	13/16	20.64	2 11/16	68.26	2	TGI758	C32493	30.02
7/16	0.4375	11.11	3/8	9.53	13/16	20.64	2 11/16	68.26	2	TGI759	C32494	22.49
29/64	0.4531	11.51	1/2	12.70	1	25.40	3 1/4	82.55	2	TGI760	C32495	29.89
15/32	0.4688	11.91	1/2	12.70	1	25.40	3 1/4	82.55	2	TGI761	C32496	25.89
31/64	0.4844	12.30	1/2	12.70	1	25.40	3 1/4	82.55	2	TGI762	C32497	29.89
1/2	0.5000	12.70	1/2	12.70	1	25.40	3 1/4	82.55	2	TGI763	C42616	23.36
5/8	0.6250	15.88	5/8	15.88	1 5/16	33.34	3 1/4	82.55	2	TGI764	C42619	41.12
3/4	0.7500	19.05	3/4	19.05	1 5/16	33.34	3 7/8	98.43	2	TGI765	C42622	47.93
1"	1.0000	25.40	1	25.40	1 5/8	41.28	4 1/2	114.30	2	TGI766	C42629	73.63
1-1/4	1.2500	31.75	1 1/4	31.75	1 5/8	41.28	4 1/2	114.30	2	TGI767	C42633	123.13
1-1/2	1.5000	38.10	1 1/4	31.75	1 5/8	41.28	4 1/2	114.30	2	TGI768	C42639	165.38

SINGLE END FINISHERS, COBALT, 2 FLUTE CENTER CUTTING BALL NOSE

- M42 cobalt substrate
- General-purpose geometry
- Ball Nose
- 30° helix angle, right-hand cut
- High red hardness for high heat conditions
- Ideal for slotting and peripheral cuts
- **Designed for use in titanium alloys, nickel alloys, cobalt alloys, and stainless steel**

TGI769



DIA FRA	DIA IN	DIA MM	Shank Dia		Flute Length		OAL		Flutes	Model No.	Mfg. No.	Price /Each
IN	MM	IN	MM	IN	MM	IN	MM					
1/8	0.1250	3.18	3/8	9.53	3/8	9.53	2 5/16	58.74	2	TGI769	C42643	21.90
3/16	0.1875	4.76	3/8	9.53	1/2	12.70	2 3/8	60.33	2	TGI770	C42645	20.37
1/4	0.2500	6.35	3/8	9.53	5/8	15.88	2 7/16	61.91	2	TGI771	C42648	21.90
5/16	0.3125	7.94	3/8	9.53	3/4	19.05	2 1/2	63.50	2	TGI772	C42650	22.30
3/8	0.3750	9.53	3/8	9.53	3/4	19.05	2 1/2	63.50	2	TGI773	C42653	22.30
1/2	0.5000	12.70	1/2	12.70	1	25.40	3 1/4	82.55	2	TGI774	C42657	34.23
5/8	0.6250	15.88	5/8	15.88	1 3/8	34.93	3 1/4	82.55	2	TGI775	C42660	67.95
3/4	0.7500	19.05	3/4	19.05	1 5/8	41.28	3 7/8	98.43	2	TGI776	C42663	71.33
7/8	0.8750	22.23	7/8	22.23	2	50.80	4 1/4	107.95	2	TGI777	C32736	111.65
1"	1.0000	25.40	1	25.40	2 1/4	57.15	4 1/2	114.30	2	TGI778	C42670	105.63
1-1/4	1.2500	31.75	1 1/4	31.75	2 1/2	63.50	4 1/2	114.30	2	TGI779	C42674	188.23
1-1/2	1.5000	38.10	1 1/4	31.75	2 1/2	63.50	4 1/2	114.30	2	TGI780	C42680	238.94

SINGLE END FINISHERS, HSS, 4 OR 6 FLUTE NON CENTER CUTTING, SQUARE END

- General-purpose geometry
- 30° helix angle, right-hand cut
- Heavy cross-section for high rigidity
- Ideal for profiling operations
- **Designed for use in alloy steel, tool steel, cast iron, and copper alloys**

QM937



DIA FRA	DIA IN	DIA MM	Shank Dia		Flute Length		OAL		Flutes	Model No.	Mfg. No.	Price /Each
IN	MM	IN	MM	IN	MM	IN	MM					
1/8	0.1250	3.18	3/8	9.53	3/8	9.53	2 5/16	58.74	4	QM937	C41243	21.26
9/64	0.1406	3.57	3/8	9.53	1/2	12.70	2 5/16	58.74	4	TGI981	C33141	21.40
5/32	0.1562	3.97	3/8	9.53	1/2	12.70	2 3/8	60.33	4	TGI982	C33142	21.40
11/64	0.1719	4.37	3/8	9.53	1/2	12.70	2 3/8	60.33	4	TGI983	C33143	21.40
3/16	0.1875	4.76	3/8	9.53	1/2	12.70	2 3/8	60.33	4	QM926	C41245	19.36
13/64	0.2031	5.16	3/8	9.53	5/8	15.88	2 7/16	61.91	4	TGI986	C33144	21.42

SINGLE END FINISHERS, HSS, 4 OR 6 FLUTE NON CENTER CUTTING, SQUARE END (CONT'D)



DIA FRA	DIA IN	DIA MM	Shank Dia IN	Shank Dia MM	Flute Length IN	Flute Length MM	OAL IN	OAL MM	Flutes	Model No.	Mfg. No.	Price /Each
7/32	0.2188	5.56	3/8	9.53	5/8	15.88	2 7/16	61.91	4	TGI987	C33145	19.36
15/64	0.2344	5.95	3/8	9.53	5/8	15.88	2 7/16	61.91	4	TGI990	C33146	21.42
1/4	0.2500	6.35	3/8	9.53	5/8	15.88	2 7/16	61.91	4	QM935	C41248	19.39
17/64	0.2656	6.75	3/8	9.53	3/4	19.05	2 1/2	63.50	4	TGI992	C33147	22.16
9/32	0.2812	7.14	3/8	9.53	3/4	19.05	2 1/2	63.50	4	TGI993	C33148	24.04
19/64	0.2969	7.54	3/8	9.53	3/4	19.05	2 1/2	63.50	4	TGI996	C33149	22.16
5/16	0.3125	7.94	3/8	9.53	3/4	19.05	2 1/2	63.50	4	QM929	C41250	19.62
21/64	0.3281	8.33	3/8	9.53	3/4	19.05	2 1/2	63.50	4	TGI998	C33150	22.16
11/32	0.3438	8.73	3/8	9.53	3/4	19.05	2 1/2	63.50	4	TGJ002	C33151	20.08
23/64	0.3594	9.13	3/8	9.53	3/4	19.05	2 1/2	63.50	4	TGJ005	C33152	22.16
3/8	0.3750	9.53	3/8	9.53	3/4	19.05	2 1/2	63.50	4	QM966	C41253	21.31
25/64	0.3906	9.92	3/8	9.53	1	25.40	2 11/16	68.26	4	TGJ007	C33153	35.55
13/32	0.4062	10.32	3/8	9.53	1	25.40	2 11/16	68.26	4	TGJ008	C33154	27.93
27/64	0.4219	10.72	3/8	9.53	1	25.40	2 11/16	68.26	4	TGJ011	C33155	35.55
7/16	0.4375	11.11	3/8	9.53	1	25.40	2 11/16	68.26	4	QM948	C41254	30.33
15/32	0.4688	11.91	1/2	12.70	1 1/4	31.75	3 1/4	82.55	4	TGJ014	C33158	31.02
31/64	0.4844	12.30	1/2	12.70	1 1/4	31.75	3 1/4	82.55	4	TGJ017	C33159	34.67
1/2	0.5000	12.70	3/8	9.53	1	25.40	2 11/16	68.26	4	TGJ018	C33160	27.15
17/32	0.5312	13.49	1/2	12.70	1 3/8	34.93	3 3/8	85.73	4	TGJ020	C33161	48.18
9/16	0.5625	14.29	1/2	12.70	1 3/8	34.93	3 3/8	85.73	4	TGJ021	C33162	52.64
19/32	0.5938	15.08	1/2	12.70	1 3/8	34.93	3 3/8	85.73	4	TGJ022	C33163	47.44
5/8	0.6250	15.88	5/8	15.88	1 5/8	41.28	3 3/4	95.25	4	QM950	C41260	48.18
21/32	0.6562	16.67	5/8	15.88	1 5/8	41.28	3 3/4	95.25	4	TGJ025	C33165	56.40
11/16	0.6875	17.46	1/2	12.70	1 5/8	41.28	3 3/8	85.73	4	TGJ026	C33166	57.44
23/32	0.7188	18.26	3/4	19.05	1 5/8	41.28	3 7/8	98.43	4	TGJ027	C33167	74.10
3/4	0.7500	19.05	1/2	12.70	1 5/8	41.28	3 3/8	85.73	4	TGJ028	C33168	56.75
25/32	0.7812	19.84	3/4	19.05	1 7/8	47.63	4 1/8	104.78	4	TGJ031	C33170	87.06
13/16	0.8125	20.64	5/8	15.88	1 7/8	47.63	4	101.60	4	TGJ032	C33171	70.01
27/32	0.8438	21.43	7/8	22.23	1 7/8	47.63	4	101.60	4	TGJ033	C33172	87.06
7/8	0.8750	22.23	3/4	19.05	1 7/8	47.63	4 1/8	104.78	4	TGJ035	C33174	78.55
29/32	0.9062	23.02	7/8	22.23	1 7/8	47.63	4 1/8	104.78	4	TGJ037	C33175	87.06
15/16	0.9375	23.81	7/8	22.23	1 7/8	47.63	4 1/8	104.78	4	TGJ038	C33176	78.93
31/32	0.9688	24.61	1	25.40	2	50.80	4 1/2	114.30	4	TGJ039	C33177	95.52
1	1.0000	25.40	3/4	19.05	1 7/8	47.63	4 1/8	104.78	4	TGJ041	C33179	86.10
1-1/8	1.1250	28.58	1	25.40	2	50.80	4 1/2	114.30	4	QM957	C41275	111.24
1-1/4	1.1250	28.58	1 1/4	31.75	4	101.60	6 1/2	165.10	4	TGJ046	C41353	158.55
1-1/4	1.2500	31.75	7/8	22.23	2	50.80	4 1/2	114.30	4	TGJ047	C33182	134.40
1-3/8	1.3750	34.93	1	25.40	2	50.80	4 1/2	114.30	4	TGJ052	C33184	146.02
1-1/2	1.5000	38.10	1	25.40	2	50.80	4 1/2	114.30	6	TGJ053	C33185	173.42
1-1/2	1.5000	38.10	1 1/4	31.75	4	101.60	6 1/2	165.10	4	TGJ055	C33381	200.64
1-3/4	1.7500	44.45	1 1/4	31.75	2	50.80	4 1/2	114.30	6	TGJ058	C33186	186.16
1-3/4	1.7500	44.45	1 1/4	31.75	4	101.60	6 1/2	165.10	4	TGJ059	C33382	254.20
2	2.0000	50.80	1 1/4	31.75	2	50.80	4 1/2	114.30	8	TGJ060	C33187	231.83
2	2.0000	50.80	1 1/4	31.75	4	101.60	6 1/2	165.10	4	TGJ061	C33383	310.27

SINGLE END FINISHERS, HSS, 4-FLUTE CENTER CUTTING, BALL NOSE

- General-purpose geometry
- 30° helix angle, right-hand cut
- Ideal for profiling and contouring operations
- Designed for use in alloy steel, tool steel, cast iron, and copper alloys

TGI948



DIA FRA	DIA IN	DIA MM	Shank Dia IN	Shank Dia MM	Flute Length IN	Flute Length MM	OAL IN	OAL MM	Flutes	Model No.	Mfg. No.	Price /Each
1/4	0.2500	6.35	3/8	9.53	5/8	15.88	2 7/16	61.91	4	TGI948	C33301	23.12
5/16	0.3125	7.94	3/8	9.53	3/4	19.05	2 1/2	63.50	4	TGI951	C33302	45.12
3/8	0.3750	9.53	3/8	9.53	3/4	19.05	2 1/2	63.50	4	TGI954	C33325	54.26
1/2	0.5000	12.70	1/2	12.70	1 1/4	31.75	3 1/4	82.55	4	TGI957	C41293	53.36
5/8	0.6250	15.88	5/8	15.88	1 5/8	41.28	3 1/4	82.55	4	TGI960	C33348	138.48
3/4	0.7500	19.05	3/4	19.05	1 5/8	41.28	3 7/8	98.43	4	TGI963	C41300	111.13
3/4	0.7500	19.05	3/4	19.05	2	50.80	5 1/4	133.35	4	TGI964	C41364	136.55
7/8	0.8750	22.23	7/8	22.23	1 7/8	47.63	4 1/8	104.78	4	TGI966	C41304	124.81
1	1.0000	25.40	1	25.40	2	50.80	4 1/2	114.30	4	TGI967	C41308	188.08
1	1.0000	25.40	1	25.40	4	101.60	6 1/2	165.10	4	TGI968	C41371	219.53
1-1/4	1.2500	31.75	1 1/4	31.75	2	50.80	4 1/2	114.30	4	TGI970	C41312	203.65
1-1/4	1.2500	31.75	1 1/4	31.75	4	101.60	6 1/2	165.10	4	TGI971	C41375	319.78
1-1/2	1.5000	38.10	1 1/4	31.75	2	50.80	4 1/2	114.30	4	TGI973	C41318	302.94
1-1/2	1.5000	38.10	1 1/4	31.75	4	101.60	6 1/2	165.10	4	TGI974	C41377	332.85
2	2.0000	50.80	1 1/4	31.75	2	50.80	6 3/4	171.45	4	TGI976	C33007	516.80
2	2.0000	50.80	1 1/4	31.75	4	101.60	7 3/4	196.85	4	TGI977	C33008	499.75
2-1/2	2.5000	63.50	1 1/4	31.75	5	127.00	8 3/4	222.25	4	TGI980	C43567	744.13

CUTTING TOOLS

SINGLE END FINISHERS, COBALT, MULTI-FLUTE CENTER CUTTING, SQUARE END

- M42 cobalt substrate
- General-purpose geometry
- Heavy cross-section for high rigidity
- 30° helix angle, right-hand cut
- High red hardness for high heat conditions
- Use for peripheral cuts
- Designed for use in titanium alloys, nickel alloys, cobalt alloys, and stainless steel



TGI781



DIA FRA	DIA IN	DIA MM	Shank Dia		Flute Length		OAL		Flutes	Model No.	Mfg. No.	Price /Each
			IN	MM	IN	MM	IN	MM				
1/8	0.1250	3.18	3/8	9.53	3/8	9.53	2 5/16	58.74	4	TGI781	C42684	20.14
5/32	0.1562	3.97	3/8	9.53	1/2	12.70	2 3/8	60.33	4	TGI782	C32556	18.83
11/64	0.1719	4.37	3/8	9.53	1/2	12.70	2 3/8	60.33	4	TGI783	C32557	20.27
3/16	0.1875	4.76	3/8	9.53	1/2	12.70	2 3/8	60.33	4	TGI784	C42686	18.33
13/64	0.2031	5.16	3/8	9.53	5/8	15.88	2 7/16	61.91	4	TGI785	C32558	20.29
7/32	0.2188	5.56	3/8	9.53	5/8	15.88	2 7/16	61.91	4	TGI786	C32559	18.33
15/64	0.2344	5.95	3/8	9.53	5/8	15.88	2 7/16	61.91	4	TGI787	C32560	20.29
1/4	0.2500	6.35	3/8	9.53	5/8	15.88	2 7/16	61.91	4	TGI788	C42689	18.37
17/64	0.2656	6.75	3/8	9.53	3/4	19.05	2 1/2	63.50	4	TGI791	C32561	35.43
9/32	0.2812	7.14	3/8	9.53	3/4	19.05	2 1/2	63.50	4	TGI792	C32562	22.40
19/64	0.2969	7.54	3/8	9.53	3/4	19.05	2 1/2	63.50	4	TGI795	C32563	20.67
5/16	0.3125	7.94	3/8	9.53	3/4	19.05	2 1/2	63.50	4	TGI796	C42691	18.28
21/64	0.3281	8.33	3/8	9.53	3/4	19.05	2 1/2	63.50	4	TGI799	C32564	20.67
11/32	0.3438	8.73	3/8	9.53	3/4	19.05	2 1/2	63.50	4	TGI800	C32565	18.70
23/64	0.3594	9.13	3/8	9.53	3/4	19.05	2 1/2	63.50	4	TGI803	C32566	20.67
3/8	0.3750	9.53	3/8	9.53	3/4	19.05	2 1/2	63.50	4	TGI804	C42694	19.86
25/64	0.3906	9.92	3/8	9.53	1	25.40	2 11/16	68.26	4	TGI807	C32567	33.13
13/32	0.4062	10.32	3/8	9.53	1	25.40	2 11/16	68.26	4	TGI808	C32568	26.05
27/64	0.4219	10.72	3/8	9.53	1	25.40	2 11/16	68.26	4	TGI811	C32569	33.13
7/16	0.4375	11.11	3/8	9.53	1	25.40	2 11/16	68.26	4	TGI812	C32570	25.38
29/64	0.4531	11.51	1/2	12.70	1 1/4	31.75	3 1/4	82.55	4	TGI815	C32571	32.33
15/32	0.4688	11.91	1/2	12.70	1 1/4	31.75	3 1/4	82.55	4	TGI816	C32572	28.92
31/64	0.4844	12.30	1/2	12.70	1 1/4	31.75	3 1/4	82.55	4	TGI819	C32573	32.33
1/2	0.5000	12.70	1/2	12.70	1 1/4	31.75	3 1/4	82.55	4	TGI820	C42699	24.99
1/2	0.5000	12.70	1/2	12.70	1 1/4	31.75	3 1/4	82.55	6	TGI821	C42698	28.38
5/8	0.6250	15.88	5/8	15.88	1 5/8	41.28	3 1/4	82.55	4	TGI824	C42703	50.15
5/8	0.6250	15.88	5/8	15.88	1 5/8	41.28	3 1/4	82.55	6	TGI825	C42702	60.23
3/4	0.7500	19.05	3/4	19.05	1 5/8	41.28	3 7/8	98.43	4	TGI828	C42707	63.77
3/4	0.7500	19.05	3/4	19.05	1 5/8	41.28	3 7/8	98.43	6	TGI829	C42706	67.48
7/8	0.8750	22.23	7/8	22.23	3 1/2	88.90	5 3/4	146.05	4	TGI834	C32653	80.58
7/8	0.8750	22.23	7/8	22.23	3 1/2	88.90	5 3/4	146.05	6	TGI835	C32654	114.53
1	1.0000	25.40	1	25.40	2	50.80	4 1/2	114.30	4	TGI836	C42715	86.30
1	1.0000	25.40	1	25.40	2	50.80	4 1/2	114.30	6	TGI837	C42714	93.40
1-1/4	1.2500	31.75	1 1/4	31.75	2	50.80	4 1/2	114.30	4	TGI842	C42720	128.76
1-1/4	1.2500	31.75	1 1/4	31.75	2	50.80	4 1/2	114.30	6	TGI843	C42719	145.49
1-1/2	1.5000	38.10	1 1/4	31.75	2	50.80	4 1/2	114.30	4	TGI848	C42727	163.43
1-1/2	1.5000	38.10	1 1/4	31.75	2	50.80	4 1/2	114.30	6	TGI849	C42726	169.41
2	2.0000	50.80	2	50.80	4	101.60	7 3/4	196.85	6	TGI852	C42731	270.26

SINGLE END FINISHERS, COBALT, MULTI FLUTE CENTER CUTTING, BALL NOSE

- M42 cobalt substrate
- General-purpose geometry
- Heavy cross-section for high rigidity
- 30° helix angle, right-hand cut
- High red hardness for high heat conditions
- Ideal for contouring and peripheral cuts
- Designed for use in titanium alloys, nickel alloys, cobalt alloys, and stainless steel



TGI853



DIA FRA	DIA IN	DIA MM	Shank Dia		Flute Length		OAL		Flutes	Model No.	Mfg. No.	Price /Each
			IN	MM	IN	MM	IN	MM				
1/8	0.1250	3.18	3/8	9.53	3/8	9.53	2 5/16	58.74	4	TGI853	C42778	36.04
3/16	0.1875	4.76	3/8	9.53	1/2	12.70	2 3/8	60.33	4	TGI854	C42780	36.04
1/4	0.2500	6.35	3/8	9.53	5/8	15.88	2 7/16	61.91	4	TGI855	C42783	37.63
5/16	0.3125	7.94	3/8	9.53	3/4	19.05	2 1/2	63.50	4	TGI856	C42785	38.32
3/8	0.3750	9.53	3/8	9.53	3/4	19.05	2 1/2	63.50	4	TGI857	C42788	37.45
1/2	0.5000	12.70	1/2	12.70	1 1/4	31.75	3 1/4	82.55	4	TGI858	C42792	49.75
5/8	0.6250	15.88	5/8	15.88	1 5/8	41.28	3 1/4	82.55	4	TGI859	C42795	97.80
3/4	0.7500	19.05	3/4	19.05	1 5/8	41.28	3 7/8	98.43	4	TGI860	C42799	93.83
3/4	0.7500	19.05	3/4	19.05	1 5/8	41.28	3 7/8	98.43	6	TGI861	C42798	121.42
1	1.0000	25.40	1	25.40	2	50.80	4 1/2	114.30	4	TGI862	C42807	139.31
1	1.0000	25.40	1	25.40	2	50.80	4 1/2	114.30	6	TGI863	C42806	202.36
1-1/4	1.2500	31.75	1 1/4	31.75	2	50.80	4 1/2	114.30	6	TGI864	C32761	251.31
1-1/2	1.5000	38.10	1 1/4	31.75	2	50.80	4 1/2	114.30	6	TGI865	C32762	337.49

PM PLUS™ SINGLE END FINISHERS, POWDER METAL, 3-FLUTE, CENTER CUTTING, SQUARE END

- High-performance geometry
- 42° right-hand high helix
- Use for slotting and finishing operations
- Provides quiet, chatter-free machining and high shear cutting
- **Designed for us in aluminum and non-ferrous materials**

TGJ062



DIA IN	Decimal	Metric	Shank Dia		Length of Cut		OAL		Flutes	Model No.	Mfg. No.	Price /Each
			IN	MM	IN	MM	IN	MM				
3/8	0.3750	9.53	3/8	9.53	3/4	19.05	2 1/2	63.50	3	TGJ062	C40072	37.27
3/8	0.3750	9.53	3/8	9.53	1 1/2	38.10	3 1/4	82.55	3	TGJ063	C40074	42.91
1/2	0.5000	12.70	1/2	12.70	1 1/4	31.75	3 1/4	82.55	3	TGJ064	C40076	50.23
1/2	0.5000	12.70	1/2	12.70	2	50.80	4	101.60	3	TGJ065	C40078	57.76
1/2	0.5000	12.70	1/2	12.70	3	76.20	5	127.00	3	TGJ066	C40080	67.67
5/8	0.6250	15.88	5/8	15.88	1 5/8	41.28	3 7/8	98.43	3	TGJ067	C40082	68.91
5/8	0.6250	15.88	5/8	15.88	2 1/2	63.50	4 5/8	117.48	3	TGJ068	C40084	79.36
5/8	0.6225	15.81	5/8	15.88	3	76.20	5 1/8	130.18	3	TGJ069	C40086	106.98
3/4	0.7500	19.05	3/4	19.05	1 5/8	41.28	3 3/4	95.25	3	TGJ070	C40345	72.27
3/4	0.7500	19.05	3/4	19.05	2 1/4	57.15	4 1/2	114.30	3	TGJ071	C40390	84.55
3/4	0.7500	19.05	3/4	19.05	3	76.20	5 1/4	133.35	3	TGJ072	C40350	100.08
1	1.0000	25.40	1	25.40	2	50.80	4 1/2	114.30	3	TGJ073	C40355	115.95
1	1.0000	25.40	1	25.40	3	76.20	5 1/2	139.70	3	TGJ074	C40360	143.21
1	1.0000	25.40	1	25.40	4	101.60	6 1/2	165.10	3	TGJ075	C40365	174.27
1-1/4	1.2500	31.75	1 1/4	31.75	2	50.80	4 1/2	114.30	3	TGJ076	C40370	178.21
1-1/4	1.2500	31.75	1 1/4	31.75	3	76.20	5 1/2	139.70	3	TGJ077	C40375	221.49
1-1/4	1.2500	31.75	1 1/4	31.75	4	101.60	6 1/2	165.10	3	TGJ078	C40380	250.39
1-1/4	1.2500	31.75	1 1/4	31.75	6	152.40	8 1/2	215.90	3	TGJ079	C40385	365.94
1-1/2	1.5000	38.10	1 1/4	31.75	2	50.80	4 1/2	114.30	3	TGJ080	C40240	245.39
1-1/2	1.5000	38.10	1 1/4	31.75	3	76.20	5 1/2	139.70	3	TGJ081	C40241	301.47
1-1/2	1.5000	38.10	1 1/4	31.75	4	101.60	6 1/2	165.10	3	TGJ082	C40242	329.94
1-1/2	1.5000	38.10	1 1/4	31.75	6	152.40	8 1/2	215.90	3	TGJ083	C40243	450.53
2	2.0000	50.80	2	50.80	3	76.20	6 3/4	171.45	3	TGJ084	C40245	555.46
2	2.0000	50.80	2	50.80	4	101.60	7 3/4	196.85	3	TGJ085	C40246	603.54
2	2.0000	50.80	2	50.80	6	152.40	9 3/4	247.65	3	TGJ086	C40247	729.57

PM PLUS™ SINGLE END ROUGHERS, POWDER METAL, 3-FLUTE, CENTER CUTTING, SQUARE END

- High-performance geometry
- Coarse profile
- **Designed for use for high volume roughing in aluminum, non-ferrous materials, and copper alloys**

TGJ087



DIA IN	Decimal	Metric	Shank Dia		Length of Cut		OAL		Flutes	Model No.	Mfg. No.	Price /Each
			IN	MM	IN	MM	IN	MM				
1/2	0.5000	12.70	1/2	12.70	1 1/4	31.75	3 1/4	82.55	3	TGJ087	C40003	67.16
1/2	0.5000	12.70	1/2	12.70	2	50.80	4	101.60	3	TGJ088	C40004	79.44
5/8	0.6250	15.88	5/8	15.88	1 5/8	41.28	3 3/4	95.25	3	TGJ089	C40005	107.97
5/8	0.6250	15.88	5/8	15.88	2 1/2	63.50	4 5/8	117.48	3	TGJ090	C40006	110.70
3/4	0.7500	19.05	3/4	19.05	1 5/8	41.28	3 7/8	98.43	3	TGJ091	C40007	106.59
3/4	0.7500	19.05	3/4	19.05	3	76.20	5 1/4	133.35	3	TGJ092	C40008	149.73
3/4	0.7500	19.05	3/4	19.05	2 1/4	57.15	4 3/4	120.65	3	TGJ093	C40062	138.78
1"	1.0000	25.40	1	25.40	2	50.80	4 1/2	114.30	3	TGJ094	C40009	183.65
1"	1.0000	25.40	1	25.40	3	76.20	5 1/2	139.70	3	TGJ095	C40010	198.19
1"	1.0000	25.40	1	25.40	4	101.60	6 1/2	165.10	3	TGJ096	C40011	246.94
1-1/4	1.2500	31.75	1 1/4	31.75	2	50.80	4 1/2	114.30	3	TGJ097	C40048	228.16
1-1/4	1.2500	31.75	1 1/4	31.75	3	76.20	5 1/2	139.70	3	TGJ098	C40012	243.84
1-1/4	1.2500	31.75	1 1/4	31.75	4	101.60	6 1/2	165.10	3	TGJ099	C40013	248.01
1-1/4	1.2500	31.75	1 1/4	31.75	6	152.40	8 1/2	215.90	3	TGJ100	C40014	338.82
1-1/2	1.5000	38.10	1 1/4	31.75	2	50.80	4 1/2	114.30	3	TGJ101	C43244	376.17
1-1/2	1.5000	38.10	1 1/4	31.75	3	76.20	5 1/2	139.70	3	TGJ102	C43247	382.92
1-1/2	1.5000	38.10	1 1/4	31.75	4	101.60	6 1/2	165.10	3	TGJ103	C43250	394.11
1-1/2	1.5000	38.10	1 1/4	31.75	6	152.40	8 1/2	215.90	3	TGJ104	C43253	412.59
2	2.0000	50.80	2	50.80	2	50.80	5 3/4	146.05	3	TGJ105	C43256	524.54
2	2.0000	50.80	2	50.80	3	76.20	6 3/4	171.45	3	TGJ106	C43259	539.32
2	2.0000	50.80	2	50.80	4	101.60	7 3/4	196.85	3	TGJ107	C43262	573.13
2	2.0000	50.80	2	50.80	6	152.40	9 3/4	247.65	3	TGJ108	C43265	665.06

CUTTING TOOLS

ROUGHERS, COBALT, MULTI-FLUTE, CENTER CUTTING, SQUARE END

- M42 cobalt substrate
- Heavy cross-section for high rigidity, High red hardness for high heat conditions
- 30° helix angle, right-hand cut
- 45° chamfer
- Ideal for profiling and plunge cutting operations
- Use in free-machining stainless steel, alloy steel, medium- and low-carbon steel



TGJ109



DIA IN	Decimal	Metric	Shank Dia IN	MM	Length of Cut IN	MM	OAL IN	MM	Flutes	Model No.	Mfg. No.	Price /Each
3/16	0.1875	4.76	3/8	9.53	1/2	12.70	2 3/8	60.33	4	TGJ109	C30709	36.89
1/4	0.2500	6.35	3/8	9.53	1/4	6.35	2 1/16	52.39	3	TGJ110	C31173	36.89
1/4	0.2500	6.35	3/8	9.53	5/8	15.88	2 7/16	61.91	4	TGJ111	C31174	42.07
1/4	0.2500	6.35	3/8	9.53	1 1/4	31.75	3 1/8	79.38	4	TGJ112	C31175	49.26
5/16	0.3125	7.94	3/8	9.53	3/4	19.05	2 1/2	63.50	4	TGJ113	C31176	42.07
3/8	0.3750	9.53	3/8	9.53	3/8	9.53	2 5/32	54.77	4	TGJ114	C31177	33.24
3/8	0.3750	9.53	3/8	9.53	3/4	19.05	2 1/2	63.50	4	TGJ115	C31178	42.07
3/8	0.3750	9.53	3/8	9.53	1 1/2	38.10	3 1/4	82.55	4	TGJ116	C31179	49.26
7/16	0.4375	11.11	1/2	12.70	1 1/4	31.75	3 1/4	82.55	4	TGJ117	C30710	67.81
1/2	0.5000	12.70	1/2	12.70	1/2	12.70	2 1/2	63.50	4	TGJ118	C31180	50.85
1/2	0.5000	12.70	1/2	12.70	1 1/4	31.75	3 1/4	82.55	4	TGJ119	C31181	56.11
1/2	0.5000	12.70	1/2	12.70	2	50.80	4	101.60	4	TGJ120	C31182	72.17
1/2	0.5000	12.70	1/2	12.70	3	76.20	5	127.00	4	TGJ121	C30732	108.82
5/8	0.6250	15.88	5/8	15.88	5/8	15.88	2 3/4	69.85	4	TGJ122	C31183	62.51
5/8	0.6250	15.88	5/8	15.88	1 5/8	41.28	3 3/4	95.25	4	TGJ123	C31184	79.13
5/8	0.6250	15.88	5/8	15.88	2 1/2	63.50	4 5/8	117.48	4	TGJ124	C31190	103.79
3/4	0.7500	19.05	3/4	19.05	3/4	19.05	2 7/8	73.03	4	TGJ125	C31193	73.26
3/4	0.7500	19.05	3/4	19.05	1 5/8	41.28	3 7/8	98.43	4	TGJ126	C31194	90.98
3/4	0.7500	19.05	3/4	19.05	3	76.20	5 1/4	133.35	4	TGJ127	C31195	115.63
1	1.0000	25.40	1	25.40	1	25.40	3 1/2	88.90	5	TGJ128	C31202	112.52
1	1.0000	25.40	1	25.40	2	50.80	4 1/2	114.30	5	TGJ129	C31197	139.14
1	1.0000	25.40	1	25.40	3	76.20	5 1/2	139.70	5	TGJ130	C31198	168.61
1	1.0000	25.40	1	25.40	4	101.60	6 1/2	165.10	5	TGJ131	C31199	180.34
1 1/4	1.2500	31.75	1 1/4	31.75	2	50.80	4 1/2	114.30	6	TGJ132	C31203	182.98
1 1/4	1.2500	31.75	1 1/4	31.75	3	76.20	5 1/2	139.70	6	TGJ133	C31204	240.81
1 1/4	1.2500	31.75	1 1/4	31.75	4	101.60	6 1/2	165.10	6	TGJ134	C31205	272.93
1 1/2	1.5000	38.10	1 1/4	31.75	3	76.20	5 1/2	139.70	6	TGJ135	C31206	319.38
2	2.0000	50.80	2	50.80	3	76.20	6 3/4	171.45	6	TGJ136	C31207	468.38
2	2.0000	50.80	2	50.80	4	101.60	7 3/4	196.85	6	TGJ137	C31208	522.30
2	2.0000	50.80	2	50.80	6	152.40	9 3/4	247.65	6	TGJ138	C31209	673.01

ROUGHERS, COBALT, MULTI-FLUTE, CENTER CUTTING, BALL NOSE

- M42 cobalt substrate
- Heavy cross-section for high rigidity, High red hardness for high heat conditions
- 30° helix angle, right-hand cut
- Ideal for peripheral cuts and contouring operations
- Use in free-machining stainless steel, alloy steel, medium- and low-carbon steel



TGJ139



DIA IN	Decimal	Metric	Shank Dia IN	MM	Length of Cut IN	MM	OAL IN	MM	Flutes	Model No.	Mfg. No.	Price /Each
1/2	0.5000	12.70	1/2	12.70	1 1/4	31.75	3 1/4	82.55	4	TGJ139	C30888	87.84
5/8	0.6250	15.88	5/8	15.88	1 5/8	41.28	3 3/4	95.25	4	TGJ140	C30889	108.75
3/4	0.7500	19.05	3/4	19.05	1 5/8	41.28	3 7/8	98.43	4	TGJ141	C30890	115.77
3/4	0.7500	19.05	3/4	19.05	3	76.20	5 1/4	133.35	4	TGJ142	C30900	152.14
1	1.0000	25.40	1	25.40	2	50.80	4 1/2	114.30	5	TGJ143	C30891	172.83
1	1.0000	25.40	1	25.40	4	101.60	6 1/2	165.10	5	TGJ144	C30901	235.16
1 1/4	1.2500	31.75	1 1/4	31.75	2	50.80	4 1/2	114.30	6	TGJ145	C30892	212.22
1 1/4	1.2500	31.75	1 1/4	31.75	4	101.60	6 1/2	165.10	6	TGJ146	C30708	295.65
2	2.0000	50.80	2	50.80	4	101.60	7 3/4	196.85	6	TGJ147	C30893	396.56
2	2.0000	50.80	2	50.80	6	152.40	9 3/4	247.65	6	TGJ148	C30894	507.98



RMP-ECO® cleaning products
are the Green solution to
industrial cleaning.
All RMP-ECO® products are
EcoLogo® certified.
RMP-ECO® is safe for you and
the environment.



SOLID CARBIDE BURRS

- Wide selection of shapes and sizes
- Constructed from solid carbide
- Bright finish
- Offered in right hand spiral cut and double cut
- Available with: 1/8 solid carbide (shank A), 1/8 hardened steel (shank B) or 1/4" hardened steel (shank C)



CUT STYLES	
RH Spiral Cut	Right hand spiral cut produces a smooth finish for general purpose use on steel, cast iron and other ferrous and non-ferrous materials
Double Cut	Double cut style has right and left hand helical flutes combined to produce a chisel-type cutting tooth. This feature results in faster penetration and stock removal with minimum bounce or chatter. This results in higher productivity with less operator fatigue and a good finish on a variety of workpiece materials



CLE-SA – CYLINDER SHAPE WITH NO END CUT

INCH

Cutting Diameter			OAL	USCTI No.	Shank Type	RH Spiral Cut		Double Cut	
Fract	Dec	Metric				Model No.	Price /Each	Model No.	Price /Each
3/32	0.0938	2.38	1-1/2	SA-42	A	TGI541	7.83	TGI632	8.51
1/8	0.1250	3.18	1-1/2	SA-43	A	TGI542	7.21	TGI633	7.87
3/16	0.1875	4.76	2	SA-14	C	TGI543	15.79	—	—
1/4	0.2500	6.35	2	SA-1	C	TGI544	13.56	TGI634	14.82
5/16	0.3125	7.94	2-1/2	SA-2	C	TGI545	18.84	TGI635	19.38
3/8	0.3750	9.53	2-1/2	SA-3	C	TGI546	18.79	TGI636	20.18
7/16	0.4375	11.11	2-3/4	SA-4	C	TGI547	27.38	—	—
1/2	0.5000	12.70	2-3/4	SA-5	C	TGI548	27.40	TGI637	29.68
5/8	0.6250	15.88	2-3/4	SA-6	C	—	—	TGI638	39.84
3/4	0.7500	19.05	2-3/4	SA-7	C	—	—	TGI639	50.73
1	1.000	25.40	2-3/4	SA-9	C	TGI549	74.12	TGI640	81.53

TGI541



METRIC

Cutting Diameter			OAL	USCTI No.	Shank Type	RH Spiral Cut		Double Cut	
MM	Dec					Model No.	Price /Each	Model No.	Price /Each
3	0.1181	38.1	SA-43	A	—	—	—	TGI641	7.42
6	0.2362	50.8	SA-1	C	—	—	—	TGI642	16.31
7.94	0.3125	63.5	SA-2	C	—	—	—	TGI643	19.59
9.53	0.3750	63.5	SA-3	C	—	—	—	TGI644	21.28
12.7	0.5000	69.9	SA-5	C	—	—	—	TGI645	30.45

CLE-SB – CYLINDER SHAPE WITH END CUT

INCH

Cutting Diameter			OAL	USCTI No.	Shank Type	RH Spiral Cut		Double Cut	
Fract	Dec	Metric				Model No.	Price /Each	Model No.	Price /Each
1/8	0.1250	3.18	1-1/2	SB-43	A	TGI550	7.68	—	—
1/8	0.1250	3.18	2	SB-11	C	TGI551	16.31	—	—
3/16	0.1875	4.76	2	SB-14	C	TGI552	16.31	—	—
1/4	0.2500	6.35	1-7/16	SB-51	B	TGI553	16.15	—	—
1/4	0.2500	6.35	2	SB-1	C	TGI554	15.67	TGI646	16.43
3/8	0.3750	9.53	2-1/2	SB-3	C	TGI555	24.80	TGI647	26.21
1/2	0.5000	12.70	2-3/4	SB-5	C	TGI556	36.74	TGI648	39.44
5/8	0.6250	15.88	2-3/4	SB-6	C	—	—	TGI649	50.95

TGI550



METRIC

Cutting Diameter			OAL	USCTI No.	Shank Type	RH Spiral Cut		Double Cut	
MM	Dec					Model No.	Price /Each	Model No.	Price /Each
3	0.1181	38.1	SB-43	A	—	TGI557	8.18	TGI650	8.34
6	0.2362	50.8	SB-1	C	—	—	—	TGI651	18.62
7.94	0.3125	63.5	SB-2	C	—	—	—	TGI652	29.38
9.53	0.3750	63.5	SB-3	C	—	—	—	TGI653	30.99
12.7	0.5000	69.9	SB-5	C	—	—	—	TGI654	44.83
15.88	0.6250	69.9	SB-6	C	—	TGI558	44.38	TGI655	47.94

CLE-SC – CYLINDER SHAPE WITH BALL NOSE

INCH

Cutting Diameter			OAL	USCTI No.	Shank Type	RH Spiral Cut		Double Cut	
Fract	Dec	Metric				Model No.	Price /Each	Model No.	Price /Each
3/32	0.0938	2.38	1-1/2	SC-41	A	TGI559	8.37	—	—
1/8	0.1250	3.18	1-1/2	SC-42	A	TGI560	7.26	TGI656	7.93
1/8	0.1250	3.18	2	SC-11	C	—	—	TGI657	16.46
3/16	0.1875	4.76	2	SC14	C	TGI561	16.15	—	—
1/4	0.2500	6.35	2	SC-1	C	TGI562	15.42	TGI658	16.43
5/16	0.3125	7.94	2-1/2	SC-2	C	—	—	TGI659	20.81
3/8	0.3750	9.53	2-1/2	SC-3	C	TGI563	20.13	TGI660	21.66
1/2	0.5000	12.70	2-3/4	SC-5	C	TGI564	27.65	TGI661	30.38
5/8	0.6250	15.88	2-3/4	SC-6	C	—	—	TGI662	39.84

TGI559



METRIC

Cutting Diameter			OAL	USCTI No.	Shank Type	RH Spiral Cut		Double Cut	
MM	Dec					Model No.	Price /Each	Model No.	Price /Each
3.0	0.1181	38.1	SC-43	A	—	TGI565	7.26	TGI663	7.93
3.97	0.1562	38.1	SC-52	A	—	—	—	TGI664	34.79
4.76	0.1875	38.1	SC-53	A	—	—	—	TGI665	28.39
6.0	0.2362	50.8	SC-1	C	—	—	—	TGI666	17.03
6.35	0.2500	44.5	SC-51	B	—	—	—	TGI667	21.18
7.94	0.3125	63.5	SC-2	C	—	—	—	TGI668	20.90
9.53	0.3750	63.5	SC-3	C	—	—	—	TGI669	22.29
12.7	0.5000	69.9	SC-5	C	—	—	—	TGI670	30.98
15.88	0.6250	69.9	SC-6	C	—	—	—	TGI671	44.20
19.05	0.7500	69.9	SC-7	C	—	—	—	TGI672	53.82

CLE-SF – TREE SHAPE WITH BALL NOSE

INCH

Cutting Diameter			OAL	USCTI No.	Shank Type	RH Spiral Cut		Double Cut	
Fract	Dec	Metric				Model No.	Price /Each	Model No.	Price /Each
1/8	0.1250	3.18	1-1/2	SF-41	A	TGI566	7.33	—	—
1/8	0.1250	3.18	1-1/2	SF-42	A	TGI567	7.33	—	—
1/4	0.2500	6.35	2	SF-1	C	TGI568	16.67	TGI673	17.69
3/8	0.3750	9.53	2-1/2	SF-3	C	TGI569	21.02	TGI674	23.00
1/2	0.5000	12.70	2-1/2	SF-13	C	TGI570	27.11	—	—
1/2	0.5000	12.70	2-3/4	SF-5	C	TGI571	27.52	TGI675	30.29
5/8	0.6250	15.88	2-3/4	SF-6	C	—	—	TGI676	39.51
3/4	0.7500	19.05	2-3/4	SF-7	C	—	—	TGI677	55.36
3/4	0.7500	19.05	3	SF-14	C	TGI572	55.75	—	—
3/4	0.7500	19.05	3-1/4	SF-15	C	TGI573	69.93	—	—

TGI566



METRIC

Cutting Diameter			OAL	USCTI No.	Shank Type	RH Spiral Cut		Double Cut	
MM	Dec					Model No.	Price /Each	Model No.	Price /Each
3	0.1181	38.1	SF-42	A	—	TGI574	7.42	TGI678	7.69
4.76	0.1875	38.1	SF-53	A	—	—	—	TGI679	20.40
6	0.2362	50.8	SF-1	C	—	—	—	TGI680	18.54
6.35	0.2500	44.5	SF-51	B	—	TGI575	17.54	TGI681	18.79
9.53	0.3750	63.5	SF-3	C	—	—	—	TGI682	23.88
12.7	0.5000	69.9	SF-5	C	—	—	—	TGI683	30.03

CUTTING TOOLS

SOLID CARBIDE BURRS (CONT'D)

CLE-SG – TREE SHAPE POINTED END

INCH

Cutting Diameter			OAL	USCTI No.	Shank Type	RH Spiral Cut		Double Cut	
Fract	Dec	Metric				Model No.	Price /Each	Model No.	Price /Each
1/8	0.1250	3.18	1-1/2	SG-41	A	TGI576	8.09	—	—
1/8	0.1250	3.18	1-1/2	SG-42	A	TGI577	7.30	—	—
3/16	0.1875	4.76	1-1/2	SG-53	A	TGI578	17.65	—	—
1/4	0.2500	6.35	1-3/4	SG-51	B	TGI579	15.78	—	—
1/4	0.2500	6.35	2	SG-1	C	TGI580	16.67	TGI684	17.69
3/8	0.3750	9.53	2-1/2	SG-3	C	TGI581	22.40	TGI685	24.85
1/2	0.5000	12.70	2-1/2	SG-13	C	—	—	TGI686	31.13
1/2	0.5000	12.70	2-3/4	SG-5	C	TGI582	27.49	TGI687	30.21
5/8	0.6250	15.88	2-3/4	SG-6	C	—	—	TGI688	39.51

CLE-SM – POINTED CONE SHAPE

INCH

Cutting Diameter			OAL	Inverted Angle	USCTI No.	Shank Type	RH Spiral Cut		Double Cut	
Fract	Dec	Metric					Model No.	Price /Each	Model No.	Price /Each
1/8	0.1250	3.18	1-1/2	14°	SM-42	A	TGI584	8.72	TGI695	8.96
1/4	0.2500	6.35	1-7/8	22°	SM-51	B	TGI585	16.15	—	—
1/4	0.2500	6.35	2	22°	SM-1	C	TGI586	18.55	TGI696	19.15
1/4	0.2500	6.35	2	14°	SM-2	C	TGI587	18.88	TGI697	19.92
1/4	0.2500	6.35	2	10°	SM-3	C	TGI588	19.23	TGI698	20.81
3/8	0.3750	9.53	2-1/2	28°	SM-4	C	—	—	TGI699	29.81
1/2	0.5000	12.70	2-3/4	28°	SM-5	C	TGI589	28.33	TGI700	31.18
5/8	0.6250	15.88	2-7/8	31°	SM-6	C	TGI590	37.45	TGI701	41.20

CLE-SE – OVAL SHAPE

INCH

Cutting Diameter			OAL	USCTI No.	Shank Type	RH Spiral Cut		Double Cut	
Fract	Dec	Metric				Model No.	Price /Each	Model No.	Price /Each
1/8	0.1250	3.18	1-1/2	SE-41	A	TGI594	7.83	—	—
1/4	0.2500	6.35	1-5/8	SE-51	B	TGI595	15.78	—	—
1/4	0.2500	6.35	2	SE-1	C	TGI596	17.17	TGI707	17.43
3/8	0.3750	9.53	2-3/8	SE-3	C	TGI597	19.93	TGI708	21.17
1/2	0.5000	12.70	2-5/8	SE-5	C	TGI598	27.11	TGI709	29.32
5/8	0.6250	15.88	2-3/4	SE-6	C	TGI599	39.17	—	—
3/4	0.7500	19.05	2-3/4	SE-7	C	—	—	TGI710	54.34

CLE-SL – TAPER SHAPE RADIUS END 14°

INCH

Cutting Diameter			OAL	Inverted Angle	USCTI No.	Shank Type	RH Spiral Cut		Double Cut	
Fract	Dec	Metric					Model No.	Price /Each	Model No.	Price /Each
1/8	0.1250	3.18	1-1/2	8°	SL-42	A	TGI601	8.25	—	—
1/4	0.2500	6.35	2	14°	SL-1	C	TGI602	17.69	TGI712	18.96
5/16	0.3125	7.94	2-3/4	14°	SL-2	C	TGI603	20.76	TGI713	22.82
3/8	0.3750	9.53	2-15/16	14°	SL-3	C	TGI604	24.43	TGI714	26.87
1/2	0.5000	12.70	3	14°	SL-4	C	TGI605	29.47	TGI715	32.88
5/8	0.6250	15.88	3-3/16	14°	SL-6	C	TGI606	47.72	TGI716	53.13

CLE-SE – BALL SHAPE

INCH

Cutting Diameter			OAL	USCTI No.	Shank Type	RH Spiral Cut		Double Cut	
Fract	Dec	Metric				Model No.	Price /Each	Model No.	Price /Each
1/16	0.0625	1.59	1-1/2	SD-40	A	TGI609	7.48	—	—
3/32	0.0938	2.38	1-1/2	SD-41	A	TGI610	7.48	—	—
1/8	0.1250	3.18	1-1/2	SD-42	A	TGI611	7.48	TGI720	8.22
1/8	0.1250	3.18	2	SD-11	C	TGI612	14.33	TGI721	15.17
3/16	0.1875	4.76	1-1/2	SD-53	A	TGI613	18.51	—	—
3/16	0.1875	4.76	2	SD-14	C	TGI614	14.33	TGI722	15.17
1/4	0.2500	6.35	1-3/4	SD-51	B	TGI615	16.15	—	—
1/4	0.2500	6.35	2	SD-1	C	TGI616	14.33	TGI723	15.17
5/16	0.3125	7.94	2-1/32	SD-2	C	TGI617	15.67	TGI724	16.93
3/8	0.3750	9.53	2-5/64	SD-3	C	TGI618	15.79	TGI725	17.11
1/2	0.5000	12.70	2-13/64	SD-5	C	TGI619	21.34	TGI726	23.20
5/8	0.6250	15.88	2-5/16	SD-6	C	TGI620	28.43	TGI727	30.91
3/4	0.7500	19.05	2-7/16	SD-7	C	TGI621	36.64	TGI728	39.67
1	1.0000	25.40	2-11/16	SD-9	C	TGI622	60.77	—	—



TGI576



METRIC

Cutting Diameter			OAL	USCTI No.	Shank Type	RH Spiral Cut		Double Cut	
MM	Dec					Model No.	Price /Each	Model No.	Price /Each
3	0.1181		38.1	SG-44	A	TGI583	5.83	TGI689	6.42
4.76	0.1875		38.1	SG-53	A	—	—	TGI690	18.85
6	0.2362		50.8	SG-1	C	—	—	TGI691	18.54
7.94	0.3125		63.5	SG-2	C	—	—	TGI692	23.40
9.53	0.3750		63.5	SG-3	C	—	—	TGI693	25.95
12.7	0.5000		69.9	SG-5	C	—	—	TGI694	30.67

TGI584



METRIC

Cutting Diameter			OAL	Inverted Angle	USCTI No.	Shank Type	RH Spiral Cut		Double Cut	
MM	Dec						Model No.	Price /Each	Model No.	Price /Each
3.0	0.1181		38.1	14°	SM-42	A	TGI591	9.94	TGI702	10.41
4.76	0.1875		38.1	16°	SM-53	A	TGI592	23.31	—	—
6.0	0.2362		50.8	14°	SM-2	C	—	—	TGI703	22.75
9.53	0.3750		63.5	28°	SM-4	C	—	—	TGI704	31.99
12.7	0.5000		69.9	28°	SM-5	C	TGI593	28.62	TGI705	31.27
15.88	0.6250		66.7	31°	SM-6	C	—	—	TGI706	41.10

TGI594



METRIC

Cutting Diameter			OAL	USCTI No.	Shank Type	RH Spiral Cut		Double Cut	
MM	Dec					Model No.	Price /Each	Model No.	Price /Each
3.0	0.1181		38.1	SE-41	A	TGI600	8.54	—	—
4.76	0.1875		38.1	SE-53	A	—	—	TGI711	25.85

TGI601



METRIC

Cutting Diameter			OAL	Inverted Angle	USCTI No.	Shank Type	RH Spiral Cut		Double Cut	
MM	Dec						Model No.	Price /Each	Model No.	Price /Each
3.0	0.1181		38.1	8°	SL-41	A	TGI607	9.17	TGI717	10.04
9.53	0.3750		74.6	14°	SL-3	C	TGI608	24.36	TGI718	26.71
12.7	0.5000		76.2	14°	SL-4	C	—	—	TGI719	32.85

TGI609



METRIC

Cutting Diameter			OAL	USCTI No.	Shank Type	RH Spiral Cut		Double Cut	
MM	Dec					Model No.	Price /Each	Model No.	Price /Each
1.59	0.0625		38.1	SD-40	A	TGI623	8.11	—	—
3	0.1181		38.1	SD-42	A	TGI624	7.88	TGI729	8.30
4.76	0.1875		38.1	SD-53	A	TGI625	18.71	TGI730	19.46
6	0.2362		50.8	SD-1	C	TGI626	15.10	TGI731	19.82
6.35	0.2500		44.45	SD-51	B	—	—	TGI732	20.06
9.53	0.3750		52.8	SD-3	C	TGI627	15.98	TGI733	16.89
12.7	0.5000		56.0	SD-5	C	TGI628	21.15	TGI734	23.00
19.05	0.7500		61.9	SD-7	C	—	—	TGI735	44.72

SOLID CARBIDE BURRS (CONT'D)



CLE-SH – FLAME SHAPED

INCH

Cutting Diameter			USCTI No.		Shank Type	RH Spiral Cut Model No.	Price /Each	Double Cut Model No.	Price /Each
Fract	Dec	Metric	OAL						
1/8	0.1250	3.18	1-1/2	SH-41	A	TGI629	7.89	—	—
5/16	0.3125	7.94	2-1/2	SH-2	C	—	—	TGI736	23.13
1/2	0.5000	12.70	3	SH-5	C	TGI630	34.97	TGI737	39.70

METRIC

Cutting Diameter			USCTI No.		Shank Type	RH Spiral Cut Model No.	Price /Each	Double Cut Model No.	Price /Each
MM	Dec		OAL						
4.76	0.1875		38.1	SH-53	A	TGI631	25.86	TGI738	26.82

TGI629



RIGHT HAND SPIRAL BURR SETS

Cutting Diameter			Shank Diameter	Number of Pieces	Shank Type	Set Contains USCTI Nos.	Model No.	Mfg. No.	Price /Each
Fract	Dec	Metric							
3/32 & 1/8	0.0938 -0.1250	2.38 - 3.18	1/8	9	A	SA-42, SA-43, SC-41, SC-42, SF-42, SG-42, SM-43, SE-41, SD-42	TGI629	C17760	96.49
1/4	0.2500	6.35	1/8	9	B	SA-51, SA-51-2, SC-51, SF-51, SG-51, SM-51, SE-51, SD-51, SN-51	TGI630	C17761	143.38
1/4	0.2500	6.35	1/4	8	C	SA-1, SC-1, SF-1, SG-1, SM-2, SE-1, SL-1, SD-1	TGI631	C17762	156.40
1/2	0.5000	12.7	1/4	8	C	SA-5, SC-5, SF-5, SG-5, SM-5, SE-5, SL-4, SD-5	TGI739	C17763	230.04



SOLID CARBIDE BURRS – 1/4" X 6" LONG SHANK

SC90 DOUBLE CUT

- 6" overall length
- Double cut
- Excellent control allows for clean finish
- 1/4" shank
- Ideal for extra tough materials



CYLINDER SHAPE

Model No.	Mfg. No.	No.	Head Dia."	Flute Length"	Price /Each
BL422	SC90601	SA-1L6	1/4	1/2	13.89
BL423	SC90602	SA-3L6	3/8	3/4	13.89
BL424	SC90603	SA-5L6	1/2	1	16.63



CYLINDER SHAPE WITH RADIUS END

Model No.	Mfg. No.	No.	Head Dia."	Flute Length"	Price /Each
BL425	SC90604	SC-1L6	1/4	1/2	17.29
BL426	SC90605	SC-3L6	3/8	3/4	23.28
BL427	SC90606	SC-5L6	1/2	1	36.59



BALL SHAPE

Model No.	Mfg. No.	No.	Head Dia."	Flute Length"	Price/Each
BL428	SC90607	SD-1L6	1/4	3/16	15.96
BL429	SC90608	SD-3L6	3/8	5/16	19.15
BL430	SC90609	SD-5L6	1/2	7/16	25.77



OVAL SHAPE

Model No.	Mfg. No.	No.	Head Dia."	Flute Length"	Price /Each
BL431	SC90610	SE-1L6	1/4	3/8	19.21
BL432	SC90611	SE-3L6	3/8	5/8	23.28
BL433	SC90612	SE-5L6	1/2	7/8	34.09

CLARKSON OSBORN

TREE SHAPE - RADIUS END

Model No.	Mfg. No.	No.	Head Dia."	Flute Length"	Price /Each
BL434	SC90613	SF-1L6	1/4	1/2	18.03
BL435	SC90614	SF-3L6	3/8	3/4	22.80
BL436	SC90615	SF-5L6	1/2	1	33.63



TREE SHAPE - POINTED END

Model No.	Mfg. No.	No.	Head Dia."	Flute Length"	Price /Each
BL437	SC90616	SG-1L6	1/4	1/2	18.03
BL438	SC90617	SG-3L6	3/8	3/4	24.26
BL439	SC90618	SG-5L6	1/2	1	33.14



FLAME SHAPE

Model No.	Mfg. No.	No.	Head Dia."	Flute Length"	Price /Each
BL440	SC90619	SH-2L6	5/16	3/4	23.93
BL441	SC90620	SH-5L6	1/2	1 1/4	48.72



14° DEGREE TAPER - RADIUS END

Model No.	Mfg. No.	No.	Head Dia."	Flute Length"	Price /Each
BL442	SC90621	SL-1L6	1/4	5/8	18.46
BL443	SC90622	SL-3L6	3/8	1 1/16	29.08
BL444	SC90623	SL-4L6	1/2	1 1/8	35.61



PRICING

The prices shown in this catalogue are for "REFERENCE AND BUDGET PURPOSES ONLY" as of July 2012, and should be used exclusively as a guideline.

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Canada's Best Value in Industrial Tools... Period.



aurora tools®

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CANADA'S LEADER IN WELDING SUPPLIES



ABRASIVES

REINFORCED CUT-OFF WHEELS

Typical Applications

- Cutting sheet metal
- Cutting pipe
- Foundry/forge shops – gate/riser removal, cutting forgings
- Metal plate dimensioning
- Ship building – metal fabrication
- Tool room – cutting drill bits, steel bar, tubing, metallurgical sectioning
- Construction – concrete/masonry work

To be used with:

- Portable grinder small diameter (2" - 4")
- Right angle grinder (4" - 9")
- Circular saw (6" - 8")
- High-speed gas/electric saw (12" - 16")
- Stationary machine large diameter (10" - 30")
- Chop saw (10" - 16")

PORTABLE SMALL DIAMETER REINFORCED CUT-OFF WHEELS



NORZON PLUS TYPE 01

- Patented Norton SG (ceramic alumina)/ NorZon (zirconia alumina) grain combination
- Highly advanced bond system
- State-of-the-art manufacturing
- NorZon Plus: Up to 3x life versus aluminum oxide wheels on carbon steel, stainless and cast iron, 40% faster cut rate versus standard aluminum oxide wheels
- Superior wheel balance



CHARGER TYPE 01

- A unique blend of premium NorZon (zirconia alumina) and aluminum oxide
- Free cutting
- 2x the life of aluminum oxide wheels
- Effectively cuts a variety of metals from alloys and stainless to grey iron
- Long life and economical performance-to-price ratio lower total cost



NORTON

Model No.	Mfg. No.	D" x T" x H"	Max RPM	Price /Each
NS138	C0303514NZP	3 x 0.035 x 1/4	25 465	5.44
NS139	C0303538NZP	3 x 0.035 x 3/8	25 465	5.18
NS140	C0311614NZP	3 x 1/16 x 1/4	25 465	5.44
NS142	C0311638NZP	3 x 1/16 x 3/8	25 465	5.44
NS145	C031838NZP	3 x 1/8 x 3/8	25 465	6.69
NR003	C0403538NZP	4 x 0.035 x 3/8	19 100	7.42
NR004	C0411614NZP	4 x 1/16 x 1/4	19 100	7.42
NR005	C0411638NZP	4 x 1/16 x 3/8	19 100	7.42
NR006	C041838NZP	4 x 1/8 x 3/8	19 100	10.13

NORTON

Model No.	Mfg. No.	D" x T" x H"	Max RPM	Price /Each
NS146	C0303514GFC	3 x 0.035 x 1/4	25 465	3.01
NS147	C0311614GFC	3 x 1/16 x 1/4	25 465	3.01
NS148	C0403514GFC	4 x 0.035 x 3/8	19 100	4.29
NS149	C0411614GFC	4 x 1/16 x 3/8	19 100	4.29
NS150	C041838GFC	4 x 1/8 x 3/8	19 100	4.94

GEMINI TYPE 01

- Advanced formulation
- Free cutting
- Maximizes the performance of conventional aluminum oxide abrasive
- Engineered to cut hard materials

NORTON



Model No.	Mfg. No.	D" x T" x H"	Max RPM	Price /Each
NS172	C0303514GFC	3 x 0.035 x 1/4	25 465	2.14
NS174	C0303538GFC	3 x 0.035 x 3/8	25 465	2.14
NS176	C0311614GFC	3 x 1/16 x 1/4	25 465	2.14
NS178	C0311638GFC	3 x 1/16 x 3/8	25 465	2.14
NS180	C031814GFC	3 x 1/8 x 1/4	25 465	2.56
NS182	C031838GFC	3 x 1/8 x 3/8	25 465	2.56
NS184	C0403514GFC	4 x 0.035 x 1/4	19 100	3.10
NS186	C0403538GFC	4 x 0.035 x 3/8	19 100	3.10
NS188	C0411614GFC	4 x 1/16 x 1/4	19 100	3.10
NS189	C0411638GFC	4 x 1/16 x 3/8	19 100	3.10
NS191	C041814GFC	4 x 1/8 x 1/4	19 100	3.43
NS192	C041838GFC	4 x 1/8 x 3/8	19 100	3.43

D x T x H: Diameter x Thickness x Hub Size

3" AIR CUT-OFF TOOL

- Polyurethane handle reduces operator fatigue and vibration
- Power/speed regulator allows for easy rpm adjustment
- Twin-bearing design for smooth operation and cut off powerfully
- Wrenches included



aurora tools®

Model No.	Cutting Wheel in mm	Free Speed RPM	Average Air Consumption CFM	Air Inlet	Hose Size in mm	Horsepower HP	Vibration Less Than m/s²	Sound Pressure Level dB(A)	Net Weight lbs. kg	Price /Each
THZ677	3 76.2	21 000	3	1/4"-18 NPT	3/8 9.5	0.45	0.2	81	1.8 0.82	62.20

RIGHT ANGLE GRINDER REINFORCED CUT-OFF WHEEL

RIGHTCUT EVO

- Quality aluminum oxide grain
- Consistent performance at a competitive price
- Ideal for small jobs on a variety of metal applications from carbon to stainless steels
- Unique reinforcement design
- Provides safety, strength and straight cuts
- Extra thin
- Quick cutting action and low kerf loss



NORTON

Model No.	Mfg. No.	D"	x	Size T"	x	H"	Max RPM	Price /Each
TYPE 01 - CUT OFF								
NS004	RC45G	4 1/2	x	3/64	x	7/8	13 580	2.84
NS003	RC5G	5	x	3/64	x	7/8	12 225	3.24
NS209	RC6G	6	x	3/64	x	7/8	10 185	3.99
NS211	RC7G	7	x	1/16	x	7/8	8730	4.16
TYPE 27 - DEPRESSED CENTRE CUT OFF								
NS093	RC45G27	4 1/2	x	3/64	x	7/8	13 580	3.19
NS094	RC5G27	5	x	3/64	x	7/8	12 225	3.89
NS095	RC6G27	6	x	3/64	x	7/8	10 185	4.22
NS096	RC7G27	7	x	1/16	x	7/8	8730	4.88

CHOP SAW REINFORCED CUT-OFF WHEELS

GEMINI TYPE 01

- **Free Cut:** side reinforced; engineered for larger cross-sections and/or hard-to-cut materials, resist breakage and provide straight cuts
- **Long Life:** side reinforced; ideal for small cross-section work pieces, resist breakage and provide straight cuts
- **Rapid Cut:** centrally reinforced; free cutting, non-binding; burr- and burn-free cuts rough sides
- **Aluminum:** specially formulated bond for aluminum and other soft, nonferrous metals, no wax or rubber fillers; free cutting, resists loading, no surface contamination



NORTON

Model No.	Mfg. No.	D"	x	Size T"	x	H"	Max RPM	Price /Each
GEMINI LONG LIFE								
NS255	CO10764G	10	x	7/64	x	1	6110	8.40
NS256	CO12764G	12	x	7/64	x	1	5095	6.23
NS259	CO14764GLL	14	x	7/64	x	1	4365	8.52
NS261	CO16764G	16	x	7/64	x	1	3820	14.78
GEMINI RAPID CUT								
NS257	CO12764GRC	12	x	7/64	x	1	5095	6.91
NS260	CO14764GRC	14	x	7/64	x	1	4365	8.98
GEMINI ALUMINUM								
NS258	CO14764GALU	14	x	7/64	x	1	4365	11.10

CHARGER TYPE 01

- Zirconia alumina/aluminum oxide abrasive blend, 2x the life and cut rate of aluminum oxide
- High performance resin bond, free-cutting; burn-free cut
- **Free Cut (CH):** Side reinforced; engineered for larger cross-sections and/or hard-to-cut materials, resist breakage and provide straight cuts
- **Long Life (LL):** Side reinforced; ideal for small cross-section work pieces, resist breakage and provide straight cuts
- **Rapid Cut (RC):** Centrally reinforced, non-binding, free cutting, rough sides, burr- and burn-free cuts



NORTON

Model No.	Mfg. No.	D"	x	Size T"	x	H"	Max RPM	Price /Each
NS251	CO12764CH	12	x	7/64	x	1	5095	15.07
NS252	CO14764CHLL	14	x	7/64	x	1	4365	20.30
NS253	CO14764CHRC	14	x	7/64	x	1	4365	17.92
NS254	CO16764LL	16	x	7/64	x	1	3820	26.32

CHARGER RIGHTCUT

- Durable zirconia alumina abrasive
- 3x the life and 2x the cut rate of standard aluminum oxide wheels
- Excels on a broad range of materials, from alloys and stainless to gray iron
- Unique reinforcement design
- Provides safety, strength and straight cuts
- Extra thin
- Quick cutting action and low kerf loss



NORTON

Model No.	Mfg. No.	D"	x	Size T"	x	H"	Max RPM	Price /Each
TYPE 01 - CUT OFF								
NS200	RC45CH	4 1/2	x	1/16	x	7/8	13 580	3.90
NS201	RC5CH	5	x	1/16	x	7/8	12 225	4.50
NS202	RC6CH	6	x	1/16	x	7/8	10 185	5.11
NS203	22675	7	x	1/16	x	7/8	8730	17.69
TYPE 27 - DEPRESSED CENTRE CUT OFF								
NS072	RC45CH27	4 1/2	x	1/16	x	7/8	13 580	4.06
NS005	RC5CH27	5	x	1/16	x	7/8	12 225	4.74
NS073	RC6CH27	6	x	1/16	x	7/8	10 185	5.15

NORZON PLUS RIGHTCUT

- High performance, proprietary ceramic and zirconia alumina abrasives blend
- Far fewer wheel changes required so job is completed faster
- Ideal for applications on steel and stainless steel
- Extra thin, quick cutting action; minimal low kerf loss



NORTON

Model No.	Mfg. No.	D"	x	Size T"	x	H"	Max RPM	Price /Each
TYPE 01 - CUT OFF								
NS194	RC45NZP	4 1/2	x	0.045	x	7/8	13 580	5.39
NS195	RC5NZP	6	x	0.045	x	7/8	12 225	6.18
NS196	RC6NZP	6	x	0.045	x	7/8	10 185	6.53
TYPE 27 - DEPRESSED CENTRE CUT OFF								
NS197	RC45NZP27	4 1/2	x	0.045	x	7/8	13 580	5.74
NS198	RC5NZP27	6	x	0.045	x	7/8	12 225	6.76
NS199	RC6NZP27	6	x	0.045	x	7/8	10 185	7.30

D x T x H: Diameter x Thickness x Hub Size

CHOP SAWS

Milwaukee

14" ABRASIVE CHOP SAW	
Features:	Quick set-up, quick release locking device Material can be angle cut up to 45 degrees Cutting capacity: 5" round / 5" square Max. depth of cut 4" Max. width of cut 7 1/4"
Includes:	Vise, abrasive wheel and hex wrench
Amps	15.0
Motor Horsepower	4
No load speed RPM	3900
Blade Diameter"	14
Tool Weight lbs.	40
Mfg. No.	6177-20
Model No.	TLV202
Price/Each	\$229.43



ABRASIVES

HIGH SPEED REINFORCED CUT-OFF WHEELS

- **Universal arbor:** 1 1/20-mm knock out arbor fits all gas and electric high speed saws, 20-mm bushing is pre-mounted into the 1" hole use as is for a 20-mm arbor or remove bushing for a 1" arbor (once bushing is removed, cannot be replaced)
- **Asphalt:** Special blend of extra coarse silicon carbide ideal for cutting asphalt, green concrete, wide range of aggregates and abrasive materials
- **Concrete:** Coarse grit silicon carbide ideal for cutting brick, block, concrete and other masonry products
- **Metalworking:** High performance aluminum oxide ideal for general purpose cutting of steel and stainless steel parts (rebar, steel pipe, structural steel, sheet metal, etc)



NORTON

Model No.	Mfg. No.	D"	x	Size T"	x	H	Max RPM	Price /Each
FOR ASPHALT								
NR146	70184670243	12	x	1/8	x	1 1/20 mm	6360	8.10
NR147	70184672877	14	x	1/8	x	1 1/20 mm	5400	13.39
FOR CONCRETE								
NR865	66252837839	12	x	1/8	x	1 1/20 mm	6360	8.35
NR868	66252837842	14	x	1/8	x	1 1/20 mm	5400	13.98
NS234	70184623029	16	x	1/8	x	1 1/20 mm	4800	16.99
FOR METALWORKING								
NR864	66252837838	12	x	1/8	x	1 1/20 mm	6360	8.35
NR867	66252837841	14	x	1/8	x	1 1/20 mm	5400	13.98

LARGE DIAMETER REINFORCED CUT-OFF WHEELS FOR STATIONARY SAWS

GEMINI LARGE DIAMETER TYPE 01

- Quality aluminum; sets the aluminum oxide industry standard for cutting all oxide abrasive material in metal fabrication applications



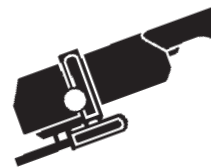
NORTON

Model No.	Mfg. No.	D"	x	Size T"	x	H"	Max RPM	Price /Each
GEMINI FREE CUT								
NS240	C01218GFC	12	x	1/8	x	1	5095	12.11
NS242	C01418GFC	14	x	1/8	x	1	4365	18.43
NS244	C016532GFC	16	x	5/32	x	1	3820	25.20
NS246	C018532G	18	x	5/32	x	1	3015	42.14
NS247	C020532GFC	20	x	5/32	x	1	2710	44.24
NS249	C020316GFC	20	x	3/16	x	1	2710	48.90
GEMINI LONG LIFE								
NS241	C01218GLL	12	x	1/8	x	1	5095	11.76
NS243	C01418GLL	14	x	1/8	x	1	4365	18.43
NS245	C016532GLL	16	x	5/32	x	1	3820	25.20
NS248	C020532GLL	20	x	5/32	x	1	2710	44.24
NS250	C020316GLL	20	x	3/16	x	1	2710	48.90

DEPRESSED CENTRE GRINDING WHEELS

Typical Applications

- Metal fabrication
- Petrochemical maintenance
- All-weld grinding
- Shipbuilding
- Foundry – notching and removing gates and risers
- Pipeline – root pass grinding, pipe bevelling and repair
- Construction – masonry/concrete fabrication



NORZON PLUS TYPE 27

- Premium, combination of Norton SG (ceramic aluminum oxide) and NorZon (zirconia alumina)
- Up to 10 times the performance of aluminum oxide wheels
- Advanced bond system providing the fastest cutting zirconia wheel on the market; easy on the operator and equipment



CHARGER PLUS TYPE 27

- A blend of zirconia alumina and aluminum oxide grains – with more NorZon (zirconia) grain
- 3 times the life of aluminum oxide wheels
- Ideal for stainless steel and carbon steel applications and efficiently grinds a variety of material from alloys to grey iron



NORTON

Model No.	Mfg. No.	D"	x	Size T"	x	H"	Max RPM	Price /Each
FOR STEEL CUTTING/NOTCHING & LIGHT GRINDING								
NS053	DC4518NZP	4 1/2	x	1/8	x	7/8	13 580	8.96
NS054	DC518NZP	5	x	1/8	x	7/8	12 225	10.80
NS055	DC718NZP	7	x	1/8	x	7/8	8600	12.34
NS056	DC918NZP	9	x	1/8	x	7/8	6600	16.91
FOR STEEL GRINDING								
NS044	DC4514NZP	4 1/2	x	1/4	x	7/8	13 580	10.40
NS039	DC514NZP	5	x	1/4	x	7/8	12 225	12.53
NS059	DC614NZP	6	x	1/4	x	7/8	10 185	14.79
NS036	DC714NZP	7	x	1/4	x	7/8	8600	15.28
NS032	DC914NZP	9	x	1/4	x	7/8	6600	20.70

NORTON

Model No.	Mfg. No.	D"	x	Size T"	x	H"	Max RPM	Price /Each
FOR STEEL CUTTING/NOTCHING/LIGHT GRINDING								
NS076	DC4518CH	4 1/2	x	1/8	x	7/8	13 580	4.69
NS041	DC518CH	5	x	1/8	x	7/8	12 225	5.51
NS077	DC618CH	6	x	1/8	x	7/8	10 185	7.11
NS078	DC718CH	7	x	1/8	x	7/8	8600	7.74
NS079	DC918CH	9	x	1/8	x	7/8	6600	11.13
FOR STEEL GRINDING								
NS082	DC4514CH	4 1/2	x	1/4	x	7/8	13 580	5.15
NS084	DC514CH	5	x	1/4	x	7/8	12 225	6.58
NS085	DC614CH	6	x	1/4	x	7/8	10 185	8.09
NS087	DC714CH	7	x	1/4	x	7/8	8600	8.59
NS088	DC914CH	9	x	1/4	x	7/8	6600	12.90

D x T x H: Diameter x Thickness x Hub Size

GEMINI ALUMINUM OXIDE TYPE 27

- Quality aluminum oxide
- Consistent, maximum performance of aluminum oxide wheels at a competitive price
- Ideal for small job shops on a variety of metalworking applications
- **Gemini Aluminum:** Contains no wax or rubber fillers for grinding aluminum and soft metals without loading



NORTON

Model No.	Mfg. No.	D" x T" x H"	Max RPM	Price /Each
FOR STEEL CUTTING, NOTCHING & LIGHT GRINDING				
NS106	DC4518G	4 1/2 x 1/8 x 7/8	13 580	2.84
NS040	DC518G	5 x 1/8 x 7/8	12 225	4.03
NS107	DC618G	6 x 1/8 x 7/8	10 185	5.08
NS108	DC718G	7 x 1/8 x 7/8	8600	5.53
NS109	DC918G	9 x 1/8 x 7/8	6600	8.05

FOR METAL & STEEL GRINDING

NS042	DC4514G	4 1/2 x 1/4 x 7/8	13 580	2.87
NS037	DC514G	5 x 1/4 x 7/8	12 225	4.04
NS114	DC614G	6 x 1/4 x 7/8	10 185	5.34
NS116	DC714GFC	7 x 1/4 x 7/8	8600	5.67
NS033	DC914GFC	9 x 1/4 x 7/8	6600	8.02

GEMINI ALUMINUM

NS121	DC4514GALU	4 1/2 x 1/4 x 7/8	13 580	6.48
NS122	DC514GALU	5 x 1/8 x 7/8	12 225	6.70
NS123	DC714GALU24	7 x 1/8 x 7/8	8600	7.84

CHARGER PLUS FASTCUT STAINLESS STEEL

- Zirconia alumina blend with aluminum oxide
- Contains less than 0.1% iron, sulfur or chlorine for rust-free and corrosion-free result
- Will not contaminate stainless steel
- Type 27



NORTON

Model No.	Mfg. No.	D" x T" x A"	Max RPM	Price /Each
FOR CUTTING/NOTCHING & LIGHT GRINDING				
NS063	66243578248	4 1/2 x 1/8 x 7/8	13 580	4.43
NS064	66243578252	5 x 1/8 x 7/8	12 225	5.23
NS065	66243578256	6 x 1/8 x 7/8	10 185	6.62
NS066	66243578240	7 x 1/8 x 7/8	8600	7.37

FOR GRINDING

NS043	66243578250	4 1/2 x 1/4 x 7/8	13 580	4.88
NS038	66243578254	5 x 1/4 x 7/8	12 225	6.16
NS070	66243578258	6 x 1/4 x 7/8	10 185	7.68
NS035	66243578242	7 x 1/4 x 7/8	8600	8.19
NS031	66243578246	9 x 1/4 x 7/8	6600	12.29

CHARGER AVOS & FLEX TYPE 29

- Aluminum oxide grain in a uniquely patterned face (with button "nubs")
- Cooler operating; prevents digging, snagging, and loading through greater swarf removal
- No offensive odours generated while grinding
- Excellent for grinding and finishing stainless steel, carbon steel, and aluminum
- **Type 29 conical shape:** Non-hubbed: used at a 15° angle; hubbed: can grind on wheel face; shallow grinding area permits larger contact area with less gouging of work piece; smooth cutting action; let the wheels do the work ideal for getting into tight spaces, smoothing corners and curves, and polishing and blending welds on flat surfaces
- **AVOS (Allows View of Surface):** Innovative shape and patented design; provide complete vision of the grinding zone; operator can grind more effectively with less work; allow interrupted cut which reduces heat on work piece



NORTON

Model No.	Mfg. No.	D" x T" x H"	Max RPM	Price /Each
TYPE 29 CONICAL SHAPE				
NR007	DC4518CHFLEX36	4 1/2 x 1/8 x 7/8	13 580	5.64
NS091	DC518CHFLEX36	5 x 1/8 x 7/8	12 225	6.32
NS092	DC718CHFLEX36	7 x 1/8 x 7/8	8600	8.45
AVOS (ALLOWS VIEW OF SURFACE)				
NR008	DC4518CAVOS36	4 1/2 x 1/8 x 7/8	13 580	6.02
NR009	DC518CAVOS36	5 x 1/8 x 7/8	12 225	6.76

NORTON METAL TYPE 27

- Quality aluminum oxide abrasive, ideal for grinding alloys, metals, steels and ferrous metals
- Ideal for on site and small unit job
- Type 27



NORTON

NORTON METAL GRINDING WHEELS

Model No.	Mfg. No.	D" x T" x A"	Max RPM	Price /Each
FOR STEEL CUTTING/NOTCHING & LIGHT DEBURRING				
NR881	DC4518M	4 1/2 x 1/8 x 7/8	13 580	2.00
NR882	DC518M	5 x 1/8 x 7/8	12 225	2.64
NR883	DC718M	7 x 1/8 x 7/8	8600	3.97
FOR GRINDING				
NS130	DC4514M	4 1/2 x 1/4 x 7/8	13 580	2.12
NS132	DC514M	5 x 1/4 x 7/8	12 225	2.84
NS134	DC714M	7 x 1/4 x 7/8	8600	4.22



**CANADA'S LEADER
IN WELDING SUPPLIES**



ABRASIVES

BENCH GRINDING WHEELS

Typical Applications

- Offhand deburring and sharpening of parts and tools



SCOTCH-BRITE™ HIGH STRENGTH DISCS (ALUMINUM OXIDE)

- Very conformable discs
- Ideal for light deburring, cleaning and finishing



Model No.	Dia."	Grade	Max. RPM	Price /Each
NW051	6 x 1/4	Very Fine	4000	2.74
NW052	6 x 1/2	Medium	4000	5.43
NW053	6 x 1/2	Very Fine	4000	2.77
NW054	8 x 1/2	Medium	3000	8.28
NW055	8 x 1/2	Very Fine	3000	4.31

SCOTCH-BRITE™ CUT & POLISH WHEELS

Heavy-duty wheels for aggressive blending and finishing.

- Produce uniform results quickly and easily
- Replace rubber bonded wheels, set-up wheels and lap wheels



Model No.	Grit	Finish	Size"	Max. RPM	Price /Each
BP680	7A	Coarse	6 x 1 x 1	6000	120.23
BP682	7A	Medium	6 x 1 x 1	6000	120.23
BP681	7A	Fine	6 x 1 x 1	6000	120.23

SCOTCH-BRITE™ EXL DEBURRING WHEELS

Use to clean, finish, blend, deburr or polish all types of metals, composites and glass.



Model No.	Grit	Finish	Size"	Max. RPM	Price /Each
BP694	8A	Medium	6 x 1/2 x 1	6000	57.97
BP695	8S	Fine	6 x 1/2 x 1	6000	57.97
BP696	9S	Fine	6 x 1/2 x 1	6000	57.97
BP690	8A	Medium	6 x 1 x 1	6000	76.85
BP692	8S	Fine	6 x 1 x 1	6000	76.85
BP693	9S	Fine	6 x 1 x 1	6000	76.85
BP701	8A	Medium	8 x 1/2 x 3	4500	73.48
BP702	8S	Fine	8 x 1/2 x 3	4500	73.48
BP703	9S	Fine	8 x 1/2 x 3	4500	73.48
BP697	8A	Medium	8 x 1 x 3	4500	98.25
BP698	8S	Fine	8 x 1 x 3	4500	98.25
BP700	9S	Fine	8 x 1 x 3	4500	98.25
BP704	8A	Medium	8 x 2 x 3	4500	167.31
BP705	8S	Fine	8 x 2 x 3	4500	167.31
BP706	9S	Fine	8 x 2 x 3	4500	167.31

D x T x H: Diameter x Thickness x Hub Size

GEMINI

- Quality, grey aluminum oxide for metal general purpose applications and sharp, green silicon carbide for nonferrous applications
- Each wheel contains nested bushings, accommodates a wide variety of standard arbor sizes
- Economical prices; ideal for small job shops and numerous applications



NORTON

Model No.	Mfg. No.	D" x T" x H"	Grade	Max RPM	Price /Each
ALUMINUM OXIDE WHEELS FOR STEEL APPLICATION					
NS320	36132	6 x 1/2 x 1	Coarse	4140	20.86
NS321	36131	6 x 1/2 x 1	Medium	4140	20.86
NS322	36133	6 x 1/2 x 1	Fine	4140	20.86
NS323	37103	6 x 3/4 x 1	Coarse	4140	24.38
NS324	37102	6 x 3/4 x 1	Medium	4140	24.38
NS325	37101	6 x 3/4 x 1	Fine	4140	24.38
NS326	37958	6 x 1 x 1	Coarse	3600	28.16
NS327	37957	6 x 1 x 1	Medium	3600	28.16
NS328	37100	6 x 1 x 1	Fine	3600	28.16
NS329	42292	7 x 1 x 1	Coarse	3600	34.42
NS330	42294	7 x 1 x 1	Medium	3600	34.42
NS331	42295	7 x 1 x 1	Fine	3600	34.42
NS332	42315	8 x 3/4 x 1	Coarse	3600	35.77
NS333	42316	8 x 3/4 x 1	Medium	3600	35.77
NS334	42317	8 x 3/4 x 1	Fine	3600	35.77
NS335	44454	8 x 1 x 1	Very coarse	3600	42.21
NS336	44449	8 x 1 x 1	Coarse	3600	42.21
NS337	44448	8 x 1 x 1	Medium	3600	42.21
NS338	44447	8 x 1 x 1	Fine	3600	42.21
NS339	60788	10 x 1 x 1	Very coarse	2485	64.93
NS340	60787	10 x 1 x 1	Coarse	2485	64.93
NS341	60789	10 x 1 x 1	Medium	2485	64.93
NS342	60350	10 x 1 x 1	Fine	2485	64.93
NS343	61250	10 x 1 1/4 x 1 1/4	Coarse	2485	77.16
NS344	61251	10 x 1 1/4 x 1 1/4	Medium	2485	77.16
NS345	61393	10 x 1 1/2 x 1 1/4	Coarse	2485	89.34
NS346	61395	10 x 1 1/2 x 1 1/4	Medium	2485	89.34
NS347	63052	12 x 1 1/2 x 1 1/2	Coarse	2070	122.76
NS348	63053	12 x 1 1/2 x 1 1/2	Medium	2070	122.76
NS349	63054	12 x 2 x 1 1/2	Very coarse	2070	157.29
NS350	63055	12 x 2 x 1 1/2	Coarse	2070	157.29
NS351	63056	12 x 2 x 1 1/2	Medium	2070	157.29
SILICON CARBIDE WHEELS FOR NON-STEEL APPLICATIONS					
NS352	36571	6 x 1/2 x 1	Medium	4140	35.33
NS353	36572	6 x 1/2 x 1	Fine	4140	35.33
NS354	36573	6 x 1/2 x 1	Extra-fine	4140	35.33
NS355	37190	6 x 3/4 x 1	Medium	4140	41.23
NS356	37191	6 x 3/4 x 1	Fine	4140	41.23
NS357	37192	6 x 3/4 x 1	Extra-fine	4140	41.23
NS358	37187	6 x 1 x 1	Medium	3600	47.65
NS359	37193	6 x 1 x 1	Fine	3600	47.65
NS360	37194	6 x 1 x 1	Extra-fine	3600	47.65
NS361	42300	7 x 1 x 1	Medium	3600	58.28
NS362	42301	7 x 1 x 1	Fine	3600	58.28
NS363	42302	7 x 1 x 1	Extra-fine	3600	58.28
NS364	44087	8 x 1 x 1	Medium	3600	71.35
NS365	44534	8 x 1 x 1	Fine	3600	71.35
NS366	44535	8 x 1 x 1	Extra-fine	3600	71.35
NS367	44536	10 x 1 x 1 1/4	Medium	2485	109.81
NS368	60366	10 x 1 x 1 1/4	Fine	2485	109.81
NS369	63359	12 x 2 x 1 1/4	Medium	2070	265.91
NS370	63360	12 x 2 x 1 1/4	Fine	2070	265.91

Arbor bushings

These size bushings shipped free of charge with your Gemini wheel order

Wheel Diameter	Wheel Centre Hole	1/2"	5/8"	3/4"	7/8"	1"	1 1/4"
6", 7"	1"	.	.	.	.	.	.
8"	1"	.	.	.	.	.	.
10"	1 1/4"	.	.	.	.	.	.
12" x 1"	1 1/4"	.	.	.	.	.	.
12" x 2"	1 1/4"	.	.	.	.	.	.
12"	1 1/2"	.	.	.	.	.	.

VITRIFIED TOOLROOM WHEELS

Typical Applications

- Surface grinding
- Tool and cutter grinding
- Drill sharpening

VBE Bond:

General purpose; narrow/medium contact area; versatile; economical

VBEP Bond:

Porous bond; medium/wide contact area; cool cutting; less burn than VBE; high chip clearance; high stock removal/economical

Grit 46:

General purpose

Grit 60:

Commercial finish

Grit 80:

Fine finish

NORTON 32A WHEELS

Ideal for medium to heavy stock removal

- Sharp monocrystalline aluminum oxide grain – the industry's most versatile abrasive – grey
- Free cutting on a wide range of applications and materials
- Outstanding form holding



NORTON

Model No.	Mfg. No.	D"	x	T"	x	A"	Grit	Grade	Bond	Max RPM	Price /Each
NR010	66252836380	6	x	1/2	x	1 1/4	46	K	VBE	4140	41.86
NR011	66252836396	6	x	1/2	x	1 1/4	60	K	VBE	4140	39.32
NR012	66252836405	6	x	1/2	x	1 1/4	80	J	VBE	4140	41.86
NR013	66252941203	7	x	1/2	x	1 1/4	46	F	VBEP	3600	50.07
NR014	66252940862	7	x	1/2	x	1 1/4	46	G	VBE	3600	50.07
NR015	66252941204	7	x	1/2	x	1 1/4	46	G	VBEP	3600	50.07
NR016	66252940864	7	x	1/2	x	1 1/4	46	I	VBE	3600	47.02
NR017	66252941206	7	x	1/2	x	1 1/4	46	I	VBEP	3600	50.07
NR018	66252940865	7	x	1/2	x	1 1/4	46	J	VBE	3600	47.02
NR019	66252940867	7	x	1/2	x	1 1/4	46	K	VBE	3600	50.07
NR020	66252941313	7	x	1/2	x	1 1/4	60	G	VBEP	3600	50.07
NR021	66252940880	7	x	1/2	x	1 1/4	60	I	VBE	3600	47.02
NR022	66252840882	7	x	1/2	x	1 1/4	60	J	VBE	3600	50.07
NR023	66252941316	7	x	1/2	x	1 1/4	60	J	VBEP	3600	50.07
NR024	66252940885	7	x	1/2	x	1 1/4	60	K	VBE	3600	47.02
NR025	66252940888	7	x	1/2	x	1 1/4	60	L	VBE	3600	50.07
NR026	66252940895	7	x	1/2	x	1 1/4	80	I	VBE	3600	47.02
NR027	66252940897	7	x	1/2	x	1 1/4	80	J	VBE	3600	50.07
NR028	66252940899	7	x	1/2	x	1 1/4	80	K	VBE	3600	47.02
NR029	66252940900	7	x	1/2	x	1 1/4	80	L	VBE	3600	50.07
NR030	66253043882	8	x	1/2	x	1 1/4	46	G	VBEP	3600	59.96
NR031	66253043713	8	x	1/2	x	1 1/4	46	I	VBE	3600	59.96
NR032	66253043715	8	x	1/2	x	1 1/4	46	J	VBE	3600	56.28
NR033	66253043716	8	x	1/2	x	1 1/4	46	K	VBE	3600	59.96
NR034	66253043886	8	x	1/2	x	1 1/4	60	F	VBEP	3600	59.96
NR035	66253043887	8	x	1/2	x	1 1/4	60	G	VBEP	3600	59.96
NR036	66253043725	8	x	1/2	x	1 1/4	60	I	VBE	3600	56.28
NR037	66253043727	8	x	1/2	x	1 1/4	60	J	VBE	3600	59.96
NR038	66253043729	8	x	1/2	x	1 1/4	60	K	VBE	3600	56.28
NR039	66253043734	8	x	1/2	x	1 1/4	80	I	VBE	3600	59.96
NR040	66253043736	8	x	1/2	x	1 1/4	80	J	VBE	3600	59.96
NR041	66253043737	8	x	1/2	x	1 1/4	80	K	VBE	3600	59.96
NR042	66253044195	8	x	3/4	x	1 1/4	46	G	VBEP	3600	71.51
NR043	66253044215	8	x	3/4	x	1 1/4	46	I	VBE	3600	71.51
NR044	66253044161	8	x	3/4	x	1 1/4	46	J	VBE	3600	71.51
NR045	66253044165	8	x	3/4	x	1 1/4	46	K	VBE	3600	71.51
NR046	66253044198	8	x	3/4	x	1 1/4	60	G	VBEP	3600	71.51
NR047	66253044169	8	x	3/4	x	1 1/4	60	I	VBE	3600	71.51
NR048	66253044171	8	x	3/4	x	1 1/4	60	J	VBE	3600	71.51
NR049	66253044173	8	x	3/4	x	1 1/4	60	K	VBE	3600	71.51
NR050	66253044064	8	x	3/4	x	1 1/4	80	K	VBE	3600	71.51

NORTON 38A WHEELS

The choice for light grinding of tool steels

- White, friable abrasive grain
- Cool and burn-free cutting; ideal for heat-sensitive applications with light to moderate feed rates
- Consistent quality, excellent balance and dimensional accuracy time after time
- NORPOR 38A: White, most friable, aluminum oxide abrasive with VP2 porous bond
- Exceptionally cool cutting in light pressure grinding applications, or heat-sensitive applications
- Versatile, ideal for use across a broad variety of tool steels



NORTON

Model No.	Mfg. No.	D"	x	T"	x	A"	Grit	Grade	Bond	Max RPM	Price /Each
NR051	66252836520	6	x	1/2	x	1 1/4	46	K	VBE	4140	34.00
NR052	66252836533	6	x	1/2	x	1 1/4	60	K	VBE	4140	34.00
NR053	66252836550	6	x	1/2	x	1 1/4	80	K	VBE	4140	34.00
NR054	66252941022	7	x	1/2	x	1 1/4	46	G	VBEP	3600	40.64
NR055	66252941323	7	x	1/2	x	1 1/4	46	G	VBEP	3600	40.64
NR056	66252941024	7	x	1/2	x	1 1/4	46	I	VBE	3600	40.64
NR057	66252941026	7	x	1/2	x	1 1/4	46	J	VBE	3600	40.64
NR058	66252941028	7	x	1/2	x	1 1/4	46	K	VBE	3600	40.64
NR059	66252941036	7	x	1/2	x	1 1/4	60	I	VBE	3600	40.64
NR060	66252941038	7	x	1/2	x	1 1/4	60	J	VBE	3600	40.64
NR061	66252941041	7	x	1/2	x	1 1/4	60	K	VBE	3600	40.64
NR062	66252911677	7	x	1/2	x	1 1/4	60	L	VBE	3600	40.64
NR063	66252941048	7	x	1/2	x	1 1/4	80	I	VBE	3600	40.64
NR064	66252941049	7	x	1/2	x	1 1/4	80	J	VBE	3600	40.64
NR065	66252941054	7	x	1/2	x	1 1/4	80	K	VBE	3600	40.64
NR066	66252941056	7	x	1/2	x	1 1/4	80	L	VBE	3600	40.64
NR067	66253043749	8	x	1/2	x	1 1/4	46	I	VBE	3600	48.70
NR068	66253043752	8	x	1/2	x	1 1/4	46	J	VBE	3600	48.70
NR069	66253043762	8	x	1/2	x	1 1/4	46	K	VBE	3600	48.70
NR070	66253043757	8	x	1/2	x	1 1/4	60	I	VBE	3600	48.70
NR071	66253043858	8	x	1/2	x	1 1/4	60	J	VBE	3600	48.70
NR072	66253043861	8	x	1/2	x	1 1/4	60	K	VBE	3600	48.70
NR073	66253043866	8	x	1/2	x	1 1/4	80	I	VBE	3600	48.70
NR074	66253013787	8	x	1/2	x	1 1/4	80	J	VBE	3600	48.70
NR075	66253043869	8	x	1/2	x	1 1/4	80	K	VBE	3600	48.70
NR076	66253044177	8	x	3/4	x	1 1/4	46	I	VBE	3105	58.00
NR077	66253044180	8	x	3/4	x	1 1/4	46	K	VBE	3105	58.00
NR078	66253044184	8	x	3/4	x	1 1/4	60	I	VBE	3105	58.00

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ABRASIVES

FLAP DISCS

Typical Applications

- Stock removal
- Edge chamfering
- Deburring
- Rust removal
- Blending welds
- Cleaning and finishing

QUICK TRIM SG BLAZE R980P

- Latest-generation ceramic alumina abrasive grain and improved supersize grinding aid
- New orange, plastic back plate material
- Easily trimmable, the plastic wears away as the flap discs grind
- Durable Y-wt polyester flaps significantly improve life, grain retention, and fray resistance
- 1-step grinding and finishing
- Type 27
- Ideal for: Stock removal, edge chamfering, weld blending, deburring/deflashing, cleaning/finishing
- Best/highest productivity on stainless steel, titanium, and super alloys



NORTON

Model No.	Mfg. No.	D"	Size x A"	Grit	Max RPM	Price /Each
NR954	66254400253	4 1/2	x 7/8	40	13 300	12.44
NR955	66254400254	4 1/2	x 7/8	60	13 300	12.44
NR956	66254400255	4 1/2	x 7/8	80	13 300	12.44
NR957	66254400256	4 1/2	x 7/8	120	13 300	12.44
NR958	66254400262	5	x 7/8	40	12 000	13.84
NR959	66254400264	5	x 7/8	60	12 000	13.84
NR960	66254400265	5	x 7/8	80	12 000	13.84
NR961	66254400519	5	x 7/8	120	12 000	13.84
NR966	66254461059	7	x 7/8	40	8600	24.59
NR967	66254461060	7	x 7/8	60	8600	24.59
NR968	66254461061	7	x 7/8	80	8600	24.59
NR969	66254461063	7	x 7/8	120	8600	24.59

Model No.	Mfg. No.	D"	Size x A"	Grit	Max RPM	Price /Each
NR950	66254400257	4 1/2	x 5/8-11	40	13 300	14.79
NR951	66254400258	4 1/2	x 5/8-11	60	13 300	14.42
NR952	66254400259	4 1/2	x 5/8-11	80	13 300	14.42
NR953	66254400261	4 1/2	x 5/8-11	120	13 300	14.42
NR962	66254461066	7	x 5/8-11	40	8600	27.13
NR963	66254461067	7	x 5/8-11	60	8600	27.13
NR964	66254461068	7	x 5/8-11	80	8600	27.13
NR965	66254461069	7	x 5/8-11	120	8600	27.13

747D (CERAMIC ALUMINUM OXIDE - TYPE 27)

- Premium ceramic mineral provides exceptional cut and life on the hardest metals



Model No.	Mfg. No.	D"	Size x A"	Grit	Max RPM	Price /Each
BZ778	49613	4 1/2	x 7/8	36	13 300	6.48
BZ779	49614	4 1/2	x 7/8	50	13 300	6.48
BZ780	49615	4 1/2	x 7/8	60	13 300	6.48
BZ781	49616	4 1/2	x 7/8	80	13 300	6.48
BZ782	49617	4 1/2	x 7/8	120	13 300	6.48

MERIT ZIRCONIA

- Quality zirconia alumina grain with a phenolic resin back, provides fast cutting and fine finishes
- Great value for MRO operations
- **Type 27 flat face:** Fine finishing primarily on flat surfaces; flat design and used primarily on flat surfaces; Merit High Density sizes with extra large flaps lasting up to 40% longer than standard flap discs
- **Type 29 conical shape:** Maximum contact with work piece without loading; conical flap discs have flaps angled at 10° and may be used on both conical and flat surfaces; the angle provides greater surface contact and as a result, tends to be the most aggressive choice



MERIT

Model No.	Mfg. No.	D"	Size x A"	Grit	Max RPM	Price /Each
TYPE 27						
BY545	08834190172	4 1/2	x 7/8	40	13 000	9.61
BY554	08834190767	4 1/2	x 7/8	60	13 000	9.61
BY963	08834194360	4 1/2	x 7/8	80	13 000	9.61
NT675	08834190074	5	x 7/8	40	12 000	10.99
NT676	08834190376	5	x 7/8	60	12 000	10.99
NT677	08834192269	5	x 7/8	80	12 000	10.99
NS016	08834190933	7	x 7/8	40	8500	18.92
BY971	08834194514	7	x 7/8	60	8500	19.36
BY965	08834194362	7	x 7/8	80	8500	18.92
TYPE 29						
BY886	08834193723	4 1/2	x 7/8	24	13 000	7.23
BY806	08834193633	4 1/2	x 7/8	36	13 000	7.23
BY814	08834193647	4 1/2	x 7/8	40	13 000	7.23
BY807	08834193634	4 1/2	x 7/8	60	13 000	7.23
BY808	08834193635	4 1/2	x 7/8	80	13 000	7.23
BY815	08834193648	4 1/2	x 7/8	120	13 000	7.23
BY887	08834193723	5	x 7/8	24	12 000	8.17
BY816	08834193723	5	x 7/8	36	12 000	8.17
BY817	08834193723	5	x 7/8	40	12 000	8.17
BY818	08834193723	5	x 7/8	60	12 000	8.17
BY819	08834193723	5	x 7/8	80	12 000	8.17
BY820	08834193723	5	x 7/8	120	12 000	8.17
BY888	08834193723	7	x 7/8	24	8500	16.40
BY809	08834193723	7	x 7/8	36	8500	16.40
BY821	08834193723	7	x 7/8	40	8500	16.40
BY810	08834193723	7	x 7/8	60	8500	16.40
BY811	08834193723	7	x 7/8	80	8500	16.40
BY822	08834193723	7	x 7/8	120	8500	16.40

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D x A: Diameter x Arbor Size

MERIT METAL FLAP DISCS

- Quality zirconia alumina abrasive
- Strong engineered blend of X-wt cotton and Y-weight dark blue polyester flaps offers higher cut rate, longer life, and greater wear resistance
- Durable, fibreglass back offers strength, lightweight and absorbs vibration
- Available in both Type 29 conical for hard-to-grind materials and Type 27 flat for softer materials



MERIT

Model No.	Mfg. No.	D"	Size x A"	Grit	Max RPM	Price /Each
MERIT METAL TYPE 27- FIBREGLASS PLATE						
NR884	66254472653	4 1/2	x 7/8	36	13 300	4.29
NR885	66254437004	4 1/2	x 7/8	40	13 300	4.29
NR886	66254448989	4 1/2	x 7/8	60	13 300	4.29
NR887	66254448990	4 1/2	x 7/8	80	13 300	4.29
NR888	66254472659	5	x 7/8	36	12 000	4.39
NR889	66254472660	5	x 7/8	40	12 000	4.39
NR890	66254472661	5	x 7/8	60	12 000	4.39
NR891	66254472662	5	x 7/8	80	12 000	4.39
NR892	66254472664	7	x 7/8	36	8600	9.29
NR893	66254472665	7	x 7/8	40	8600	9.29
NR894	66254472666	7	x 7/8	60	8600	9.29
NR895	66254472667	7	x 7/8	80	8600	9.29
MERIT METAL TYPE 29- FIBREGLASS PLATE						
NR148	66254419963	4 1/2	x 7/8	36	13 300	4.29
NR149	66254419978	4 1/2	x 7/8	40	13 300	4.29
NR150	66254419984	4 1/2	x 7/8	60	13 300	4.29
NR151	66254419987	4 1/2	x 7/8	80	13 300	4.29
NR152	66254419998	5	x 7/8	36	12 000	4.39
NR153	66254420001	5	x 7/8	40	12 000	4.39
NR154	66254420002	5	x 7/8	60	12 000	4.39
NR155	66254420003	5	x 7/8	80	12 000	4.39
NR156	66254420004	7	x 7/8	36	8600	9.29
NR157	66254420006	7	x 7/8	40	8600	9.29
NR158	66254420007	7	x 7/8	60	8600	9.29
NR159	66254420008	7	x 7/8	80	8600	9.29

577F FLAP DISCS

- Alumina zirconia
- For aggressive stock removal on a variety of welds, coatings and other metal fabrication applications
- The overlapping coated abrasive cloth flaps on flap discs provide several layers of abrasives, making the disc very durable
- Type 29



Model No.	Mfg. No.	D"	Size x A"	Grit	Max RPM	Price /Each
NU080	AB50467	4 1/2	x 7/8	36	13 300	6.48
NU081	AB50468	4 1/2	x 7/8	40	13 300	6.48
NU082	051141-30989	4 1/2	x 7/8	60	13 300	6.48
NU083	AB50470	4 1/2	x 7/8	80	13 300	6.48
NU084	AB50472	7	x 7/8	36	8600	12.43
NU085	AB50473	7	x 7/8	40	8600	12.43
NU086	AB50474	7	x 7/8	60	8600	12.43

5" GRINDERS



SMALL ANGLE GRINDERS W/LOCK-ON

- Features:** Powerful 13 Amp, 11 000 RPM motor: Provides maximum performance and durability. Overload protection: Maximizes motor life. Electronic clutch: Extends tool life and prevents bind-up. Tool-free accessory change: Easily change "All Accessories" without a wrench. Tool-free adjustable guard: Provides quick guard installations and adjustments. Anti-vibration side handle: Reduces vibration, increasing user comfort during extended use. Soft start: Allows maximum control at start-up.

- Includes:** Lock-on, type 27 guard, side handle, spanner wrench, flanges

Wheel Diameter"	5
Voltage	120
Amperage	13
No Load RPM	11 000
Spindle Size"	5/8
Tool Weight lbs.	5.7
Mfg. No	6117-30
Model No.	TLV197
Price/Each	\$176.94



FLAP WHEELS

Typical Applications

- Metal fabrication
- Blending welds
- Deburring
- Cleaning and finishing

Conformable to most shapes

Designed to deliver a consistent finish with a uniform rate of cut, Norton flap wheels wear away, continually exposing fresh abrasive. Conformable to most shapes, they are available in coarse to fine grit.

244E FLAP WHEELS

ALUMINUM OXIDE - XE WT. CLOTH

- General purpose flap wheel delivers consistent finish and uniform cut
- Can be shaped to fit any desired contour



Model No.	D"	Size x A"	Grit	Max RPM	Price /Each
BP577	1	x 1 x 1/4	60	25 000	5.25
BP578	1	x 1 x 1/4	80	25 000	5.25
BP576	1	x 1 x 1/4	120	25 000	5.25
BP580	2	x 1 x 1/4	60	20 000	6.97
BP581	2	x 1 x 1/4	80	20 000	6.97

D x A: Diameter x Arbor Size

D x T x A: Diameter x Thickness x Arbor Size

BENCH MOUNTED FLAP WHEELS

- General purpose flap wheel delivers consistent finish and uniform cut
- Can be shaped to fit any desired contour



244E/241E FLAP WHEELS

Model No.	D"	Size x A"	Grit	Max RPM	Price /Each
BP595	6	x 1 x 1	50	6100	26.21
BP596	6	x 1 x 1	60	6100	26.82
BP597	6	x 1 x 1	80	6100	28.64
BP592	6	x 1 x 1	120	6100	31.03
BP594	6	x 1 x 1	220	6100	33.10
BP600	6	x 2 x 1	60	5200	44.89
BP599	6	x 2 x 1	150	5200	54.28

ABRASIVES

MANDREL MOUNTED FLAP WHEELS

- Mandrel mounted high performance
- Designed with the 1/4" mandrel as a integral part of the wheel
- More aggressive and works great in heavy stock removal operations
- A very durable, long lasting mini flap wheel

MERIT

Model No.	D"	x	Size T"	x	S"	Grit	Max RPM	Price /Each
BQ700	1	x	5/8	x	1/4	40	30000	3.76
BQ696	1	x	5/8	x	1/4	60	30000	3.76
BQ697	1	x	5/8	x	1/4	80	30000	3.76
BQ698	1	x	5/8	x	1/4	120	30000	3.76
BQ571	1	x	5/8	x	1/4	180	30000	3.76
BQ699	1	x	5/8	x	1/4	240	30000	3.76
BQ747	1	x	5/8	x	1/4	320	30000	3.76
BQ567	1	x	1	x	1/4	40	30000	3.96
NP722	1	x	1	x	1/4	50	30000	3.96
BQ730	1	x	1	x	1/4	60	30000	3.96
BQ731	1	x	1	x	1/4	80	30000	3.96
BQ732	1	x	1	x	1/4	120	30000	3.96
BQ733	1	x	1	x	1/4	180	30000	3.96
BQ701	1	x	1	x	1/4	240	30000	3.96
BQ734	1	x	1	x	1/4	320	30000	3.96
BQ736	1 3/8	x	5/8	x	1/4	60	30000	3.76
BQ737	1 3/8	x	5/8	x	1/4	80	30000	3.76
BQ738	1 3/8	x	5/8	x	1/4	120	30000	3.76
BQ739	1 3/8	x	5/8	x	1/4	180	30000	3.76
BQ740	1 3/8	x	5/8	x	1/4	240	30000	3.76
BQ677	1 1/2	x	1	x	1/4	40	25000	5.02
BQ741	1 1/2	x	1	x	1/4	60	25000	5.02
BQ707	1 1/2	x	1	x	1/4	80	25000	5.02
BQ708	1 1/2	x	1	x	1/4	120	25000	5.02
BQ742	1 1/2	x	1	x	1/4	180	25000	5.02
BQ613	1 1/2	x	1	x	1/4	240	25000	5.02
BQ709	1 1/2	x	1	x	1/4	320	25000	5.02

D x T x S: Diameter x Thickness x Shank

BENCH MOUNTED FLAP WHEELS

- Mounted on bench grinder applies light scratch pattern to stainless steel

MERIT

Model No.	D"	x	Size T"	x	A"	Grit	Max RPM	Price /Each
BQ268	5	x	1 1/2	x	5/8	40	12000	22.47
BQ269	5	x	1 1/2	x	5/8	50	12000	22.47
BQ270	5	x	1 1/2	x	5/8	60	12000	23.07
BQ271	5	x	1 1/2	x	5/8	80	12000	24.61
BQ272	5	x	1 1/2	x	5/8	120	12000	26.67
BQ274	5	x	1 1/2	x	5/8	180	12000	29.17
BQ275	5	x	1 1/2	x	5/8	240	12000	29.17
BQ276	5	x	1 1/2	x	5/8	320	12000	29.17
BQ302	6	x	1/2	x	1	40	6000	20.44
BQ303	6	x	1/2	x	1	60	6000	20.98
BQ304	6	x	1/2	x	1	80	6000	22.40
BQ305	6	x	1/2	x	1	120	6000	24.31
BQ280	6	x	1/2	x	1	150	6000	25.87
BQ306	6	x	1/2	x	1	180	6000	26.55
BQ307	6	x	1/2	x	1	240	6000	26.55
BQ279	6	x	1/2	x	1	320	6000	26.55
BQ308	6	x	1	x	1	40	6000	24.94
BQ309	6	x	1	x	1	50	6000	24.94
BQ310	6	x	1	x	1	60	6000	25.60
BQ311	6	x	1	x	1	80	6000	27.32
BQ312	6	x	1	x	1	120	6000	29.63
BQ313	6	x	1	x	1	150	6000	31.54
BQ314	6	x	1	x	1	180	6000	32.39
BQ315	6	x	1	x	1	240	6000	32.39
BQ316	6	x	1	x	1	320	6000	32.39

D x T x A: Diameter x Thickness x Arbor Size

Model No.	D"	x	Size T"	x	S"	Grit	Max RPM	Price /Each
BQ710	2	x	3/4	x	1/4	40	25000	5.67
BQ711	2	x	3/4	x	1/4	60	25000	5.67
BQ712	2	x	3/4	x	1/4	80	25000	5.67
BQ713	2	x	3/4	x	1/4	120	25000	5.67
BQ714	2	x	3/4	x	1/4	180	25000	5.67
BQ754	2	x	1	x	1/4	40	25000	6.39
NP723	2	x	1	x	1/4	50	25000	6.39
BQ748	2	x	1	x	1/4	60	25000	6.39
BQ749	2	x	1	x	1/4	80	25000	6.39
BQ750	2	x	1	x	1/4	120	25000	6.39
BQ751	2	x	1	x	1/4	180	25000	6.39
BQ752	2	x	1	x	1/4	240	25000	6.39
BQ753	2	x	1	x	1/4	320	25000	6.39
BQ716	2	x	1 1/2	x	1/4	40	25000	7.33
BQ755	2	x	1 1/2	x	1/4	60	25000	7.33
BQ756	2	x	1 1/2	x	1/4	80	25000	7.33
BQ757	2	x	1 1/2	x	1/4	120	25000	7.33
BQ759	2	x	1 1/2	x	1/4	240	25000	7.33
BQ760	2 1/2	x	1	x	1/4	40	20000	7.19
BQ761	2 1/2	x	1	x	1/4	60	20000	7.19
BQ762	2 1/2	x	1	x	1/4	80	20000	7.19
BQ763	2 1/2	x	1	x	1/4	120	20000	7.19
BQ764	2 1/2	x	1	x	1/4	180	20000	7.19
BQ847	2 1/2	x	1	x	1/4	240	20000	7.19
BQ765	2 1/2	x	1	x	1/4	320	20000	7.19

Model No.	D"	x	Size T"	x	S"	Grit	Max RPM	Price /Each
BQ766	2 1/2	x	1 1/2	x	1/4	60	20000	8.26
BQ767	2 1/2	x	1 1/2	x	1/4	80	20000	8.26
BQ768	2 1/2	x	1 1/2	x	1/4	120	20000	8.26
BQ770	3	x	3/4	x	1/4	60	20000	7.19
BQ771	3	x	3/4	x	1/4	80	20000	7.19
BQ775	3	x	1	x	1/4	40	20000	7.91
BQ773	3	x	1	x	1/4	60	20000	7.91
BQ774	3	x	1	x	1/4	80	20000	7.91
BQ722	3	x	1	x	1/4	120	20000	7.91
BQ723	3	x	1	x	1/4	180	20000	7.91
BQ685	3	x	1	x	1/4	240	20000	7.91
BQ686	3	x	1	x	1/4	320	20000	7.91
BQ776	3	x	2	x	1/4	40	12000	13.63
BQ724	3	x	2	x	1/4	60	12000	13.63
BQ725	3	x	2	x	1/4	80	12000	13.63
BQ726	3	x	2	x	1/4	120	12000	13.63
BQ727	3	x	2	x	1/4	180	12000	13.63



Model No.	D"	x	Size T"	x	A"	Grit	Max RPM	Price /Each
BQ342	8	x	1	x	1	40	4500	50.17
BQ343	8	x	1	x	1	50	4500	50.17
BQ344	8	x	1	x	1	60	4500	51.35
BQ345	8	x	1	x	1	80	4500	55.32
BQ346	8	x	1	x	1	120	4500	60.55
BQ347	8	x	1	x	1	180	4500	65.24
BQ348	8	x	1	x	1	240	4500	65.24
BQ349	8	x	1	x	1	320	4500	65.24
BQ350	8	x	2	x	1	40	4500	68.65
BQ351	8	x	2	x	1	50	4500	68.65
BQ353	8	x	2	x	1	80	4500	73.89
BQ355	8	x	2	x	1	180	4500	91.89
BQ356	8	x	2	x	1	240	4500	94.19
BQ357	8	x	2	x	1	320	4500	94.19
BQ281	10	x	1	x	1 3/4	40	4000	78.23
BQ360	10	x	1	x	1 3/4	80	4000	84.77
BQ361	10	x	1	x	1 3/4	120	4000	94.26
BQ362	10	x	1	x	1 3/4	150	4000	102.45
BQ363	10	x	1	x	1 3/4	180	4000	102.45
BQ364	10	x	1	x	1 3/4	320	4000	102.45

BRISTLE DISCS

Bristle discs are ideal for safely cleaning and stripping a wide variety of substances off of metal. The discs will easily cut through hardened enamel, paint, thick dried adhesives, and layers of corrosion, without destroying the underlying material or compromising safety with dangerous flying wires.

In addition, bristle discs do not clog up with substances being removed, and give consistent finishes throughout the life of the discs.

All bristle discs are colour coded by grade and are made of nylon embedded with abrasive to create an abrasive action. Each disc is flexible and easily conforms to contours and tight corners and angles.

ROLOC™ BRISTLE DISCS

- Uniform concentration of mineral throughout the flexible abrasive filled bristles
- Fast cut rate and long performance life for removal of rust, coatings, and flashing
- *Roloc™* attachment method for quick and easy disc changes
- All discs feature a 5/8" trim length and are embedded with *Regalite™* abrasive mineral



Model No.	Size"	Trim Type	Grit	Colour	Max. RPM	Price /Each
BP106	1	Straight	50	Green	30 000	4.51
BP107	1	Straight	80	Yellow	30 000	4.51
BP105	1	Straight	120	White	30 000	4.51
BP109	2	Tapered	50	Green	25 000	7.28
BP110	2	Tapered	80	Yellow	25 000	7.28
BP108	2	Tapered	120	White	25 000	7.28
BP112	3	Tapered	50	Green	18 000	10.71
BP113	3	Tapered	80	Yellow	18 000	10.71
BP111	3	Tapered	120	White	18 000	10.71

ROLOC™ RADIAL BRISTLE DISCS

- Same characteristics as the *Roloc™* bristle discs, but in a radial format
- *Roloc™* radial bristle discs come in 3" diameters and have a maximum operating RPM of 25 000



Model No.	Grit	Colour	Price /Each
BP103	50	Green	7.84
BP104	80	Yellow	7.84
BP102	120	White	7.84

ROLOC™ DISC HOLDERS

- Rubber *Roloc™* back-up pads are offered in different sizes and degrees of hardness for varying grinding applications
- All *Roloc™* disc holders are threaded and require model **BP013** 1/4", threaded shaft



Model No.	Size"	Density	Max. RPM	Price /Each
BP007	1	Medium	30 000	14.59
BP011	2	Soft	20 000	17.57
BP008	2	Medium	25 000	17.57
BP005	2	Hard	25 000	17.57
BP003	2	Extra hard	25 000	21.28
BP012	3	Soft	15 000	21.46
BP009	3	Medium	18 000	21.46
BP006	3	Hard	20 000	21.46
BP004	3	Extra hard	20 000	23.57
BP010	4	Medium	12 000	23.57

ROLOC™ THREADED SHAFT

Model No. **BP013** Price/Each \$3.38

RADIAL BRISTLE DISCS

- All discs are very flexible for deburring, cleaning, or finishing intricate or tiny areas
- Ideal for hi-tech housings and components, medical products, cleaning marks off of precision parts and creating satin, and higher, finishes on hard and soft metals

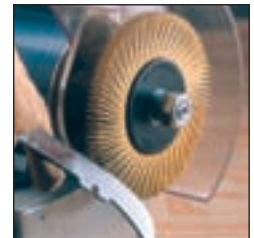


Priced per Package

Model No.	Size"	Shank"	Grit	Colour	Max. RPM	Qty /Pack	Price /Pack
BP096	9/16	1/16	120X	White	30 000	48	48.00
BP097	9/16	1/16	P220X	Red	30 000	48	48.00
BP098	9/16	1/16	P400X	Blue	30 000	48	48.00
BP101	9/16	1/16	Pumice	Pink	30 000	192	192.00
BP100	9/16	1/16	Polish II	Peach	30 000	48	48.00
BP099	9/16	1/16	Polish I	Light green	30 000	48	48.00
BP091	3/4	1/16	80X	Yellow	30 000	48	52.72
BP089	3/4	1/16	P220X	Red	30 000	48	52.72
BP090	3/4	1/16	P400X	Blue	30 000	192	210.89
BP092	3/4	1/16	Pumice	Pink	30 000	48	52.72
BP083	1	1/8	36X	Dark brown	30 000	24	29.90
BP084	1	1/8	50X	Green	30 000	24	29.90
BP085	1	1/8	80X	Yellow	30 000	24	29.90
BP082	1	1/8	120X	White	30 000	24	29.90
BP087	3	3/8	50	Green	25 000	10	78.36
BP088	3	3/8	80	Yellow	25 000	10	78.36

RADIAL BRISTLE BRUSHES FOR BENCH GRINDERS

- Radial bristle brushes have the same characteristics as the other 3M bristle brushes, but come in a convenient 6" size bench grinders
- Each brush comes with its own adapter
- Radial bristle brushes take the place of conventional wire wheels, on bench grinders, for general maintenance and production work
- Nylon bristles eliminate dangerous flying wires



Model No.	Size"	Grit	Colour	Max. RPM	Price /Each
BP093	6	36X	Dark brown	10 000	43.77
BP094	6	50X	Green	10 000	43.77
BP095	6	80X	Yellow	10 000	43.77

RADIAL BRISTLE DISCS FOR RIGHT ANGLE GRINDERS

- 4 1/2" bristle discs with 5/8"-11 threaded hub
- Same safety and efficiency benefits as other bristle discs but in a right angle grinder configuration
- Ideal for cleaning, delaminating, removing rust and oxidation, and deburring a variety of hard and soft metals and plastics
- All discs have a maximum operating speed of 12 000 RPM



Model No.	Size"	Grit	Colour	Price /Each
VV392	4 1/2	36	Brown	27.82
BP079	4 1/2	50	Green	27.82
BP080	4 1/2	80	Yellow	27.82
BP078	4 1/2	120	White	27.82

ABRASIVES

FIBRE DISCS

Typical Applications

- Material removal
- Weld grinding and blending
- Light deburring and finishing

ZIRCONIA ALUMINA FIBRE DISCS

- Durable zirconia alumina abrasive with a heavy fibre backing
- Superior product for heavy weld and metal grinding
- Cool grinding action that reduces glazing and loading
- Excellent for stainless steel applications



MERIT CERAMIC DISCS

- High performance ceramic alumina abrasive on heavy fibre backing
- Economical choice for heavy stock removal



MERIT

Model No.	Mfg. No.	Size D" x A"	Grit	Price /Each
BZ560	66623353315	4 1/2 x 7/8	24	1.17
BZ561	66623353316	4 1/2 x 7/8	36	1.14
BZ562	66623353318	4 1/2 x 7/8	50	1.10
BZ563	66623353319	4 1/2 x 7/8	60	0.96
BZ564	66623353320	4 1/2 x 7/8	80	0.89
BZ577	66623357290	5 x 7/8	24	1.38
BZ578	66623357291	5 x 7/8	36	1.28
BZ579	66623357292	5 x 7/8	50	1.17
BZ580	66623357293	5 x 7/8	60	1.10
BZ581	66623357294	5 x 7/8	80	1.02
BZ582	66623357295	7 x 7/8	24	2.01
BZ583	66623357296	7 x 7/8	36	2.01
BZ584	66623357297	7 x 7/8	50	1.86
BZ585	66623357298	7 x 7/8	60	2.00
BZ586	66623357299	7 x 7/8	80	1.93

MERIT

Model No.	Mfg. No.	Size D" x A"	Grit	Price /Each
BZ573	66623355601	4 1/2 x 7/8	24	1.54
BZ574	66623355602	4 1/2 x 7/8	36	1.49
BZ575	66623355603	4 1/2 x 7/8	50	1.40
BZ576	66623355604	4 1/2 x 7/8	60	1.24
NS489	66623365598	4 1/2 x 7/8	80	1.14
BZ569	66623355597	5 x 7/8	24	1.80
BZ570	66623355598	5 x 7/8	36	1.66
BZ571	66623355599	5 x 7/8	50	1.54
BZ572	66623355600	5 x 7/8	60	1.40
NS494	66623366015	5 x 7/8	80	1.24
BZ565	66623355578	7 x 7/8	24	3.34
BZ566	66623355594	7 x 7/8	36	3.10
BZ567	66623355595	7 x 7/8	50	2.84
BZ568	66623355596	7 x 7/8	60	2.57
NS499	66623365600	7 x 7/8	80	2.22

MERIT ALUMINUM OXIDE DISCS

- Quality aluminum oxide grain on heavy fibre backing
- Good for small job around the shop and general purpose applications



MERIT

Model No.	Mfg. No.	Size D" x A"	Grit	Price /Each
BQ035	66623353309	4 1/2 x 7/8	24	0.70
BQ036	66623353306	4 1/2 x 7/8	36	0.82
BQ037	66623353310	4 1/2 x 7/8	50	0.70
BQ038	66623353311	4 1/2 x 7/8	60	0.67
BQ039	66623353312	4 1/2 x 7/8	80	0.61
BQ040	66623353313	4 1/2 x 7/8	100	0.61
BQ041	66623353314	4 1/2 x 7/8	120	0.61
BQ042	66623357276	5 x 7/8	24	0.98
BQ043	66623357277	5 x 7/8	36	0.91
BQ044	66623357278	5 x 7/8	50	0.84
BQ045	66623357279	5 x 7/8	60	0.77
BQ046	66623357280	5 x 7/8	80	0.72
BQ047	66623357281	5 x 7/8	100	0.72
BQ048	66623357282	5 x 7/8	120	0.72
BQ049	66623357283	7 x 7/8	24	1.61
BQ050	66623357284	7 x 7/8	36	1.61
BQ051	66623357285	7 x 7/8	50	1.49
BQ052	66623357286	7 x 7/8	60	1.44
BQ053	66623357287	7 x 7/8	80	1.38
BQ054	66623357288	7 x 7/8	100	1.38
BQ055	66623357289	7 x 7/8	120	1.38

AIR COOLED RUBBER BACK UP PADS

- Designed for medium to heavy grinding applications
- Slotted aluminum hub design draws cool air behind the disc
- Curved ribs on the rubber face force heat away from the disc and back-up pad
- Cooler cutting action reduces disc loading and increases grinding life
- All pads have 5/8"-11 threaded female hub for mounting



MERIT

Model No.	Mfg. No.	Description	Max RPM	Price /Each
BZ056	08834195006	4 1/2" Back Up Pad	11 000	30.12
BZ053	08834195002	5" Back Up Pad	10 000	30.43
BZ054	08834195003	7" Back Up Pad	8500	42.58
BZ052	08834195000	Disc Pad Nut 5/8"-11	-	7.96
BY731	08834192776	Spanner Wrench Fits 5/8" and 3/8"	-	24.31

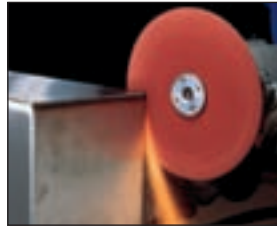
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D x A: Diameter x Arbor Size

785C REGALITE™ POLYCUT™ FIBRE DISCS

- 3M Cubitron™ abrasive grain disc constructed on a fibre backing
- Resin bonded for heat resistance
- Features grinding aid for cooler grinding
- Used primarily for stainless steel grinding and blending



381C ALUMINUM OXIDE FIBRE DISCS

- General purpose disc for weld removal, grinding and blending
- Aluminum oxide
- Resin bonded for heat resistance



Model No.	Size			Grit	Price /Each
	D"	x	A"		
BP290	4 1/2	x	7/8	36	2.70
BP294	4 1/2	x	7/8	50	2.52
BP298	4 1/2	x	7/8	60	2.52
BP302	4 1/2	x	7/8	80	2.26
BP281	4 1/2	x	7/8	100	2.26
BP285	4 1/2	x	7/8	120	2.26
BP291	5	x	7/8	36	2.77
BP295	5	x	7/8	50	2.59
BP299	5	x	7/8	60	2.59
BB425	5	x	7/8	80	2.31
BP282	5	x	7/8	100	2.31
BP286	5	x	7/8	120	2.31
BP292	7	x	7/8	36	3.51
BP296	7	x	7/8	50	3.26
BP300	7	x	7/8	60	3.26
BP283	7	x	7/8	100	2.92
BP287	7	x	7/8	120	2.92

Model No.	Size			Grit	Price /Each
	D"	x	A"		
BP228	4 1/2	x	7/8	24	2.18
BP232	4 1/2	x	7/8	36	2.18
BP240	4 1/2	x	7/8	60	2.03
BP244	4 1/2	x	7/8	80	1.84
BP230	5	x	7/8	24	2.23
BP234	5	x	7/8	36	2.23
BP242	5	x	7/8	60	2.08
BP246	5	x	7/8	80	1.85
BP231	7	x	7/8	24	2.82
BP243	7	x	7/8	60	2.71
BP247	7	x	7/8	80	2.62

ACCESSORIES

- **Disc Pad Hubs:** Plastic hubs with 5/8"-11 metal insert; use with 3M disc pad face plates
- **Disc Retainer Nuts:** For use with all 3M disc pad face plates, disc pads and 3M disc pad hubs; nuts have 5/8"-11 threaded arbor hole in three depths to accommodate grinder shaft lengths
- **Disc Pad Face Plates:** Backup plates for fibre discs 3M disc pad face plates are colour coded by density; ribbed plates result in cooler running discs; use harder face plates for heavier stock removal applications

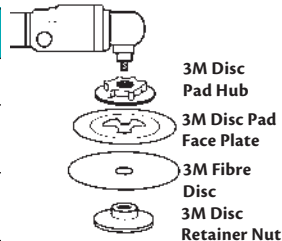


Model No.	Size"	Price/Each
DISC PAD HUBS		
BP212	2 1/2	47.89
BP213	4 1/2	48.36
DISC RETAINER NUTS		
BP219	5/8	19.75
BP217	1/2	19.75
BP218	3/8	19.75



DISC PAD FACE PLATES

Model No.	Size"	Max. RPM	Hardness - Colour	Price /Each
NS715	4 1/2	13 300	Medium - Grey	22.08
NS716	4 1/2	13 300	Hard - Black	22.26
BP188	5	12 000	Medium - Grey	29.59
BP187	5	12 000	Hard - Black	29.59
BP190	5	12 000	Extra Hard - Red	29.59
BP192	7	8600	Medium - Grey	42.77
BP191	7	8600	Hard - Black	42.77
BP194	7	8600	Extra Hard - Red	42.77



D x A: Diameter x Arbor Size

501C ALUMINA ZIRCONIA FIBRE DISCS

- Premium mineral for fast, cool grinding on all metals



Model No.	Size			Grit	Price /Each
	D"	x	A"		
BP419	4 1/2	x	7/8	24	1.07
BP422	4 1/2	x	7/8	36	1.07
BP425	4 1/2	x	7/8	50	1.07
BP428	4 1/2	x	7/8	60	1.07
BP431	4 1/2	x	7/8	80	1.07
BP306	4 1/2	x	7/8	100	1.07
BP307	4 1/2	x	7/8	120	1.07
BP420	5	x	7/8	24	1.07
BP423	5	x	7/8	36	1.07
BP426	5	x	7/8	50	1.07
BP429	5	x	7/8	60	1.07
BP432	5	x	7/8	80	1.07
BP415	5	x	7/8	100	1.07
BP417	5	x	7/8	120	1.07
BP421	7	x	7/8	24	2.66
BP424	7	x	7/8	36	2.61
BP427	7	x	7/8	50	2.44
BP430	7	x	7/8	60	2.30
BP433	7	x	7/8	80	2.15
BP418	7	x	7/8	120	2.15

Call us for
quantity
pricing!



ABRASIVES

SPEED-LOK TS & TR DISCS

Typical Applications

- Light to medium pressure grinding
- Blending, levelling and finishing applications
- For use on contours or flat surfaces

Features & benefits

Speed-Lok fastener, allows quick, tool-free disc changes allow for more grinding time
Twist on and twist off in 2 1/2 turns, disc locks securely to back-up pad, but is easily removed

NORTON SG BLAZE R980 CLOTH DISCS

- SG ceramic grain, provides coolest cut and significantly faster cut rates
- Improved resin bond system and durable backing offers greater durability and longest life on tough applications and stainless steel, and edge-fray resistance
- Polyester Y-wt backing, 3-ply laminate discs (yellow backing) more aggressive; ideal when durability and long life are required



NORTON

Size"		TS (Type II) Discs		Price /Each	TR (Type III) Discs		Price /Each
Size"	Grit	Model No.	Mfg. No.		Model No.	Mfg. No.	
1 1/2	36	NS547	66261162307	0.93	NS559	66261162308	0.93
1 1/2	50	NS548	66261162309	0.89	NS560	66261162310	0.89
1 1/2	60	NS549	66261162311	0.86	NS561	66261162312	0.86
1 1/2	80	NS550	66261162313	0.86	NS562	66261162314	0.86
2	36	NS551	66261162317	1.40	NS563	66261162318	1.40
2	50	NS552	66261162319	1.35	NS564	66261162320	1.35
2	60	NS553	66261162321	1.28	NS565	66261162322	1.28
2	80	NS554	66261162323	1.28	NS566	66261162324	1.28
3	36	NS555	66261162327	1.82	NS567	66261162328	1.82
3	50	NS556	66261162329	1.73	NS568	66261162330	1.73
3	60	NS557	66261162331	1.63	NS569	66261162332	1.63
3	80	NS558	66261162333	1.63	NS570	66261162334	1.63

MERIT ZIRC PLUS R801 CLOTH DISCS

- Self-sharpening, zirconia alumina abrasive, cooler cut, longer life
- Heavy Y-wt backing, two-ply construction, extended durability and reduced edge-wear
- For grinding and deburring stainless steel



MERIT

Size"		TS (Type II) Discs		Price /Each	TR (Type III) Discs		Price /Each
Size"	Grit	Model No.	Mfg. No.		Model No.	Mfg. No.	
1 1/2	36	BR815	08834167058	0.77	-	-	-
1 1/2	50	BR817	08834167060	0.74	-	-	-
1 1/2	60	BR818	08834167061	0.72	BR842	08834167103	0.72
1 1/2	80	BR819	08834167062	0.72	BR843	08834167104	0.72
2	36	BQ023	08834167065	1.12	BR845	08834167107	1.12
2	50	BQ025	08834165583	1.03	BR847	08834167109	1.03
2	60	BQ026	08834167068	1.00	BR848	08834167110	1.00
2	80	BQ027	08834167069	1.00	BR849	08834167111	1.00
3	36	BQ029	08834167072	1.56	BR851	08834167114	1.56
3	50	BQ031	08834167074	1.45	BR853	08834167116	1.45
3	60	BQ032	08834167075	1.40	BR854	08834167117	1.40
3	80	BQ033	08834167076	1.37	BR855	08834167118	1.37

MERIT ALO RESIN BOND CLOTH DISCS

- Premium aluminum oxide abrasive
- Long life
- Heavy-weight cloth construction
- Excellent durability
- X-wt cotton backing
- Ideal for aggressive stock removal applications
- Resistant to heat



MERIT

Size"		TS (Type II) Discs		Price /Each	TR (Type III) Discs		Price /Each
Size"	Grit	Model No.	Mfg. No.		Model No.	Mfg. No.	
1 1/2	36	BR503	08834165131	0.60	-	-	-
1 1/2	40	BR504	08834165132	0.58	BR447	08834164804	0.58
1 1/2	50	BR505	08834165133	0.56	-	-	-
1 1/2	60	BR506	08834165134	0.56	-	-	-
1 1/2	80	BR507	08834165135	0.56	BR158	08834161400	0.56
1 1/2	100	BR508	08834165136	0.56	-	-	-
1 1/2	120	BR509	08834165137	0.56	BR462	08834164905	0.56
2	36	BR515	08834165146	0.91	BR464	08834164913	0.91
2	40	BR516	08834165147	0.88	BR490	08834166353	0.51
2	50	BR517	08834165148	0.84	BR465	08834164914	0.84
2	60	BR518	08834165149	0.82	BR102	08834161155	0.82
2	80	BR519	08834165150	0.81	BR474	08834164941	0.81
2	100	BR520	08834165151	0.79	BR467	08834164917	0.79
2	120	BR521	08834165152	0.79	BR103	08834161169	0.79
3	36	BR527	08834165161	1.26	BR471	08834164938	1.26
3	40	BR528	08834165162	1.21	BR472	08834164939	1.21
3	50	BR529	08834165163	1.17	BR473	08834164940	1.17
3	60	BR530	08834165164	1.14	BR605	08834166183	1.14
3	80	BR531	08834165165	1.10	BR611	08834166191	1.10
3	100	BR532	08834165166	1.05	BR609	08834166189	1.05
3	120	BR533	08834165167	1.05	BR606	08834166184	1.05

BACK UP PADS



Description		TS (Type II)		Price /Each	TR (Type III)		Price /Each
		Model No.	Mfg. No.		Model No.	Mfg. No.	
1 1/2" Medium	30 000	BR282	08834164146	26.29	BR104	08834161174	14.16
1 1/2" Hard	30 000	BR434	08834164622	14.16	BR437	08834164640	14.16
2" Medium	30 000	BR284	08834164198	15.58	BR469	08834164922	15.58
2" Hard	30 000	BR435	08834164624	15.58	BR439	08834164643	15.58
3" Medium	20 000	BR281	08834164113	16.38	BR475	08834164949	16.38
3" Hard	20 000	BR164	08834161626	16.38	BR272	08834164036	16.38



963G ROLOC™ DISCS

- Premium Cubitron™ abrasive grain
- Water resistant polyester cloth backing
- Resin bonded for heat resistance and it can be run wet or dry
- Used primarily for metal working and woodworking



REGAL™ RESIN BOND CLOTH

Model No.	Size"	Grit	Price /Each
AC435	2	24	1.21
AC436	2	36	1.17
AC437	2	50	1.08
AC438	2	60	1.02
AC439	2	80	1.00
AC440	2	100	0.97
AC441	2	120	0.97

Model No.	Size"	Grit	Price /Each
AC442	3	24	1.57
AC443	3	36	1.51
AC444	3	50	1.34
AC445	3	60	1.31
AC446	3	80	1.31
AC447	3	100	1.26
AC448	3	120	1.31

361F DISCS

- General purpose grinding, blending and deburring on all metals
- Heavy-duty cloth backing



ROLOC™

Model No.	Size"	Grit	Price /Each
BP336	2	24	0.84
BP338	2	36	0.79
BP340	2	50	0.74
BP342	2	60	0.70
BP344	2	80	0.67
BP346	2	P100	0.67
BP348	2	P120	0.67
BP350	2	P150	0.67
BP352	2	P180	0.67
BP353	2	P240	0.67
BP337	3	24	1.07
BP339	3	36	1.00
BP341	3	50	0.92
BP343	3	60	0.90
BP345	3	80	0.89
BP347	3	P100	0.89
BP349	3	P120	0.89
BP351	3	P150	0.89
BP354	3	P240	0.89

ROLOC™ TSM

Model No.	Size"	Grit	Price /Each
BP326	2	36	1.02
BP328	2	60	0.90
BP332	2	P100	0.87
BP329	3	60	1.20
BP331	3	80	1.13
BP333	3	P100	1.13
BP335	3	P120	1.13



ROLOC™ DISC PADS

Rubber back-up pads are available in different diameters and degrees of hardness for varying grinding applications. Pads are internally threaded to receive any standard 1/4"-20 thread shaft.



Model No.	Size"	Hardness	Max. RPM	Price /Each
BP008	2	Medium	25 000	17.57
BP005	2	Hard	25 000	17.57
BP009	3	Medium	18 000	21.46
BP006	3	Hard	20 000	21.46

ROLOC™ TSM DISC PADS

For use with Roloc™ TSM grinding discs and screw on abrasive discs.



Model No.	Size"	Hardness	Max. RPM	Price /Each
BP517	2	Medium	25 000	24.80
BP516	2	Hard	25 000	24.80
BP518	3	Hard	20 000	30.57

1/4" TREADED SHAFTS

Needed with all Roloc™ disc pads.

Model No.	Size"	Hardness	Price /Each
BP013	1/4 x 1/4	Thread	3.38

ALUMINUM OXIDE 2 PLY DISCS

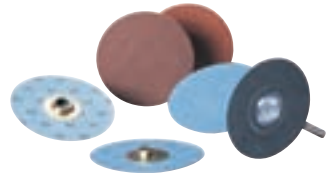
- Best disc for general purpose grinding, deburring and blending on ferrous metals

Features

- Variety of Quick Change fastening systems
- Multiple layers of backing

Benefits

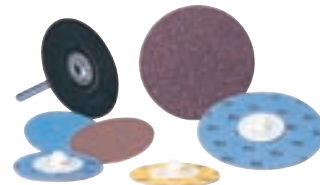
- Instant disc changes
- Disc is centered
- Smooth running
- Works well on flat or contour surfaces
- Aggressive stock removal
- Greater productivity



SOCATT® DISCS

Model No.	Size"	Grit	Price /Each
VU392	2	24	0.78
VU393	2	36	0.73
VU394	2	40	0.70
VU395	2	50	0.68
VU396	2	60	0.65
VU397	2	80	0.64
VU398	2	100	0.63
VU399	2	120	0.63
VU400	2	150	0.63
VU401	2	180	0.63
VU402	2	240	0.63
VU403	2	320	0.63

Model No.	Size"	Grit	Price /Each
VU404	3	24	0.98
VU405	3	36	0.92
VU406	3	40	0.89
VU407	3	50	0.87
VU408	3	60	0.84
VU409	3	80	0.82
VU410	3	100	0.81
VU411	3	120	0.81
VU413	3	180	0.89
VU414	3	240	0.81
VU415	3	320	0.89



LOCKIT® DISCS

Model No.	Size"	Grit	Price /Each
VU429	2	36	0.73
VU430	2	40	0.70
VU431	2	50	0.68
VU432	2	60	0.65
VU433	2	80	0.64
VU434	2	100	0.63
VU435	2	120	0.63
VU436	2	150	0.63
VU437	2	180	0.63
VU438	2	240	0.63
VU439	2	320	0.63

Model No.	Size"	Grit	Price /Each
VU441	3	36	0.92
VU442	3	40	0.89
VU443	3	50	0.87
VU444	3	60	0.84
VU445	3	80	0.82
VU446	3	100	0.81
VU447	3	120	0.81

HOLDER PADS

- With mandrel



Model No.	Dia."	Density	Price /Each
FOR SMALL DIAMETER SOCATT® DISCS			
VU601	2	Soft	13.04
VU602	2	Medium	12.49
VU603	2	Firm	14.89
VU604	3	Soft	15.87
VU605	3	Medium	14.46
VU606	3	Firm	17.22
FOR SMALL DIAMETER LOCKIT® DISCS			
VU610	2	Soft	13.68
VU611	2	Medium	12.49
VU612	2	Firm	14.89
VU613	3	Soft	15.87
VU614	3	Medium	14.46
VU615	3	Firm	17.22

PSA & HOOK AND LOOP PAPER DISCS

Typical Applications

- Preparing primed and painted surfaces for finishing
- Stripping primer and paint
- Sanding of plastic and fibreglass
- Light weld blending and deburring
- Bare wood sanding
- Finishing metal of all types

NO-FIL ADALOX A275 DISCS

- Premium P-graded, heat-treated aluminum oxide abrasive, superior life fast cut rate, consistent finish
- Unique fibre-reinforced, B-wt latex-saturated backing, 50-60% improvement in tears strength and can be used wet
- Water-based stearate, non-pigmented, No-Fil coating, provides maximum load resistance and extended life; no colour transfer to work
- The PSA adhesive is protected from air-borne contaminants
- Hook and loop are reusable discs that reduce waste



PB273 PAPER DISCS

- P-graded aluminum oxide abrasive
- Fast cutting action and extended life with consistent finish
- Flexible latex B-wt backing, with a full resin bond and open coat
- Improved resistance to delamination; no delamination to back-up pad
- Can be used moist or wet
- Water-based stearate, non-pigmented No-Fil coating provides improved load resistance and no color transfer to work



Model No.	Mfg. No.	Size"	Grit	Price /Each
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HOOK & LOOP PAPER DISCS

NZ005	66261131549	5	P80	0.61
NZ006	66261131548	5	P100	0.55
NZ007	66261131547	5	P120	0.55
NZ008	66261131546	5	P150	0.55
NZ009	66261131545	5	P180	0.55
NZ010	66261131544	5	P220	0.55
NZ011	66261131543	5	P240	0.55
NZ012	66261131542	5	P280	0.55
NZ013	66261131541	5	P320	0.55
NZ014	66261131539	5	P400	0.55
NZ015	66261131538	5	P500	0.55
NZ016	66261131537	5	P600	0.63
NZ017	66261131536	5	P800	0.63
NZ021	66261131566	6	P80	0.92
NZ022	66261131565	6	P100	0.81
NZ023	66261131564	6	P120	0.81
NZ024	66261131563	6	P150	0.81
NZ025	66261131562	6	P180	0.81
NZ026	66261131561	6	P220	0.81
NZ027	66261131560	6	P240	0.81
NZ028	66261131559	6	P280	0.81
NZ029	66261131558	6	P320	0.81
NZ030	66261131556	6	P400	0.81
NZ031	66261131555	6	P500	0.81
NZ032	66261131554	6	P600	0.81
NZ033	66261131553	6	P800	0.81

STICK AND SAND PAPER DISCS

NS025	66261131464	5	P80	47.50
NS675	66261131463	5	P100	43.80
NS030	66261131462	5	P120	43.80
NS029	66261131461	5	P150	43.80
NS028	66261131460	5	P180	43.80
NS027	66261131459	5	P220	43.80
NS026	66261131458	5	P240	43.80
NS676	66261131457	5	P280	43.80
NS677	66261131456	5	P320	43.80
NS678	66261131454	5	P400	43.80
NS679	66261131453	5	P500	43.80
NS680	66261131452	5	P600	43.80
NS681	66261131451	5	P800	43.80
NS018	66261131481	6	P80	72.03
NS019	66261131480	6	P100	66.52
NS020	66261131479	6	P120	66.52
NS682	66261131478	6	P150	66.52
NS021	66261131477	6	P180	66.52
NS022	66261131476	6	P220	66.52
NS023	66261131475	6	P240	66.52
NS683	66261131474	6	P280	66.52
NS024	66261131473	6	P320	66.64
NZ001	66261131471	6	P400	66.52
NZ002	66261131470	6	P500	66.52
NZ003	66261131469	6	P600	66.52
NZ004	66261131468	6	P800	66.52

Model No.	Mfg. No.	Size"	Grit	Price /Each
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HOOK AND LOOP DISCS

NR896	66623362950	5	P80-B	0.33
NR897	66623365788	5	P100-B	0.32
NR898	66623362949	5	P120-B	0.32
NR899	66623362948	5	P150-B	0.32
NR900	66623362947	5	P180-B	0.32
NR901	66623362946	5	P220-B	0.32
NR902	66623362945	5	P240-B	0.32
NR903	66623362944	5	P320-B	0.32
NR904	66623362943	5	P400-B	0.32
NR905	66261023937	5	P500-B	0.32
NR906	66623362942	5	P600-B	0.32
NR907	66623362941	5	P800-B	0.32
NR908	66623362960	6	P80-B	0.41
NR909	66623365789	6	P100-B	0.34
NR910	66623362959	6	P120-B	0.34
NR911	66623362958	6	P150-B	0.34
NR912	66623362957	6	P180-B	0.34
NR913	66623362956	6	P220-B	0.34
NR914	66623362955	6	P240-B	0.34
NR915	66623362954	6	P320-B	0.34
NR916	66623362953	6	P400-B	0.34
NR917	66623362952	6	P600-B	0.34
NR918	66623362951	6	P800-B	0.34

PSA DISCS

NR919	66623362930	5	P80-B	28.93
NR920	66623371920	5	P100-B	26.18
NR921	66623362929	5	P120-B	26.18
NR922	66623362928	5	P150-B	26.18
NR923	66623362927	5	P180-B	26.18
NR924	66623362926	5	P220-B	26.18
NR925	66623362925	5	P240-B	26.18
NR926	66623362924	5	P320-B	26.18
NR927	66623362923	5	P400-B	26.18
NR928	66623362922	5	P600-B	26.18
NR929	66623362921	5	P800-B	26.18
NR930	66623362940	6	P80-B	32.03
NR931	66623362939	6	P120-B	29.00
NR932	66623362938	6	P150-B	29.00
NR933	66623362937	6	P180-B	29.00
NR934	66623362936	6	P220-B	29.00
NR935	66623362935	6	P240-B	29.00
NR936	66623362934	6	P320-B	29.00
NR937	66623362933	6	P400-B	29.00
NR938	66623362932	6	P600-B	29.00
NR939	66623362931	6	P800-B	29.00

214U STIKIT™ WHITE GOLD DISC ROLLS

- Aluminum oxide A-wt paper
- Special 3M™ Fre-Cut™ coating resists loading
- Discs for paint, primer, wood, metal, plastic and fibreglass
- Grit 80 to 120:** 125 discs per roll, no holes
- Grit 150+:** 175 discs per roll, no holes



Model No.	Mfg. No.	Size"	Grade	Price /Each
BP632	AB81802	5	80A	35.72
BP631	AB81803	5	P100	35.72
BP633	AB81804	5	P120	35.72
BP635	AB81806	5	P150A	49.44
BP637	AB81808	5	P180A	49.44
BP639	AB81810	5	P220A	49.44
NT093	AB81812	5	P240A	49.44
BP641	AB81997	5	P320A	49.44
BP642	AB81996	5	P400A	49.44
NX244	AB86381	6	80	46.74
NX237	AB86389	6	P100	46.74
NX238	AB86382	6	P120	46.74
NX239	AB86383	6	P150	64.84
NX240	AB86384	6	P180	64.84
NX241	AB86385	6	P220	64.84
NX242	AB86387	6	P320	64.84

BACK UP PADS FOR PSA & HOOK AND LOOP PAPER DISCS

- Available with PSA or hook and loop faces, both are shock resistant and have a fibreglass backing plate with a riveted 5/16"-24 threaded shank for added strength and increased heat resistance
- Low profile pads, soft density utilizes 1/2" thick foam for fine finish sanding and offer moderate conformability and medium density has 1/2" thick urethane foam for intermediate and finish sanding



Model No.	Mfg No.	Description	Max RPM	Price /Each
NR940	63642506126	5" PSA Soft Low Profile	15 000	33.86
NR941	63642506131	5" PSA Medium Low Profile	15 000	33.86
NR943	63642506129	5" NorGrip Soft Low Profile	15 000	36.24
NZ049	63642506135	5" NorGrip Medium Low Profile	15 000	36.24
NR945	63642506127	6" PSA Soft Low Profile	15 000	36.09
NR946	63642506133	6" PSA Medium Low Profile	15 000	36.09
NR948	63642506130	6" NorGrip Soft Low Profile	15 000	44.98
NR947	63642506137	6" NorGrip Medium Low Profile	15 000	44.98

236U STIKIT™ DISC ROLLS

- Aluminum oxide C-wt paper
- Strong paper backing provides durability and increase cut rate
- Open coat minimizes loading
- Discs for paint, primer, wood, metal, plastic and fibreglass
- 100 discs per roll, no holes



Model No.	Mfg. No.	Size"	Grade	Price /Each
NX291	AB86488	5	P80	41.48
NX282	AB86489	5	P100	41.48
NX283	AB86490	5	P120	41.48
NX284	AB86491	5	P150	41.48
NX285	AB86492	5	P180	41.48
NX286	AB86493	5	P220	41.48
NX287	AB86494	5	P240	41.48
NX288	AB86495	5	P320	41.48
NX289	AB86496	5	P400	41.48
NX290	AB86497	5	P500	41.48
NX301	AB86468	6	P80	54.18
NX292	AB86469	6	P100	54.18
NX293	AB86470	6	P120	54.18
NX294	AB86471	6	P150	54.18
NX295	AB86472	6	P180	54.18
NX296	AB86473	6	P220	54.18
NX297	AB86474	6	P240	54.18
NX298	AB86475	6	P320	54.18
NX299	AB86476	6	P400	54.18
NX300	AB86477	6	P500	54.18

STIKIT™ DISC PADS

- Provides excellent disc adhesion yet allows quick, easy removal
- Has medium density foam and a 45° tapered edge for flexibility
- Lightweight and shock-resistant with blue vinyl face
- Use with dual action and random orbital sanders; maximum RPM of 10 000



Model No.	Dimensions	For use with	Price /Each
BP215	5" x 3/4" x 5/16-24 Ext	5" Stikit™ Discs	20.00
BP216	6" x 3/4" x 5/16-24 Ext	6" Stikit™ Discs	37.97

LARGE DIAMETER CLOTH PSA DISCS

Typical Applications

- Used on stationary disc machines
- For dimensioning
- For finishing metal workpieces
- Pressure sensitive adhesive offers fast, convenient mounting

- Made without centre holes for full-face usage

NORZON PLUS R821 DISCS

- Self-sharpening, zirconia alumina abrasive, offers cooler cut and extended life
- Heavy Y-wt backing, is durable, reduced edge wear
- Ideal for grinding and deburring stainless steel



Model No.	Mfg. No.	Size"	Grit	Price /Each
NZ057	66261138318	12	24	13.56
NZ058	66261138319	12	36	12.83
NZ059	66261138320	12	40	11.92
NZ060	66261138321	12	50	11.20
NZ061	66261138322	12	60	10.52
NZ062	66261138323	12	80	9.75

METALITE R228 DISCS

- Premium aluminum oxide abrasive
- Long life
- Heavy, X-wt cotton backing
- Durable
- Ideal for aggressive stock removal applications
- Resistant to heat



Model No.	Mfg. No.	Size"	Grit	Price /Each
NZ077	66261136635	12	36	7.86
NZ078	66261136630	12	40	7.42
NZ079	66261136625	12	50	7.00
NZ080	66261136620	12	60	6.60
NZ081	66261136615	12	80	6.18
NZ082	66261136614	12	100	5.85
NZ083	66261136613	12	120	5.85

ABRASIVES

FILE BELTS

Typical Applications

- Light weld removal and blending
- Shape and contour sanding
- Surface preparation prior to coating and plating
- Removing cutting tool marks from moulds and dies
- General clean-up and finishing



NORTON SG BLAZE R980 BELTS

- SG ceramic abrasive grain lasts 50% to 200% longer on mild and carbon steel, stainless, cobalt, chrome, inconel and titanium
- Cuts 20% faster than the current generation of grinding belts, longer belt life, better metal integrity
- Improved Y-wt polyester waterproof cloth backing, significantly improved belt life due to better grain adhesion
- Improved resin bond system, improved grain-retention, cooler cutting during the life of the belt



NORTON

Model No.	Mfg. No.	W"	Size x L"	Grit	Price /Each
NR091	69957398018	1/2	x 12	40	2.22
NR092	69957698019	1/2	x 12	60	2.17
NR093	69957398020	1/2	x 12	80	2.07
NR094	69957398021	1/2	x 18	40	2.42
NR095	69957398022	1/2	x 18	60	2.29
NR096	69957398023	1/2	x 18	80	2.21
NR097	69957398024	1/2	x 24	40	2.64
NR098	69957398025	1/2	x 24	60	2.49
NR099	69957398026	1/2	x 24	80	2.31
NR100	69957398027	3/4	x 18	40	2.71
NR101	69957398028	3/4	x 18	60	2.56
NR102	69957398029	3/4	x 18	80	2.36

NORZON PLUS R823 BELTS

- Premium, self-sharpening zirconia alumina abrasive
- Aggressive, rapid cut rate, strong grain adhesion, longer life
- Waterproof for use on a broad range of materials
- Strong X-wt polyester backing, for moderate to heavy pressure applications
- Ideal on stainless steel



NORTON

Model No.	Mfg. No.	W"	Size x L"	Grit	Price /Each
NZ178	78072728745	1/2	x 12	60	1.02
NZ179	78072728744	1/2	x 12	80	0.91
NZ180	78072728742	1/2	x 12	120	0.81
NZ181	78072728569	1/2	x 18	60	1.07
NZ182	78072728568	1/2	x 18	80	1.02
NZ183	78072728567	1/2	x 18	120	0.86
NZ184	78072728564	1/2	x 24	60	1.14
NZ185	78072728566	1/2	x 24	80	1.07
NZ187	78072728565	1/2	x 24	120	0.98
NZ188	78072709590	3/4	x 18	60	1.40
NZ189	78072758953	3/4	x 18	80	1.37
NZ194	78072728583	1	x 30	60	2.21
NZ195	78072728582	1	x 30	80	2.07

METALITE R228 BELTS

- Aluminum oxide abrasive
- Aggressive cutting; resistant to heat
- Strong X-wt rayon backing
- For metal and wood



NORTON

Model No.	Mfg. No.	W"	Size x L"	Grit	Price /Each
NZ410	78072727557	1/2	x 12	40	1.26
NZ411	78072727555	1/2	x 12	60	1.23
NZ412	78072727554	1/2	x 12	80	1.19
NZ414	78072727552	1/2	x 12	120	1.17
NZ415	78072727561	1/2	x 18	40	1.30
NZ416	78072727560	1/2	x 18	60	1.26
NZ417	78072727559	1/2	x 18	80	1.24
NZ418	78072727558	1/2	x 18	120	1.23
NZ419	78072727568	1/2	x 24	40	1.37
NZ421	78072727566	1/2	x 24	60	1.33
NZ422	78072727565	1/2	x 24	80	1.31
NZ423	78072727564	1/2	x 24	120	1.30
NZ429	78072727579	1	x 30	80	2.56
NZ430	78072727577	1	x 30	120	2.47

PORTABLE BELTS

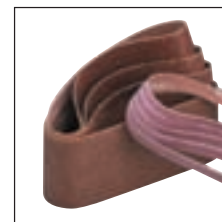
Typical Applications

- Grinding and finishing of all metals
- Blending of welds
- Sanding and finishing of wood
- Glass seaming and polishing



METALITE R228 BELTS

- Aluminum oxide abrasive
- Aggressive cutting; resistant to heat
- Strong X-wt cotton backing
- For metal and wood



NORTON

Model No.	Mfg. No.	W"	Size x L"	Grit	Price /Each
NZ283	78072721691	3	x 21	40	2.49
NZ284	78072721690	3	x 21	50	2.56
NZ285	78072721685	3	x 21	60	2.33
NZ286	78072721680	3	x 21	80	2.22
NZ287	78072721676	3	x 21	100	2.17
NZ288	78072721675	3	x 21	120	2.17
NZ289	78072721770	3	x 24	36	2.87
NZ290	78072721765	3	x 24	40	2.71
NZ291	78072721760	3	x 24	50	2.59
NZ292	78072721755	3	x 24	60	2.49
NZ293	78072721750	3	x 24	80	2.40
NZ294	78072721745	3	x 24	100	2.31
NZ302	78072722058	4	x 24	36	4.94
NZ303	78072722057	4	x 24	40	4.36
NZ304	78072722056	4	x 24	50	4.20
NZ305	78072722055	4	x 24	60	4.04
NZ306	78072722050	4	x 24	80	3.80
NZ307	78072722045	4	x 24	100	3.71
NZ308	78072722044	4	x 24	120	3.71

Call us for
quantity
pricing!



STATIONARY BELTS

Typical Applications

- Benchstand and backstand belts
- Grinding and deburring of all metals
- Heavy stock removal
- Blending, dimensioning and shaping
- Polishing

NORZON PLUS R823 BELTS

- Premium self-sharpening zirconia alumina abrasive, aggressive, rapid cut rate
- Strong X-wt polyester backing; waterproof, greater flexibility, ideal for heavy pressure applications



NORTON

Model No.	Mfg. No.	W"	Size x L"	Grit	Price /Each
NZ196	78072728596	1	x 42	60	2.43
NZ197	78072728594	1	x 42	80	2.24
NZ198	78072728592	1	x 42	100	2.12
NZ199	78072728590	1	x 42	120	2.12
NZ200	78072728586	1	x 42	180	2.12
NZ215	78072728827	4	x 36	60	6.58
NZ216	78072728825	4	x 36	80	6.06
NZ217	78072728821	4	x 36	120	5.79
NZ218	78072728937	6	x 48	60	12.23
NZ219	78072728935	6	x 48	80	11.06
NZ220	78072728933	6	x 48	100	10.76
NZ221	78072728931	6	x 48	120	10.76

METALITE R228 BELTS

- Aluminum oxide abrasive
- For a wide range of metalworking applications
- Strong X-wt cotton backing, aggressive cutting/resistant to heat



NORTON

Model No.	Mfg. No.	W"	Size x L"	Grit	Price /Each
NZ309	78072720910	1	x 42	40	2.66
NZ310	78072720905	1	x 42	50	2.59
NZ311	78072720900	1	x 42	60	2.54
NZ312	78072720895	1	x 42	80	2.45
NZ313	78072720890	1	x 42	100	2.35
NZ314	78072720885	1	x 42	120	2.35
NZ315	78072720880	1	x 42	150	2.35
NZ316	78072720875	1	x 42	180	2.35
NZ317	78072720871	1	x 42	220	2.35
NZ318	78072720870	1	x 42	240	2.35
NZ319	78072720865	1	x 42	320	2.35
NZ354	78072722110	4	x 36	36	6.63
NZ355	78072722105	4	x 36	40	6.37
NZ356	78072722100	4	x 36	50	6.14
NZ357	78072722095	4	x 36	60	5.95
NZ358	78072722090	4	x 36	80	5.65
NZ359	78072722085	4	x 36	100	5.50
NZ360	78072722080	4	x 36	120	5.50
NZ361	78072722079	4	x 36	150	4.88
NZ362	78072722075	4	x 36	180	4.88
NZ363	78072722071	4	x 36	320	4.88
NZ371	78072722590	6	x 48	36	11.24
NZ372	78072722585	6	x 48	40	11.38
NZ373	78072722580	6	x 48	50	10.25
NZ374	78072722575	6	x 48	60	9.84
NZ375	78072722570	6	x 48	80	9.38
NZ376	78072722565	6	x 48	100	9.10
NZ377	78072722560	6	x 48	120	9.10
NZ378	78072722555	6	x 48	150	8.65
NZ379	78072722550	6	x 48	180	8.65
NZ380	78072722546	6	x 48	220	8.65
NZ381	78072722545	6	x 48	240	8.65
NZ382	78072722543	6	x 48	320	8.65

SPIRAL BANDS

Typical Applications

- Deburring
- Polishing
- Surface preparation

Features & benefits

- Spiral construction avoids shadow marks and provides smooth cutting action
- Achieve close tolerances when finishing curved or contoured areas

SPIRAL BANDS

- Aluminum oxide resin bond



NORTON

Model No.	Mfg. No.	Size"	Grit	Price /Each
BZ251	08834196068	1/2 x 1/2	60	62.69
BZ288	08834196179	1/2 x 1/2	80	62.69
BZ252	08834196069	1/2 x 1/2	120	62.69
BZ307	08834196212	1/2 x 1	60	65.77
BZ309	08834196215	1/2 x 1	80	65.77
BZ305	08834196210	1/2 x 1	120	65.77
BZ401	08834196554	3/4 x 1	60	79.40
BZ328	08834196249	3/4 x 1	80	78.19
BZ244	08834196057	3/4 x 1	120	77.25
BZ257	08834196074	1 x 1	80	73.90
BZ278	08834196167	1 x 1	100	72.45
BZ286	08834196177	1 x 1	120	72.45
BZ247	08834196060	1 x 1 1/2	60	85.87
BZ274	08834196162	1 x 1 1/2	80	83.70
BZ443	08834196677	1 x 1 1/2	120	82.50
BZ289	08834196181	2 x 2	80	130.11
BZ298	08834196193	2 x 2	100	129.38
BZ412	08834196585	2 x 2	120	129.38
BZ296	08834196188	3 x 3	60	239.17
BZ272	08834196159	3 x 3	80	231.72
BZ407	08834196572	3 x 3	120	225.77

CARTRIDGE ROLLS

MERIT

Typical Applications

- Flash removal
- Polishing
- Removing machine tool marks and edge breaking

Features & benefits

- Can reach into corners where larger diameter tools cannot

CARTRIDGE ROLLS TEST KIT CR

- Includes 120 of the most popular sizes, grit and shape with their appropriate mandrels

Model No. BS529
Price/Each \$74.60



ABRASIVES

SHOP CLOTH ROLLS

Typical Applications

- Polishing lathe turnings, rolls and cylinders
- Light deburring
- Blending machine tool marks
- Removing rust and scale
- Fine sanding and polishing

METALITE K225 CLOTH SHOP ROLLS

- For general purpose metalworking applications
- Premium P-graded aluminum oxide abrasive produces greater cut rate
- Flexible J-wt cotton backing offers superior conformability to complex surfaces and better finishes
- Advanced full resin bond system offers exceptional grain adhesion for longer life



NORTON

Model No.	Mfg. No.	Grit	Price /Each
1" X 50 YARD			
NS204	66261058716	40	43.91
NS205	66261127728	50	40.83
NS206	66261127729	60	27.98
NS212	66261126276	80	32.25
NS213	66261126275	100	31.20
NS214	66261126274	120	31.20
NS215	66261126273	150	31.20
NZ846	66261126270	240	31.20
NZ847	66261126268	320	31.20
NZ887	66261126267	400	31.20
1 1/2" X 50 YARD			
NZ888	66261058715	40	61.57
NZ890	66261127731	60	53.48
NZ891	66261126288	80	45.19
NZ892	66261126287	100	43.68
NZ893	66261126286	120	43.68

Model No.	Mfg. No.	Grit	Price /Each
1 1/2" X 50 YARD			
NZ894	66261126285	150	43.68
NZ951	66261126284	180	43.68
NZ953	66261126282	240	43.68
NZ955	66261126280	320	43.68
NZ957	66261126279	400	43.68
2" X 50 YARD			
NZ959	66261058714	40	78.21
NZ995	66261127732	50	72.75
NZ996	66261127733	60	67.95
NS048	66261126299	80	57.40
NZ997	66261126298	100	55.51
NS049	66261126297	120	55.51
NS050	66261126296	150	55.51
NS051	66261126295	180	55.51
NZ998	66261126293	240	55.51
NZ999	66261126291	320	55.51
NR001	66261126290	400	55.51

METALITE K227 CLOTH SHOP ROLLS

- The choice for quality metal finishing
- P-graded aluminum oxide abrasive grain produces fast cut rate and consistent finish
- Flexible J-wt cotton backing offers superior conformity to complex surfaces and better finishes
- Resin bond system for longer life



NORTON

Model No.	Mfg. No.	Grit	Price /Each
1 1/2" X 50 YDS			
NR132	66261109255	P80-J	33.78
NR133	66261058719	P100-J	32.59
NR134	66261109245	P120-J	32.59
NR135	66261058717	P150-J	32.59
NR136	66261109235	P180-J	32.59
NR137	66261109225	P280-J	32.59
NR138	66261109215	P320-J	32.59

Model No.	Mfg. No.	Grit	Price /Each
2" X 50 YDS			
NR139	66261109335	P80-J	43.24
NR140	66261109330	P100-J	41.72
NR141	66261109325	P120-J	41.72
NR142	66261109320	P150-J	41.72
NR143	66261109315	P180-J	41.72
NR144	66261109305	P280-J	41.72
NR145	66261109295	P320-J	41.72

314D PROFESSIONAL CLOTH SHEETS

- Cleaning metal prior to soldering or welding
- Repairing and blending metal finishes and removing stamping marks
- Fine sanding and polishing
- Removing rust, scale and other contaminants
- Hand or machine deburring



3M

9" X 11" SHEETS

Model No.	Mfg. No.	Grit	Price /Each
BP672	60333	50X	0.85
BP673	60334	60X	0.80
BP671	60342	80J	0.70
BP664	60343	100J	0.67
BP665	60344	120J	0.67
BP666	60345	150J	0.67
BP667	60346	180J	0.67
BP668	60347	220J	0.67
BP669	60348	240J	0.67
BP670	60349	280J	0.67

ROLLS

Model No.	Mfg. No.	Grit	Price /Each
1" X 50 YARD			
BP660	60326	50X	16.48
BP662	60325	60X	15.52
BP657	60686	80J	13.61
BP643	60687	100J	12.82
BP645	60688	120J	12.82
BP647	60689	150J	12.82
BP649	60690	180J	12.82
BP651	60691	220J	12.82
BP653	60692	240J	12.82
BP655	60693	280J	12.82

ROLLS

Model No.	Mfg. No.	Grit	Price /Each
1 1/2" X 50 YARD ROLLS			
BP624	60327	50X	24.71
BP625	60328	60X	23.30
BP623	60697	80J	20.43
BP616	60698	100J	19.15
BP617	60699	120J	19.15
BP618	60700	150J	19.15
BP619	60701	180J	19.15
BP620	60702	220J	19.15
BP621	60703	240J	19.15
BP622	60704	280J	19.15
2" X 50 YARD ROLLS			
BP659	60329	40X	35.43
BP661	60330	50X	32.92
BP663	60331	60X	31.05
BP658	60708	80J	27.23
BP644	60709	100J	25.56
BP646	60710	120J	25.56
BP648	60711	150J	25.56
BP650	60712	180J	25.56
BP652	60713	220J	25.56
BP654	60714	240J	25.56
BP656	60715	280J	25.56

Call us for
all your Welding
& Metalworking
requirements!



SANDPAPER, CLOTH SHEETS

Typical Applications

- Scouring and light deburring
- Scale and rust removal
- Blending machine tool marks
- Fine sanding and polishing

METALITE K225 9" X 11" SHEETS

- Premium P-graded aluminum oxide abrasive
- Advanced full resin bond system offers exceptional grain adhesion for longer life
- Flexible J-wt cotton backing, for superior conformability to complex surfaces and better finishes



NORTON

Model No.	Mfg. No.	Grit	Price /Each
NR103	66261058713	40	1.49
NR104	66261101862	50	1.38
NR105	66261101861	60	1.30
NZ455	66261126340	80	1.10
NZ456	66261126339	100	1.02
NZ457	66261126338	120	1.02
NZ458	66261126337	150	1.02
NZ459	66261126336	180	1.02
NZ460	66261126335	220	1.02
NZ461	66261126334	240	1.02
NZ462	66261126333	280	1.02
NZ463	66261126332	320	1.02
NZ464	66261126331	400	1.02
NZ465	66261126330	600	1.02

SANDPAPER, PAPER SHEETS

Typical Applications

- Light duty, metal sanding
- Primer sanding, defect removal from painted surfaces
- Filler sanding
- Sanding and finishing of composites and fibreglass
- Bare wood sanding
- Sanding between sealer coats

NO-FIL ADALOX A275 9" X 11" SHEETS

- Premium P-graded, heat-treated aluminum oxide abrasive
- Unique fibre-reinforced, B-wt latex-saturated backing, can be used wet
- Water-based serrated, non-pigmented, No-Fil coating, provides maximum load resistance and extended life; no colour transfer to work

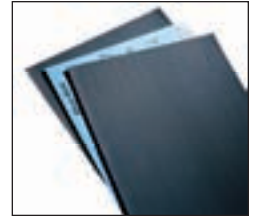


NORTON

Model No.	Mfg. No.	Grit	Price /Each
NZ431	66261131634	80	0.88
NZ432	66261131633	100	0.79
NZ433	66261131632	120	0.79
NZ434	66261131631	150	0.79
NZ435	66261131630	180	0.79
NZ436	66261131629	220	0.79
NZ437	66261131628	240	0.79
NZ438	66261131627	280	0.79
NZ439	66261131626	320	0.79
NZ440	66261131624	400	0.79
NZ441	66261131623	500	0.79
NZ442	66261131622	600	0.79
NZ443	66261131621	800	0.79

BLUE-BAK T414 WATERPROOF 9" X 11" SHEETS

- Sharp silicon carbide abrasive, exceptional finishes in wet applications
- Strong resin bond, longer life in wet applications
- High strength B-wt waterproof paper backing, extremely flexible
- Environmentally stable; resists humidity-caused curling

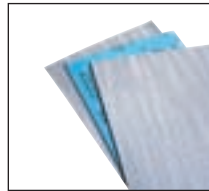


NORTON

Model No.	Mfg. No.	Grit	Price /Each
NZ447	66261139367	220	0.93
NZ448	66261139366	240	0.93
NZ449	66261139365	280	0.93
NZ450	66261139364	320	0.93
NZ451	66261139363	360	0.93
NZ452	66261139362	400	0.93
NZ453	66261139361	500	0.93
NZ454	66261139360	600	0.93

NO-FILL DURITE A475 9" X 11" SHEETS

- P-graded silicone carbide abrasive offers easy penetration of the hardest surfaces
- Water-based stearate, non-pigmented, no-fill coating resists loading for longer usable product life, no color transfer to work
- Fibre-reinforced latex paper backing provides flexibility and resistance to tearing
- Ideal choice for gel coats, hard composite substrates, abrasion-resistant coatings and woodworking application



NORTON

Model No.	Mfg. No.	Grit	Price /Each
NR856	66254487393	P80-B	0.72
NR857	66254487394	P100-B	0.60
NR858	66254487395	P120-B	0.60
NR859	66254487396	P150-B	0.60
NR860	66254487397	P180-B	0.60
NR861	66254487398	P220-B	0.60
NR862	66254487399	P240-B	0.60
NR863	66254487400	P320-B	0.60

GARNET A511 9" X 11" SHEETS

- Natural garnet grain
- Excellent for soft woods, consistent finishes, A-weight paper
- Designed for heavy-duty to light-duty hand and machine sanding



NORTON

Model No.	Mfg. No.	Grit	Price /Each
NR114	66261101505	80	0.49
NR115	66261101500	100	0.49
NR116	66261101495	120	0.49
NR117	66261101490	150	0.49
NR118	66261101489	180	0.49
NR119	66261101488	220	0.49

ABRASIVES

HAND PADS

Typical Applications

- Light to heavy duty cleaning
- Deburring
- Blending
- Polishing
- Finishing

Features & benefits

- Made of a nonwoven nylon web impregnated with abrasive grain and resin
- A variety of abrasives, grit sizes and backing materials provides an extensive and superior product offering
- Can be used instead of steel wool
- Non-loading, non-rusting, waterproof and solvent resistant

SCOTCH-BRITE™ HAND PADS

- Excellent products for hand finishing, polishing, cleaning, blending, deburring of wood, metals and composites
- Ideal for wood finishing, paint preparation and general cleaning
- 6" x 9" sheets
- Can be used dry or with water or solvents



Model No.	Type of Pad	Colour	Finish	Price /Each
BP486	Heavy-Duty	Tan	Coarse	3.08
BP482	Blending	Grey	Medium	2.04
BP484	General Purpose	Maroon	Very Fine	1.05
BP492	Ultra Fine	Light Grey	Ultra fine	1.07
BP488	Cleaning	White	Cleaning	1.33
NC871	General Purpose #96	Green	Scouring	0.91

SANDING SPONGES

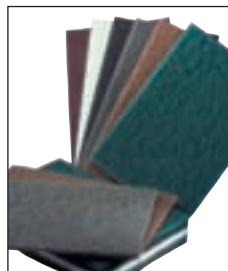
- Sponges form perfectly to corners, contours and flat surfaces
- Can be used on all surfaces, from wood, metal and plastic, to coated or painted surfaces
- Sponges are all 4 1/2" x 5 1/2" in size and have a soft sponge in the centre



Model No.	Grit	Price /Each
BP629	Medium	1.44
BP628	Fine	1.44
BP630	Super Fine	1.44

BEAR-TEX HAND PADS

- Flexible, gentle action and resilient construction
- Conform to work surface and easily remove flashing or burrs without affecting dimension of work piece
- Non-loading, non-rusting, constant supply of new cutting edges, no workpiece contamination



NORTON

Model No.	Colour	Description	Abrasive	Grit	Qty /Pkg.	Price /Each
NZ811	White	Light-Duty Cleaning Pad	Non-Abrasive	-	60	1.28
NZ812	Grey	Clean and Finish Pad	Silicon Carbide	Ultra Fine	60	1.17
NZ813	Light Green	Food Pro Pad	Aluminum Oxide	Very Fine	60	0.47
NS046	Dark Tan	Heavy-Duty Pad	Aluminum Oxide	Medium	40	2.98
NZ814	Grey	Metal Blend Pad	Silicon Carbide	Medium	40	1.93
NS045	Maroon	General Purpose Pad	Aluminum Oxide	Very Fine	60	1.17
NZ815	Grey	Final Shine Pad	Silicon Carbide	Micro Fine	60	1.17
NZ816	Maroon	Long Life Pad	Aluminum Oxide	Very Fine	60	1.17
NZ817	Green	Scouring Pad	Aluminum Oxide	Very Fine	60	1.17
NZ818	Maroon	General Purpose Perforated Pad	Aluminum Oxide	Very Fine	60	1.19
NZ819	Grey	General Purpose Pad	Silicon Carbide	Very Fine	40	1.77
NZ820	-	Hand Pad Holder	-	-	10	7.07

SCOTCH-BRITE™ SHEET ROLLS

- Tough, highly flexible, sharp cutting abrasive
- High flexibility makes for easy cleaning and finishing surfaces by hand
- 8" x 4" sheets come packaged in rolls of 60 sheets
- Purple colour sheets provide a Very Fine finish, and grey sheets provide an Ultra Fine finish

Model No. BP001

Very Fine Roll
Price/Each \$47.93

Model No. BP002

Ultra Fine Roll
Price/Each \$47.93



SCOTCH-BRITE™ PRODUCTION HAND PADS

- Higher rate of cut, longer life and better finish
- Use on aluminum, stainless steel, plastics, wood and fibreglass
- Ideal for paint preparations, surface blending and scuffing
- Comes in 6" x 9" pads which tear easily into 4 1/2" x 6" sheets

Model No. BP490

Price/Each \$1.17



HAND PAD HOLDERS

- Used with Scotch-Brite™ hand pads and roll material cut to 4" x 6" size

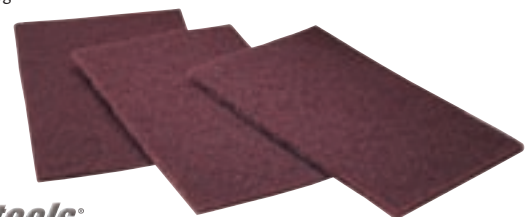
Model No. BP500

Price/Each \$7.45



AURORA HAND PADS

- Non-woven, synthetic fibres, bonded together with specially formulated resins and impregnated throughout the web with mineral grain creating an open, three dimensional structure
- Designed for light duty cleaning, polishing, scuffing, finishing and for heavy duty paint, rust and corrosion removal
- Can be used for dry scuffing and finishing or may be used with water or chemical solvents
- Flexible and strong
- 6" x 9"



aurora tools®

Model No.	Description	Finish	Price /Each
NU022	Tan Heavy-Duty	Coarse	2.00
NU023	Green Industrial	Scouring	0.74
NU024	Maroon GP	Medium	0.69
NU025	Grey Ultra Fine	Ultra-Fine	0.82
NU026	White Non-Abrasive	Non-Abrasive	1.09

ROLLS

Typical Applications

- Light deburring
- Cleaning
- Finishing
- Applying decorative finishes

Features & benefits

- Rolls may be cut for use in jitterbug sanding or on hand sanding applications
- Rolls have the durability for indexing machine applications

CLEAN & STRIP

Typical Applications

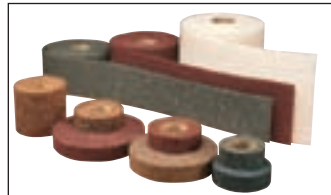
- Removal of paint and epoxy coating, surface rust and residue, corrosion, light weld splatter, dirt, mill scale and other similar surface contaminants
- Surface prep before coatings are applied
- Surface prep before welding; cleaning and conditioning afterwards
- Applying fine finishes

Features & benefits

- A web of strong synthetic fibres and quality abrasive, bonded together by a smear-resistant adhesive for cleaning, conditioning, and finishing a multitude of materials, quickly and easily with little loading

SCOTCH-BRITE™ CLEAN & FINISH ROLLS

- Used for final hand cleaning, blending and finishing
- Can be cut to desired length for oscillating sanders



Model No.	Mfg. No.	Size	Colour	Finish	Price /Each
BP604	00264	4" x 30'	Maroon	Medium	92.48
BP612	00274	6" x 30'	Maroon	Medium	136.90
BP603	00265	4" x 30'	Maroon	Fine	69.85
BP611	00275	6" x 30'	Maroon	Fine	100.44
BP605	00266	4" x 30'	Maroon	Very Fine	57.77
BP609	00270	4" x 30'	Grey	Very Fine	57.77
BP613	00276	6" x 30'	Maroon	Very Fine	85.31
BP608	69006	4" x 30'	Grey	Ultra Fine	57.77
BP607	69009	4" x 30'	Grey	Super Fine	57.77
BP606	69010	4" x 30'	White	Cleaning	57.77

MINI-MANDRELS

- Use with 1" x 1 1/2" Scotch-Brite™ material to fit tight areas
- Mandrel is 2 7/8" long with a 1/4" shank

Model No. BP504
Price/Each \$15.93



CUT 'N POLISH ROLLS

- Outlast and outperform emery cloth and utility rolls around angles, corners, odd shapes, and inside/outside diameters
- Used for general cleaning, deburring odd shapes and stropping pipe prior to soldering or welding
- Tan colour and medium finish

Model No. BP614 1" x 30' Roll
Price/Each \$36.57

Model No. BP615 2" x 30' Roll
Price/Each \$70.18



BEAR-TEX FAST CUT ROLLS

- Premium aluminum oxide grain provides clean cutting and long lasting
- Fast initial cut, less pressure needed
- Improved base adhesion, improved cut rate



Model No.	Colour	Grit	Size	Price /Each
NZ821	Tan	Medium	4" x 30'	149.77
NZ822	Maroon	Very Fine	4" x 30'	60.38
NZ823	Grey	Very Fine	4" x 30'	57.54

BEAR-TEX

Rapid strip discs and depressed center wheels

- Open web constructions provides fast cutting action with very little loading
- Follow difficult part profiles, easy cleaning of uneven surfaces
- Thick, strong, synthetic fibres and extra coarse grit
- Quick cleaning and conditioning of surfaces
- Silicon carbide abrasive, extra coarse
- Ideal for surface preparation, conditioning and cleaning, removal of rust, paint, weld spatter, etc.



Model No.	Size"	Max RPM	Qty /Pkg.	Price /Each
TYPE 1 - BEAR-TEX RAPID STRIP DISCS				
NZ842	4 x 1/4	8000	25	11.64
NZ843	4 x 1/2	8000	25	11.64
NZ844	6 x 1/2	5500	15	18.85
TYPE 27 - BEAR-TEX RAPID STRIP CLEANING WHEELS				
NS047	4 1/2 x 7/8	11000	10	13.16
NS136	7 x 7/8	8000	10	20.95

SCOTCH-BRITE™

CLEAN & STRIP DISCS (SILICON CARBIDE - EXTRA COARSE)

- Tough open web ideal for weld cleaning, paint and coatings removal
- Faster and safer than wire brushes



Model No.	Dia."	Max. RPM	Price /Each
BP252	4 x 1/2	6000	8.92
BP254	6 x 1/2	4000	14.67
BP255	8 x 1/2	3000	22.28

MANDRELS

- Furnished complete with washers to fit available disc sizes

Model No.	Mfg. No.	Size"	Price /Each
BP502	933	2	7.26
BP503	934	3 1/16	24.18



SURFACE BLENDING

Typical Applications

- Removing surface defects
- Removing light edge burrs, parting lines or flashing
- Removing rust, oxides, corrosion, paints and scale
- Cleaning molds
- Blending mill marks, tool marks, uneven edges and coated abrasive finish

Features & benefits

- Discs and belts perform well under a wide range of applications: from removing engine gaskets, and deburring of aluminum and steel, to finishing nickel alloy turbine blades

SCOTCH-BRITE™ COATING REMOVAL DISCS

Made for right angle tools from aggressive clean and strip web. Non-loading design ideal for removing rust and coatings.

- Hook and loop backing easily attaches to 3M disc pad holder
- Silicon carbide - extra coarse



Model No.	Dia."	Grit	Max. RPM	Price /Each
BP272	4 1/2	Extra Coarse	12 000	11.79
BP274	5	Extra Coarse	10 000	13.00
BP275	7	Extra Coarse	6000	21.84

HOOK & LOOP SCOTCH-BRITE™ SURFACE CONDITIONING DISCS

Scotch-Brite™ surface conditioning discs are best for finishing, cleaning and light deburring on flat metal surfaces. Attach and remove easily to 3M hook & loop back up pads.

Used with the following hand tools:

- Right angle
- Random orbital
- Dual action



Model No.	Dia."	Grit	Colour	Max. RPM	Price /Each
BP357	2	Coarse	Brown	23 000	1.16
BP359	2	Medium	Maroon	23 000	1.16
BP362	2	Very Fine	Blue	23 000	1.16
BP363	3	Coarse	Brown	20 000	2.39
BP365	3	Medium	Maroon	20 000	2.66
BP367	3	Very Fine	Blue	20 000	2.39
BP376	4	Coarse	Brown	13 000	3.07
BP380	4	Very Fine	Blue	13 000	2.98
BP369	4 1/2	Coarse	Brown	13 000	3.62
BP371	4 1/2	Medium	Maroon	13 000	3.23
BP381	5	Coarse	Brown	10 000	4.20
BP383	5	Medium	Maroon	10 000	3.48
BP386	5	Very Fine	Blue	10 000	3.48
BP388	7	Coarse	Brown	6000	7.37
BP390	7	Medium	Maroon	6000	5.28
BP392	7	Very Fine	Blue	6000	5.87

HOOK & LOOP DISC PAD HOLDERS

For use with 3M Scotch-Brite™ surface conditioning and coating removal discs.

Model No.	Size"	Shank	Max. RPM	Price /Each
SHANK MOUNTED DISC PAD HOLDERS				
BP207	2	1/4"	23 000	7.89
BP208	3	1/4"	20 000	10.03
BP209	4	1/4"	13 000	11.08
BP206	5	5/16"-24	10 000	32.13
BP210	5	5/16"-24	12 000	27.71
HUB MOUNTED DISC PAD HOLDERS				
BP199	4	5/8"-11	13 000	31.48
BP200	4	M14 x 2.0	13 000	31.48
BP201	4 1/2	5/8"-11	13 000	33.69
BP202	5	5/8"-11	10 000	31.48
BP204	7	5/8"-11	6000	32.16



BP206



BP199

SCOTCH-BRITE™ DISCS

Premium Scotch-Brite™ surface conditioning non-woven web provides a burr-free decorative finish.

Removes grind marks, rust and coatings.



Model No.	Dia."	Grit	Colour	Price /Each
ROLOC™				
BP396	2	Coarse	Brown	1.10
BP397	2	Medium	Maroon	1.10
BP398	2	Very Fine	Blue	1.10
BP400	3	Coarse	Brown	2.20
BP401	3	Medium	Maroon	2.27
BP403	3	Very Fine	Blue	2.27
ROLOC™ TSM				
BP404	2	Coarse	Brown	1.36
BP405	2	Medium	Maroon	1.36
BP406	2	Very Fine	Blue	1.36
BP407	3	Coarse	Brown	2.72
BP408	3	Medium	Maroon	2.72
BP409	3	Very Fine	Blue	2.72

ROLOC™ DISC PADS

Rubber back-up pads are available in different diameters and degrees of hardness for varying grinding applications.

Pads are internally threaded to receive any standard 1/4"-20 thread shaft.



Model No.	Size"	Max. RPM	Hardness	Price /Each
BP008	2	25 000	Medium	17.57
BP005	2	25 000	Hard	17.57
BP009	3	18 000	Medium	21.46
BP006	3	20 000	Hard	21.46

ROLOC™ TSM DISC PADS

For use with Roloc™ TSM grinding discs and screw on abrasive discs.



Model No.	Size"	Max. RPM	Hardness	Price /Each
BP517	2	25 000	Medium	24.80
BP516	2	25 000	Hard	24.80
BP518	3	20 000	Hard	30.57

1/4" THREADED SHAFTS

- Needed with all Roloc™ disc pads

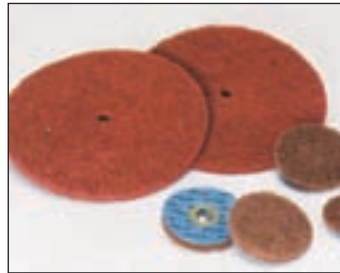
Model No. BP013 Price/Each \$3.38

BUFF & BLEND® PRODUCTS

These products are made from an open structure of non-woven fibres impregnated with abrasive particles held together by resin to form a loose webbing. *Buff & Blend®* products are designed for light duty removal of rust, oxidation and coatings (including paint), without affecting the base material. They are not intended for use on sharp edges or burrs.

GP MATERIAL

- Flexible and conformable
- GP provides a high rate of cut



SURFACE CONDITIONING DISCS

These products provide a more compact structure of non-woven fibres than *Buff & Blend®* products. Surface conditioning products have a woven fabric (Scrib) imbedded in the nylon structure to provide additional strength and durability for edge work, deburring and efficient blending of all metal types.

FE MATERIAL

- High initial and extended rate of cut
- Very flexible with high edge durability
- Effective on both flat and contoured surfaces



SOCATT® DISCS

Model No.	Size"	Grit	Price /Each
VU676	2	Medium	1.05
VU677	2	Fine	0.99
VU678	2	Very Fine	0.99
VU679	3	Medium	1.71
VU680	3	Fine	1.54
VU681	3	Very Fine	1.54

LOCKIT® DISCS

Model No.	Size"	Grit	Price /Each
VU685	2	Medium	1.05
VU686	2	Fine	0.99
VU687	2	Very Fine	0.99

SOCATT® DISCS

Model No.	Size"	Grit	Price /Each
NP136	2	Coarse	1.06
NW105	2	Medium	1.06
NP137	2	Very Fine	1.06
NW104	3	Coarse	2.01
NP131	3	Medium	2.01
NP132	3	Very Fine	2.01

LOCKIT® DISCS

Model No.	Size"	Grit	Price /Each
NP138	2	Coarse	1.06
NP139	2	Medium	1.06
NP140	2	Very Fine	1.06
NP133	3	Coarse	2.01
NP134	3	Medium	2.01
NP135	3	Very Fine	2.01

HP MATERIAL

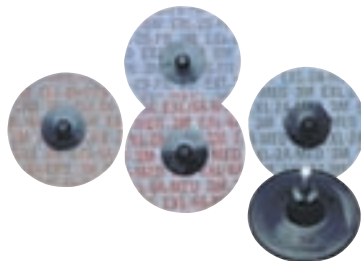
- Durable and aggressive
- Recommended starting point for deburring applications

Model No.	Size"	Grit	Price /Each
VU697	6 x 1/2	Very Fine	2.72
VU705	8 x 1/2	Very Fine	4.22

SCOTCH-BRITE EXL™

ROLOC™ UNITIZED WHEELS

- Strong, efficient products for edge deburring and finishing
- Used with 3M Roloc® holder pads on a straight shaft or right angle tool



Model No.	Grit	Finish	Size"	Max. RPM	Price /Each
NW069	6A	Medium	2	22100	4.61
NW070	2A	Medium	2	22100	3.82
NW071	2S	Fine	2	22100	3.82
NW072	6A	Medium	3	15100	8.11
NW073	2A	Medium	3	15100	6.75
NW074	2S	Fine	3	15100	6.75

HOLDER PADS

- With mandrel

FOR SMALL DIAMETER SOCATT® DISCS

Model No.	Dia."	Density	Price /Each
VU601	2	Soft	13.04
VU602	2	Medium	12.49
VU603	2	Firm	14.89
VU604	3	Soft	15.87
VU605	3	Medium	14.46
VU606	3	Firm	17.22

FOR SMALL DIAMETER LOCKIT® DISCS

Model No.	Dia."	Density	Price /Each
VU610	2	Soft	13.68
VU611	2	Medium	12.49
VU612	2	Firm	14.89
VU613	3	Soft	15.87
VU614	3	Medium	14.46
VU615	3	Firm	17.22



RMP-ECO® cleaning products are the Green solution to industrial cleaning.
All RMP-ECO® products are EcoLogo® certified.
RMP-ECO® is safe for you and the environment.



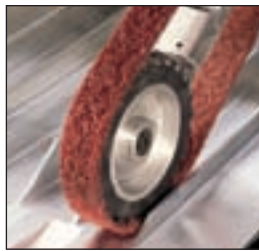
ABRASIVES

SCOTCH-BRITE™ SURFACE CONDITIONING FILE BELTS

Premium Scotch-Brite™ surface conditioning non-woven web.

Designed for:

- Cleaning
- Finishing
- Light deburring



Recommended Operating Speeds:

Generally, low speeds are recommended for generating very uniform satin finishes, finishing aluminum alloys without lubricants, and woodworking applications. Higher speeds are recommended when removing imperfections prior to buffing. High belt speed will result in faster cut along with finer finishes.

Application	Recommended SFPM*
Decorative Finishing	500-3000
Wood Sanding	1200-2700
Deburring	5000-6500

Application	Recommended SFPM*
Cleaning and Conditioning	2000-5000
Oxide Removal	4500-6500

*Surface feet per minute

Model No.	Size"	Colour	Finish	Price /Each
BP069	1/4 x 24	Blue	Very Fine	4.38
BP068	1/4 x 24	Maroon	Medium	4.38
BP067	1/4 x 24	Brown	Coarse	4.38
BP063	1/2 x 18	Blue	Very Fine	6.41
BP062	1/2 x 18	Maroon	Medium	6.41
BP061	1/2 x 18	Brown	Coarse	6.41
BP066	1/2 x 24	Blue	Very Fine	6.75
BP065	1/2 x 24	Maroon	Medium	6.75
BP064	1/2 x 24	Brown	Coarse	6.75
BP076	3/4 x 18	Blue	Very Fine	8.89
BP075	3/4 x 18	Maroon	Medium	8.89
BP074	3/4 x 18	Brown	Coarse	8.89
BP060	1 x 48	Blue	Very Fine	15.74
BP073	3 x 24	Maroon	Medium	24.75
BP059	3 1/2 x 15	Blue	Very Fine	28.93
BP071	3 1/2 x 15	Maroon	Medium	27.98
BP070	3 1/2 x 15	Brown	Coarse	27.98

BUFFING WHEELS

#60 Soft Cotton Wheels: 100% cotton 60/60 threads per square inch unbleached. For finishing stainless steel, brass, aluminum, gold, silver, chrome and wood.

#80 Cotton Buffing Wheels: 100% unbleached cotton 86/80 threads per square inch. For finishing brass, stainless steel, aluminum, bronze and cast iron.

Sisal Buffing Wheels: Made of sisal cloth #64 and cotton. 6 ply sisal/4 ply cotton. For aggressive buffing and polishing of steel, cast aluminum, iron, brass and bronze. Also excellent for deburring, breaking sharp edges in casting and removing stains, abrasive belt lines and light die marks.



Model No.	Dia."	Arbor"	Ply	Stitching	Price /Each
#60 SOFT COTTON WHEELS					
TD164	6	1/2	20	1/4" Spiral Sewn	27.61
TD167	6	1/2	25	Loose Style	16.19
TT161	6	1/2	36	1/2" Square Sewn	31.98
TD165	8	5/8	20	1/4" Spiral Sewn	28.85
TD168	8	5/8	25	Loose Style	19.32
TT150	10	5/8	20	1/4" Spiral Sewn	33.56
TT151	10	5/8	25	Loose Style	22.50
#80 COTTON BUFFING WHEELS					
TT152	6	1/2	20	1/4" Spiral Sewn	24.78
TT153	6	1/2	25	Loose Style	15.26
TT154	8	5/8	20	1/4" Spiral Sewn	25.24
TT155	8	5/8	25	Loose Style	15.26
TT156	10	5/8	20	1/4" Spiral Sewn	33.39
TT157	10	5/8	25	Loose Style	21.06
SISAL BUFFING WHEELS					
TT158	6	1/2	6 Sisal/4 Cotton	1/4" Spiral Sewn	37.30
TT159	8	5/8	6 Sisal/4 Cotton	1/4" Spiral Sewn	44.63
TT160	10	5/8	6 Sisal/4 Cotton	1/4" Spiral Sewn	51.02

SCOTCH-BRITE™ FLAP BRUSHES



- Heavy duty brush excellent for removing handling marks and surface imperfections
- Available on 1/4" shaft (CPFB-S) or Roloc+ attachment system (CPFB-R)



CPFB-R & CPFB-S

Model No.	Size"	Max. RPM	Grit	Price /Each
NW061	2 x 1 x 1/4	12000	Medium	16.18
NW062	3 x 1 3/8	8000	Medium	25.51
BP446	3 x 1 3/4 x 1/4	8500	Medium	29.20

CFFB-R & CFFB-S

- Ideal for decorative finishes and light deburring applications
- Available on 1/4" shaft (CFFB-S) or Roloc+ attachment system (CFFB-R)

Model No.	Size"	Max. RPM	Grit	Price /Each
NS702	3 x 1 3/8	8000	Coarse	26.49
BP442	3 x 1 3/4 x 1/4	8500	Coarse	29.10
NS701	3 x 1 3/4 x 1/4	8500	Fine	29.10

COMBI WHEELS

- Made of alternating flaps of coated abrasive and Scotch-Brite™ web
- Aggressive cuts and fine finishes



Model No.	Grit	Size"	Max. RPM	Price /Each
NW066	80	3 x 1 3/4 x 1/4	8000	30.30
NW067	P120	3 x 1 3/4 x 1/4	8000	30.30
NW068	P180	3 x 1 3/4 x 1/4	8500	30.30

POLISHING & BUFFING WHEEL COMPOUNDS

For use with buffing wheels.
All bars are: 2" x 2" x 10" except jewelers rouge: 1 1/4" x 1 1/4" x 6".



Model No.	Bar Type	Description	Price /Each
TT143	Black	Coarse, Fast Cutting Bar for Removal of Rust and Scale From Iron and Steel	17.98
TT144	Brown Tripoli	General Purpose Bar for Buffing Brass and Aluminum	9.59
TT149	Green	For Fine Stainless Steel and Other Metals, General Purpose	21.35
TT218	White Rouge	Provides a Bright Luster to Stainless Steel, Aluminum, Iron, Chrome and Nickel Surfaces	17.39
TT219	Red Jewelers	Enhances Luster of Buffed Precious Metals, Gold, Sterling, Silver, Platinum etc.	14.17
TT220	General Purpose	All Round General Purpose Buffing Compound	12.24

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DEBURRING & MULTI-FINISHING WHEELS

Typical Applications

- Burr and flashing removal
- Surface roughness reduction
- Blending weld areas on stainless steel
- Blending scratch patterns
- Weld polishing
- Removing rust and oxides
- Applying decorative finishes including antique patterns

Features & benefits

- Formed by wrapping and bonding web material impregnated with abrasive grain and resin around a center core
- Offers a wide range of uses from heavy burr removal to cleaning rust and oxides

SCOTCH-BRITE™ MULTI-FINISHING WHEELS

Produces uniform grain finishes on stainless steel and other metals.

- Highly conformable
- Tough enough to finish edges and welds



Model No.	Grit	Finish	Size"	Max. RPM	Price /Each
BP715	2S	Coarse	6 x 1 x 1	6000	53.69
BP717	2S	Medium	6 x 1 x 1	6000	53.69
BP718	2S	Coarse	6 x 2 x 1	6000	83.62
BP720	2S	Medium	6 x 2 x 1	6000	83.62
BP721	2S	Coarse	8 x 1 x 3	4500	76.23
BP723	2S	Medium	8 x 1 x 3	4500	76.23

SCOTCH-BRITE™ EXL DEBURRING WHEELS

Use to clean, finish, blend, deburr or polish all types of metals, composites and glass.



Model No.	Grit	Finish	Size"	Max. RPM	Price /Each
BP694	8A	Medium	6 x 1/2 x 1	6000	57.97
BP695	8S	Fine	6 x 1/2 x 1	6000	57.97
BP696	9S	Fine	6 x 1/2 x 1	6000	57.97
BP690	8A	Medium	6 x 1 x 1	6000	76.85
BP692	8S	Fine	6 x 1 x 1	6000	76.85
BP693	9S	Fine	6 x 1 x 1	6000	76.85
BP697	8A	Medium	8 x 1 x 3	4500	98.25
BP698	8S	Fine	8 x 1 x 3	4500	98.25
BP700	9S	Fine	8 x 1 x 3	4500	98.25
BP704	8A	Medium	8 x 2 x 3	4500	167.31
BP705	8S	Fine	8 x 2 x 3	4500	167.31
BP706	9S	Fine	8 x 2 x 3	4500	167.31

SCOTCH-BRITE™ EXL UNITIZED DEBURRING WHEELS

Excellent for deburring and polishing a wide range of metals, plastics and composites.

- Cool running allows more pressure to be applied
- Cleaner than buffs and compounds
- Eliminate danger of loose-flying wires



Model No.	Grit	Finish	Size"	Max RPM	Price /Each
BP737	2A	Medium	1 x 1 x 3/16	25 100	4.07
BP738	2S	Fine	1 x 1 x 3/16	30 100	4.07
BP739	6A	Medium	1 x 1 x 3/16	35 100	4.44
BP740	6S	Fine	1 x 1 x 3/16	35 100	4.44
BP741	8A	Coarse	1 x 1 x 3/16	35 100	4.89
BP742	8A	Medium	1 x 1 x 3/16	35 100	4.89
BP743	2A	Medium	3 x 1/4 x 3/8	12 100	7.20
BP744	2S	Fine	3 x 1/4 x 3/8	12 100	6.54
BP745	4A	Fine	3 x 1/4 x 3/8	18 100	7.10
BP746	6A	Medium	3 x 1/4 x 3/8	18 100	7.82
BP747	6S	Fine	3 x 1/4 x 3/8	18 100	7.82
BP748	8A	Coarse	3 x 1/4 x 3/8	18 100	8.62
BP749	8A	Medium	3 x 1/4 x 3/8	18 100	8.62

SCOTCH-BRITE™ HIGH STRENGTH DISCS (ALUMINUM OXIDE)

- Very conformable discs
- Ideal for light deburring, cleaning and finishing



Model No.	Dia."	Grade	Max. RPM	Price /Each
NW051	6 x 1/4	Very Fine	4000	2.74
NW052	6 x 1/2	Medium	4000	5.43
NW053	6 x 1/2	Very Fine	4000	2.77
NW054	8 x 1/2	Medium	3000	8.28
NW055	8 x 1/2	Very Fine	3000	4.31

WHEEL ACCESSORIES

Flange Adaptor No. 5: For use with 6" wheels. Telescoping wheel adaptors 1" and 1/2" wide to reduce 1" wheel cores to fit 5/8". Must be used with side flanges.

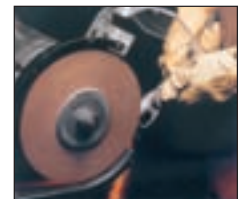


Model No.	Size"	Price /Each
NW080	1 x 1/2 x 1/2	6.95
NW081	1 x 1 x 1/2	1.82

SCOTCH-BRITE™ CUT & POLISH WHEELS

Heavy-duty wheels for aggressive blending and finishing.

- Produce uniform results quickly and easily
- Replace rubber bonded wheels, set-up wheels and lap wheels



Model No.	Grit	Finish	Size"	Max. RPM	Price /Each
BP680	7A	Coarse	6 x 1 x 1	6000	120.23
BP682	7A	Medium	6 x 1 x 1	6000	120.23
BP681	7A	Fine	6 x 1 x 1	6000	120.23

MANDRELS

Designed for use with Scotch-Brite™ unitized wheels.

Model No.	Size"	Max RPM	Price /Each
BP505	2 1/16 x 1/4 x 3/4	22 200	7.66
NW076	1 3/4 x 1/4 x 1/2	35 200	7.67
BP508	1 3/4 x 1/4	18 200	15.38



BUILT TOUGH!

100% Canadian Owned

Kleiton builds quality and dependability into all of their products. The same is true for products specially built to meet your specifications. Look throughout the catalogue for the Kleiton Custom Symbol indicating which products can be customized to meet your specific needs.

ABRASIVES

CLOVER® SILICON CARBIDE GREASE MIX

- The standard abrasive paste for fast metal removal
- Produces a smooth, flat surface but not a polished one
- Leaves a rust-preventing film on lapped surfaces
- Container: 1lb. can



LOCTITE

ABRASIVE CORDS & TAPE

- Debur, grind and polish hard-to-reach areas which are inaccessible to most standard tools
- Ideal for narrow slots, grooves, small holes, and curved surfaces
- Impregnated on both sides with aluminum oxide, silicon carbide or crocus, suitable for use on metal, plastic, and wood
- Cords and tapes are supplied on an adhesive tape-like spool in 50 foot lengths



Model No.	Description	Grit	Price /Each
AB846	Extremely Fine	1200	68.70
AB847	Extremely Fine	1000	49.57
AB848	Extremely Fine	800	49.57
AB849	Very Fine	600	49.57
AB850	Very Fine	500	31.02
AB851	Very Fine	400	31.02
AB852	Fine	320	31.02
AB853	Fine	280	31.02
AB854	Medium Fine	240	31.02
AB895	Medium Fine	220	31.02
AB856	Medium	180	31.02
AB857	Medium	150	31.02
AB858	Coarse	120	31.02
AB859	Coarse	100	31.02
AB860	Coarse	80	31.02

		Alum. oxide		Crocus		S. Carbide	
Dia. "	Grain	Model No.	Price /Each	Model No.	Price /Each	Model No.	Price /Each
0.150	120	-	-	-	-	VS101	149.52
0.125	120	-	-	-	-	VS102	173.69
0.093	150	VS078	83.48	-	-	-	-
0.082	120	VS079	52.52	VS090	59.36	VS103	70.14
0.070	180	VS080	46.66	VS091	56.20	VS104	66.98
0.055	120	VS081	38.23	-	-	VS105	56.46
0.055	150	VS082	38.23	VS092	45.40	VS106	56.46
0.040	180	VS083	39.48	VS093	45.40	VS107	54.84
0.030	200	VS084	38.24	VS094	45.40	VS108	60.67
0.025	200	-	-	VS095	50.54	VS109	40.79
0.018	200	-	-	VS096	50.54	VS110	40.79
0.015	200	-	-	VS097	49.09	VS111	42.63
0.012	280	-	-	VS098	81.98	VS112	78.88
1/16	180	VS085*	45.54	-	-	VS113	60.93
3/32	180	VS086*	39.25	VS099*	46.33	VS114*	56.72
1/8	180	VS087*	42.11	-	-	VS115*	57.77
6/32	150	VS088*	45.80	-	-	VS116*	61.58
1/4	150	VS089*	51.06	VS100*	62.23	VS117*	67.12

*Tapes

STEEL WOOL

UTILITY PADS

- 16 large pads of steel wool per package



Model No.	Grit	Price /Each
VS118	0000 (Finest)	13.91
VS119	000 (Extra Fine)	12.08
VS120	00 (Very Fine)	9.55
VS121	0 (Fine)	7.78

Model No.	Grit	Price /Each
VS122	1 (Medium)	7.78
VS123	2 (Coarse)	7.78
VS124	3 (Very Coarse)	7.78

ONE POUND TUBES

- One pound of continuous ribbon per package



Model No.	Grit	Price /Each
VS125	0000 (Finest)	13.91
VS126	000 (Extra Fine)	12.08
VS127	00 (Very Fine)	9.55
VS128	0 (Fine)	7.78

Model No.	Grit	Price /Each
VS129	1 (Medium)	7.78
VS131	3 (Very Coarse)	7.12

UTILITY ROLLS

- 6 large rolls per package

Model No.	Grit	Price /Each
VS133	0 (Fine)	2.09
VS134	1 (Medium)	2.09
VS135	2 (Coarse)	2.09



FLOOR MACHINE PADS



Size"	Grits				Price /Each
	0 (fine) Model No.	1 (medium) Model No.	2 (coarse) Model No.	3 (very coarse) Model No.	
12	VS136	VS145	VS154	VS163	16.29
13	VS137	VS146	VS155	VS164	18.15
14	VS138	VS147	VS156	VS165	20.25
15	VS139	VS148	VS157	VS166	21.76
16	VS140	VS149	VS158	VS167	22.81
17	VS141	VS150	VS159	VS168	23.97
18	VS142	VS151	VS160	VS169	26.76
19	VS143	VS152	VS161	VS170	29.33
20	VS144	VS153	VS162	VS171	32.58

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INDUSTRIAL-DUTY SCRATCH BRUSHES

- Wood handle
- Choice of carbon or stainless steel bristles



Model No.	Length of brush"	O.A. Length"	Wire Bristles	Rows	Trim Length"	Price /Each
LONG HANDLE BRUSHES						
NT607	5 3/4	13 3/4	Carbon Steel	3 x 19	1	2.00
NT608	5 3/4	13 3/4	Carbon Steel	4 x 19	1	2.45
NT611	5 3/4	13 3/4	Stainless Steel	3 x 19	1	3.25
NT612	6	10 1/4	Stainless Steel	4 x 19	1	3.85
SHOE HANDLE BRUSHES						
NT609	5 1/4	10 1/2	Carbon Steel	3 x 16	1	2.15
NT610	5 1/4	10 1/2	Carbon Steel	4 x 16	1	2.20
NT613	5	10 1/4	Stainless Steel	3 x 16	1	3.95
NT614	5	10 1/4	Stainless Steel	4 x 16	1	4.20
SMALL CLEANING SCRATCH BRUSH						
NT615	1 1/2	7 3/4	Stainless Steel	3 x 7	1/2	0.95

SMALL CLEANING SCRATCH BRUSHES



Model No.	Length of brush"	O.A. Length"	Description	Wire Rows	Trim Length"	Price /Each
ANGLED BACK						
NP247	1 7/16	7 3/4	Brass	3 x 7	7/16	4.28
NP250	1 7/16	7 3/4	Polypro	3 x 7	7/16	3.68
BZ976	1 7/16	7 3/4	Stainless Steel	3 x 7	7/16	3.76
NP249	1 7/16	7 3/4	Steel	3 x 7	7/16	4.02
CURVED BACK						
NP255	2 1/2	8 5/8	Brass	2 x 9	5/8	2.48
NP256	2 1/2	8 5/8	Stainless	2 x 9	5/8	2.56

STRAIGHT HANDLE SCRATCH BRUSHES W/SCRAPER



Model No.	Length of brush"	O.A. Length"	Wire Rows	Trim Length"	Price /Each
BZ979	5 1/2	11 3/8	4 x 11	1 5/8	7.52

CURVED HANDLE SCRATCH BRUSHES



Model No.	Length of brush"	O.A. Length"	Description	Wire Rows	Trim Length"	Price /Each
BZ970	6	13 11/16	Stainless Steel	3 x 19	1 1/8	7.72
BZ606	6	13 11/16	Steel	3 x 19	1 1/8	3.52
NP248*	6	13 11/16	Steel	3 x 19	1 1/8	4.54
BZ607**	6	13 11/16	Steel	4 x 19	1 1/8	4.28

*With scraper ** Heavy-duty

V-TRIM SMALL HANDLE SCRATCH BRUSHES



Model No.	Description	Length of brush"	O.A. Length"	Wire Rows	Trim Length"	Price /Each
NP246	Steel	1 1/2	7 7/8	3 x 7	1/2	4.80
NP244	Stainless Steel	1 1/2	7 7/8	3 x 7	1/2	5.48
BZ982	Brass	1 1/2	7 7/8	3 x 7	1/2	5.14

V-GROOVE LONG HANDLE SCRATCH BRUSHES



Model No.	Description	Wire Rows	Trim Length"	Price /Each
NP245	Steel	3 x 14	1 1/2	4.96
BZ985	Stainless Steel	3 x 14	1 1/2	7.82

V-TRIM LONG HANDLE SCRATCH BRUSHES



Model No.	Description	Length of brush"	O.A. Length"	Wire Rows	Trim Length"	Price /Each
NP253	Steel	6	13 3/4	3 x 19	1 1/4	3.26
BZ984	Stainless Steel	6	13 3/4	3 x 19	1 1/4	7.90

V-TRIM SHOE HANDLE SCRATCH BRUSHES



Model No.	Description	Length of brush"	O.A. Length"	Wire Rows	Trim Length"	Price /Each
NP252	Steel	5 1/4	19 3/4	4 x 16	1 1/8	3.26
BZ983	Stainless Steel	5 1/4	19 3/4	4 x 16	1 1/8	5.74

PRO COUNTER DUSTERS

- Sturdy, light-weight brushing tools
- Recommended for dusting and chip removal
- Can be used wet or dry, will not load



Model No.	Length of brush"	Description	Trim Length"	Price /Each
BZ986	8	Black Tampico	2 1/2	5.88
NP243	8	Light Blue Polypro	2 1/2	5.54

BRUSHES

ECONOMY BRUSHES

- An economic alternative to the high-value *Osborn*[®] brand
- Geared toward light industrial and DIY users
- Selected from the fastest movers in the *Osborn*[®] line to provide a complete selection of quick-turning products
- Standard arbor sizes or shanks
- Power brushes with plain arbor holes come packaged with adapters for common drive sizes
- High-speed thread adapters are included in the *Osborn*[®] economy line to fit most threaded drives
- All power brushes are display packaged



CRIMPED WIRE WHEEL BRUSHES - NARROW FACE
INCLUDES 1/2" AND 5/8" ADAPTERS

Model No.	Mfg. No.	Brush Dia."	Arbor Hole"	Fill Dia."	Type	Face Width"	Max. RPM	Price /Each
NU096	99009	6	2	0.014	Steel	5/8"	6000	9.52
NU097	99010	8	2	0.014	Steel	5/8"	6000	13.98



CRIMPED WIRE WHEEL BRUSHES - WIDE FACE
INCLUDES 1/2" AND 5/8" ADAPTERS

Model No.	Mfg. No.	Brush Dia."	Arbor Hole"	Fill Dia."	Type	Face Width"	Max. RPM	Price /Each
NU103	99022	6	2	0.014	Steel	1 1/4"	6000	24.40
NU104	99023	8	2	0.014	Steel	1 1/4"	4500	34.00

CRIMPED WIRE WHEEL BRUSHES - MEDIUM FACE
INCLUDES 1/2" AND 5/8" ADAPTERS

Model No.	Mfg. No.	Brush Dia."	Arbor Hole"	Fill Dia."	Type	Face Width"	Max. RPM	Price /Each
NU098	99012	6	2	0.008	Steel	3/4"	6000	18.12
NU099	99015	6	2	0.014	Steel	3/4"	6000	17.42
NU100	99016	7	2	0.014	Steel	3/4"	6000	18.88
NU101	99013	8	2	0.008	Steel	3/4"	6000	25.72
NU102	99017	8	2	0.014	Steel	3/4"	6000	24.26



HIGH SPEED STRINGER BEAD KNOT WIRE WHEEL BRUSH

Model No.	Mfg. No.	Brush Dia."	Arbor Hole"	Fill Dia."	Type	Face Width"	Max. RPM	Price /Each
NU105	99083	5	5/8-11	0.02	Steel	3/16	12 000	14.66
NU106	99089	6	5/8-11	0.02	Stainless	1/4	12 000	30.84
NU107	99084	6	5/8-11	0.02	Steel	1/4	12 000	17.32
NU108	99086	6 1/2"	5/8-11	0.02	Steel	3/16	12 000	17.52



KNOT WIRE END BRUSH

Model No.	Mfg. No.	Brush Dia."	Fill Dia."	Stem Dia."	Type	Max. RPM	Price /Each
NU109	99098	3/4	0.014	1/4	Steel	20 000	9.08
NU110	99099	3/4	0.02	1/4	Steel	20 000	8.64
NU111	99100	1	0.012	1/4	Steel	20 000	10.32
NU112	99101	1	0.014	1/4	Steel	20 000	10.08
NU113	99102	1	0.02	1/4	Steel	20 000	9.78
NU114	99103	1	0.014	1/4	Stainless	20 000	18.72

ATB™ NYLON ABRASIVE COMPOSITE FLEXIBLE WHEEL BRUSHES

- Brushes with long trim and moderate density offer long brush life, less filament breakage and uniform distribution of filaments
- Maximum RPM: 3600
- Ideal for applications requiring a high degree of conformability
- **Applications:** Turbine blades, indexable cutting tool inserts, cam shafts, machined parts, and edge radiusing



Brush Dia."	Grit	Filament Diameter (mm)	Arbor Hole"	Face Width"	Trim Length"	Model No.	Price /Each
6	80	0.04	2	1	1 1/4	NT733	61.96
6	80	1.14 x 2.28	2	1	1 1/4	NT734	86.80
6	120	0.028	2	1	1 1/4	NT735	61.96
6	120	0.04	2	1	1 1/4	NT736	61.96
6	180	0.035	2	1	1 1/4	NT737	64.44
6	320	0.022	2	1	1 1/4	NT738	64.44
8	80	1.14 x 2.28	1 1/4	1	2 1/4	NT739	126.23
8	80	0.04	1 1/4	1	2 1/4	NT740	90.18
8	120	0.04	1 1/4	1	2 1/4	NT741	90.18
8	180	0.035	1 1/4	1	2 1/4	NT742	90.18
8	320	0.022	1 1/4	1	2 1/4	NT743	90.18

ATB™ SMALL DIAMETER FLEXIBLE HONING TOOLS

- Flexible with round, abrasive beads fastened to ends of flexible elements
- Self-centering and conform to the bore surface providing a consistent, even surface finish over the usable life of the tool
- Due to their unique design, these tools provide an "edge break" not possible with traditional honing stones
- Available for hole diameters ranging from 6.4 mm to 64 mm
- Silicon carbide grit available in three sizes (120, 180 and 240) to meet your applications
- Perfect for use on engine bores, pneumatic and hydraulic bores, valve pumps and housings, pipes, hydraulic cylinders, stainless steel tubing and more
- **Applications:** Honing, creating cross-hatched surface pattern for oil retention, cylinder port deburring, eliminating inside flashing



Hole Dia. (mm)	Hole Dia. (in.)	Brush Length (mm)	O.A. Length (mm)	120 GR Model No.	Price /Each	180 GR Model No.	Price /Each	240 GR Model No.	Price /Each
6.4	0.25	50	200	NT688	10.48	NT697	10.48	NT706	10.48
9.5	0.375	50	200	NT689	13.08	NT698	13.08	NT707	13.08
12.7	0.5	60	200	NT690	15.08	NT699	15.08	NT708	15.08
16	0.63	60	200	NT691	16.76	NT700	16.76	NT709	16.76
22	0.875	70	200	NT692	18.14	NT701	18.14	NT710	18.14
31.8	1.25	70	200	NT693	20.40	NT702	20.40	NT711	20.40
38	1.5	70	200	NT694	22.10	NT703	22.10	NT712	22.10
51	2	70	200	NT695	23.16	NT704	23.16	NT713	23.16
64	2.5	70	200	NT696	28.44	NT705	28.44	NT714	28.44

Note: Other diameters available.

ATB™ NYLON ABRASIVE HEAVY-DUTY INTERNAL DEBURRING BRUSHES

- Helical brush shape and flexible round crimped filaments allow the brush to work in both rotational directions with excellent part conformity
- Higher silicon carbide impregnated filament concentration for heavy deburring, minimum cycle time, stainless steel applications and hardened alloys
- Can be used wet or dry
- Operational speeds between 600 and 1800 RPM
- **Applications:** Cross hole deburring, edge blending, edge radiusing, cam bores, cleaning threads, etc.

Brush Dia."	Grit	Model No.	Price /Each
1	80	NT756	44.68
1	120	NT757	44.68
1 1/4	80	NT758	46.04
1 1/4	120	NT759	46.04
1 1/2	80	NT760	47.38
1 1/2	120	NT761	47.38
1 3/4	80	NT762	48.82
1 3/4	120	NT763	48.82
2	80	NT764	50.32
2	120	NT765	50.32

Brush Dia."	Grit	Model No.	Price /Each
2 1/4	80	NT766	51.82
2 1/4	120	NT767	51.82
2 1/2	80	NT768	53.34
2 1/2	120	NT769	53.34
3	80	NT770	54.94
3	120	NT771	54.94
3 1/2	80	NT772	56.60
3 1/2	120	NT773	56.60
4	80	NT774	58.28
4	120	NT775	58.28



ATB™ MICROABRASIVE BRUSH KITS

- Designed for ultra-fine deburring and cleaning of holes produced by micro drilling while not altering diameter or surface finish
- Can be used with power tools using a side swiping action or manually
- **Applications:** Aircraft/aerospace, computers, electronics, medical equipment and hydraulic fittings



Model No. NT777

500 Grit Silicon Carbide Kit Includes:

Brush Dia."	Brush Area Length"	Overall Length"	Stem Dia. (mm)
0.165	1	5	0.093
0.19	1	5	0.093
0.26	1	5	0.121
0.325	1	5	0.121
0.385	1	5	0.154
0.515	1	5	0.175
0.64	1	5	0.175
0.765	1	5	0.228
0.89	1	5	0.228
1.015	1	5	0.255

Price/Each \$70.66

Model No. NT776

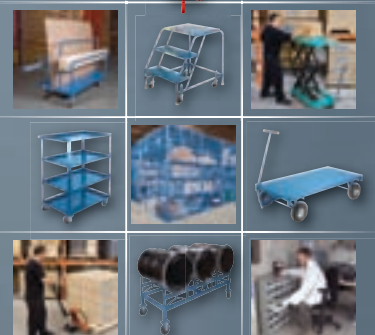
500 Grit Silicon Carbide Kit Includes:

Brush Dia."	Brush Area Length"	Overall Length"	Stem Dia. (mm)
0.05	1/2	4	0.023
0.075	3/4	4	0.035
0.09	3/4	4	0.043
0.105	1	4	0.046
0.125	1	4	0.067
0.135	1	4	0.067

Price/Each \$57.12

KLETON

Canada's Leading
Material Handling Manufacturer



BRUSHES



AH - ARBOR HOLE

Osborn® brushes are made with a variety of standard sizes which can easily be adapted to fit any standard spindle.

OD - OUTSIDE DIAMETER

Standard Osborn® wheel brushes are made with outside diameters from about one inch to almost two feet. Generally, the largest diameter that suits your work space and machine speed will be most efficient.

ID - INSIDE DIAMETER

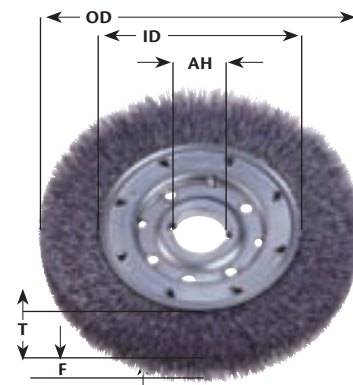
Assuming a fixed O.D., increasing the I.D. produces a stiffer, less flexible brush.

T - TRIM LENGTH

Shorter trim makes a stiff, fast cutting brush. Longer trim makes a more flexible brush for irregular surfaces.

F - FACE WIDTH

Standard face widths range from extremely narrow to several inches wide. Many styles can be mounted in multiple.



CRIMPED WIRE WHEEL BRUSHES

- Can be mounted horizontally or vertically
- Highly flexible, ideal for light to medium duty surface preparation on irregular surface
- Offered a variety of style from aggressive material removal to surface conditioning and polishing

NARROW FACE

- More flexible than the wide and medium style
- Can be mounted in multiples
- To be used with a straight grinder, a bench/pedestal grinder or a right angle grinder
- **Application:** Deburring and cleaning narrow areas, producing antique finishes, rust and paint removal



MEDIUM FACE

- Greater fill density and more aggressive brushing action
- Can be adaptable to multiple mounting for brushing wider areas
- To be used with a bench/pedestal grinder
- **Application:** Edge blending, deburring, rust removal, surface finishing and cleaning



Brush Dia."	Arbor Hole"	Wire Gauge"	Trim Length"	Face Width"	Max RPM	Model No.	Price /Each
STEEL							
6	1 1/4	0.0104	1 1/8	5/8	6000	BW882	16.50
8	1 1/4	0.014	1 1/2	5/8	4500	BW886	26.94
10	1 1/4	0.014	2 1/2	5/8	3600	BW888	35.42

STAINLESS							
6	1 1/4	0.0104	1 1/8	5/8	6000	BW899	40.70
8	1 1/4	0.0104	3/4	1/2	4500	BW900	48.66

Brush Dia."	Arbor Hole"	Wire Gauge"	Trim Length"	Face Width"	Max RPM	Model No.	Price /Each
STEEL							
6	2	0.0118	1	7/8	6000	BW996	32.14
8	2	0.0118	1 1/2	5/8	4500	BX006	45.40
10	2	0.0118	2	1 1/4	3600	BX022	74.80

STAINLESS							
6	2	0.0118	1	7/8	6000	BX040	55.02
8	2	0.0118	1 1/2	5/8	4500	BX038	72.76

WIDE FACE

- Maximum wire density and aggression, providing fast, efficient brushing on production work and general maintenance job
- To be used with a bench/pedestal grinder
- **Application:** Deburring, rust removal, surface finishing and cleaning



CENTERING BUSHINGS

- Use only one
- For use with Osborn® brushes only



Brush Dia."	Arbor Hole"	Wire Gauge"	Trim Length"	Face Width"	Max RPM	Model No.	Price /Each
STEEL							
4 1/4	2	0.0118	3/4	1	6000	BW964	43.86
6	2	0.0118	1	1 1/4	6000	BW968	62.36
8	2	0.0118	1 1/2	1 1/2	4500	BW980	82.34
10	2	0.0118	2 1/8	2	3600	BW983	153.15

STAINLESS							
8	2	0.0118	1 1/2	1 1/2	4500	BX017	136.13

Model No.	Fits AH"	Reduces to"	Price /Each
BY231	1/2	1/4	1.03
BY232	1/2	3/8	1.09
BY235	5/8	1/4	1.03
BY234	5/8	3/8	1.03
BY233	5/8	1/2	1.03

CRIMPED WIRE WHEEL BRUSH WITH 1/4" SHANK

- Uniform dense fill
- Can be used of hand or on a drill press for internal and external cleaning and deburring
- **Application:** Rust, scale, paint, dirt and weld spatter removal



SMALL DIAMETER CRIMPED WIRE WHEEL BRUSH

- Specially designed for effective brushing operations on internal surfaces and other hard to reach areas
- Can be mounted singly or in multiples, directly onto the shaft of a portable tool
- To be used with: straight grinder, right angle air die grinder, die grinder, drill.
- **Applications:** Deburring, ID cleaning, rust, scale, carbon and corrosion removal



Brush Dia."	Shank Dia."	Wire Gauge"	Trim Length"	Max RPM	Model No.	Price /Each
STEEL						
1 1/2	1/4	0.008	0.281	25 000	BW737	8.46
1 1/2	1/4	0.012	0.281	25 000	BW741	10.94
2	1/4	0.014	0.438	25 000	BW743	9.60
3	1/4	0.014	0.75	25 000	BW753	9.68

STAINLESS						
2	1/4	0.014	0.438	25 000	BW746	15.36
3	1/4	0.014	0.75	25 000	BW756	18.64

Brush Dia."	Arbor Hole"	Wire Gauge"	Trim Length"	Face Width"	Max RPM	Model No.	Price /Each
STEEL							
1 1/2	3/8	0.014	3/8	7/32	20 000	BB458	4.70
2	1/2	0.014	1/2	1/4	20 000	BB470	5.76
3	1/2	0.014	1	1/4	20 000	BW680	7.34

STAINLESS							
1 1/2	3/8	0.014	3/8	7/32	20 000	BB437	6.50
2	1/2	0.014	1/2	1/4	20 000	BB440	7.76
3	1/2	0.014	1	1/4	20 000	BW700	11.28

KNOT WIRE WHEEL BRUSHES

- The individual knot wire tufts of a knot wheel provide minimal flexibility for more aggressive brushing action
- Rugged knot-type construction provides high brush flexibility, more uniform results, maximum safety and efficient operation at high speeds
- Brushes larger than 6" should be mounted on stationary tables; those 6" and smaller can be mounted to stationary installations or attached to portable tools

STANDARD TWIST KNOT

- Aggressive, high impact action for severe application,
- To be used with straight grinders, bench and pedestal grinder or right angle grinder



STRINGER BEAD

- Tighter knot, fit into more recessed area
- To be used with straight grinders or right angle grinder



There are other wheel sizes,
wire sizes & arbor sizes
available for all brush types.

Different materials
are also available.

STANDARD TWIST KNOT

- Application:** Removal of rubber flash, paint slag, scale, rust, surface contamination, weld cleaning, blending, finishing, deburring, descaling, pipeline cleaning and general cleaning



Brush Dia."	Arbor Hole"	Wire Gauge"	Trim Length"	Face Width"	Max RPM	Model No.	Price /Each
STEEL							
4	3/8	0.014	7/8	5/16	20 000	BX125	23.54
6	5/8-11NC	0.025	1 1/2	1/2	9000	BX137	23.06
8	5/8	0.025	1 11/16	5/8	8500	BX144	44.40
STAINLESS							
4	3/8	0.014	7/8	5/16	20 000	BX202	34.94
6	5/8-11NC	0.025	1 1/2	1/2	9000	BX272	41.84

STRINGER BEAD

- Small width allows this brush to be used in recessed area such as welding junctions
- Application:** Cleaning stringer bead welds



Brush Dia."	Arbor Hole"	Wire Gauge"	Trim Length"	Face Width"	Max RPM	Model No.	Price /Each
STEEL							
4 7/8	5/8-11NC	0.02	1	3/16	12 000	BX338	24.64
6 1/2	5/8-11NC	0.02	1 1/4	3/16	12 000	BX161	27.12
STAINLESS							
4 7/8	5/8-11NC	0.02	1	3/16	12 000	BX270	32.34
6 1/2	5/8-11NC	0.02	1 1/4	3/16	12 000	BX273	42.20

STANDARD TWIST KNOT WITH 1/4" SHANK

- Designed to operate at high speeds
- Applications:** Maintenance and metal surface cleaning



Brush Dia."	Wire Gauge"	Trim Length"	Max RPM	Model No.	Price /Each
STEEL					
3	0.014	5/8	25 000	BX193	18.84
4	0.014	7/8	20 000	BX196	19.98
STAINLESS					
3	0.014	5/8	25 000	BX195	33.22
4	0.014	7/8	20 000	BX198	34.90

BRUSH DRIVE ARBOR

- For brushes up to 3" in diameter
- Design for use with a single brush only
- Not for use with non-brush perishable tool



Diameter"	Overall Length"	Shank Dia."	Model No.	Price /Each
1/4	1 1/2	3/16	BY198	6.08
3/8	1 3/4	1/4	BY199	6.08
1/2	1 3/4	1/4	BY200	6.52
5/8	1 3/4	1/4	BY201	6.52

STANDARD TWIST KNOT HIGH SPEED STEEL SMALL GRINDER

- Works aggressively, smoothly and efficiently on air or portable power tools
- Applications:** Cleans grooves, T-connections, weld beads and surface prep



Brush Dia."	Arbor Hole"	Colour	Wire Gauge"	Trim Length"	Max RPM	Model No.	Price /Each
STEEL							
4	5/8-11NC	Steel	0.02	7/8	20 000	BX305	19.20
4	M-14 x 2.0	Red	0.02	7/8	20 000	BX301	19.20
5	5/8-11NC	Steel	0.02	1	12 000	BX206	21.54
STAINLESS							
4	5/8-11NC	Steel	0.02	7/8	20 000	BX299	33.10
4	M-14 x 2.0	Red	0.02	7/8	20 000	BX295	30.08
5	5/8-11NC	Steel	0.02	1	12 000	BX207	53.54

HIGH SPEED STEEL SMALL GRINDER, STRINGER BEAD

- Works aggressively, smoothly and efficiently on air or portable power tools
- Application:** Bead scale removal



Brush Dia."	Arbor Hole"	Colour	Wire Gauge"	Trim Length"	Max RPM	Model No.	Price /Each
STEEL							
4	5/8-11NC	Steel	0.02	7/8	20 000	BX288	16.02
4	M-14 x 2.0	Red	0.02	7/8	20 000	BX284	16.76
STAINLESS STEEL							
4	5/8-11NC	Steel	0.02	7/8	20 000	BX311	27.02
4	M-14 x 2.0	Red	0.02	7/8	20 000	BX307	28.00

METAL ADAPTOR FOR 1 1/4" & 2" ARBOR HOLE

- Slip fit adaptor
- Comes in pair



Fits Arbor Hole"	Reduces to Arbor Hole"	Model No.	Price /Each
1 1/4	1/2	BY224	2.74
1 1/4	5/8	BY225	2.74
1 1/4	3/4	BY226	2.74
2	1/2	BY204	2.74
2	5/8	BY205	2.74
2	3/4	BY206	2.74
2	7/8	BY207	2.74
2	1	BY208	2.74
2	1 1/4	BY210	2.74
2	1 1/2	BY211	2.74

BRUSHES

AH - ARBOR HOLE

Most cup brushes are available with either plain or 5/8-11NC threaded arbor holes, while a few styles feature a hexagonal opening, and smaller sizes are fitted with a 1/4" shank.

OD - OUTSIDE DIAMETER

Standard *Osborn*® cup brushes are made in a range of outside diameters from 2" to 9". Generally, the largest diameter that suits your work space and machine speed will be most efficient.

T - TRIM LENGTH

The length of the fill material that extends beyond the metal cup or bridle. A short trim length provides a stiff, fast-cutting brush, while a longer trim length offers flexibility for dressing irregular surfaces.

R - ROW COUNT & ALIGNMENT

Cup brushes are available with one, two, or three rows of filaments or knots. Unless otherwise identified as "Stagger Row," multiple rows are parallel. Stagger row brushes provide more aggressive action.



ATB™ NYLON ABRASIVE ROUND TRIM CUP BRUSHES

- Brushes are heavily filled with round nylon filaments impregnated with silicon carbide
- Ideal for surface finishing and deburring
- Applications:** Engine blocks, transmission housings, water pumps, bulk heads, machine components, gears, castings, etc.

Brush Dia."	Grit	Thread	Trim Length"	Max RPM	Model No.	Price /Each
4	80	5/8-11NC	1 1/2	6000	BX583	49.68
4	120	5/8-11NC	1 1/2	6000	BX575	49.42
4	320	5/8-11NC	1 1/2	6000	BX576	49.42
6	80	5/8-11NC	1 1/2	6000	BX584	77.00
6	120	5/8-11NC	1 1/2	6000	BX577	77.66
6	320	5/8-11NC	1 1/2	6000	BX579	77.66



CRIMPED WIRE CUP BRUSHES

Designed for light and medium-duty applications on a variety of high speed air and electric tools. Offers smooth, responsive cutting action at all speeds on a variety of jobs.

- Cleaning of large metal surfaces
- Removal of burrs, weld scale and rust
- Edge blending
- Surface prep

WITH 1/4" SHANK - LIGHT DUTY

- Offers light duty cleaning action on air tools or electric high-speed portable tools
- All brushes have a 1/4" shank

HIGH SPEED SMALL GRINDER

- Flat brushing
- Surface prep
- Medium duty cleaning of flat surfaces and edges
- Removal of burrs
- Cleaning flat or curved surfaces
- Cleaning edges or angles
- Welding cleanup



Brush Dia."	Arbor Hole"	Wire Gauge"	Trim Length"	Max RPM	Model No.	Price /Each
STEEL						
3 1/2	5/8-11NC	0.02	1	7500	BX565	57.36
4	5/8-11NC	0.02	1 1/8	9000	BX580	26.12
5	5/8-11NC	0.02	1 1/2	8000	BX581	35.34
6	5/8-11NC	0.02	1 1/2	7000	BX582	39.30

Brush Dia."	Arbor Hole"	Trim Length"	Max RPM	Model No.	Price /Each
STEEL					
1 3/4	0.0118	1/2	13000	BX593	8.18
2 1/2	0.0104	5/8	4500	BX530	26.64

Brush Dia."	Arbor Hole"	Trim Length"	Max RPM	Model No.	Price /Each
STAINLESS					
1 3/4	0.0118	1/2	13000	BX595	14.84
2 1/2	0.0104	5/8	4500	BX572	33.62

Brush Dia."	Arbor Hole"	Wire Gauge"	Trim Length"	Max RPM	Model No.	Price /Each
STEEL						
2 3/4	5/8-11NC	0.014	1	14000	BX547	14.92
2 3/4	M-10 x 1.25	0.014	1	14000	BX544	14.92
2 3/4	M-14 x 2.0	0.014	1	14000	BX543	14.92
STAINLESS						
2 3/4	5/8-11NC	0.014	1	14000	BX574	24.74

HIGH SPEED THREAD ADAPTERS

Model No.	Fits AH"	Bushing AH"	Price /Each
BY284	5/8-11NC	3/8-24UNF	3.54
BY282	5/8-11NC	M-10 x 1.25	3.54
BY283	5/8-11NC	M-10 x 1.5	3.54



There are other wheel sizes, wire sizes & arbor sizes available for all brush types.

Different materials are also available.

3" BRIDLED CUP BRUSHES

- Aggressive tools for fast, heavy-duty cleaning and brushing of metal surfaces
- Removes carbon build up, paint, rust, scale and other contaminants
- Knot twisted with safety control bridle, removable bridle keep the knot oriented and extends brush life



Brush Dia."	Arbor Hole"	Wire Gauge"	Trim Length"	Max RPM	Model No.	Price /Each
STEEL						
3	5/8-11NC	0.020	5/8	12 000	NT969	10.96
STAINLESS						
3	5/8-11NC	0.020	5/8	12 000	NT970	21.46

KNOT WIRE CUP BRUSHES

Osborn® knot wire cup brushes are rugged, efficient tools for fast, heavy-duty cleaning of large metal surfaces. They are specially designed for use on portable tools and are filled with special analysis Osborn® steel wire. Knot type brushes are recommended for extremely rigorous jobs.

- Removal of weld scale, rust, old paint and corrosion
- Cleaning and surface prep of metals



STEEL

Brush Dia."	Arbor Hole"	Wire Gauge"	Row Wide	Trim Length"	Max RPM	Model No.	Price /Each
4	5/8-11NC	0.02	2	1	6000	BX635	33.56
6	5/8-11NC	0.035	2	1 3/4	6000	BX622	84.66

STAGGER ROW

Offers extra-fast cutting and cleaning action over wide areas.

- Cleaning of flat surfaces, angles and corners
- Surface prep
- Removal of oils, grease, rust, paint, varnish



STEEL

Brush Dia."	Arbor Hole"	Wire Gauge"	Row Wide	Max RPM	Model No.	Price /Each
5 3/4	5/8-11NC	0.02	1 3/4	6000	BX647	65.76
5 3/4	5/8-11NC	0.035	1 3/4	6000	BX648	60.42

FLARED CUP BRUSH

Has a wide diameter for wide-area cleaning, surface preparation and general maintenance.

- Fast heavy-duty cleaning of large metal surfaces
- Removal of weld scale, rust, old paint and corrosion
- Pre-paint surface prep



STEEL

Brush Dia."	Arbor Hole"	Wire Gauge"	Row Wide	Trim Length"	Max RPM	Model No.	Price /Each
6	5/8-11NC	0.02	1	1 5/8	7000	BX226	49.28

HIGH SPEED SMALL GRINDER

- Use on portable power tools operating at high speeds, or where uniform cleaning is desired
- Designed for high productivity and long life
- Knot style offers aggressive action
- Available in crimped, knotted and heavy-duty knotted styles
- Designed for 4 1/2" and 5" grinders



Brush Dia."	Arbor Hole"	Colour	Wire Gauge"	Trim Length"	Max RPM	Model No.	Price /Each
STEEL							
2 3/4	1/2-13NC	Black	0.014	7/8	14 000	BX652	18.32
2 3/4	5/8-11NC	Steel	0.014	7/8	14 000	BX653	14.14
2 3/4	M-10 x 1.25	Gold	0.014	7/8	14 000	BX650	18.32
2 3/4	M-10 x 1.5	Silver	0.014	7/8	14 000	BX651	18.32

STAINLESS

2 3/4	1/2-13NC	Black	0.014	7/8	14 000	BX658	28.96
2 3/4	5/8-11NC	Steel	0.014	7/8	14 000	BX659	22.36
2 3/4	M-10 x 1.25	Gold	0.014	7/8	14 000	BX656	28.96
2 3/4	M-10 x 1.5	Silver	0.014	7/8	14 000	BX657	28.96

WITH BRIDLE - HEAVY-DUTY

- Heavy-duty for rugged, efficient, and fast work on a variety of maintenance or cleaning applications
- Bridles reduce the flare of the wires for a more aggressive brush face
- Bridles can be easily removed after partial wear



Brush Dia."	Arbor Hole"	Wire Gauge"	Row Wide	Trim Length"	Max RPM	Model No.	Price /Each
STEEL							
4	5/8-11NC	0.014	2	1 3/4	7000	BX628	125.83
STAINLESS							
4	5/8-11NC	0.014	2	1 3/4	7000	BX698	132.11

BRUSHES



END BRUSHES

Especially suited for use on portable air and electric tools, CNC and robotic equipment, the end brush is designed for work where space limitations are a factor. In most applications, higher speeds (up to 25 000 RPM) are required for effective brushing action. *Osborn* end brush fill materials include carbon and stainless steels, brass, natural fibre, abrasive nylon, and TY[®] elastomer encapsulated wire.

OD - OUTSIDE DIAMETER

Standard *Osborn* end brushes are made with outside diameters from 3/16" through 3". For larger surfaces or "surround" applications, multiple brushes may be clustered. As a guide, add 1/8" to brush O.D. to get overall O.D.

T - TRIM LENGTH

Shorter brush section provides stiffness and faster cutting. Longer filaments have more flexibility for irregular surfaces.

OAL - OVERALL LENGTH

Distance from end of brush part to end of shank.

S - SHANK DIAMETER

All standard end brushes have 1/4" diameter shank. Miniature end brushes have 1/8" diameter shank.



CRIMPED WIRE END BRUSHES

- Engineered to operate at high speeds
- Applications:** Rubber and Plastic Mold Cleaning/Cleaning Pipe I.D./Removing Rust, Weld Scale and Spatter/Cleaning Castings/Burr Removal/Rubber Flash Removal/Carbon Removal/Spot Facing/Cleaning and Finishing Recessed Areas



WITH 1/4" SHANK

Brush Dia."	O.A. Length"	Wire Gauge"	Trim Length"	Max RPM	Model No.	Price /Each
STEEL						
1/2	2 3/4	0.0104	1	25 000	BX374	8.06
1/2	2 3/4	0.02	1	25 000	BX375	7.14
3/4	2 3/4	0.02	1	20 000	BX378	8.30
STAINLESS						
1/2	2 3/4	0.0104	1	25 000	BX359	9.28
1/2	2 3/4	0.014	1	25 000	BX360	8.30

ATB™ NYLON ABRASIVE END BRUSHES W/BRIDLE

- Frequently used to fit into tight areas too small for wheels and discs
- Recommended for operations where balance is critical, as in CNC and robotic use
- Removable plastic bridle keeps silicon carbide impregnated filaments from flaring
- Applications:** Cleaning and finishing I.D., spot facing, brushing recessed areas, etc.



Brush Dia."	Grit	Brush Area Length"	O.A. Length"	Trim Length"	Shank Dia."	Max RPM	Model No.	Price /Each
1/2	80	1	2 3/4	1	1/4	9000	BX449	13.64
1/2	120	1	2 3/4	1	1/4	9000	BX452	13.64
3/4	80	1	2 3/4	1	1/4	9000	BX450	15.08
3/4	120	1	2 3/4	1	1/4	9000	BX453	15.08
1	80	1	2 3/4	1	1/4	9000	BX451	17.02
1	120	1	2 3/4	1	1/4	9000	BX454	17.02

KNOT WIRE END BRUSH

Rugged brushing tools designed with the finest wire to offer efficient usage for a wide variety of tough cleaning and maintenance applications; can be used on CNC equipment. Available with steel, stainless steel and brass wire. Certain styles are available in clamshell packaging.

- Applications:** Spot Cleaning or Facing/Removal of Slag, Rust or Scale/Cleaning Pipe I.D./Deburring or Flash Removal/Cleaning of Dies, Moulds and Tooling/Pipeline Cleaning



WITH 1/4" SHANK

Brush Dia."	O.A. Length"	Wire Gauge"	Trim Length"	Max RPM	Model No.	Price /Each
STEEL						
1/2	2 3/4	0.014	1 1/8	22 000	BX350	12.78
3/4	2 3/4	0.014	1 1/8	20 000	BX353	12.92
1	2 3/4	0.014	1	20 000	BX357	13.67
STAINLESS						
1/2	2 3/4	0.014	1 1/8	22 000	BX481	12.46
3/4	2 3/4	0.014	1 1/8	20 000	BX484	14.06
1	2 3/4	0.014	1	20 000	BX487	16.52

SCUF-GUARD COATED BRUSHES

- Made with a durable elastomer layer on the cup to help prevent accidental scratches or markings on the work surface during operation
- Stainless steel wire



Brush Dia."	Brush Length"	O.A. Length"	Fill Dia."	Trim Length"	Max RPM	Model No.	Price /Each
1/2	1 1/8	2 3/4	0.006	1 1/8	22 000	BX364	21.74
1/2	1 1/8	2 3/4	0.014	1 1/8	22 000	BX366	17.80
3/4	1 1/8	2 3/4	0.006	1 1/8	20 000	BX367	24.48
3/4	1 1/8	2 3/4	0.014	1 1/8	20 000	BX369	18.52
1	1	2 3/4	0.006	1 1/8	20 000	BX370	30.34
1	1	2 3/4	0.014	1	20 000	BX372	24.30

CRIMPED WIRE INTERNAL BRUSH KITS

HELITUF® BRUSH KIT

- Includes two brush holders and twelve *Helituf*® internal brushes

Model No. **BX763** Price/Each **\$169.21**

Model No.	Description	Price /Each
BY196	Spiral tube brush holder, 3/16"	12.31
BX765	3/8" Spiral wire tube brush	3.58
BX767	7/16" Spiral wire tube brush	3.50
BX768	1/2" Spiral wire tube brush	3.70
BX770	9/16" Spiral wire tube brush	3.94
BX771	5/8" Spiral wire tube brush	3.92
BX773	11/16" Spiral wire tube brush	3.96



Model No.	Description	Price /Each
BX774	3/4" Spiral wire tube brush	4.28
BX776	13/16" Spiral wire tube brush	4.38
BX777	7/8" Spiral wire tube brush	4.44
BX779	15/16" Spiral wire tube brush	4.62
BX780	1" Spiral wire tube brush	4.86
BX782	1 1/8" Spiral wire tube brush	5.12

SANDBLAST MEDIA ABRASIVES

- All abrasives are sold in 50-lb. bags
- Other grades of abrasives also available
- Steel grit and steel bead also available



APPLICATIONS:

COARSE:

Good for cleaning heavier contamination and peening for stress

MEDIUM COARSE:

Good for engine rebuilding, mold texturing and peening of softer metals

MEDIUM:

Good for plating, anodising preparation and most general applications

FINE:

Good for cleaning light contamination and wherever a fine surface finish is desired

GLASS BEADS

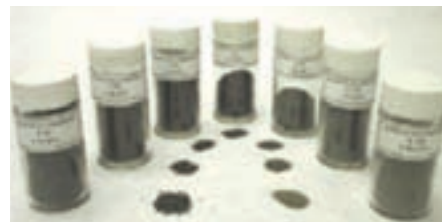
A popular media used primarily for dimensionally sensitive applications where tolerance and finish are your main concerns. Perfect for re-moving medium to light contamination without causing dimensional change, over stressing, imbedding or pitting. Used widely by automotive rebuilders, die and mold makers in the plating and aerospace industries.



Model No.	US Screen	Application	Price/Each
TG392	20-30	Coarse	55.53
TG393	30-40	Coarse	55.53
TG394	40-50	Coarse	55.53
TG398	50-70	Med. Coarse	55.53
TG399	70-80	Medium	55.53
TG400	70-100	Medium	55.53
TG401	80-120	Fine	55.53
TG402	100-170	Fine	55.53
TG403	140-230	Fine	55.53
BZ738	170-325	Fine	55.53

ALUMINUM OXIDE

Highly aggressive abrasive. Ideal for applications where tough contamination is encountered and surface removal of .0005" to .08" is acceptable. Resulting finish is ideal for painting, plating and coating. Grit sizes range from #12 (coarse) to #240 (fine).

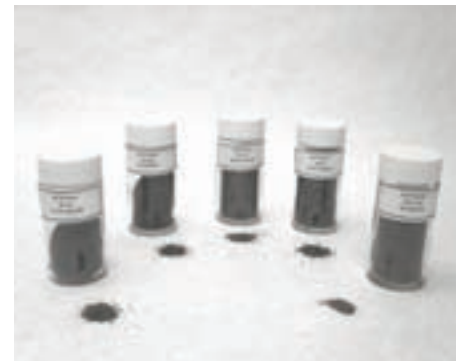


Model No.	Grit	Application	Price/Each
TG404	16	Coarse	102.44
NP845	20	Coarse	102.44
TG405	24	Coarse	102.44
BZ740	30	Coarse	102.44
BZ739	36	Coarse	102.44
TG406	46	Med. Coarse	102.44
BZ741	54	Med. Coarse	102.44
TG407	60	Med. Coarse	108.18
TG408	70	Medium	108.18
TG409	80	Medium	108.18
NP846	90	Medium	113.93
TG410	100	Med. Fine	108.18
NP847	120	Med. Fine	108.18
TG411	150	Med. Fine	108.18
TG412	180	Fine	108.18
TG413	220	Fine	108.18

JETMAG

(SYNTHETIC OLIVINE PYROXENE SAND)

The only true substitute to sand (silica), JetMag offers excellent sanding quality and is cost/performance ratio is highly competitive. It allows faster cleaning and reduces consumption, therefore it offers greater productivity in enclosed work places. Because of its chemical and mineral composition, JetMag is a non-toxic material and environment friendly. Less than 1% free silica.



Model No.	Description	Application	Price/Each
NP848	16-60	16 Mesh	12.16
NP849	30-60	24 Mesh	12.16
NP850	35-70	40 Mesh	12.16

SANDBLAST CABINETS

- Filtered fluorescent light
- Gun comes with different sized nozzles for different usage
- 2 rubber gauntlet gloves mounted in front

Model No.	BV745	BC894
Fluorescent light	110 V	110 V
Maximum operating pressure	100 PSI	116 PSI
Required compressor output	5 CFM/PFM @ 80 PSI	15-25 CFM/PFM @ 40-80 PSI
Max. amount of abrasives	10 lbs.	35 lbs.
Cabinet dimensions	23" x 19" x 12" - 15"	37" x 26 3/4" x 17 1/2" - 25 1/2"
Dimensions (L x W x H)	23" x 19" x 19"	37" x 26 3/4" x 59"
Weight	36 lbs.	176 lbs.
Price/Each	\$216.16	\$772.04





LIGHT INDUSTRIAL - ECONOBLAST SERIES SUCTION CABINETS

The *Econoblast* compact blast cleaning cabinet is offered in various convenient dimensions. These blast-cleaning cabinets are the most economical and versatile models available on the market. Built for occasional work, they are ideal for cleaning, finishing, deburring and etching. If you need an abrasive blasting cabinet and have a limited budget, the *Econoblast* will perform most tasks. For cleaning, deburring, stripping and deflashing.



SPECIFICATIONS:

- Dust bag standard - ventilation 400 CFM
- 1/3 HP, 3450 RPM, 115 V TEFC motor
- Natural latex gloves with nylon gauntlets
- Single door opening
- Window: 13" x 21" with plastic protector
- Halogen 250 W flood light
- Ceramic 5/16" nozzle, 5/32" air jet
- Trigger blasting control
- Will operate with a 5 HP industrial compressor
- 14-gauge expanded steel deck
- Convenient quick flush rubber plug
- Sturdy 13 gauge steel construction
- CSA approved
- Capacity: 300 lbs.
- Made in Canada
- Optional dust collector

Model No.	Dimensions"	Filtration Sq.Ft.	Price/Each
TG414	26 x 36	13	4153.15
NP839	26 x 36	50	6146.44
TG415	28 x 44	13	4509.30
NP840	28 x 44	50	6600.24
TG417	36 x 48	13	5164.16
NP842	36 x 48"	50	7289.56

SEMI-INDUSTRIAL - ECAB SERIES SUCTION CABINETS

The semi-industrial line of blast finishing cabinets is a mid-level line designed to deliver the same dependability and performance as the industrial units, but at a more economical price. Whatever the application, all that is necessary is an air compressor producing a minimum of 22 CFM, and several pounds of sandblasting media (glass beads, aluminum oxide, etc.). Use the semi-industrial *Ecab* cabinets for medium duty cleaning, etching, deburring, finishing, trimming, etc.



SPECIFICATIONS:

- Dust bag standard - Ventilation 400 CFM
- 1/2 HP, 3450 RPM, 115 V TEFC Motor
- Natural latex gloves with nylon gauntlets
- 13" x 21" window with plastic protector
- Single door opening
- 2 x 100 W halogen bulbs
- Ceramic 5/16" nozzle, 5/32" (34 CFM) air jet standard
- Foot pedal blasting control
- Regulator and gauge air control
- Adjustable louver air vent
- 1/8" perforated steel screen drawer
- Convenient rubber plug for quick flushing of recycler
- 14 gauge steel construction
- 3 1/2" diameter return hose
- Abrasive recycler included
- CSA approved
- Capacity: 300 lbs.
- Made in Canada

Model No.	Dimensions"	Filtration Sq.Ft.	Price/Each
TG419	26 x 36	13	5876.45
NP828	26 x 36	50	7955.90
NP829	28 x 36	100	9966.42
TG421	36 x 48	50	7174.67
NP833	36 x 48	100	10655.74

DUST COLLECTORS & DUST BAGS – SUCTION OR PRESSURE TYPE CABINETS

- Models **TG422** and **NP766** dust bags are standard dust filtration and reclamation system used with the *Econoblast* and *Ecab* series blast cleaning cabinets
- Model **TG418** dust collector is designed for medium duty blast cleaning operations
- Models **TG423** and **NP827** dust collectors are designed for heavy-duty applications and are the most efficient for preventing dust from escaping into the work environment and contaminating machines and work surfaces



Model No.	Description	Filtration Sq.Ft.	Motor HP	Fan CFM	Price /Each
TG418	Medium Duty Dust Collector	50	0.5	400	2280.50
TG423	Heavy-Duty Dust Collector	100	1	600	4084.22
NP827	Heavy-Duty Dust Collector	230	2	1200	6519.82
TG422	Dust Bag	13	0.33	400	105.08
NP766	Dust Bag	30	1	600	203.92



80-LB CAPACITY PORTABLE BLASTER

- Ideal for light maintenance jobs on machinery and road equipment
- Requires minimum 5 HP air compressor to operate
- CSA approved, made in Canada
- Capacity: 1.0 cu.ft
- **Includes:** Blast hose 8' long (3.04 m) and 1/2" i.d. (12.7 mm), with fittings. Ceramic nozzle, 1/8" (3.1 mm) orifice. Protective washers for nozzle and fittings. **BZ689** protective hood with replacement visor. **BZ685** remote control system.

Model No. TJZ979
Piping: 1/2"
Total height: 39"
Tank diameter: 12"
Capacity: 80 lbs.
Weight: 45 lbs.
Price/Each \$603.16



346® PORTABLE PRESSURE BLASTER

- Tank capacity of 4.1 cubic feet, 18" diameter
- Standard pressure release dead man control systems, for greater safety
- Abrasive metering valves will assure precise and easy control flow of abrasive
- Standard pneumatic dead man remote control system
- Convex top for built-in filling funnel
- Removable plunger with no threads
- Durable sealing plunger
- Extra low profile
- Large hand hole for easy access to inside of tank
- Lifting eyes
- Heavy duty piping
- Conical bottom
- Stabilizing support frame which eliminates wheel fatigue and pot tip over
- Large hard rubber wheels
- Air pressure gauge
- Water separator

TMA028 includes: Pneumatic sandblaster, 50' sandblasting hose, one tungsten carbide nozzle, *Radex* air purifier, 50' of air hose to feed air between air purifier and protective hood and *Nova 2000* air supplied protective kit

TMA026 includes: Pneumatic sandblaster, 50' sandblasting hose and one tungsten carbide nozzle

TMA027 includes: Pneumatic sandblaster, *Radex* air purifier, 50' of air hose to feed air between air purifier and protective hood and *Nova 2000* air supplied protective kit



Model No.	MFG No.	Description	Weight	Price/Each
TMA021	646101	Pneumatic Sandblaster	225 lbs	4365.69
TMA026	734400	Portable Pressure Blaster Kit #1	275 lbs	878.88
TMA027	735000	Portable Pressure Blaster Kit #2	300 lbs	1723.30
TMA028	-	Portable Pressure Blaster Complete Kit	500 lbs	10743.97



BZ715



NP768



NOZZLES FOR BLASTING GUNS

STRAIGHT BARREL W/ TAPERED BODY – 7/8" OD DIAMETER AT BASE, 1 1/4" LENGTH

Model No.	Description	Dimensions"	For cabinets	Price/Each
BZ691	Ceramic Nozzle	1/4	Econo	26.25
BZ692	Ceramic Nozzle	5/16	Econo	26.25
NP769	Tungsten Carbide Nozzle	1/4	Econo	126.38

STRAIGHT BARREL W/ TAPERED BODY – 1 1/8" OD DIAMETER AT BASE, 1 3/8" LENGTH

Model No.	Description	Dimensions"	For cabinets	Price/Each
NP770	Ceramic Nozzle	1/4	Ecab, M	15.09
NP771	Ceramic Nozzle	5/16	Ecab, M	15.09
NP776	Ceramic Nozzle	3/8	Ecab, M	15.09
NP772	Ceramic Nozzle	7/16	Ecab, M	15.09
NP773	Tungsten Carbide Nozzle	1/4	Ecab, M	101.10
NP774	Boron Carbide Nozzle	1/4	Ecab, M	143.61
BZ694	Boron Carbide Nozzle	5/16	Ecab, M	143.61
NP775	Boron Carbide Nozzle	7/16	Ecab, M	143.61



TG425



BZ692



NP776



NP773



BZ694

ACCESSORIES FOR SUCTION CABINETS

BLAST GUNS & NOZZLES

Model No.	Description	Dimensions"	For cabinets	Price/Each
TG424	With Ceramic Nozzle	5/16	Econo	327.43
TG425	With Ceramic Nozzle	5/16	Ecab, M	296.41
NP823	With Boron Carbide Nozzle	5/16	Ecab, M	442.31
BZ715	Gun body	-	Econo	258.50
BZ719	Gun body	-	Ecab, M	137.86

ACCESSORIES FOR SUCTION & PRESSURE CABINETS

Model No.	Description	Dimensions	Price/Each
NP768	Cabinet gloves – Leather sleeves		224.03
BZ690	Cabinet gloves – Nylon sleeves		78.30
BZ720	Replacement Laminated Window	22" x 14"	86.17
BZ681	Replacement Plastic Shields	23 3/4" x 18 3/4"	5.97
BZ682	Replacement Plastic Shields	20 3/4" x 12 7/8"	7.72
BZ684	Plastic Pail white	23 Liters	27.52
NP806	Blast Hose	ID 1/2", OD 1 3/16"	57.44
NP807	Blast Hose	ID 3/4", OD 1 1/2"	156.53
BZ699	Blast Hose Kit	NP806 + BZ700"	124.31
BZ700	Quick Connect Stem Coupling for NP806		4.98
NP809	Quick Connect Stem Coupling for NP807		12.58

FUME EXTRACTORS

MOBI-FLEX & MOBI-FLEX ECO

- Mobile mechanical filter for welding fumes, grinding dust, etc
- Compact and flexible
- The extraction arm captures fume and dust at a distance of 30-50 cm (12-20") from the source and within an area of 0.5 m (20") diameter
- Black hood w/optimized airflow and ring handle and built in damper
- Flame proof PVC hose 160 mm (6.5") diameter
- This unit can also be fitted with an activated carbon filter which removes gases from polluted air

CONSTRUCTION:

- Unit made of powder painted steel sheet 16 ga.
- Fan 0,75 kW(1HP), 120 V, 1-phase, 2400 m³/hr (1400 CFM) free-blowing
- The unit filters 1250 m³/hr (700 CFM) through the hood
- Comes standard with 1-prefilter (spark-trap) and 1 washable (99% spun-bound polyester) cartridge filter (P-160)
- Active filter surface 14 m² (150 +ft²)
- Delivered complete with ON/OFF starter, cable, and plug
- Flameproof 6.5' PVC coated fibreglass hose
- **5-year limited warranty**

Model No.	Mfg. No.	Description	Price/Each
BA655	P-150/P-002	Mobile Fume Extractor C/W 2 m Extraction Arm	4254.88
BA656	P-150/P-003	Mobile Fume Extractor C/W 3 m Extraction Arm	4478.88
BA657	P-160	Replacement Filter Cartridge For BA655-BA656 (Cleanable with compressed air)	325.52
BA659	P-160-W	Replacement Filter Cartridge For BA655-BA656 (Washable with soap and hot water, suitable for oily smoke)	403.20
EA452	P-535/P-002	"Self Cleaning" Mobile Fume Extractor C/W 2 m Extraction Arm	5374.88
EA453	P-535/P-003	"Self Cleaning" Mobile Fume Extractor C/W 3 m Extraction Arm	5822.88
EA454	P-541	Replacement Filter Cartridge For EA452-EA453 (Cleanable with compressed air)	446.88



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MOBILE FUME EXTRACTORS W/SELF CLEANING FILTERS

For direct capture of dust, smoke and fumes. Suitable for the following applications:

- Dry Particulates
- Welding Smoke
- Fumes
- Carbon Dust
- Plastic Dust
- Ceramic Dust
- Woodworking
- Fibreglass • Synthetics
- Textiles
- Rubber Dust
- Grinding Dust
- Powders
- Dry Chemicals
- Composites
- Cotton Dust

Dirty air enters the cabinet from the hose and is directed vertically downward which results in a 180° turn at the bottom of the unit, causing separation of heavier particles into the removable dust pan. Second stage cartridge filter, traps the remaining particles with up to 99% efficiency.

SPECIFICATIONS:

Construction: 16-gauge steel cabinet finished with 2 part chemical and oil resistant paint. Includes *Ultra-Seal*® filter mounting system, removable access door to filters and direct drive motor/blower, 6.7' externally self-supporting *E-Z Arm*™ high flow pickup arm, 8" fixed front and 5" rear swivel casters, power cord, and on-off switch.

Weight: 255 lbs. Shipping weight 400 lbs.

Airflow: 800 CFM with 1.5 HP motor

Noise: 70 dBA / 73 dBA 1.5 HP

Electrical: 1.5 HP 115/1/60

Filter Seal: *Ultra-Seal*® with positive sealing filter locking mechanism for all main filters, optional HEPA filter and adsorber modules (when used). Slide tracks shall be used for prefilters only.



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Model No.	Mfg. No.	Description	Price /Each
BA710	PCH-1-1.5	Self Cleaning Mobile Filter w/2-m arm	7838.88
BA667	7FR02020	Replacement Filter Cartridge	190.40
BA712	PCH-1-PG-5	0-5" Dial Pressure Gauge	441.65

*Other extractors also available

FANS FOR FUME EXTRACTORS

- Powerful, silent, energy efficient fans provide even airflow with the lowest possible power consumption
- Extra bracket required for use with booms (use **BA694** for 6.5" boom and **EA456** for 8" boom)

Model No.	Mfg. No.	Voltage/ Phases/Amp	Free-Blowing HP	CFM	Nominal (At-The-Hood) CFM	Price /Each
EA263*	P-149-1	115/1/60	1.0	1200	1 @ 600 CFM	1286.88
BA683	P-152-1	115/1/60	1.5	1400	1 @ 900 CFM	1566.88
BA689	P-152-2	208-230-460/3/60	2.0	1700	2 @ 600 CFM or 1 @ 900 CFM	1566.88
BA693	P-152-3	575/3/60	2.0	1700	2 @ 600 CFM or 1 @ 900 CFM	1566.88
EA264	P-154-1	208-230-460/3/60	3.0	1800	3 @ 600 CFM or 2 @ 900 CFM	2462.88
EA265	P-154-2	575/3/60	3.0	1800	3 @ 600 CFM or 2 @ 900 CFM	2462.88
EA266	LD-130-1	208-230-460/3/60	5.0	2000	4 @ 600 CFM or 3 @ 900 CFM	4814.88
EA267	LD-130-2	575/3/60	5.0	2000	4 @ 600 CFM or 3 @ 900 CFM	4814.88
EA268	LD-150-1	208-230-460/3/60	7.5	3000	6 @ 600 CFM or 5 @ 900 CFM	5598.88
EA269	LD-150-2	575/3/60	7.5	3000	6 @ 600 CFM or 5 @ 900 CFM	5598.88

*Now complete with Plug & Play



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FUME EXTRACTOR ARMS

- An extractor arm extracts smoke, dust and gases directly at the source, before the contamination has spread in the premises and been inhaled
- Superior extraction arm and advanced design "Parallelogram" counter balancing system that eliminates the need for continual adjustment of friction joints and allows for an unparalleled ease of movement
- Ideal solution for most "source-capture" applications and specifically recommended for applications requiring an "easy to position" extractor that does not require constant adjustment
- Compact and smooth design, excellent for areas with low ceiling
- **5-year limited warranty**

FLEXI CONSTRUCTION:

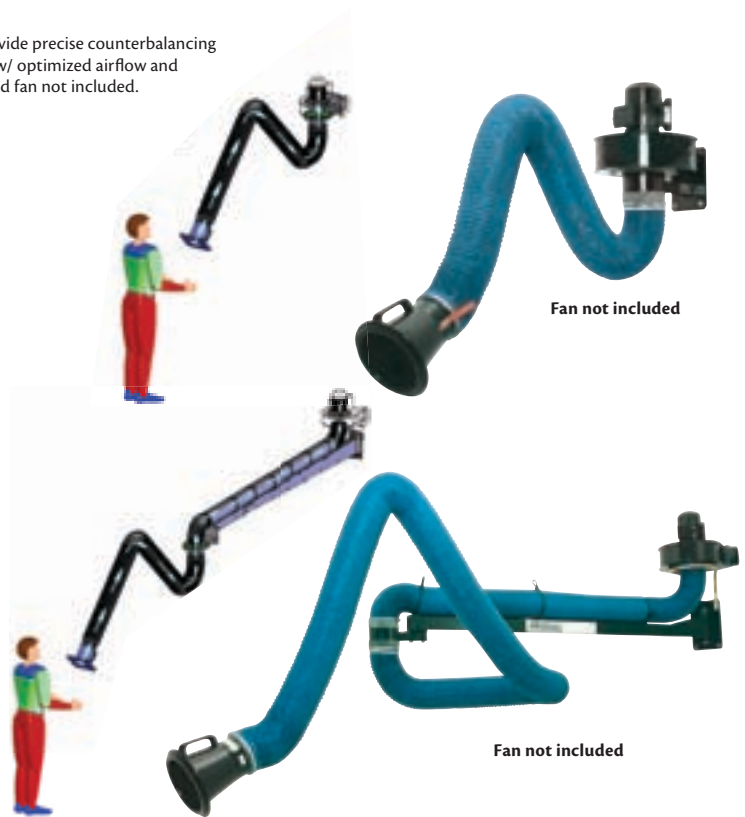
Internal supporting mechanism made of mild steel tubing, 3 spring-assisted joints to provide precise counterbalancing of the extractor's inner and outer arm. Comes with a black baked-on enamel steel hood w/ optimized airflow and ring handle, and built in damper and with black baked-on enamel wall bracket. Motor and fan not included.

Description	Flexi I, 6.5" dia Model No.	Price /Each	Flexi II, 8" dia Model No.	Price /Each
6.7' (2 m) Extraction arm w/wall bracket	BA660	1047.20	BA978	1344.00
10' (3 m) Extraction arm w/wall bracket	BA661	1232.00	BA979	1540.00
13.5' (4 m) Extraction arm w/wall bracket	BA662	1456.00	BA980	1764.00
16.5' (5 m) Extraction arm w/wall bracket	BA663	1624.00	BA985	1932.00

BOOM/EXTRACTOR ARM COMBOS

- Combos specially developed for welding, grinding, mixing of chemicals, grinding, and other application when you need to reach over long distances
- Hoses are made of flame proof PVC w/internal steel spiral
- Comes with Super-Flex® horizontal arm w/ball bearing, extractor arm, hood w/ring handle and built-in damper, wall bracket, hose & hood.
- Fan and motor not included

Description	W/Flexi I, 6.5" dia Model No.	Price /Each
6.7' (3 m) Horizontal arm w/13.5' (4 m) extractor arm	BA675	2576.00
10' (3 m) Horizontal arm w/13.5' (4 m) extractor arm	BA678	2798.88
14' (4 m) Horizontal arm w/13.5' (4 m) extractor arm	BA680	3134.88



Fan not included

Fan not included

WALL FLEX & WALL FLEX ECO

NEW SELF-CLEANING UNIT NOW AVAILABLE

- Used to "at-Source" capture and filter a variety of airborne contaminants such as fumes, dust and gases
- Recognized as an excellent solution for the specific demands filtering source captured contaminants, the wall flex comes complete with a cleanable or self-cleaning filter and fan

CONSTRUCTION:

- Unit made of powder coated 12-14-16 ga. sheet steel
- Fan 0.75 kW (1HP), 120 V, 1-phase, 2400 m³/hr (1450 CFM) free-blowing
- Capacity: 1250 m³/hr (730 CFM) (With extraction arm)
- Standard with 1-prefilter and 1 washable 99% main filter (99.5% @ .5 micrometers)
- Complete with ON/OFF motor starter and overload protection
- 3.5 m (12') cable and plug
- Reverse Pulse-Jet filter cleaning units include:
 - Spark-proof impeller
 - Motor out of the air stream
 - Removable dust drawer
- **5-year limited warranty**
- **Always refer to owners manual before operating this type of equipment**

FEATURES & BENEFITS:

- "All Steel design" (not including hose) - No plastic to bend, melt or otherwise lose shape & deform
- Compact wall mount design - Saves on floor space
- Washable or self-cleaning filters - Avoid high cost replacement filters
- Available w/pulse jet filter cleaning system - Save on time required to clean the filters



Arm not included

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Model No.	Mfg No.	Description	Price /Each
BA697	P-026/P-149/115V/1PH	Wall Mounted Filter comes with 115/1/60; 1.5 HP Fan	2436.00
BA657	P-160	Replacement Filter Cartridge for BA697, BA698 and BA699 (Cleanable with compressed air)	325.52
BA659	P-160-W	Replacement Filter Cartridge for BA697, BA698 and BA699 (Washable with soap and hot water... Suitable for oily smoke)	403.20
EA462*	P-151/P-149/115V/1PH	"Self Cleaning" Wall Mounted Filter comes with 115/1/60; 1.5 HP Fan	4478.88
EA454	P-541	Replacement Filter Cartridge for EA462, EA463 and EA464 (Cleanable With Compressed Air)	446.88

* Now complete with Plug & Play

FUME EXTRACTORS



MINI-FLEX

- "At source" fume collector designed for soldering, TIG welding and other toxic applications
- The compact design ensures convenient mobility and features 2 flexible extractor arms that retain their position to source capture fume and gases before entering the operators breathing zone.
- Easily mounted on top or just underneath a table (Tabletop would require two 3.5" diameter holes).

CONSTRUCTION:

- 16/18 ga. welded steel cabinet with white finish
- Filter access through top assembly
- ON/OFF rocker switch
- 2.5 m (8') long power cord
- Running light
- Acoustical silencing foam
- 200 Watt motor, 115/1/60Hz (0.85 amps),
- 1" poly prefilter, 99.97 % HEPA filter, 1" charcoal filter,
- Two 42" fume extractor arms with aluminum hoods.
- 12" L x 13" W x 20" H
- **5-year limited warranty**
- **Always refer to owners manual before operating this type of equipment**

FEATURES & BENEFITS:

- Light extraction arms
 - Easy to set into position above the process
- Compact design
 - Place directly on or below the work surface/table
- 3 stage filtration: Prefilter, HEPA and charcoal
 - Allow the unit to be used for a variety of applications
- High flow rate (300 CFM)
 - Capture fumes before they reach the operators breathing zone



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Model No.	Mfg. No.	Description	Price /Each
EA448	MINI-FLEX	Mini Flex Dual Hose Mount	2323.96
EA449	MF-PRE	Prefilter for Mini Flex	92.74
EA450	MF-HEPA	HEPA Filter for Mini Flex	357.28
EA451	MF-CHARCOAL	Charcoal Filter for Mini Flex	66.08

SLEDGEHAMMER® SERIES DOWNDRAFT TABLES

- Used to capture and filter airborne contaminants generated from table TABLE-TOP type processes
- Additionally, a patent pending modular design allows these tables to be bolted together when a larger work surface is required

Added safety features included:

- Water tray
- Secondary spark trap
- Side and top shields
- Spark-proof impeller
- Motor installed out of the airstream

CONSTRUCTION

- 14-16 ga. sheet steel, 1/4" steel plate work surface, 36" x 24"
- 1 hp (0.75 kW) 120 V/1/60 TEFC drive class II motor
- Flowrate: 1200 CFM (2000 m³/hr)
- Avg. open face velocity: 250 FPM
- Nano Fiber filter cartridge (99.5 % @ .5 micrometers)
- ON/OFF motor starter & overload protection
- 3.5 m (12') cable and plug
- Reverse Pulse-Jet filter cleaning system
- Centrifugal "spark-proof" impeller
- **5-year limited warranty**
- **Always refer to owners manual before operating this type of equipment**

FEATURES & BENEFITS:

- Patent pending modular design that can be bolted together
 - Ideal when larger work surfaces are required.
- Water tray - Extinguished sparks in high sparking applications
- Secondary spark trap - Further minimizes the risk of fire in sparking applications
- Reverse Pulse Jet filter cleaning system - High dust producing applications
- Enclosed side and back walls - Protect others from debris eg: Grinding particulates



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Model No.	Mfg. No.	Description	Price /Each
EA455	MF-SH-1	Down Draft Table	4680.48
EA454	P-541	Replacement Filter Cartridge for EA455 (Cleanable with compressed air)	446.88

PORTA-FLEX PORTABLE WELDING FUME EXTRACTORS WITH BUILT IN FILTER

- Suitable for welding in confined spaces or difficult to reach locations
- Perfect for service and repair work
- Efficient filtration
- The filter cartridge has long life and efficient filtration. It is easy to change when it is full
- Uniquely easy to bring with you
- Porta-Flex has a weight of just 15 kg: It is extremely easy to carry with you as you roll the hose around the handle and fix the magnet nozzle to the outside of the filter box
- Two versions available
- Both come with flexible hose 2.5 m and filter cartridge is included with both, nozzle sold separately



EA515, PORTA-FLEX 200 (1KW) 160 M³/H

- Designed for use with the smokeless welding torches and lighter duty applications for collection of dust and smoke at the source
- Polluted air is drawn away and filtered through a 3-stage filtration system
- 28 lbs

EA516, PORTA-FLEX 200AUTO (1KW) 160 M³/H AND AUTOMATIC START/STOP

- Collects dust and smoke at the source
- Polluted air is drawn away and filtered through a 3-stage filtration system
- The dual powered fan system assures consistent and effective performance
- The side selection of filter combinations allow the unit to be used in a variety of applications
- Comes complete with an "AUTO-START" control which turns on the collector when the welder strikes the arc
- 28 lbs

Model No.	Mfg. No.	Description	Price/Each
EA515	P-610	Porta-Flex 200 1-phase/1kW/220V/50Hz. 650 (W)x250(D)x450mm(H)	2238.88
EA516	P-614	Porta-Flex 200 Auto 1-phase/1kW/220V/50Hz. with automatic start/stop	3109.12
EA517	P-615	400mm Porta-Flex Nozzle with Magnetic Base	224.00
EA518	P-616	300mm Porta-Flex Nozzle with Magnetic Base	224.00
EA519	P-617	200mm Porta-Flex Nozzle with Magnetic Base	212.80
EA520	P-618	80mm Porta-Flex Nozzle with Magnetic Base	218.40
EA521	P-619	Replacement Main Filter for the Porta-Flex	487.33
EA522	P-620	Replacement HEPA Filter for the Porta-Flex	545.44

POWER CAT® PORTABLE BLOWERS

- Provides the extra power to tackle tough, industrial jobs
- Unique portable blower can be used for ventilating, cooling and heating the work space
- Removes fumes and smoke created during welding through addition of accessories
- Choice of 300 CFM model blower, or variable 1120/877 CFM unit
- Fitted with a duplex receptacle featuring 25', heavy-duty grounded extension cord
- 120 Volt/60 Hz motor
- Accessories sold separately



Model No.	Mfg. No.	Blower	Lamp	Receptacle	Price /Each
EA090	A300	300 CFM	40 Watts	Duplex, Grounded	257.77
EA091	1200XL	High Speed – 1120 CFM Low Speed – 877 CFM	N/A	Duplex, Grounded Weather-Resistant	528.92

Model No.	Mfg. No.	Description	Price /Each
FOR MODEL EA090			
EA092	300DA	Duct accessory. 10' x 5" flexible duct with exhaust adaptor. Use to extend EA094 in 10' increments.	177.43
EA093	300EXT	Extension accessory. 10' x 6" flexible duct with connecting sleeve and clamp. Use to extend EA092 and EA094 in 10' increments.	159.08
EA094	300IA	Intake accessory. 10' x 6" flexible duct with quick-mount fittings at both ends.	232.74
EA095	300FE	Welding Fume Exhaust Nozzle. Clamps to EA094 to direct intake of welding fumes.	130.87

Model No.	Mfg. No.	Description	Price /Each
FOR MODEL EA091			
EA096	1200EA	Extension accessory. Easily attaches to connect EA098 to unit.	144.89
EA097	1200IA	Intake Adaptor. Quick-mount fitting to attach duct to unit.	66.20
EA098	1200FD	Flexible Duct. 10' x 8" duct to be used with either EA096 or EA097.	235.36
EA099	1200DC	Duct Coupling. Clamp-on connector for additional EA098 ducts.	43.87
EA100	1200FE	Welding Fume Exhaust Nozzle. Clamps to EA098 for extraction of welding fumes.	126.10

ACCESSORIES FOR MODEL EA091



ACCESSORIES FOR MODEL EA090



PARTS CLEANERS

RECIRCULATING PARTS WASHERS

- Safety lever has fusible link which shuts cover in case of fire
- Thermally protected 110 V motor and on/off switch
- Durable pump included
- 3-way filtration traps grime
- Flush hose delivers flow of solvent to rinse parts clean, quickly and easily



BV742



BV743



BV744

5 GALLONS

Capacity: 3.5 gallons
Motor: 0.25 A
Voltage: 110 V, 1 phase, 60 Hz
Dimensions: 18 1/4" x 13 1/2" x 9"
Height of stand: N/A
Weight: 20 lbs.
Model No. BV742*
Price/Each \$108.73

20 GALLONS

Capacity: 12 gallons
Motor: 0.25 A
Voltage: 110 V, 1 phase, 60 Hz
Dimensions: 30 1/2" x 21 1/4" x 10"
Height of stand: 24 1/2"
Weight: 66 lbs.
Model No. BV743*
Price/Each \$228.92

40 GALLONS

Capacity: 30 gallons
Motor: 0.25 A
Voltage: 110 V, 1 phase, 60 Hz
Dimensions: 44 1/2" x 21 1/4" x 10 1/2"
Height of stand: 24 1/2"
Weight: 100 lbs.
Model No. BV744*
Price/Each \$324.31

*A material safety data sheet is required for purchase



PARTS CLEANING BRUSHES

Recommended for cleaning motors, machinery and metal parts.

OSBORN
JACKSONLEA

BZ987



TEX274



Model No.	Brush Dia."	Overall Length"	Trim Length"	Qty/Pkg.	Price /Each
BZ987	1 1/8	11	2 3/4	12	3.64
TEX274	1 7/8	37 3/8	3 1/2	1	20.98

Brush Only: 10"

LUBERITE™ STORAGE & DISPENSING CONTAINERS

- Ideal for anyone using lube oils, hydraulic oils, gear oils, motor oils, and coolants
- Sealed system protects against lubricant contamination to reduce machinery downtime
- Minimizes dangerous and costly spills, while saving money by maximizing usable lubricants
- Speeds up lubrication jobs and allows for easy dispensing in awkward points
- Includes: Simple colour coding system for easy identification of contents and minimize cross-contamination



LUBERITE™ LIDS

- Three sizes available to meet your pouring applications
- Each lid includes eight coloured bands to match colour coding system on drums
- HDPE lids offer a fully sealed system using nitrile O-rings
- Quick fill port minimizes exposure to airborne contaminants by eliminating the need to remove lids during refilling
- Flip-switch activated breather vent eliminates the need to hold down a spring-loaded venting button



AD021

Model No.	Lid Type	Nozzle Size inch	mm	Dimensions Height"	Width"	Length"	Price /Each
AD021	Pour	1/4	6	8 1/2	5 5/8	13 1/8	65.32
AD022	Pour	1/2	12	8 1/2	5 5/8	13 1/8	65.32
AD023	Pour	1	25	8 1/2	5 5/8	13 1/8	65.32
AD024	Storage/Pump	N/A	N/A	5	5 3/4	6 3/4	39.87

LUBERITE™ EXTENSION HOSES

- Flexible extension hoses combine with lids for lubricating hard-to-reach areas



AD026

Model No.	For Use With	Length"	Price /Each
AD026	AD021	12	14.13
AD027	AD022	12	15.90
AD028	AD023	10 1/2	17.67

LUBERITE™ DRUMS

- Containers made from non-reactive HDPE for durability and ease of cleaning
- Available in three sizes to meet your specific applications
- Identification cards are coloured on both sides for a total of 8-colour choices to avoid cross contamination
- Comes with standard data pouch with 4-colour identification cards



Model No.	Capacity Quarts/Liters	Dimensions Height"	Width"	Length"	Price /Each
AD018	2	9 7/8	5 3/8	5 3/8	18.93
AD019	5	11 1/2	7	7	24.06
AD020	10	14 3/4	8 3/4	10 5/8	36.84

LUBERITE™ ALUMINUM HAND PUMPS

- Use piston style pump in combination with the storage/pump lid for pumping applications
- Aluminum construction for corrosion resistance
- For use with 5 and 10 quart/liter drums only
- Weight: 2 lbs.

Model No. AD025 Price/Each \$69.52



AD025

LUBERITE™ PREMIUM ZIPPERED POUCHES

- Available in two sizes including coloured identification cards
- Heavier duty pouch is ideal for also holding MSDS sheets

Model No.	Dimensions Length"	Width"	Price /Each
AD029	3 1/2	5 5/16	7.20
AD030	5 1/8	6 11/16	7.95

AD029



DIP TANKS

- Manually operated covers which stay open for convenient access
- Cover is equipped with a self-closing mechanism and fusible link which melts at 165°F to snap the cover shut in case of fire
- Constructed of 24-gauge coated steel, durable powder coat paint finish for long use
- Available with polyethylene liner for outstanding chemical resistance to harsh, corrosive chemicals

SD562



Model No.	Description	Outside Dim.			Approved Regulation	Wt. lbs/kg	Price /Each
		Dia."	x	H"			
SD561	1-gallon steel dip tank	9 3/8	x	5 1/2	FM,UL	5/2.3	94.94
SD562	2-gallon steel dip tank	9 3/8	x	10	FM,UL	6/2.7	97.63
SD563	3.5-gallon steel dip tank	11 3/8	x	11 1/4	FM,UL	8/3.6	106.13
SD564	5-gallon steel dip tank	13 3/4	x	13	FM,UL	10/4.5	124.37
WN969	5-gallon steel dip tank w/HDPE liner	13 3/4	x	13	FM	12/5.5	316.74
WN970	8-gallon steel dip tank	15 5/8	x	14 1/4	FM,UL	13/5.9	150.66

BENCH CANS

- Spring-loaded, perforated plated steel dasher plate
- Simply press down and agitate, then release to return to drain position
- Effective flame arrester
- Hinged cover minimizes evaporation losses
- Protected rim reduces the possibility of hand injury
- 24-gauge premium coated steel
- Powder coat paint finish adds durability

AB491



Model No.	Description	Dasher Dia."	Outside Dim.			Approved Regulation	Wt. lbs/kg	Price /Each
			Dia."	x	H"			
WN978	1-quart steel bench can	4 1/2	4 7/8	x	5 1/2	FM	2/0.9	60.12
AB491	2-quart steel bench can	7 1/2	9 3/8	x	3 1/4	FM	4/1.8	75.17
AB492	1-gallon steel bench can	7 1/2	9 3/8	x	4 1/2	FM	5/2.3	66.88
WN979	1-gallon steel bench can w/parts basket	7 1/2	9 3/8	x	4 1/2	FM	5/2.3	85.13
AB493	2-gallon steel bench can	9 3/4	11 1/2	x	5 3/8	FM	8/3.6	120.54
AB494	3-gallon steel bench can	12 1/8	13 1/2	x	6	FM	9/4.1	136.60
WN980	Optional 24-gauge parts basket	-	6 7/16	x	7/16	-	1/0.5	21.09

WASH TANKS

- Cover opens wide for access
- Integral parts basket facilitates washing quantities of small parts quickly
- Can and basket are made of sturdy 24-gauge coated steel
- After cleaning, the basket is positioned at the top of the tank to allow solvent to drain
- Cover is equipped with a self-closing mechanism and fusible link which melts at 165°F and snaps the cover shut in case of fire
- Available with polyethylene liner for outstanding chemical resistance to harsh, corrosive chemicals

SM432



Model No.	Description	Outside Dim.			Approved Regulation	Wt. lbs/kg	Price /Each
		Dia."	x	H"			
WN971	1-gallon steel wash tank w/basket	9 3/8	x	10	FM,UL	7/3.2	159.05
WN972	2-gallon steel wash tank w/basket	11 3/8	x	11 1/4	FM,UL	9/4.1	184.39
WN973	3.5-gallon steel wash tank w/basket	13 3/4	x	13	FM,UL	12/5.5	190.05
WN974	3.5-gallon steel wash tank w/HDPE liner and basket	13 3/4	x	13	FM	14/6.4	463.12
SM432	6-gallon steel wash tank w/basket	15 5/8	x	14 1/4	FM,UL	16/7.3	204.14

RINSE TANKS

- Large parts (up to 16" x 35") can be totally immersed
- Heavy-duty, 18-gauge coated steel construction
- Tough powder coat paint finish for superior durability and chemical resistance

FLOOR STANDING RINSE TANKS

- Supported on a sturdy stand, 33" height for convenient access whether standing or seated
- Self-closing cover is foot-treadle operated so it can be opened by a worker with both hands full
- Adjustable-rate pneumatic cylinder prevents cover from slamming shut instantly
- A 3/4" drain plug for easy solvent replacement

Clean
larger parts
with ease!

BENCH TOP RINSE TANKS

- Sit conveniently on work bench or counter for easy access
- Lift-and-latch style cover has fusible link that melts at 165°F and closes the cover in case of fire
- A 3/4" drain plug allows for easy solvent replacement

SEDIMENT SCREENS

- 26-gauge premium coated steel
- Rests at bottom of tank to catch grime as it settles and allows for easy cleaning during solvent change

PARTS BASKETS

- 26-gauge premium coated steel
- Carries numerous smaller parts to be washed in a single action

TANKS

Model No.	Description	Dimensions				Approved Regulation	Wt. lbs/kg	Price /Each
		L"	x	W"	x	D"		
FLOOR STANDING & BENCH TOP RINSE TANKS								
SM434	11-gallon steel floor standing rinse tank	24	x	16	x	8 3/4	FM	60/27 642.76
SM431	11-gallon steel bench top rinse tank	24	x	16	x	8 3/4	FM	29/13 474.02
SM433	22-gallon steel floor standing rinse tank	35 1/4	x	16	x	12	FM	78/35 800.01
WN975	22-gallon steel bench top rinse tank	35 1/4	x	16	x	12	FM	48/22 755.95
TWIN CHAMBER RINSE TANKS								
WN976	2 x 4-gallon steel floor standing rinse tank	24	x	16	x	8 3/4	FM	62/28 792.53
WN977	2 x 9-gallon steel floor standing rinse tank	35 1/4	x	16	x	12	FM	80/36 915.85

SEDIMENT SCREENS & PART BASKETS

Model No.	Description	Dimensions				Wt. lbs/kg	Price /Each
		L"	x	W"	x	D"	
SM437	Sediment screen for tank models SM434 and SM431	23	x	13 3/4	x	3/4	3/1.4 49.29
SM436	Sediment screen for rinse tank models SM433 and WN975	23	x	13 3/4	x	3/4	4/1.8 73.20
SM430	Parts basket for rinse tank models SM434 and SM431	16	x	13	x	4	4/1.8 104.20
SM428	Parts basket for rinse tank models SM433 and WN975	28	x	13	x	4	6/2.7 140.04



SM433



TANK STANDS

- Heavy-duty 18-gauge premium coated steel tank with two shelves
- Powder coat paint finish for durability
- Suitable for all Justrite® cleaning tanks
- Storage of solvent container at point-of-use when using Type I or Type II containers
- 16" x 16" x 24"

Model No. SM435
Price/Each \$212.35

SAFETY TIP

To assure material compatibility, test product on a small inconspicuous area or similar expendable component prior to use. Do not use on energized electrical equipment or equipment in operation and allow surface to dry before restart.

OCX CITRUS DEGREASER

- High performance industrial degreaser that cleans on contact
- Fast acting on grease, oil and sludge
- Natural based
- Does not contain chlorinated solvents
- Flash point above 100°F (38°C)
- Non-conductive
- Safe on all metals and most plastics
- Inverta spray valve
- Value Performance



Model No.	Mfg. No.	Size	Price /Each
AB588	C05020	15 oz.	15.67
AB585	C05005	5 gal.	382.34
AB586	C05055	55 gal.	3982.32

T-91 NON-SOLVENT DEGREASER

- Zero VOC's, biodegradable
- Non-flammable, non-toxic, low odour
- Safe on metals
- Non-dilutable – Must be used straight
- Moderate foam for effective mechanical cleaning
- Ideal for traditional solvent cleaning, basin style part washers and dip tanks
- NSF registered category code A1
- Accepted for use in Canadian food processing facilities



Model No.	Mfg. No.	Size	Price /Each
AD295	C06328	28 oz. Trigger	16.55
AD183	C06301	1 gal.	55.16
AD184	C06305	5 gal.	260.03
AD185	C06355	55 gal.	1875.16

A-151 CLEANER /DEGREASER

- High flash point above 140°F (60°C)
- Low odour
- No rinsing and no residue
- Non-conductive
- Safe to use on most surfaces
- NSF registered category code C1



Model No.	Mfg. No.	Size	Price /Each
AA920	C04320	15 oz.	22.88
AB448	C04305	5 gal.	550.91
AB579	C04355	55 gal.	4543.71

EVR CLEAN AIR SOLVENT

- High solvent strength, fast evaporating, low VOC content
- Not a Hazard Air Pollutant (HAP)
- Instant cleaning action
- Ideal for cleaning metals
- No residue or ozone depleting compounds
- Inverta spray valve allows can to be sprayed at almost any angle
- NSF registered category code C1



Model No.	Mfg. No.	Size	Price /Each
AD060	C05220	14 oz.	14.63
AD061	C05201	1 gal.	59.89
AD062	C05205	5 gal.	279.97
AD063	C05255	55 gal.	2260.62

HDX HEAVY-DUTY DEGREASER

- Low odour
- Quick penetration
- No rinsing
- No residue
- Non-conductive
- Heavy-duty action removes oil, grease, wax, dirt, moisture, tar, brake fluid and other contaminants
- NSF registered category code K1



Model No.	Mfg. No.	Size	Price /Each
AA840	C01020	19 oz.	11.42
AB446	C01005	5 gal.	391.65
AB596	C01055	55 gal.	4220.34

PRESOLVE® CLEANER /DEGREASER

- High performance cleaner
- Non-conductive
- Natural-based solvent
- No rinsing and no residue
- Fast acting, deep penetration
- Safe on all metals and most plastics
- NSF registered category code C1



Model No.	Mfg. No.	Size	Price /Each
AA786	C01420	15 oz.	22.92
AD729	C01422	22 oz. Trigger	31.79
AB604	C01428	1 gal.	168.24
AB603	C01405	5 gal.	787.29
AA868	C01455	55 gal.	7138.95

F-104° FAST DRY CLEANER/ DEGREASER

- 104°F (40°C) flash point
- Rapid evaporation
- Low odour
- Non-conductive
- No rinsing and no residue
- Heavy-duty cleaner/degreaser
- Safe to use on most surfaces - may be harmful to some plastics



Model No.	Mfg. No.	Size	Price /Each
AA919	C04920	15 oz.	16.37
AB589	C04905	5 gal.	343.18
AB591	C04955	55 gal.	2950.97

ZEROTRI® HEAVY-DUTY DEGREASER

- Heavy-duty penetrating degreaser instantly removes oil, grease, wax, dirt, moisture, tar, conformal coatings and other contaminants
- No ozone depleting chemicals
- Fast evaporating, no rinsing, no residue
- Does not contain chlorinated solvents
- Safe to use on most surfaces
- Inverta spray valve
- NSF registered category code C1
- Accepted for use in Canadian food processing facilities



Model No.	Mfg. No.	Size	Price /Each
AA787	C03520	15 oz.	24.82
AB607	C03528	1 gal.	159.85
AB605	C03505	5 gal.	783.50
AB606	C03555	55 gal.	6319.33

ECO-GRADE™ SOY DEGREASER

- Unique soy-based blend that quickly penetrates and loosens a variety of industrial soils
 - Formulated with EPA DFE certified materials and with renewable resource ingredient which are friendly to workers and the environment
 - Formulated to replace common petroleum products, terpene and petrochemical based products
 - Leaves behind a protective lubricating film that can be removed with soap and water
 - Excellent for the removal of industrial oils/grease, adhesive residue, tar
- **Do not use on styrene, polyethylene, polypropylene, acrylics and natural rubber



Model No.	Mfg. No.	Size	Price /Each
AD401	C00406000	12 oz.	10.06

G-49 LOW VOC ORANGE DEGREASER

- Complies with CARB/OTC/LADCO (California Air Resources Board/Ozone Transport Commission/Lake Michigan Air Directors Consortium) VOC regulations
- Instant cleaning action, no residue
- High solvent strength
- Moderate evaporation
- Not a hazardous air pollutant (HAP)
- Ideal for cleaning metals
- Invert spray valve can be sprayed at almost any angle
- NSF registered category code C1



Model No.	Mfg. No.	Size	Price /Each
AD186	C06420	14 oz.	17.65

GENERAL PURPOSE CLEANER

- All-purpose formula cuts through dirt with ease
- Safe to use on metal, finished wood, porcelain, vinyl, leather, laminated surfaces and glass
- Cleans spots on synthetic carpets
- USDA compliant, NSF Certified
- For office equipment, copy machines, vehicle interiors, windshields, counters, chalkboards and fixtures



Model No.	Mfg. No.	Size	Price /Each
AA200	A00880	17 oz.	4.65

EFX SOLVENT /DEGREASER

- Heavy-duty solvent
- Instant degreasing action, quickly removes grease and oil
- Power blast spray
- Fast evaporating, no residue, non-chlorinated
- Safe to use on most surfaces
- Ideal for cleaning metals and most plastics



Model No.	Mfg. No.	Size	Price /Each
AD833	C01820	15 oz.	11.95
AD834	C1801	1 gal.	47.12
AD835	C1805	5 gal.	221.25
AD836	C01855	55 gal.	2075.56

EM-CITRO EMULSION DEGREASER

- Heavy-duty, citrus-based, aerosol degreaser that quickly removes oil/grease, tar, and grime from metal parts and equipment
- High delivery spray enhances and accelerates soil removal
- Wipe dry or rinse with water – product/soil emulsifies and is removed easily by a strong stream of fresh water
- Neutral pH with no caustics, acids, chlorinated solvents, alcohols, or ozone depleting solvents
- Low foam viscous liquid enhances contact time by clinging to the soil & surface
- Safe on most surfaces
- Meets VOC regulations under CARB and the Ozone Transport Commission
- NSF registered category code C1



Model No.	Mfg. No.	Size	Price /Each
AD001	C02820	12 oz aerosol	16.04
AD003	C02805	18.93 L	452.43
AD004	C02855	208 L	3384.13

BFX ALL-PURPOSE CLEANER

- Water-based
- Butyl-free
- Biodegradable
- Removes grease and oil
- Rinses clean
- Ideal for parts washers and pressure washers
- Safe on most surfaces except magnesium
- Available in ready-to-use and concentrate
- NSF registered category code C1



Model No.	Mfg. No.	Size	Price /Each
AB581	C05528	28 oz. trigger	12.66
AB584	C05501	1 gal.	30.40
AB582	C05505	5 gal.	153.85
AB583	C05555	55 gal.	1442.84

CITRUS CLEANER /DEGREASER

- Biodegradable, heavy-duty, multi-purpose cleaner and graffiti remover
- Pleasant citrus scent
- Removes grimy dirt, grease and oil
- For surfaces such as Formica, fiberglass, wood, ceramic tile and some plastics
- Cleans residue on moulds, aluminum and concrete
- Ideal for public areas subject to abuse, such as restrooms, locker rooms, schools and buildings



Model No.	Mfg. No.	Size	Price /Each
AA111	A00751	20 oz.	10.96

SA-X X-TREME DEGREASER

- Water-based
- High alkalinity - pH: 12.0 - 13.0
- Super aggressive formula
- Non-flammable
- Removes greases, oil, tar, and dirt
- Economical, can be diluted with water
- Efficient, requires fewer products than traditional water-based cleaners to get the job done
- Rinses clean with no residue
- Safe on most metals
- Trigger spray bottle is ready-to-use



Model No.	Mfg. No.	Net Contents	Price /Each
AD320	C06828	28 fl. oz. (828 ml) trigger R-T-U	9.53
AD321	C06801	1 gal. (3.78 litres)	22.68
AD322	C06805	5 gal. (18.93 litres)	103.10
AD323	C06855	55 gal. (208 litres)	824.70

INSTANT SUPER DEGREASER

- Heavy-duty performance
- Power blast spray
- Non-flammable
- Non chlorinated
- Safe on most metals (as per MIL-T-81533A)
- NSF registered category code C1
- Accepted for use in Canadian food processing facilities



Model No.	Mfg. No.	Size	Price /Each
AD727	C00720	20 oz.	37.90
AB597	C00705	5 gal.	947.47

PRECISION CLEAN MULTI-PURPOSE CLEANER/DEGREASER

- Water-based, biodegradable
- Removes grease, oil, sludge, soot, ink, coffee, and more
- Contains no chlorinated or petroleum solvents, bleach, ammonia, abrasives or butyl
- Contains a corrosion inhibitor
- Super industrial-strength
- Safe on all surfaces
- NSF registered category code C1



Model No.	Mfg. No.	Size	Price /Each
READY TO USE FORMULA			
AB444	C02720	18 oz.	14.49
AA789	C02728	28 oz. trigger	16.61
AB602	C02765	55 gal.	1468.95
CONCENTRATED FORMULA			
AA788	C02701	1 gal.	50.51
AB600	C02705	5 gal.	247.75
AB601	C02755	55 gal.	1806.66

CHEMICALS

FOOD GRADE CITRUS CLEANER/DEGREASER

- D-Limonene is biodegradable
- Heavy-duty, multi-purpose cleaner and graffiti remover
- Removes grimy dirt, grease and oil
- Cleans residue on molds, aluminum and concrete
- NSF Certified



Model No.	Mfg. No.	Size	Price /Each
AB532	A020454LQ	14 oz. trigger	11.81

FOOD GRADE STAINLESS STEEL CLEANER

- Polishes, brightens, cleans and protects stainless steel and metal surfaces
- Water-based emulsion
- Invisible coating resists fingerprints, watermarks and rusting
- Resists corrosion
- Cleans and shines
- Good for aluminum, porcelain and ceramic tile
- NSF Certified



Model No.	Mfg. No.	Size	Price /Each
AB536	A020885LQ	14 oz. trigger	8.93

FOOD GRADE GENERAL PURPOSE CLEANER

- All-purpose formula that cuts through dirt with ease
- Effective and safe to use on metal, finished wood, porcelain, vinyl, leather, laminated surfaces and glass
- Cleans spots on synthetic carpets
- For office equipment, copy machines, vehicle interiors, windshields, counters, chalkboards and fixtures
- NSF Certified



Model No.	Mfg. No.	Size	Price /Each
AB535	A020880LQ	14 oz. trigger	7.50

UNO S F CLEANER

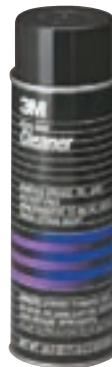
- Non-flammable
- Concentrated cleaning power
- Contains corrosion inhibitors
- Solvent, phosphate and butyl-free
- For iron, steel, and stainless steel
- Removes oil, fat, grease, soot, wax and protein
- VOC free
- Accepted for use in Canadian food processing facilities



Model No.	Mfg. No.	Size	Price /Each
AA464	53-G-023	500 ml trigger	12.99
AA465	53-G-016	5 L	44.60
AA466	53-G-017	20 L	158.02
NI137	53-G-018	200 L	992.85

CITRUS BASE CLEANER

- Heavy-duty degreaser/cleaner
- Safe on metals, ceramic, glass, porcelain and many plastics
- Removes grease, oil, ink and most adhesives
- No harmful solvents
- Cleans without streaking
- Non-aerosol pump



Model No.	Size	Price /Each
AA528	5 oz.	17.05
QN488	18.5 oz.	25.00

SLAP SHOT™ CLEANER/DEGREASER

- Industrial parts cleaner/degreaser
- Removes grease and oil
- Free of chlorinated solvent
- Safe on all metals
- Prepares surfaces for painting or relubrication
- Requires no rinsing, leaves no residues



Model No.	Mfg. No.	Size	Price /Each
YC419	53-C-502	500 ml	8.73
AC306	53-C-503	500 ml, trigger	15.37
AA462	53-C-506	5 L	72.57
AA463	53-C-507	20 L	247.22
AC307	53-C-508	200 L	1411.45

STAINLESS STEEL CLEANER

- Water-based emulsion
- Effectively cleans most water and oil-based stains on stainless steel and other metal surfaces
- Resists finger-prints, water marks and rusting
- USDA compliant, NSF Certified
- For kitchen equipment, drinking fountains, elevator doors and furniture



Model No.	Mfg. No.	Size	Price /Each
AA202	A00885	17 oz.	6.46

WORKPLACE HAND CLEANER TOWELS

- Waterless hand cleaner
- Deep cleaning, non-scratching abrasives
- Leaves hands clean, conditioned and softened
- 72 towels per bucket



Model No.	Mfg. No.	Price /Each
AA841	C09200	25.91

GLASS CLEANER

- Removes soil, smoke haze, fingerprints, road film and surface smears
- Cleans any surface not normally harmed by water
- USDA compliant, NSF Certified
- Will not cloud plexiglas or other plastic materials
- Resists streaking; wipes clean
- For windows, glass, mirrors, windshields, chrome, showcases, countertops, tile, vinyl upholstery and safety glass



Model No.	Mfg. No.	Size	Price /Each
AA201	A00888	18 oz.	4.65

COIL CLEANER

- Water-based, foaming coil cleaner
- Foaming and penetrating action
- Non-flammable and non-corrosive
- Safe on all types of metal
- Recommended use: All refrigerator and A/C coils, coolers, freezer engines, HVAC units, motors and machinery



Model No.	Mfg. No.	Size	Price /Each
AD056	A00887	18 oz.	4.98

TRIFREE BRAKE CLEANER

- Heavy-duty performance
- Improves brake performance
- Helps stop disc brake squeal
- Fast evaporation
- Non-conductive
- Powerful jet spray
- No rinsing and no residue



Model No.	Mfg. No.	Size	Price /Each
AA818	C03620	15 oz.	17.90

U-10 BRAKE CLEANER

- Complies with CARB (California Air Resource Board) brake cleaner regulation
- Instantly removes brake fluid, dust, grease and oil
- No ozone depleting chemicals, does not contain chlorinated solvents or toluene
- Fast evaporating, no rinsing, no residue
- Can be applied without disassembling the brake unit
- Improves brake performance, helps stop break disc squeal



Model No.	Mfg. No.	Size	Price /Each
AD175	C06220	14 oz.	12.46

EVAPO-RUST™ RUST REMOVERS

- Removes rust quickly without scrubbing
- Dipping process
- Non-toxic, non-corrosive, non-flammable
- VOC free
- Water-soluble, biodegradable, safe on skin
- Contains no acids, bases or solvents
- Will not harm unrusted metals



Model No.	Mfg. No.	Size	Price /Each
AD048	ER8	237 ml	6.00
AD049	ER1	1 L	9.79
AD050	ER4	3.78 L	29.49
AD051	ER20	18.9 L	141.75
AD052	ER205	205 L	1267.61

EXTEND® RUST TREATMENTS

- Goes on white and converts rust to a durable, black, metal-protective coating in 10 minutes
- Wirebrush parts and apply with brush or spray
- Surface rust must be present
- Use as a primer or finish coat
- Resists temperatures to 250°F intermittent, 200°F continuous
- Approved by the American Bureau of Shipping



Model No.	Mfg. No.	Size	Price /Each
AA632	30539	10.5 oz.	10.56
AA633	75430	1 qt.	35.96
AA634	75448	1 gal.	128.86
AC110	75465	5 gal.	543.66

FIGHTBACK™ GRAFFITI REMOVER

- Safe and efficient, used to remove vandal marks leaving an undamaged original surface
- Ideal for use on brick, concrete, ceramic tiles, aluminum, steel, brass, chrome, vinyl, enamels, porcelain, marble slab, laminated plastic and most plastic surfaces
- Adequate for sprayed paint on vehicles and commercial trailers
- Breaks down and dissolves fresh stained molecules
- Spray it on, wait 30 to 60 sec. and wipe or spray with water
- Removes spray paint, indelible ink, grease, crayon, lipstick, black heel marks, etc.
- Very low toxicity
- No methylene chloride
- Non-flammable



Model No.	Size	Price /Each
AA529	350 g aerosol	11.24

ECO-GRADE™ VANDAL MARK & GRAFFITI REMOVER

- Soy based, contains natural, biodegradable ingredients made to replace terpene or petrochemical based products
- Formulated with EPA DFE certified materials
- Quickly and easily removes paint, ink, crayon, magic marker and adhesive residue
- Sprays and clings to vertical surfaces
- Penetrates and dissolves oil based stains quickly



Model No.	Mfg. No.	Size	Price /Each
AD402	A00404000	12 oz.	11.88

GRAFFITI BARRIER

- Clear coat barrier to prevent graffiti from penetrating the substrate
- Graffiti easily removed with simple power washing
- Non-sacrificial, single component siloxane coating
- UV resistant
- For use over interior or exterior surfaces that require protection from graffiti such as bridges, schools, overpasses, commercial buildings, transit stations, railcars, etc



Model No.	Mfg. No.	Format	Price /Each
AD404	K00001965-16	1 gal.	168.66
AD405	K00001965-20	5 gal.	842.60



SAFETY TIP

To assure material compatibility, test product on a small inconspicuous area or similar expendable component prior to use. Do not use on energized electrical equipment or equipment in operation and allow surface to dry before restart.

CFC FREE ELECTRO CONTACT CLEANER

- Fast evaporation
- No residue
- Low odour
- Non-conductive
- Safe on plastics
- *Inverta* spray valve allows you to spray in an upright or inverted position
- NSF registered category code K2



Model No.	Mfg. No.	Size	Price /Each
AA784	C03116	11 oz.	22.99
AB546	C03101	1 gal.	106.86
AB544	C03105	5 gal.	458.58
AB545	C03155	55 gal.	4156.22

CFC FREE NU LVC CONTACT CLEANER

- Reduced VOC's (Volatile Organic Compounds) content and conforms to CARB (California Air Resources Board), OTC (Ozone Transport Commission) and LADCO (Lake Michigan Air Directors Consortium) VOC regulations
- Removes dirt, flux, moisture, dust, and other contaminants from electrical equipment
- Fast evaporating, safe on plastics
- Will not leave a residue
- NSF registered category code K2



Model No.	Mfg. No.	Size	Price /Each
AD177	C05416	11 oz.	23.56

REVO 66 CONTACT CLEANER

- Ideal for removing dirt, moisture, flux or oxides from the internal components of electronic equipment
- Non-flammable precision cleaning
- Does not contain brominated solvents
- Fast evaporating
- Non-conductive
- Quick penetration
- No rinsing and no residue
- Safe to use on most surfaces
- NSF registered category code K2



Model No.	Mfg. No.	Size	Price /Each
AD010	C04416	12 oz. (340 g)	31.53

ELECTRO 140° CONTACT CLEANER

- Flash point above 140°F (60°C)
- Superior wetting and penetrating action
- Controlled evaporation
- No residue • Non-conductive
- Safe to use on most surfaces
- *Inverta* spray valve allows you to spray in an upright or inverted position



Model No.	Mfg. No.	Size	Price /Each
AA836	C00916	11 oz.	20.49
AD728	C00922	22 oz. trigger	25.89
AB447	C09128	1 gal.	101.33
AB547	C00905	5 gal.	454.20

NOFLASH NU PRECISION CONTACT CLEANER

- Does not contain chlorinated solvents
- Non-flammable precision cleaning
- No flash point
- Fast drying
- Quick penetration and evaporation
- No rinsing and no residue
- Safe to use on most surfaces
- NSF registered category code K2



Model No.	Mfg. No.	Size	Price /Each
AA860	C04015	15 oz.	41.11

MICRO-X FAST EVAPORATING CONTACT CLEANER

- Fast evaporation
- Quick penetration
- No residue
- Low odour
- Safe on plastics
- No rinsing
- *Inverta* spray valve allows you to spray in an upright or inverted position



Model No.	Mfg. No.	Size	Price /Each
AA837	C04516	11 oz.	12.52
AB549	C04555	55 gal.	2485.07

QB PRECISION DUSTER

- Quick blast precision duster removes contaminants, dirt, dust and other soils
- Moisture free
- No residue
- No flash point
- Odourless



Model No.	Mfg. No.	Size	Price /Each
AA918	C05710	10 oz.	15.26

ELECTRO CONTACT CLEANER

- No ozone depletion potential
- Fast penetration
- Quick evaporation
- Penetrates into minute spaces
- Cleans/degreases delicate mechanisms
- Ideal for electrical/electronic fine parts
- Removes light greases, oils, dirt and organic soils
- No rinsing and no residue
- Safe to use on most surfaces



Model No.	Mfg. No.	Size	Price /Each
AA858	C00416	14 oz.	72.48



NON-CHLORINATED ELECTRICAL DEGREASER

- Penetrates instantly to remove dirt, oil, grease and wax
- More thorough and faster than alkaline cleaners
- Safe on all ferrous and non-ferrous metals and most plastics
- Non-flammable, non-chlorinated, non-ozone depleting, fast evaporating
- Dielectric strength: 15 000 volts
- NSF registered category code K2



Model No.	Mfg. No.	Size	Price /Each
AB533	A020847LQ	14 fl oz. trigger	27.31

FLASH FREE SAFETY SOLVENT & DEGREASER

- Meets California's consumer regulation (CONS1) for energized electrical cleaner
- Fast-acting solvent penetrates easily, evaporates quickly, leaves no residue
- Excellent cleaning properties make it ideal for removing grease, dirt, wax and oil
- Non-conductive, non-flammable, fast evaporating, chlorinated
- Dielectric strength: 37 000 volts
- NSF registered category code K2



Model No.	Mfg. No.	Size	Price /Each
AB534	A020848LQ	14 fl oz. trigger	14.61

ENVIRONMENTAL CLEANER & DEGREASER

- Meets California's consumer regulation (CONS1) for energized electrical cleaner
- Designed for fast, effective removal of dirt, oil, grease, wax and tar
- For use on non-energized equipment
- Leaves no residue
- Fast-evaporating
- NSF registered category code K2



Model No.	Mfg. No.	Size	Price /Each
AB531	A0220749LQ	14 fl oz. trigger	10.26

DUSTERS

- Non-conductive
- Non-flammable
- Removes microscopic particles of lint, dust, ferrous oxide and other contaminants
- Useful on instruments where residual entrapment could be a problem
- High-delivery trigger valve
- Safe on plastics
- Non-abrasive
- For electronics, data processing, optical and laboratory equipment, personal computers and precision mechanical parts



Model No.	Mfg. No.	Size	Price /Each
AB934	A0200700	8 oz.	11.56

ENVIRONMENTAL CONTACT CLEANERS

- Heavy-duty degreaser and quick-drying cleaner
- Ideal for sensitive equipment and precision instruments
- Fast-evaporating
- Safe on most plastics
- Leaves no residue
- For use on non-energized equipment
- For printed circuits, office machines, vacuum tube parts and computer systems



Model No.	Mfg. No.	Size	Price /Each
AA214	80230Z	11 oz.	11.33

ENVIRONMENTAL CLEANER & DEGREASER

- Designed for fast, effective removal of dirt, oil, grease, wax and tar on electrical equipment
- For use on non-energized equipment
- Leaves no residue
- Fast-evaporating
- For electric motors, radar equipment, gears, brakes, clutches, generators, air tools and molds



Model No.	Mfg. No.	Size	Price /Each
NA613	A00749	15 fl oz.	9.59

FLASH FREE® SAFETY SOLVENT & DEGREASER

- Fast-acting solvent penetrates easily, evaporates quickly, leaves no residue
- Ideal for removing grease, dirt, wax and metallic particles
- Non-conductive
- Non-flammable
- Dielectric strength: 37 000 volts
- Includes extension tube and high-delivery nozzle for flush-type applications
- NSF registered category code K2



Model No.	Mfg. No.	Size	Price /Each
AA216	A20848	17 oz.	9.11

ANTI-STATIC SPRAY

- Neutralizes static electricity generated by friction or atmospheric conditions
- Proven effective on plastic, paper, cellophane, cloth and thread materials
- Dries instantly, non-staining
- Can be applied to machinery or parts in process
- Will not attract contaminants



Model No.	Mfg. No.	Size	Price /Each
AC517	A00610	15 oz.	11.52

ELECTRICAL CONTACT & PARTS CLEANERS

- Fast-evaporating
- Removes grease, oil and other contaminants
- Safe on most plastics
- Non-conductive
- Non-corrosive
- Drying time: < 30 seconds
- No rinse and no residue



Model No.	Mfg. No.	Size	Price /Each
AA534	25791	11 oz.	13.39

CHEMICALS

LPS 1® PREMIUM LUBRICANT

- Dry, thin lubricating film
- Resists oil, dust and dirt build-up
- Fast acting penetration
- Displaces moisture
- Loosens rusted or frozen parts
- Provides short term, light, corrosion resistant barrier
- Safe on paint and most plastics
- Inverta spray valve lets you spray in all directions
- NSF registered category code H2
- Accepted for use in Canadian food processing facilities



Model No.	Mfg. No.	Size	Price /Each
AA819	C30116	11 oz.	15.55
AB628	C00122	20 oz. trigger	20.91
AB627	C01128	1 gal.	61.64
AB625	C00105	5 gal.	274.77
AB626	C00155	55 gal.	2604.13

LPS 2® HEAVY-DUTY LUBRICANT

- Added corrosion protection
- Provides a nondrying, light, oily film for use on indoor /outdoor equipment
- Reduces wear caused by friction and corrosion
- Displaces moisture
- Loosens rusted or frozen parts
- Provides up to one year of protection
- Safe on paint and most plastics
- Inverta spray valve lets you spray in all directions
- NSF registered category code H2
- Accepted for use in Canadian food processing facilities



Model No.	Mfg. No.	Size	Price /Each
AA820	C30216	11 oz.	15.15
AB632	C00222	20 oz. trigger	23.21
AB631	C02128	1 gal.	64.85
AB629	C00205	5 gal.	291.09
AB630	C00255	55 gal.	2843.83

LPS 3® HEAVY-DUTY INHIBITOR

- Protects up to two years
- Stops rust and corrosion
- Provides non-sling lubrication
- Non-flammable propellant
- Self-healing, waxy film
- Provides anti-seize coating
- Safe to use on rubber, fabric, plastics and paints
- Meets or exceeds these specs: Boeing BMS-3 23F Type II, MIL-C-0083933A, para.3.2-3.16, MIL-C-16173D Grade 2 Class I, DMS 2150, Airbus TN A. 007.10138 Type I Grade 2



Model No.	Mfg. No.	Size	Price /Each
AA808	C00316	11 oz.	19.91
AB559	C00322	20-oz. Trigger	26.19
AB558	C03128	1 gal.	92.92
AB556	C00305	5 gal.	414.60
AB557	C00355	55 gal.	3855.52

HIGH PERFORMANCE SILICONE LUBRICANT

- 6.6% silicone formula
- Stops squeaks and sticking, eliminates friction, repels water and prevents freezing
- Does not harden or degrade from -40°F to 400°F
- Apply to wood, metal, fabric, rubber or leather
- Keeps rubber soft and flexible
- For rubber mountings, weather-strip insulation, doors, locks, trunk lids, windows, slitter knives, any sliding surface



Model No.	Mfg. No.	Size	Price /Each
AA647	A01324	10 oz.	6.19

HEAVY-DUTY SILICONE LUBRICANT

- Silicone-rich formula
- Water-based formula
- Colourless and odourless
- Excellent lubricity
- Eliminates sticking, binding and squeaking
- Dry, non-staining
- Safe on most surfaces
- Made of FDA compliant materials
- NSF registered category code H1
- Accepted for use in Canadian food processing facilities



Model No.	Mfg. No.	Size	Price /Each
AA844	C01516	13 oz.	15.36
AB624	C01505	5 gal.	382.12

ALL-PURPOSE SILICONE LUBRICANT

- Reduces friction and sticking; protects against corrosion and oxidation with an invisible film that repels water
- Compatible with most surfaces; will not attack most plastics
- Will not interfere with painting or decorating
- Effective from -50°F to 375°F
- For rubber moldings, windows, sliding wood surfaces, sewing dissimilar metals, springs, leather, doors, hinges, weather-stripping, plastic assemblies
- NSF registered category code H1



Model No.	Mfg. No.	Size	Price /Each
AB517	A000206LQ	14 oz.	9.74

ALL-PURPOSE SILICONE LUBRICANT

- 5% silicone formula
- Reduces friction and sticking; protects against corrosion and oxidation with an invisible film that repels water
- Compatible with most surfaces; will not attack most plastics
- Will not interfere with painting or decorating
- Effective from -50°F to 375°F
- For rubber moldings, windows, sliding wood surfaces, sewing equipment, sliding racks, dissimilar metals, springs, leather, doors, hinges, weather-stripping, plastic assemblies



Model No.	Mfg. No.	Size	Price /Each
AA108	800206	10 oz.	6.60

INDUSTRIAL LUBRICANT

- Penetrates inaccessible areas to displace contaminants
- Lubricates with oils, additives and PTFE to reduce friction and increase part life
- Protects against moisture and corrosion damage; displaces moisture to prevent icing; inhibits rust formation and corrosive build-up
- Rejects dirt, dust, sand and other abrasive particles
- Resists rust and corrosion, even under extreme conditions
- Effective from -60°F to 475°F
- For bearings, cables, nuts and bolts, air power tools, ball and socket joints, control cables, conveyors, cutting tools, drive chains, electric power tools, gears, glides, hinges, linkages, precision tools, rollers, taps, dies and valves
- NSF registered category code H2



Model No.	Mfg. No.	Size	Price /Each
AA427	CTF20005	6 oz.	10.22
AA428	CTF20006	12 oz.	18.84
AA429	CTF20007	18 oz.	30.14

SILICONE LUBRICANT

- Lubricates cutting tools and tables
- Prevents build-up of glues, wax, inks, paints
- Fast drying, long lasting, high quality
- Eliminates squeaks and sticking
- Contains no petroleum oils to stain fabrics
- Helps preserve plastic, rubber and leather
- Rubber mold release agent
- Temperature resistance: 350°F (177°C)



Model No.	Size	Price /Each
AA613	375 g	10.48

DRY FILM GRAPHITE LUBRICANT

- Ideal where a dry lubricant is or where petroleum products must be avoided
- Adheres with minimum pre-treatment
- Effective up to 850°F constant and 1000°F intermittent
- Dries rapidly at room temperature
- For pre-assembly lubrication of moving parts, mechanisms of vending machines and parking meters, automotive and industrial gaskets, bearings, locks, springs, hinges, mating surfaces on machines, CRT's, plating non-conductors, curing ovens



Model No.	Mfg. No.	Size	Price /Each
AA107	A00204	10 oz.	8.48

DRY FILM SILICONE LUBRICANT

- Colourless, thin film
- Excellent for releasing molded parts in high temperatures or pressures
- Low odour
- Non-staining
- Non-flammable
- Non-corrosive



Model No.	Mfg. No.	Size	Price /Each
AA902	C01616	12 oz.	15.95

QTL DRY LUBRICANT WITH PTFE

- Dry, non-oily, non-staining lubricant
- Made with DuPont® Krytox®
- Dries quickly to a white, chemically inert film
- Effective from -40°F to 572°F
- Resists most solvents
- For metal extrusions, munitions, locks and catches, window guides, synthetic fibers, machine parts, cord, twine or rope, leather drawers, hinges, paper, glass, elastomers and some plastics
- Use as release agent on conveyor belts, chutes and slides, industrial blenders, tanks, bins and spray booths



Model No.	Mfg. No.	Size	Price /Each
AA184	800708	10 oz.	9.48

SYNTHETIC DRY PROTECTANT

- Quickly loosens rust while penetrating grease and dirt
- Transparent, non-staining oil
- Light film displaces moisture and acts as a corrosion preventative
- Jet stream sprays up to two feet for safe, accurate application
- Flashpoint: 205°F
- Will not harm painted surfaces
- For releasing rusted or frozen lugs and bolts, lubricating tight-fitting parts, general overhaul, repair work, food plant equipment
- NSF registered category code H2



Model No.	Mfg. No.	Size	Price /Each
AA227	A00737	11 oz.	9.14

DRY FILM PTFE LUBRICANT

- Ideal for releasing molded parts
- Excellent for high temperature applications up to 500°F (260°C)
- Dry, thin film won't attract dust or dirt
- Non-flammable
- No silicone or chlorinated solvents
- Safe on most surfaces



Model No.	Mfg. No.	Size	Price /Each
AA870	C02616	12 oz.	16.95

DRY MOLY LUBRICANT

- Penetrates pores of substrate and bonds to surface for long-lasting lubrication
- High-pressure, high-solids molybdenum disulfide coating
- Withstands pressures up to 50 000 PSI
- Air dries in 5-10 minutes; cures in 2 hours at room temperature
- Maintains effectiveness under high temperatures (650°F constant and 750°F intermittent)
- For assembly and run-in lubrication, automotive and industrial gaskets, sliding surfaces and gears, chutes and bins, bearings, chain drives, intricate mechanisms, vending machines, parking meters, roller chains, conveyor belts where heat is present



Model No.	Mfg. No.	Size	Price /Each
AA104	800200	11 oz.	8.42

FORCE 842® DRY MOLY LUBRICANT

- Works under high temperature - 842°F (450°C) and pressures - 100 000 PSI (6890 bars)
- Prevents seizure of parts
- High adhesion
- Resists dust and dirt
- Water and chemical resistant
- Provides a quick drying, thin film
- Not recommended for friction bearings or light-duty bearings



Model No.	Mfg. No.	Size	Price /Each
AA845	C02516	11 oz.	29.07

MAGNUM PREMIUM LUBRICANT WITH PTFE

- High performance lubricant with PTFE additives
- Ultra high lubricity
- Penetrates and protects metal against rust and corrosion
- Flash point of 175°F (79°C)
- Displaces moisture
- Safe to use on most surfaces
- Inverta Spray Valve lets you spray in all directions
- NSF registered category code H2



Model No.	Mfg. No.	Size	Price /Each
AA842	C00616	11 oz.	17.74
AB636	C00605	5 gal.	600.13

ECO-GRADE™ HIGH PERFORMANCE LUBE WITH PTFE

- Formulated with 100% natural soy oil and fortified with PTFE to offer excellent extreme pressure lubricity, water resistance and high temperature performance
- Contains no heavy metals
- Penetrate, water-displacer, rust inhibitor
- Equipped with spray Anyway™ valve and extension tube for hard to reach areas
- Best for use in high wear areas such as chains, cable, linkage, conveyor belts, industrial machines and more
- Surface to be protected should be clean, dry and free of rust, oil and mill scale



Model No.	Mfg. No.	Size	Price /Each
AD403	A00401000	12 oz.	12.62

PLASTIC AND FOOD DON'T MIX



METAL DETECTABLE PLASTIC COMPONENTS



LPS® Laboratories has revolutionized food safety for manufacturers with the release of six NSF H1 food grade lubricants with patent-pending DETEX™ metal detectable plastic components.



FOOD GRADE SILICONE LUBRICANT

- Contains silicone
- Provides excellent lubrication
- Non-staining
- Non-corrosive
- Fast evaporating
- No CFC's or chlorinated solvents
- Made of FDA compliant materials
- NSF registered category code H1
- Accepted for use in Canadian food processing facilities



Model No.	Mfg. No.	Size	Price /Each
AA917	C01716	10 oz.	13.89

SYNTHETIC FOOD GRADE OIL

- Includes PTFE. for added lubricity
- Does not emulsify with water
- Waterproof
- Biodegradable
- Clear, non-staining
- Kosher approved
- For pumps, gear boxes, bearings, hydraulic systems, motors, chains, conveyors, general purpose lubrication
- NSF registered category code H1



Model No.	Mfg. No.	Size	Price /Each
AA525	TF23010	16 oz.	14.00

SILICONE LUBRICANT

- Effective from -58°F to 450°F
- Colourless, odourless low-viscosity lubricant
- Prevents sticking without transferring to end products
- Will not attack delicate surfaces such as styrene or urethane
- For slides, guide rails, knives, slicers, saws, grinders, dough mixers, guards, conveyors, food racks, ovens, bottling machines, heat sealing equipment, all food and drug processing equipment
- Made of FDA compliant materials
- NSF registered category code H1



Model No.	Mfg. No.	Size	Price /Each
AB519	A00210LQ	14 oz.	9.57

WHITE LITHIUM LUBRICANT

- Inhibits corrosion on unpainted metal surfaces
- High-solids, non-staining white grease
- Excellent for metal-to-metal applications
- Will not drip or run on vertical surfaces
- Effective from -20°F to 275°F
- For chains, gears, drives, hinges and other vertical or overhead surfaces
- NSF registered category code H2



Model No.	Mfg. No.	Size	Price /Each
AB513	A000100LQ	14 oz.	9.11

SILICONE LUBRICANT

- 5% silicone formula
- Colourless, odourless low-viscosity lubricant
- Prevents sticking without transferring to end products
- Will not attack delicate surfaces such as styrene or urethane
- For slides, guide rails, knives, slicers, saws, grinders, dough mixers, guards, conveyors, food racks, ovens, bottling machines, heat sealing equipment, all food and drug processing equipment
- NSF registered category code H1



Model No.	Mfg. No.	Size	Price /Each
AA110	A00210	10 oz.	4.77

WHITE LITHIUM GREASE

- Inhibits corrosion on unpainted metal surfaces
- High-solids, non-staining white grease
- Excellent for metal-to-metal applications
- Will not drip or run on vertical surfaces
- Effective from -20°F to 275°F
- For chains, gears, drives, hinges and other vertical or overhead surfaces
- Recommended for use on knock-out pins on mold equipment
- NSF registered category code H2



Model No.	Mfg. No.	Size	Price /Each
AA103	A00100	11 oz.	7.54

FOOD GRADE MACHINE OIL

- Penetrates to loosen frozen nuts and bolts
- Value performance
- Provides excellent lubricity
- Does not contain silicone
- Eliminates sticking, binding and squeaking
- Non-staining lubricant, safe on most surfaces
- *Inverta* spray valve lets you spray in an upright or inverted position
- Made of FDA compliant materials
- NSF registered category code H1
- Accepted for use in Canadian food processing facilities



Model No.	Mfg. No.	Size	Price /Each
AB623	C01316	11 oz.	16.00

FOOD GRADE MACHINERY OIL

- Economical, general- purpose lubricant
- Penetrates and loosens rust, dirt, scale and corrosion
- Non-silicone formula is excellent for use in areas where silicone overspray might interfere with carton sealing or capping operations
- Virtually odourless, tasteless and colourless
- For bottle and carton filling machinery, valves, pistons, rollers, stainless steel pumps, chain drive belts, paste and sauce fillers, cams on rotary-type fillers, mixers, conveyors
- NSF registered category code H1



Model No.	Mfg. No.	Size	Price /Each
AA139	800700	10 oz.	7.96

CHAINMATE™ CHAIN & WIRE ROPE LUBRICANT

- Effective under extreme temperature and pressure ranges
- Fortified with molybdenum disulfide
- Deep penetration to the core of wire ropes
- High adhesion
- Lubricant and corrosion protectant
- Use with guards in place to eliminate costly down time
- Increases chain and wire rope life
- Reduces wear caused by friction and corrosion



Model No.	Mfg. No.	Size	Price /Each
AA877	C02416	11 oz.	18.78

MOLY CHAIN LUBRICANT

- Foaming action penetrates close tolerances of chain drive bushings and pins
- Specially formulated for all chain drive equipment
- Reduces wear, increases chain life up to three times when applied regularly
- *Moly* additive assures lubrication under extreme pressure
- Effective from -20°F to 300°F
- Excellent as a protective coating for stored metal parts
- For chain drives and pins, forklift trucks, tractors, machinery, workstand rollers, conveyors, motorcycle and bicycle chains, sprockets, clippers, cutter bars, chain saws, link and roller assemblies
- NSF registered category code H2



Model No.	Mfg. No.	Size	Price /Each
AA106	800202	11 oz.	7.34

CHAIN LUBRICANT FOOD GRADE

- Excellent for applications involving incidental food contact on food processing equipment
- Foaming action provides extra penetration and lubrication
- Oily, wet film extends chain life
- Non-flammable, does not contain silicone
- Reduces wear caused by friction
- NSF registered category code H1
- Accepted for use in Canadian food processing facilities



Model No.	Mfg. No.	Size	Price /Each
AD731	C06016	12 oz.	20.69

BELT DRESSING

- Does not contain 1,1,1 or any harmful, chlorinated solvents that deteriorate drive belts
- Low odour
- Prevents belt slippage on flat, round and V-belts
- Fast evaporation
- Eliminates squeaks from slipping belts
- Resists wash-off
- Extends belt life and pulling bearing life
- Can be used in wet outdoor conditions
- Made of FDA compliant materials
- NSF registered category code H1
- Accepted for use in Canadian food processing facilities



Model No.	Mfg. No.	Size	Price /Each
AA869	C02216	10 oz.	16.17

OPEN GEAR & WIRE ROPE LUBRICANT

- Penetrates to core of wire rope, minimizing internal friction
- "Travels" on metal surfaces, displacing water to provide excellent rust protection
- Withstands extreme pressure with maximum adhesion
- Works from 0°F to 250°F
- Penetrates pores of surfaces without heating
- Will not wash, weather away or rub off
- Black colour aids in determining adequate coverage
- For open or exposed gears, wire rope winches, elevator cables, metal forming presses, wire rope, gear boxes, cable, roller chains, machine tools



Model No.	Mfg. No.	Size	Price /Each
AA105	800201	12 oz.	9.08

HEAVY DUTY OPEN GEAR & WIRE ROPE LUBRICANT

- Penetrates to core of wire rope, minimizing internal friction
- "Travels" on metal surfaces, displacing water to provide excellent rust protection
- Withstands extreme pressure with maximum adhesion
- Works from 0°F to 450°F
- Penetrates pores of surfaces without heating
- Won't wash, weather away or rub off
- Black colour aids in determining adequate coverage
- For open or exposed gears, wire rope winches, elevator cables, metal forming presses, wire rope, gear boxes, cable, roller chains, machine tools
- NSF registered category code H2



Model No.	Mfg. No.	Size	Price /Each
AB515	A000201LQ	14 oz.	11.89

FOOD GRADE MOLY CHAIN & PIN BUSHING LUBRICANT

- Specially formulated for all chain drive equipment
- Reduces wear, increases chain life up to three times when applied regularly
- *Moly* additive assures lubrication under extreme pressure
- Effective from -20°F to 300°F
- Excellent as a protective coating for stored metal parts
- For chain drives and pins, forklift trucks, tractors, machinery, workstand rollers, conveyors, motorcycle and bicycle chains, sprockets, clippers, cutter bars, chain saws, link and roller assemblies
- NSF registered category code H2



Model No.	Mfg. No.	Size	Price /Each
AB516	A000202LQ	14 oz.	10.06

CHEMICALS

DRY FILM RELEASE AGENT

- Made with DuPont® Krytox® dry film
- Non-silicone mold release
- Exceptional anti-stick properties that will not transfer to finished parts allowing for multiple releases per application
- Compatible with most moldable resins, elastomeric compounds, urethanes and styrenes
- Will not attack rubber, paints or metals
- Recommended for low and high-temperature moulds up to 575°F
- For polystyrenes, polypropylenes, nylon, rubber, foams, metals, filament windings, polyurethanes, epoxy potting and encapsulating and phenolic resins
- NSF Certified



Model No.	Mfg. No.	Size	Price /Each
AA174	A00311	12 oz.	11.94

LONG TERM INDOOR PROTECTANT & LUBRICANT

- Non-staining, medium-weight oil formulated for long-term indoor protection
- Penetrates, displaces moisture and prevents rust
- Works up to 15 months against humidity and corrosion damage
- Leaves an amber film to identify coverage
- Contains no silicone or chlorinated solvents
- Safe to use on metals, rubber, and most plastic and painted surfaces
- Protects equipment stored indoors and items waiting to be shipped



Model No.	Mfg. No.	Size	Price /Each
AA228	A00767	11 oz.	9.82

LONG TERM OUTDOOR PROTECTANT & LUBRICANT

- A waxy, heavy-duty, rust inhibitor
- Formulated to stand up to the most severe weather conditions
- Offers 24-month durability
- Provides a barrier that guards against humidity
- Works on all metals, rubber, most plastic and painted surfaces
- Contains no silicone or chlorinated solvents
- Easily removed with mineral spirits
- For bodies and frames of vehicles and machines, storage tanks and containers, castings, industrial parts and machines, molds, cables, generators, marine engines and parts, electrical equipment, sheet steel, oil field equipment, threads, locks, dies, gears, engines, aircraft parts, and railroad equipment



Model No.	Mfg. No.	Size	Price /Each
AA229	A00777	11 oz.	10.20

RUBBERIZED UNDERCOATING

- Heavy-duty undercoating seals, protects, and insulates
- Rubberized for maximum durability



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA635	30538	16 oz.	6.49

COLOR GUARD® TOUGH RUBBER COATING

- Inhibits rust and corrosion
- Seals, insulates, and identifies almost any material in minutes
- Creates a non-slip gripping surface
- Rubber coating won't crack or chip
- Acid and alkali resistant
- Lasts for years
- Use to 200°F
- For dip, spray, or brush
- For tools, metal, electrical connections, masonry, wood, conveyors, glass, rope, fabric
- Toluene-free



LOCTITE

Model No.	Mfg. No.	Size	Colour	Price /Each
AC013	34979	14.5 oz.	Black	20.08
AC014	34980	1 gal.	Black	136.00
AC016	34982	14.5 oz.	Blue	20.08
AC017	34983	1 gal.	Blue	136.00
AC011	34985	14.5 oz.	Red	20.08
AC012	34986	1 gal.	Red	136.00
AC159	34988	14.5 oz.	Yellow	20.08
AC015	34989	1 gal.	Yellow	136.00
PRIMER				
AC213	34994	1 gal.	Grey	115.95

Call us for
all your Welding
& Metalworking
requirements!



RUST BREAKER™ PENETRANT

- Quickly loosens rust while penetrating grease and dirt
- Transparent, non-staining oil
- Light film displaces moisture and acts as a corrosion preventative
- Jet stream sprays up to two feet for safe, accurate application
- Flashpoint: 205°F
- Will not harm painted surfaces
- For releasing rusted or frozen lugs and bolts, lubricating tight-fitting parts, general overhaul, repair work, food plant equipment



Model No.	Mfg. No.	Size	Price /Each
AA113	A00103	12 oz.	7.92

TKX ALL-PURPOSE PENETRANT, LUBRICANT & PROTECTANT

- Non-flammable CO₂ propellant
- Displaces moisture
- High flash point of 175°F (79°C)
- Protects against corrosion
- Loosens rusted or frozen parts
- Safe on fabric, plastic, rubber, paint and other finishes
- Inverta spray valve lets you spray in all directions
- NSF registered category code H2



Model No.	Mfg. No.	Size	Price /Each
AA846	C02016	11 oz.	7.80
AD730	C02022	22 oz trigger	16.35
AB490	C02028	1 gal.	50.29
AB638	C02005	5 gal.	224.85
AB639	C02055	55 gal.	2336.97

5-WAY PLUS™ PENETRANT

- Penetrates, lubricates, demounts, cleans and prevents rust
- Inhibits corrosion and pitting of molding dies and extension screws
- Frees rusted, frozen nuts and bolts
- Excellent for precision instruments
- Ideal for stainless steel and aluminum
- Displaces moisture in electrical apparatus, generators, motors
- Undercuts grit and grime on metal surfaces leaving a protective film



Model No.	Size	Price /Each
AA505	24 oz.	13.02

LST PENETRANT

- Specially formulated with low surface tension for fast penetrating action
- Attacks rust and corrosion to free frozen parts
- Powerful foaming action provides complete surface coverage
- Displaces moisture
- Lubricates and protects metal surfaces
- Flash point of 175°F (79°C)
- Inverta spray valve lets you spray in all directions
- NSF registered category code H2



Model No.	Mfg. No.	Size	Price /Each
AA843	C01916	11 oz.	11.30
AB635	C01928	1 gal.	67.81
AB633	C01905	5 gal.	290.28
AB634	C01955	55 gal.	2653.22

HARDCOAT CORROSION INHIBITOR

- Durable, hard transparent film
- Multi-year protection of metal parts in outside storage
- 500 plus hours salt spray resistance
- Low odour and non-conductive
- Resists dripping and puddling during spray application
- Safe to use on rubber, fabric, plastics and paints
- Ready-to-use and can be applied with conventional airless or air-operated spray equipment



Model No.	Mfg. No.	Size	Price /Each
AA817	C03316	10 oz.	12.94
AB555	C03328	1 gal.	134.58
AB553	C03305	5 gal.	598.43
AB554	C03355	55 gal.	4725.95

KB 88 THE ULTIMATE PENETRANT

- Quickly releases rusted and corroded nuts, bolts, hinges and other frozen components
- Extremely high solvency, low surface tension
- Enhanced penetration and lubrication
- Outperforms the competition in independent lab tests
- Penetrates faster and deeper than most other similar products in the market place
- Meets the California Air Resources Board (CARB)
- VOC regulatory guidelines
- Inverta spray valve
- NSF registered category code H2



Model No.	Mfg. No.	Size	Price /Each
AD970	C02316	13 oz. (367 g)	14.63
AD971	C02301	1 gal. (3.78 L)	93.99
AD972	C02305	5 gal. (18.93 L)	434.49
AD973	C02355	55 gal. (208 L)	4082.74

WD-40

- Loosens rusted parts
- Displaces moisture
- Non-conductor, dries out electrical and electronic equipment
- Stops squeaks
- Lubricates and protects against moisture and corrosion
- Operating temperature: -50°F to 300°F
- Minimum flash point 110°F open cup



Model No.	Size	Price /Each
NA611	11 oz. aerosol	6.23
NA609	4 L	31.71
NA608	Spray bottle empty	6.02

BOLT-OUT™

- Penetrates then lubricates
- Faster disassembly with less effort
- Inhibits further rust
- Displaces moisture
- No chlorinated solvents
- Non-flammable liquid formula
- Effective at wide temperature range



Model No.	Mfg. No.	Size	Price /Each
YC429	53-D 892	400 ml	11.25
AC310	53-D 893	500 ml trigger	16.58
AA487	53-D 896	5 L	17.08
AA479	53-D 897	20 L	289.87
AC311	53-D 898	200 L	1915.92

FREEZE & RELEASE

- Penetrating oil instantly freezes seized and rusted bolts, nuts and studs down to -45°F (-43°C)
- Shock-freeze effect of this penetrating oil causes microscopic cracks in the layer of rust, allowing the lubricating ingredient to wick directly into the rust by capillary action
- The rusted bolt assembly can be easily dismantled after allowing only 1-2 minutes penetration time
- Released parts remain lubricated and protected from corrosion
- Chemistry: Synthetics



Model No.	Mfg. No.	Size	Price /Each
AD133	996456	13.53 oz. aerosol	11.81

CHEMICALS

MARINE GRADE ANTI-SEIZE

- Protects assemblies exposed directly or indirectly to fresh and salt water
- Works especially well in high humidity conditions
- Excellent lubricity, superior water wash-out water spray resistance
- Prevents galvanic corrosion



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC338	34395	8 oz.	24.53
TDP003	34026	16 oz.	28.53

FOOD GRADE ANTI-SEIZE

- Prevents seizure, galling and friction in stainless steel and other metal parts up to 750°F (399°C)



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC339	51168	8 oz.	20.54

HEAVY-DUTY ANTI-SEIZE

- Metal-free
- Excellent lubricity
- Outstanding lubrication to all metals including stainless steel, aluminum and soft metals up to 2400°F (1315°C)



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC208	51605	9 oz.	30.62
AC328	51606	1.2 lb.	48.96

ANTI-SEIZE QUICKSTICKS™

- Typically used in high temperature applications, Loctite® anti-seizes provide exceptional lubrication as well as protection against rust, corrosion, seizing and galling
- Also reduce friction and wear of critical parts that can be easily disassembled when needed

Typical applications:

- Use with copper, brass, cast iron, and all alloys including stainless steel, all plastics, and all non-metallic gasket materials
- Bolts, bushings, pipes, fittings, flanges, gaskets, headers, manifolds, studs, etc.
- High heat ovens, crane assemblies, turbine studs, coal crushers, casting and molding equipment, and heat exchangers

Model No.	Mfg. No.	Format	Colour	Price /Each
AB653	37229	20 g	Copper	6.60
AB654	37230	20 g	Silver	7.16

COPPER ANTI-SEIZE

- Service rating: -65°F (-54°C) to 1800°F (982°C)
- Lead free, low friction lubricant in a water-resistant grease fortified with anti-oxidants
- Protects against seizure, heat-freeze, galling, rust and corrosion
- Permits reuse of fittings, saves stud, bolt and nut replacements
- Not affected by contraction, expansion or vibration
- Will not run, drip or settle out
- Copper colour



Model No.	Mfg. No.	Size	Price /Each
AA890	C02916	12 oz. aerosol	23.81
AA925	C02908	1/2 lb.	20.78
AA874	C02910	1 lb.	26.42

C5-A® COPPER BASED ANTI-SEIZE

- Suspends copper and graphite in a high quality grease
- Protects metal parts from rust, corrosion, galling, and seizing at temperatures to 1800°F (982°C)



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC345	51147	8 oz.	14.96
AA533	51003	12 oz. aerosol	22.38
AB467	51007	1 lb.	21.80

NICKEL ANTI-SEIZE

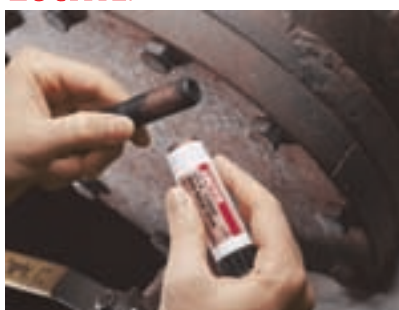
- Copper-free
- Recommended for stainless steel and other metal fittings
- For preventing corrosion, seizing and galling in harsh, chemical environments
- For temperatures to 2400°F (1315°C)



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC337	77124	8 oz.	25.35
AB486	51286	12 oz. aerosol	30.15
AA117	77164	1 lb.	29.94

LOCTITE



ALL-PURPOSE ANTI-SEIZE

- Service rating: -65°F (-54°C) to 1050°F (566°C)
- Moly-fortified
- Lead free
- Protects against seizure, heat-freeze, galling, rust and corrosion
- Lowers friction and reduces wrench torque
- Not affected by contraction, expansion or vibration
- Will not harden, evaporate or settle out and requires no thinning
- Steel blue colour



Model No.	Mfg. No.	Size	Price /Each
AA924	C04108	1/2 lb.	14.01
AB475	C04110	1 lb.	21.20

NICKEL ANTI-SEIZE

- Service rating: -65°F (-54°C) to 2600°F (1427°C)
- Contains no lead, copper, graphite, chlorides, phosphorous, silicone or halogens
- Can be used with ammonia, acetylene and vinyl monomers, which are unstable in the presence of copper
- Protects against seizure, rust and corrosion
- Safe on stainless steel when temperatures exceed 550°F (288°C)
- Prevents water wash-off
- Will not run, drip or settle out
- Silver colour



LPS

Model No.	Mfg. No.	Size	Price /Each
AA926	C03908	1/2 lb.	37.74
AB637	C03910	1 lb.	48.65

SILVER GRADE ANTI-SEIZE

- Heavy-duty, temperature resistant, petroleum-based lubricant
- Fortified with graphite and metallic flake
- Inert, will not evaporate or harden in extreme cold or heat
- For use in assemblies up to 1600°F (871°C)



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC347	76732	8 oz.	14.90
YA275	76759	12 oz. aerosol	17.25
YA276	76764	1 lb.	19.51

Call us for all your



Welding & Metalworking requirements!

RED & REDI MULTI-PURPOSE RED GREASE

- Delivers excellent lubrication
- Prevents rust, corrosion and oxidation
- Remains effective at extremely high temperatures
- Reduces friction and vibration
- Resists shock
- Red colour allows easy visual inspection
- Penetrates quickly



Model No.	Mfg. No.	Size	Price /Each
AA873	C05816	11 oz.	13.87

WHITE LITHIUM MULTI-PURPOSE WHITE GREASE

- Rapidly forms into a pure white grease
- Heat and water resistant
- Produces a long lasting, protective film against rust and corrosion
- White colour allows easy visual inspection
- Does not contain any chlorinated solvents
- Accepted for use in Canadian food processing facilities



Model No.	Mfg. No.	Size	Price /Each
AA914	C03816	10 oz.	16.99

THERMAPLEX® MULTI-PURPOSE BEARING GREASE

- Excellent load carrying properties
- Prolongs bearing life
- Ideal for lubricating all types of bearings
- Blue coloured paste
- Petroleum odour
- Temperature range: -22°F (-30°C) to 302°F (150°C)
- Dropping point: 446°F (230°C)
- NLGI Grade: No. 2



Model No.	Mfg. No.	Size	Price /Each
AA847	C70614	14.1 oz.	9.47
AB620	C70606	5 gal.	343.44
AB622	C70635	16 gal.	1064.67
AB621	C70655	55 gal.	2996.84

THERMAPLEX® AQUA BEARING GREASE

- Resists water washout
- Excellent corrosion resistance
- Significant load carrying capability
- Greater degree of bearing protection
- Amber coloured paste
- Petroleum odour
- Temperature range: -4°F (-20°C) to 302°F (150°C)
- Dropping point: 500°F (260°C)
- NLGI Grade: No. 2



Model No.	Mfg. No.	Size	Price /Each
AA851	C70514	14.1 oz.	9.16
AB608	C70506	5 gal.	315.52
AB610	C70535	16 gal.	986.36
AB609	C70555	55 gal.	2708.49

THERMAPLEX® HI-LOAD BEARING GREASE

- Withstands shock loading
- Reduces wear from vibration
- Excellent anti-wear properties
- Wide operating temperature range
- Blue/black colour paste
- Petroleum odour
- Temperature range: -22°F (-30°C) to 302°F (150°C)
- Dropping point: 446°F (230°C)
- NLGI Grade: No. 2



Model No.	Mfg. No.	Size	Price /Each
AA850	C70414	14.1 oz.	11.33
AB614	C70406	5 gal.	419.97
AB616	C70435	16 gal.	1320.65
AB615	C70455	55 gal.	3749.44

THERMAPLEX® FOODLUBE BEARING GREASE

- Ensures safety in areas where incidental food contact may occur
- Does not contain mineral oil, solvents or silicone
- Nontoxic, nonstaining and none mulsifying
- White coloured paste
- Mild odour
- Temperature range: -4°F (-20°C) to 300°F (149°C)
- Dropping point: 500°F (260°C)
- NLGI Grade: No. 2
- Made of FDA compliant materials
- NSF registered category code H1
- Accepted for use in Canadian food processing facilities



Model No.	Mfg. No.	Size	Price /Each
AA852	C70114	14.1 oz.	13.49
AB611	C70106	5 gal.	521.57
AB613	C70135	16 gal.	1671.57
AB612	C70155	55 gal.	4789.70

THERMAPLEX® HI-TEMP BEARING GREASE

- Resists carbonization at high temperatures
- Extends relubrication intervals
- Reduces risk of bearing failure at high temperature
- Ensures optimal production rates
- Smooth, brown paste
- Petroleum odour
- Temperature range: -40°F (-40°C) to 392°F (200°C)
- Dropping point: 536°F (280°C)
- NLGI Grade: No. 2



Model No.	Mfg. No.	Size	Price /Each
AA848	C70214	14.1 oz.	14.53
AB617	C70206	5 gal.	653.39
AB619	C70235	16 gal.	2120.04
AB618	C70255	55 gal.	6109.08

THERMAPLEX® BIO GREEN™ BEARING GREASE

- Environmentally responsible, biodegradable grease
- Premium performance
- Superior anti-wear and anti-corrosion properties
- Extends re-lubrication intervals for bearings
- Excellent thermal and oxidative stability
- Prolongs bearing life
- Water resistant
- Green colour allows easy visual inspection
- Wide operating temperature range: -10°F to 307°F (-23°C to 188°C)
- Non-toxic
- NLGI No. 2
- NSF registered category code H2



Model No.	Mfg. No.	Size	Price /Each
AD181	C70714	14.1 oz.	15.86
AD182	C70706	35 lbs.	612.86

THERMAPLEX® CS MOLY BEARING GREASE

- Excellent oxidation stability, adhesive and cohesive properties and corrosion resistance
- Exceptional water resistance
- Premium performance
- Calcium sulfonate grease
- Contains molybdenum disulfide
- Reduces wear from vibration
- High load carrying capacity
- Prolongs bearing life
- Wide operating temperature range: 0°F to 425°F (-18°C to 218°C)
- Extends re-lubrication intervals for bearings
- NLGI No. 2
- NSF registered category code H2



Model No.	Mfg. No.	Size	Price /Each
AD179	C70814	14.1 oz.	12.34
AD180	C70806	35 lbs.	481.63



MINI PISTOL GREASE GUNS

DELUXE

- Single-hand-operated pistol grip
- Die cast grease gun head with dual discharge ports for use with steel extension as well as flexible hose
- Develops 3500 PSI
- Capacity: 3 oz grease cartridge or bulk fill
- Textured zinc plated finish for non-slip grip
- Includes: 4" steel extension and professional 4-jaw coupler with ball check

Model No. AC477
Price/Each \$13.90

aurora tools®



AC477

PISTOL GREASE GUNS

HEAVY-DUTY

- Designed for use in general confined spaces or where access to grease nipples is restricted
- Heavy-duty die cast grease gun head
- Develops 5000 PSI
- Capacity: 14 oz (400 g) grease cartridge or suction fill
- AC475 comes complete with 4" steel extension and 4-jaw coupler with ball check
- AC476 comes complete with 18" flexible hose and 4-jaw coupler with ball check

Model No. AC475
Price/Each \$23.50

Model No. AC476
Price/Each \$29.95

aurora tools®



AC475

MINI GREASE GUNS

- Designed for use in general confined spaces, or where access to grease nipples is restricted
- Single-hand-operated push type grip
- Develops 1400 PSI
- Capacity: 3 oz. (85 g)

Model No. AD084
Price/Each \$14.95

aurora tools®



AD084

AIR-OPERATED GREASE GUNS

- Ideal for use in factory maintenance
- Single shot of grease discharge with every press of the trigger
- Air operating range: 40 - 120 PSI
- Comes with 6" steel extension and professional 4-jaw coupler with ball check

Model No. AC478
Price/Each \$53.50

aurora tools®



AC478

LEVER GREASE GUNS

STANDARD-DUTY

- Designed for use in general lubrication and daily maintenance work
- Capacity: 14 oz (400 g) grease cartridge or suction fill
- Complete with 6" steel extension and 4-jaw coupler with ball check
- Develops 6000 PSI

Model No. AC472
Price/Each \$15.95

aurora tools®



AC472

HEAVY-DUTY

- Designed for punishing day-in and day-out heavy industrial application
- Built-in variable stroke feature for greasing fittings with limited access
- Die cast grease gun head fitted with bulk loader and air bleeder
- Extra heavy-duty zinc plated lever handle with ergonomic rubber grip
- Develops 10 000 PSI
- Capacity: 14 oz. (400 g) grease cartridge, filler pump or suction fill
- Includes: 6" steel extension and 4-jaw coupler with ball check

Model No. AC473
Price/Each \$24.80

aurora tools®



AC473

SUCTION GUNS

- A rugged transfer gun designed for use with gear oils to get them both into and out of gear boxes, transfer cases and differentials
- Capacity: 16 oz
- Complete with 12" flexible vinyl hose

Model No. AC494
Price/Each \$15.60

aurora tools®

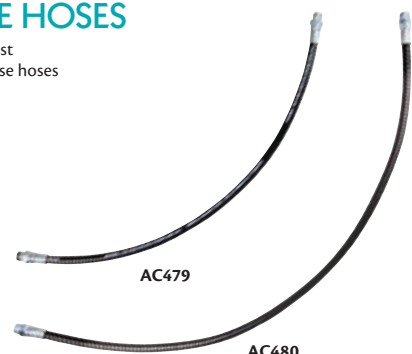


AC494

FLEXIBLE GREASE HOSES

- Standard grease hose is the most popular version of flexible grease hoses
- AC481 hose fitted with heavy-duty spring guard adds safety and convenience in fitment, prevents those from bending
- Threads: 1/8" NPT
- Working Pressure 3500 PSI
- For hand-operated grease guns only

aurora tools®



AC479

AC480

Model No.	Length" (End to End)	Price /Each
AC479	12	4.95
AC480	18	6.25
AC481	18	6.90

PISTOL GRIP GREASE GUNS

PROFESSIONAL-DUTY

Develops 5500 PSI. Three-way loading: cartridge, suction or loader pump. Features automatic variable stroke/pressure, air vent, vinyl grip and loader fitting. Delivery: 1 oz. per 33 strokes.

Model No. AA690

Includes: rigid extension and coupler

Price/Each \$67.34

Model No. AA691

Includes: 18" flexible hose and coupler

Price/Each \$70.28



AA691

PNEUMATIC GREASE GUNS

Three way loading: cartridge, suction or loader pump. Features air vent, loader fitting, rigid extension and coupler.

Model No. AB821

Price/Each \$96.84



LEVER GREASE GUNS

PROFESSIONAL-DUTY

Develops 10 000 PSI. Three-way loading: 14 oz. cartridge, suction or loader pump. Features automatic variable stroke/pressure, air vent, vinyl grip, loader fitting.

Delivery: 1 oz. per 21 strokes.

Model No. AA643

Includes: rigid extension and coupler

Price/Each \$51.89

Model No. AB827

Includes: 18" hose and coupler

Price/Each \$62.17

Model No. AB825

Includes: 24 oz. cylinder, rigid extension and coupler

Price/Each \$60.97



AA643

HEAVY-DUTY/HIGH PRESSURE

Develops 10 000 PSI. Three-way loading: cartridge, suction or loader pump. Features heavy-duty lever with adjustable linkage for high pressure or high volume operation and loader fitting. Gun outlet 1/8" NPTF.

Delivery: 1 oz. per 16 strokes in high volume mode.

Delivery: 1 oz. per 25 strokes in high pressure mode.

Model No. AB817

16-oz. gun only

Price/Each \$183.37

Model No. AA692

16-oz. gun with rigid extension and coupler

Price/Each \$207.51

Model No. AB816

24-oz. gun with rigid extension and coupler

Price/Each \$215.41



AA692



SUCTION GUNS

16 oz. capacity. Includes flexible vinyl hose.

Suitable for all purpose draining of non-corrosive lubricants.

Model No. AB833

Price/Each \$21.82



12 VOLT CORDLESS GREASE GUNS

Lightweight, powerful, professional quality.

The most innovative grease gun ever designed, giving you faster more efficient lubrication:

- High-Pressure Delivery: up to 6500 PSI
- High Flow Rate: 5.25 oz. per minute @ 1000 PSI
- 3-Way Loading: 14-oz. cartridge, 16-oz. bulk or suction loaded
- Lightweight: 6.8 lbs.
- Comes with two batteries

Model No. AB812

Price/Each \$428.39



GREASE GUN EXTENSION HOSES

WARNING: For use with hand operated grease guns only.

- Economical and durable hose
- 12 000 PSI burst pressure
- 1/8" NPTF(M) ends



AA693

Model No.	Length"	Working Pressure	Hose Type	Price /Each
AA693	12	4800 PSI	Single Wire Braid	16.17
AA694	18	4800 PSI	Single Wire Braid	16.97

LUBRICATING EQUIPMENT

aurora tools™

OIL CANS

- Oil can body is seamless drawn from heavy-gauge tin coated sheet
- Premium powder coated finish

Model No.	Capacity oz.	Spout Length"	Spout Type	Pump	Price /Each
LEVER TYPE					
AC514	6	6	Flexible	Steel	7.20
AC515	10	6	Flexible	Steel	7.95
AC589	13	7	Flexible	Steel	9.35
AC516	16	7	Flexible	Steel	8.90
AC592	16	9	Flexible	Steel	13.45
AC593	16	9	Rigid	Steel	12.95
AC590	23	8	Flexible	Steel	9.95
AC594	33	9	Flexible	Steel	17.95
AC595	33	9	Rigid	Steel	16.95
PISTOL TYPE					
AC588	4	5	Flexible	Steel	5.65
AC513	6	5	Flexible	Brass	8.70
AC597	6	6	Flexible	Steel	10.95
AC596	6	6	Rigid	Steel	8.50
AC599	16	6	Flexible	Steel	15.65
AC598	16	6	Rigid	Steel	16.55
AC600	33	6	Rigid	Steel	22.95



HYDRAULIC GREASE COUPLERS

Provides quick, positive and leakproof connection with hydraulic fittings.

AA862



Model No.	Type	Thread	Max. Pressure PSI	Price /Each
QG997	Standard	1/8" NPTF(F)	10 000	14.90
AB742*	Standard	1/8" NPTF(F)	10 000	21.18
QF621	Narrow	1/8" NPTF(F)	10 000	11.04
AA862*	Narrow	1/8" NPTF(F)	10 000	16.35

* Equipped with built-in check valve.

MANUAL LUBRICATION PUMPS

VOLUME DELIVERY BUCKET PUMPS

For all oils and pressure gun lubricants. Delivery 1/3 oz. per stroke. Will develop up to 500 PSI. Equipped with 25-lb capacity (5 gallons) container. Adjustable leverage adapts pump to lubricant and operating conditions. Pump outlet: 3/8" NPTF(F).

Model No. AA699
Price/Each \$654.10

MULTI-PRESSURE BUCKET PUMPS

Variable pressure 2500 to 5000 PSI for 35-lb capacity (5 gallons). Adjustable leverage (three positions) adapts pump to all lubricant and operating conditions. Approximate delivery 1/3 oz. per stroke. Suitable for oil or grease. Hose length: 5'.

Coupler type: hydraulic (narrow). Includes hose assembly (Mfg. No. 322434)

Model No. AA698
Price/Each \$694.46

PORTA-CARTS

- Used with AA699 and AA698 series pumps
- Speeds lubrication service where machines are widely separated
- Reduces operator fatigue
- Overall width: 18"

Model No. AA702
Price/Each \$520.13



VOLUME DELIVERY LOADER PUMPS

- For grease guns with Alemite loader fitting
- Delivery: 1 lbs. per 6 strokes
- Includes loader extension and loader fitting
- For 35-lb pail
- Equipped with cover and flexible follower

Model No. AB814
Price/Each \$468.20



DUAL LEVERAGE DISPENSERS

- For fluid gear lubricants
- Attach directly onto original containers
- Delivery: 1 pint per 6 strokes
- Pump outlet: 1/2" NPTF(F).
- For 5-gallon pail
- Includes: 5 1/2' hose with curved nozzle and pail cover

Model No. AB815
Price/Each \$423.68



PROFESSIONAL COUPLERS

- Hardened spring steel jaws and hardened body withstands high pressure without deformation
- Hexagonal nut allows easy tightening
- Threads: 1/8" NPT
- 4-jaw construction, 6000 PSI
- For hand-operated grease gun only

Model No. AC482

Price/Each \$4.25

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HEAVY-DUTY COUPLERS

- Hardened spring steel jaws & hardened body with double wall thickness withstands very high pressure without deformation
- Hexagonal nut allows easy tightening
- Threads: 1/8" NPT
- 4-jaw construction, 10 000 PSI
- For hand and air operated equipment

Model No. AC483

Price/Each \$7.90

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HYDRAULIC COUPLERS - 360° SWIVEL

- Excellent coupler for effective lubrication of difficult and hard to reach grease fittings
- Swivels in full 360° circle and locks conveniently at any 45° position
- Spring loaded ball-check valve helps retain pressure
- Threads: 1/8" NPT
- 3-jaw construction, 7000 PSI

Model No. AC484

Price/Each \$37.35

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HYDRAULIC COUPLERS - RIGHT ANGLED

- Fits all standard grease gun
- Designed for right angled discharge of grease, very useful for greasing fittings with limited access or in low heights
- Threads: 1/8" NPT
- 10 000 PSI

Model No. AC485

Price/Each \$9.65

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SEAL-OFF DISPENSERS

- Used with grease gun extension or hose for lubricating grease plugs
- Threads: 1/8" NPT

Model No. AC491

Price/Each \$11.75

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STEEL BEARING PACKERS

- For use with grease guns
- The design incorporates a grease nipple at one end which easily adapts to the grease gun coupler
- Grease bearings in cars boats, RV, etc. with a minimum inner diameter of 1/2" to a maximum outer dia of 5" and height from 1/4" to 2"

Model No. AC493

Price/Each \$27.95

aurora tools®



GREASE GUN HOLDERS

- Simple snap action clamp for safe storage of grease guns and suction guns

Model No. AC486

Price/Each \$6.25

aurora tools®



GREASE INJECTOR NEEDLES

- Lubricates in very tight spaces such as universal joints and sealed bearings
- Equipped with standard grease fitting without ball check and protective plastic holder
- 18-gauge needle thickness
- 1 1/2" long

Model No. AC487

Price/Each \$7.55

aurora tools®



NEEDLE NOSE DISPENSERS

- Used for dispensing a fine line of grease
- Can be attached directly to steel extensions or flexible hoses
- Threads: 1/8" NPT
- AC490 has a narrow needle with a dia of 3.96 mm
- AC489 has a 5.56 mm needle dia

Model No.	Needle Length mm	Price /Each
AC489	15	6.40
AC490	38	10.30

aurora tools®



NEEDLE NOSE ADAPTORS

- Used for dispensing a fine line of grease through the needle nose
- Tip diameter: 0.046"
- Needle length: 4"
- Quick connect action

Model No. AC488

Price/Each \$20.75

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EZEE-LUBE KITS

- The Ezee-Lube kit comprises of a range of quick-connect fittings designed to meet any and every greasing application lube accessories

Model No. AC492

Price/Each \$79.50

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LUBRICATING EQUIPMENT

GREASE FILLER PUMPS

- An ideal grease filling solution to easily load bulk or combination grease guns from bulk grease pails
- Full economy in buying bulk grease
- Pail capacity: 5 gallons
- Not for use with tapered bucket

Model No. AD383

Price/Each \$67.30

aurora tools®



BUCKET GREASERS

- High volume, high pressure grease pump
- Uses low cost bulk grease
- Delivers 3 g/stroke or 1 oz. in less than 10 strokes at pressures up to 2000 PSI
- Comes complete with 22-lb built-in steel grease bucket

Model No. AC495

Price/Each \$229.00

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AIR-OPERATED GREASE PUMPS

- Ideal for applications having continuous need for high pressure grease
- 50:1 ratio pump
- Recommended air pressure between 60 and 125 PSI
- Air inlet: 1/4" NPT (female)
- Grease outlet: 1/4" NPT (female)
- Fits 5-gallon and 16-gallon pails
- Comes complete with drum cover, rubber-lined follower plate, 7' of high pressure grease hose, Z swivel and grease control valve

Model No. AC496 For 25-50-lb. pails

Price/Each \$679.00

Model No. AC497 For 120-lb. pail

Price/Each \$798.00

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SWIVELS

- Installed between the delivery hose and grease control valve, swivels permit easy handling of control valves and prevent damage to hose caused by twisting
- 6000 PSI

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Model No.	Thread Specifications	Price /Each
AC499	1/4" NPT (F) - 1/8" NPT (M)	74.50
AC500	1/4" NPT (F) - 1/4" NPT (M)	74.50



GREASE CONTROL VALVES

- Premium quality
- For use with power-operated equipment
- Provides continuous grease flow with trigger fully depressed
- Inlet thread specification: 1/4" NPT (female)
- Outlet thread specification: 1/8" NPT (female)
- 7500 PSI
- Comes complete with 6" steel extension and heavy-duty coupler

Model No. AC498

Price/Each \$118.00

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EASY-OUT TOOLS

- Handy, dual-purpose tool for removing worn and broken grease fittings, as well as retapping holes for installing new grease fittings

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Model No.	Tap Rethreads	Price /Each
AC511	1/4"-28	15.50
AC512	1/8"-27	12.30



GREASE FITTINGS

- Manufactured to the most stringent quality standards
- QS 9000 approved
- 10 fittings per package

Priced per package

Model No.	Description	Price /Each
1/4" - 28 SAE-LT		
AC501	Short - Straight	4.65
AC502	Short - 45°	6.50
1/8" - 27 PIPE THREADS		
AC504	Short - Straight	5.35
AC505	Short - 45°	7.90
AC506	Short - 90°	7.90



SETS

Model No.	Description	Contains	Price /Each
AC509	80 Pcs of SAE Grease Fittings	15 Pcs of 1/4" 28 SAE LT Straight 10 Pcs of 1/4" 28 SAE LT 45° Angle 10 Pcs of 1/4" 28 SAE LT 90° Angle 25 Pcs of 1/8" 27 NPT Straight 10 Pcs of 1/8" 27 NPT 45° Angle 10 Pcs of 1/8" 27 NPT 90° Angle	36.85
AC510	80 Pcs of Metric Grease Fittings	20 Pcs of M6 x 1 Straight 10 Pcs of M6 x 1 90° Angle 15 Pcs of M8 x 1 Straight 10 Pcs of M8 x 1 90° Angle 15 Pcs of M10 x 1 Straight 10 Pcs of M10 x 1 90° Angle	36.85

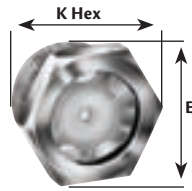


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FUSED WINDOW SIGHTS

- **Pressure:** 125 PSI maximum
- **Temperature:** 250°F maximum
- **Body:** Steel, plated
- **Reflector:** Stainless steel
- **Sight:** Glass

Plated body is made of sturdy hexagon steel and features various NPT sizes which can be mounted in any ordinary pipe thread. Stainless steel reflector enhances visibility of liquid level. These special reflectors will not tarnish, corrode or discolour under most adverse conditions.



Oil-Rite
CORPORATION

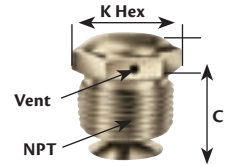
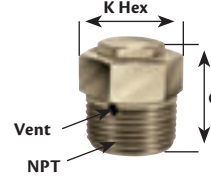
NPT	E"	K"	Less Reflector Model No.	Price /Each	w/Reflector Model No.	Price /Each
1/4	5/8	5/8	AB041	5.55	-	-
3/8	3/4	3/4	AB049	6.58	AB042	9.12
1/2	25/32	15/16	AB050	6.74	AB043	9.19
3/4	11/16	11/16	AB051	8.48	AB044	11.39
1	11/16	13/8	AB052	11.45	AB045	13.62
1 1/4	17/32	1 3/4	AB053	20.16	AB046	23.65
1 1/2	17/32	2	AB054	23.90	AB047	27.38
2	19/32	2 1/2	AB055	28.98	AB048	35.22

VENT PLUGS

Oil-Rite
CORPORATION

Vent plugs with filters can be used to relieve pressure or vacuum. These vent plugs assure pressure equalization and minimize undesirable problems, such as excessive pressure. The vent plugs allow air to freely communicate through a 40 micron filter. Steel plated body. Maximum temperature: 225°F.

Vent plugs with deflectors can also serve as filler plugs. They are equipped with a splash deflector which prevents the liquid from spilling into the vent hole and outside. To allow air to communicate freely with the outside, no screens or filters are used which might make the units inoperative.



Model No.	NPT Size	C"	K"	Price /Each
VENT PLUGS WITH FILTERS				
AB062	1/8 Male	1	11/16	7.03
AB063	1/4 Male	1	11/16	7.44
AB064	3/8 Male	1 1/16	3/4	7.76
AB065	1/2 Male	1 3/16	15/16	8.90
AB066	3/4 Male	1 1/4	1 1/16	9.33

Model No.	NPT Size	C"	K"	Price /Each
VENT PLUGS WITH DEFLECTORS				
AB056	1/8 Male	15/16	7/16	4.51
AB057	1/4 Male	1	9/16	4.79
AB058	3/8 Male	1 1/8	11/16	9.76
AB059	1/2 Male	1 3/16	15/16	10.83
AB060	3/4 Male	1 1/4	1 1/16	12.21
AB061	1 Male	1 3/8	1 3/8	17.90

ALUMINUM & ROUND NYLON LIQUID LEVEL GAUGES

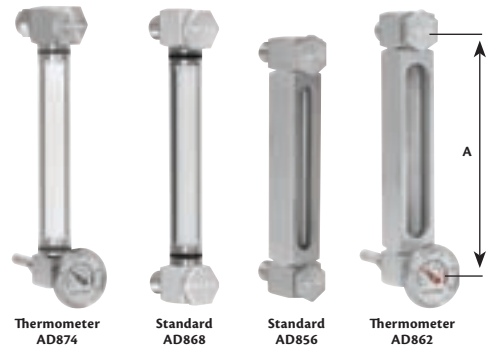
- **Pressure:** 175 PSI maximum (Alum.)
- **Temperature:** 225°F maximum (Alum.)
- **Pressure:** 125 PSI maximum @ 72°F (Round)
- **Temperature:** 205°F maximum (Round)
- **Body or end blocks:** Aluminum alloy
- **Sight:** Glass (Aluminum) - Round nylon (Trogamid)
- **Seals:** Buna-N
- **Mounting kits:** Studs - aluminum, plated steel

These gauges are used to view oil levels in hydraulic reservoirs, gearboxes, bearing housings, crank cases, transformers and machinery oil reservoirs. The universal design accommodates both front and back mounting. Models with a thermometer will also show the temperature of the liquid. Aluminum components resist rust and corrosion.

Oil-Rite
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Alum. Model No.	Price /Each	Alum. Model No.	Price /Each	Round Model No.	Price /Each	Round Model No.	Price /Each	A"
AD856	16.39	AD862*	54.21	AD868	39.75	AD874*	76.65	5
AD857	19.76	AD863*	57.57	AD869	41.03	AD875*	77.97	6
AD858	22.88	AD864*	60.71	AD870	42.35	AD876*	79.26	7
AD859	26.17	AD865*	63.99	AD871	44.93	AD877*	81.86	9
AD860	27.70	AD866*	65.53	AD872	46.23	AD878*	83.15	10
AD861	37.78	AD867*	75.62	AD873	48.82	AD879*	85.76	12

Centreline distance 3" - 36" between centre of studs are also available.
* With thermometer



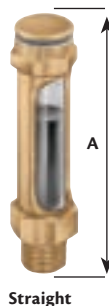
BRASS LIQUID LEVEL GAUGES

- **Pressure:** Atmospheric pressure, cap is vented
- **Temperature:** 225°F max
- **Body:** Brass
- **Sight:** Glass
- **Seal:** Buna-N
- **Washer:** Teflon
- **Cap:** Brass
- **Union Coupling:** Steel, plated

Brass gauges are used to indicate level of lubricating liquid supply at bearings, gear boxes, crank cases, transformers, switches etc. These gages are easily installed in any location having enough clearance for a one-piece oil gage.

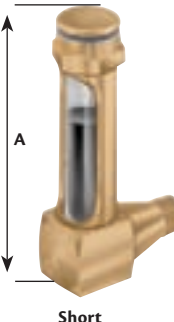
STRAIGHT

Model No.	Glass Dia."	NPT Size	A"	Price /Each
AD844	1/2	1/4	2 7/16	9.32
AD845	1/2	1/4	2 15/16	9.64
AD846	1/2	1/8	3 3/8	9.97
AD847	1/2	1/4	3 7/16	9.97
AB077	1/2	3/8	4	10.32
AD682	1/2	1/4	4 7/16	10.65
AD685	1/2	1/4	4 15/16	10.97
AD686	1/2	3/8	5	10.97
AD688	1/2	1/4	5 7/16	11.33
AD691	1/2	1/4	5 15/16	11.97
AD692	1/2	3/8	6	11.97
AB085	5/8	1/2	7 1/4	17.60
AB086	5/8	1/2	9 1/4	21.77
AB082	5/8	1/2	11 1/4	23.69
AD721	5/8	3/8	14 1/8	23.70
AB083	5/8	1/2	14 1/4	23.84



SHORT ELBOW

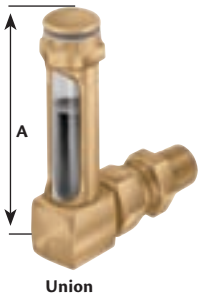
Model No.	Glass Dia."	NPT Size	A"	Price /Each
AD841	1/2	1/8	1 15/16	12.94
AD842	1/2	1/4	1 15/16	12.94
AD843	1/2	3/8	1 15/16	12.94
AD587	1/2	1/4	3 7/16	13.94
AD589	1/2	1/4	3 15/16	14.26
AD591	1/2	1/8	4 7/16	14.63
AD592	1/2	1/4	4 7/16	14.63
AD593	1/2	3/8	4 7/16	14.63
AD596	1/2	3/8	4 15/16	14.93
AB074	1/2	1/4	5 7/16	15.59
AD628	5/8	1/4	5 1/2	21.20
AD630	5/8	1/2	5 1/2	21.20



UNION COUPLING

Model No.	Glass Dia."	NPT Size	A"	Price /Each
AD852	1/2	1/4	2 7/16	15.53
AD853	1/2	1/4	2 15/16	15.93
AD659	1/2	1/4	3 7/16	16.23
AB091	1/2	3/8	3 7/16	17.24
AD662	1/2	3/8	3 15/16	17.54
AD665	1/2	3/8	4 7/16	17.88
AB092	1/2	1/4	5 7/16	17.87
AD672	1/2	1/4	6 7/16	18.56
AB234	5/8	1/2	5 7/16	26.13
AB235	5/8	1/2	8 11/16	28.82

Oil-Rite
CORPORATION

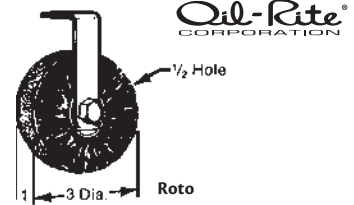
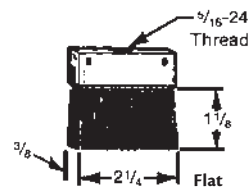


LUBRICATING EQUIPMENT

FLAT, ROUND OR ROTO BRUSHES

- Bristles for oil retention and good wear
- Crimped black nylon brushes available for greater wear resistance, longer life and recommended for high speed chains
- Crimped stainless steel brushes can be used for lubricating high temperature chains (above 250°F) as well as for cleaning

Model No.	A"	B"	Material	Price /Each
ROUND BRUSH				
AB034	1/2	3/4	Nylon	17.10
AB035	1/4	3/4	Stainless Steel	30.20
AB251	5/8	1 1/8	Nylon	12.08
AB252	5/8	1 1/8	Stainless Steel	16.38
AB253	1	1 3/4	Nylon	16.51
AB254	1	1 3/4	Stainless Steel	29.71
AB249	1 1/2	1 3/4	Nylon	18.15
AB250	1 1/2	1 3/4	Stainless Steel	37.06



Size"	Material	w/Holder Model No.	Price /Each	Without Holder Model No.	Price /Each
FLAT BRUSH					
2 1/4 x 3/8	Nylon	AB036	19.68	AD880	10.68
2 1/4 x 3/8	Stainless Steel	AB037	37.71	AD881	28.68
ROTO BRUSH					
3 x 1	Nylon	AB039	46.09	AD839	29.55
3 x 1	Stainless Steel	AB040	55.10	AD840	38.95

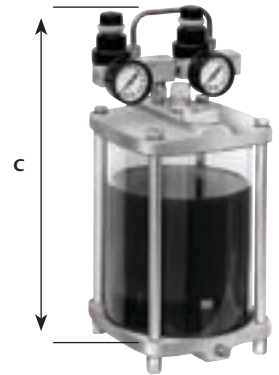
AIR OPERATED SPRAY DISPENSERS

- **Pressure:** 30 PSI maximum
- **Temperature:** 160°F maximum
- **Air capacity:** 5 CFM @ 20 PSI
- **Liquid capacity:** 3 GPH @ 10 PSI
- **Components:** External mounted
- **Maximum spray valves:** Four
- **Reservoir:** Clear acrylic
- **Seals:** Buna-N
- **Covers:** Aluminum alloy
- Air operated spray dispensers feed liquid to elevated, distant, or inaccessible points
- The amount of liquid sprayed is infinitely adjustable from a fine spray, invisible to the eye, to a coarse spray by adjusting the air pressure of the needle valve on the spray nozzle
- Any liquid that flows can usually be sprayed, up to 1000 SSU viscosity at 100°F
- For best performance, a second regulator with suitable air capacity is supplied to adjust the air pressure to spray valves
- Operation can be made automatic with two solenoid valves which can be activated by a motor drive or with a timer, allowing the valves to continually or momentarily apply a film of liquid



Model No.	Capacity	C"	Price/Each
AD848	1 qt.	8 3/4	589.60
AD849	1/2 gal.	12 1/4	639.97
AD850	1 gal.	17 1/4	739.41
AD851	2 gal.	30 1/4	788.51

The system consists of a central acrylic reservoir which dispenses liquid through one or more spray nozzles.



ADJUSTABLE AIR OPERATED PURGEX® PRECISION INJECTOR PUMPS

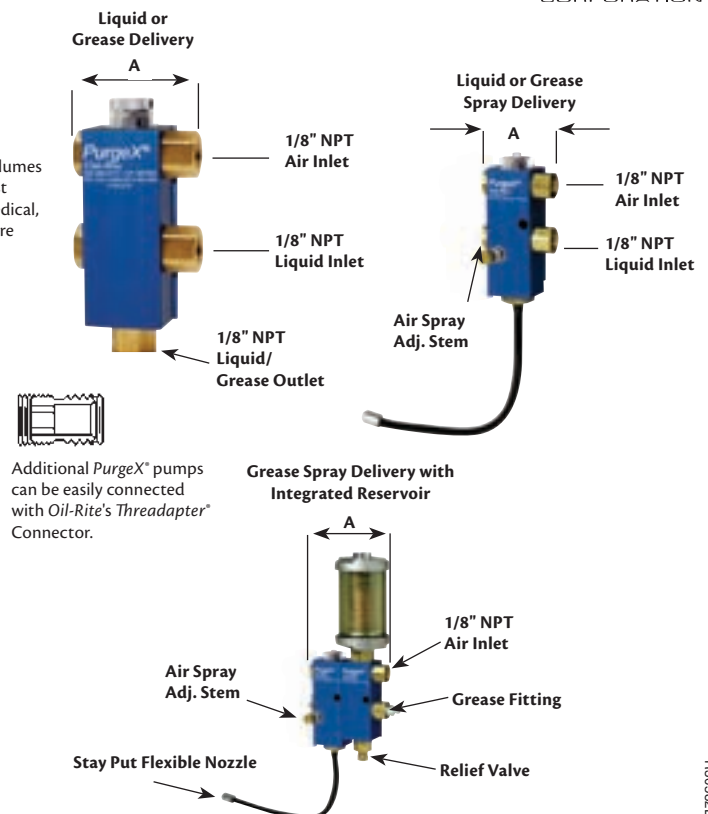
- **Pressure:** 40 to 125 PSI
- **Body:** Aluminum Alloy (other materials available)
- **Temperature range:** -15° F to 180° F
- **Seal Materials:** Buna-N and Viton® (other seals available) B 25:1
- **Liquid/Grease delivery per cycle:** 0 to .0012 cu. in., adjustable
- **Grease type:** Grade 00, 0, 1, 2
- **Piston dia. and stroke:** 0.125 dia. by 0.100 stroke (inches)
- **Nozzle:** 8" standard (other lengths available)

With ultra-fine adjustability, the single piece 1/8" piston allows precise metering of very small volumes of liquid or grease. The patented 1/8" version will help preserve liquid supplies, dispense high cost synthetic lubricants more efficiently and aid in pollution prevention. Industries such as food, medical, printing, chemical, agricultural, plastic, marine, industrial machinery, packaging and conveyors are only a few.

No. of Feeds	A"	Buna-N Seals Model No.	Price /Each	Viton® Seals Model No.	Price /Each
LIQUID OR GREASE DELIVERY					
1	2	AD732	84.93	AD750	97.98
2	3 1/4	AD733	169.88	AD751	195.99
3	4 1/2	AD734	254.81	AD752	293.97
4	5 3/4	AD735	339.74	AD753	391.98
5	7	AD736	424.69	AD754	489.95
6	8 1/4	AD737	509.62	AD755	587.96

No. of Feeds	A"	Buna-N Seals Model No.	Price /Each	Viton® Seals Model No.	Price /Each
LIQUID OR GREASE SPRAY DELIVERY					
1	1 31/32	AD738	93.71	AD756	106.78
2	3 7/32	AD739	140.60	AD757	213.53
3	4 15/32	AD740	210.83	AD758	240.22
4	5 23/32	AD741	281.11	AD759	320.30
5	6 31/32	AD742	351.35	AD760	400.37
6	8 7/32	AD743	421.65	AD761	480.45

No. of Feeds	A"	Buna-N Seals Model No.	Price /Each	Viton® Seals Model No.	Price /Each
GREASE SPRAY DELIVERY WITH INTEGRATED RESERVOIR					
1	3 7/32	AD744	227.32	AD762	267.85
2	4 15/32	AD745	266.77	AD763	318.26
3	5 23/32	AD746	306.14	AD764	363.74
4	6 31/32	AD747	345.56	AD765	409.19
5	8 7/32	AD748	384.96	AD766	454.66
6	9 15/32	AD749	424.37	AD767	500.11



STEEL FUNNELS WITH EXTENSION

- Galvanized steel funnel comes with a flexible extension
- 1/2" diameter hose for 1-pint model, 3/4" diameter for larger sizes

Model No.	Cap.	Top Dia."	Hose Spout Length"	Spout Dia."	Price /Each
NB027	1 pint	4 3/4	9	3/8	26.93
NB028	1 quart	5 7/8	9	1/2	31.11
NB025	1/2 gal.	7 5/8	10	1/2	36.75
NB026	1 gal.	8 7/8	12	1/2	41.57



STEEL FUNNELS WITH EXTENSION

- 8 3/4" diameter galvanized steel funnel with brass screen strainer
- 16" long flexible extension
- 15/16" spout diameter
- Capacity: 2 gallons
- Suitable for use with tractors

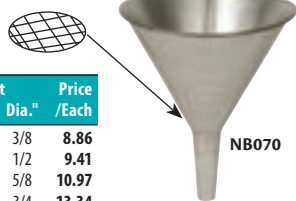
Model No. NB001
Price/Each \$53.53



STRAINER FUNNELS

- Tin strainer funnels have a built-in screen that prevents the flow of harmful particles into the liquid

Model No.	Cap.	Top Dia."	Body Ht."	Spout Ht."	Spout Dia."	Price /Each
NB069	1 pint	4 3/4	3 7/16	2 1/16	3/8	8.86
NB070	1 quart	5 3/4	4 5/16	2 3/8	1/2	9.41
NB067	1/2 gal.	7 1/2	5 5/8	2 11/16	5/8	10.97
NB068	1 gal.	8 3/4	6 1/2	3 1/2	3/4	13.34



UTILITY FUNNELS

- Lightweight tin and galvanized steel funnels available in capacities from 1 pint to 1 gallon

Cap.	Top Dia."	Body Ht."	Spout Ht."	Spout Dia."	Tin Model No.	Price /Each	Galv. Model No.	Price /Each
1 pint	4 3/4	3 7/16	2 1/16	3/8	NB077	5.56	NB031	11.66
1 quart	5 3/4	4 5/16	2 3/8	1/2	NB078	6.10	NB032	13.34
1/2 gal.	7 1/2	5 5/8	2 11/16	5/8	NB075	7.17	NB029	18.25
1 gal.	8 3/4	6 1/2	3 1/2	3/4	NB076	9.61	NB030	23.16

NB078

STEEL FUNNELS

- Suitable for use with tractors
- Galvanized steel funnel has 8 3/4" diameter and comes with a brass screen strainer
- Body height: 7 1/2"
- Spout height: 4 13/16"
- Spout diameter: 15/16"
- Capacity: 2 gallons

Model No. NA999
Price/Each \$25.20



LIQUID MEASURES

A. FLEXIBLE SPOUT

- Spill proof top
- Flexible spout makes it easy to reach difficult areas and hard to reach pouring angles
- Flexible spout length: 8"
- Spout diameter: 1/2"
- Available in tin, galvanized steel or stainless steel



B. OPEN TOP

- Available in tin, galvanized steel or stainless steel



NON-TILT STEEL FUNNELS

- Suitable for use with tractors
- Non-tilt feature allows funnel to remain upright when in use
- Galvanized steel funnel has 8 3/4" diameter, comes with brass screen strainer
- 15/16" spout diameter
- Capacity: 2 gallons

Model No. NB004
Price/Each \$31.11



Cap.	Tin Model No.	Dia." x H"	Price /Each	Galvanized Model No.	Dia." x H"	Price /Each	Stainless Model No.	Dia." x H"	Price /Each
A. FLEXIBLE SPOUT									
1 quart	NB082	4 1/4 x 4 3/4	38.79	NB035	4 x 5 7/16	51.29	NB056	4 x 5 7/16	66.14
1/2 gallon	NB079	4 1/4 x 8 7/8	41.19	NB033	5 x 7 1/4	55.84	NB052	4 x 7 1/4	77.64
1 gallon	NB081	6 x 9 3/4	44.86	NB034	6 x 9 3/4	59.65	NB054	6 x 9 3/4	88.72
B. OPEN TOP									
1 quart	NB087	4 1/4 x 4 3/4	32.31	NB038	4 x 5 7/16	44.02	NB061	4 x 5 7/16	55.92
1/2 gallon	NB083	4 1/4 x 8 7/8	29.23	NB036	5 x 7 1/4	39.51	NB057	4 x 7 1/4	73.02
1 gallon	NB085	6 x 9 3/4	39.10	NB037	6 x 9 3/4	55.84	NB059	6 x 9 3/4	77.64

CLEANFUNNEL™ SYSTEM

- Prevents dirt, dust and other contaminants from collecting on the inside funnel wall and eliminates the need for cleaning before use

Model No.	Colour	Size	Length"	Spout"	Price /Each
AA763	Orange	1 pt.	13.5	0.5	7.15
AA765	Dark Blue	1.25 qt.	10.5	0.75	16.12
AA766	Dark Green	1.25 qt.	8.5	1	16.12
AA767	Black	1.3 qt.	10.5	1.5	16.12
AA768	Bright Red	1.5 qt.	17 - flexible	0.5	16.12
AA769	Yellow	1.5 qt.	14.25 - flexible	0.75	16.12
AA770	Green	1.5 qt.	12.25 - flexible	1	16.12
AA771	Red	1.6 qt.	14 - flexible	1.5	16.12



CREATE-A FUNNEL™ FLOW CONTROL SYSTEM

THE FUNNEL THAT FITS EVERY FUNCTION!

100+ combinations!

- Ideal for automotive, small engine, household and marine applications
- Simplifies even difficult pouring jobs
- Lets you measure, mix and regulate flow
- Includes a thread adaptor for use on one gallon containers
- Fits new 5 qt. oil bottles, too



Comes complete with each of the following:

ConvertaValve™: Regulate flow from on to off, prevents spills and overflows.

MiniSpout: Add to system when low flow is needed. Outlet opening can be enlarged as desired.

Flex Extension: 12" flexible extension used for difficult pouring jobs.

Rigid Extension: 12" rigid extension used in system for difficult pouring jobs.

Thread Adaptor: For use with one-gallon container.

MeasOr Mix™ Funnel: Measure liquid before dispensing or accurately mix fluids.

Model No. AA800 Price/Each \$36.78

POLYETHYLENE FILTER FUNNELS

- Made of chemical resistant polyethylene
- Screen filter included



NC991

DIECAST ALUMINUM SCOOPS

- Bowl and handle cast in one piece for extra heavy-duty use
- Ideal for powders and granulated products



NG648

Model No.	Capacity	Bowl Length"	O.A. Length"	Price /Each
NG648	3/4 quart	7 3/4	11 1/4	12.64
NG649	1 quart	9	13	15.99
NG650	1 1/2 quart	10 1/2	15	25.75

Model No.	Dia."	Price/Each
YC564	5	6.06
NC991	9	9.86

CHEMICALS

BIG FOOT™ PRIMER/SEALER

- Specially formulated to increase adhesion and coverage of all Big Foot™ Anti-Slip Coatings except Acrylic Pedestrian Grade and Glow Coat
- For use on concrete, wood, tile, and other porous substrates
- Water-based
- 320 sq. ft. coverage
- Maximum temperature 140°F
- 120 minutes working time
- 3-6 hours, functional cure



LOCTITE

Model No.	Mfg. No.	Size	Colour	Price /Each
AA609	94142	1 gal.	Clear	219.44

BIG FOOT™ VEHICULAR GRADE

- Withstands even the heaviest rolling equipment traffic
- Resists liquids as harsh as jet fuels and hydraulic fluids
- Superior adhesion forms a solid bond to metal, concrete, and wood
- 40 sq. ft. coverage per gal.
- Max. temperature 140°F
- 120 minutes working time
- 12/72 hours, functional cure



LOCTITE

Model No.	Mfg. No.	Size	Colour	Price /Each
AA605	96221	1 gal.	Black	168.45

BIG FOOT™ HEAVY-DUTY PEDESTRIAN GRADE

- For areas with heavy pedestrian or light rolling traffic
- Ideal for ramps, walkways, locker rooms, stairs, and assembly areas
- 50 sq. ft. coverage per gal.
- Max. temperature 140°F
- 12/72 hours, functional cure



LOCTITE

Model No.	Mfg. No.	Size	Colour	Price /Each
AA603	96211	1 gal.	Black	130.03
AA604	96261	1 gal.	Grey	130.03

FIXMASTER® MAGNA-CRETE®

- Two-component, rapid setting concrete repair and grouting system
- Chemically resistant to most common liquids and chemicals
- For concrete, wood, glass, steel, and other construction materials
- 4.8 sq. ft. coverage
- Pourable
- Max temperature 2000°F
- 15 minutes working time
- 1-2 hours, functional cure



LOCTITE

Model No.	Mfg. No.	Size	Colour	Price /Each
AA748	95551	1 gal.	Grey	77.24
AD917	95555	5 gal.	Grey	157.17

FIXMASTER® DEEP POUR GROUT

- Aggregate-filled, epoxy system for pours up to 6" deep
- For self-leveling applications under rails and sole plates
- Bonds to steel, concrete, and itself
- Withstands high torque loading
- 660 cu.in. of coverage
- Pourable
- Maximum temperature 225°F
- 30 minutes working time
- 24 hours, functional cure
- Accepted for use in Canadian food processing facilities



LOCTITE

Model No.	Mfg. No.	Size	Colour	Price /Each
AA745	99545	5 gal.	Black	226.73

FIXMASTER® SUPER GROUT

- Designed for grouting up to 18" deep
- For self-leveling applications under rails and sole plates
- Typical dry service temperatures of -29°C to 107°C (-20°F to 225°F)
- 100% solids epoxy system that is non-shrinking,
- Chemical and corrosion resistant
- Stronger than concrete
- 620 cu. in. of coverage
- Withstands high torque loading
- Pourable
- Maximum temperature 225°F
- 285 minutes working time
- 24 hours, functional cure



LOCTITE

Model No.	Mfg. No.	Size	Colour	Price /Each
AC336	33510	5 gal.	Red	324.53

MULTI-PURPOSE EPOXY

- VOC: 2.27 lb/gal. (272 g/L)
- Modified epoxy phenalkamine, formulated specifically for immersion and atmospheric service in industrial and marine environments
- Can be applied at temperatures as low as 0°F
- Provides exceptional performance in corrosive environments
- Surface tolerant—damp surfaces
- Chemical resistant
- Acceptable for use in federally-inspected meat and poultry plants



KRYLON INDUSTRIAL

Model No.	Description	Colour	Size	Price /Each
AD042	-	White	1 gal.	104.40
AD044	-	Haze Grey	1 gal.	96.06
AD045	Hardener		946 ml	29.11

* 4 to 1 ratio paint to hardener

FIXMASTER® FLOOR FILL

- Trowelable
- For repairing and resurfacing cracks in concrete floors
- Bonds to old and new concrete and provides greater strength and chemical resistance
- 133 cu.in. of coverage
- Semi-pourable
- Max temperature 225°F
- 40 minutes working time
- 24 hours, functional cure



LOCTITE

Model No.	Mfg. No.	Size	Colour	Price /Each
AC362	99361	10 lbs.	Grey	97.65
AA747	99365	40 lbs.	Grey	273.02

WATER-BASED SINGLE COMPONENT ACRYLIC FLOOR COATING

- General purpose
- 100% acrylic
- Low odour
- For exterior/interior use
- Dries rapidly to a tough, alkali resistant finish which will withstand hard wear, abrasion, grease, oils, and cleaning equipment
- For use over prepared concrete and wood floors, steps, stairwells, aislesways, or previously painted floor surfaces in sound condition
- Not recommended for areas subject to hot tire pickup



KRYLON INDUSTRIAL

Model No.	Size	Colour	Price /Each
AC603	1 gal.	Grey	57.31
AC605	5 gal.	Deck grey	285.13
AC606	5 gal.	Grey	286.00

SPOTCHECK® AEROSOLS

SKL-SP1 SPOTCHECK® PENETRANT

- Post emulsifiable penetrant
- Most widely used, general purpose
- Solvent removable

SKD-S2 SPOTCHECK® DEVELOPER

- Non-chlorinated solvent developer
- Meets major requirements for special alloy and nuclear applications

SKC-S SPOTCHECK® CLEANER

- Non-chlorinated cleaner/remover
- Recommended general purpose
- Meets major requirements for special alloy and nuclear applications



PREMIUM LEAK DETECTORS

- Identifies gas and air leaks quickly
- Bubbles when exposed to gas leaks
- Meets or exceeds strict Telco performance specs
- No ethylene glycol
- Non-toxic, non-hazardous
- All-weather formula
- Non-flammable
- Available in ready-to-use (16 oz.) and concentrated formula (1 gal.)



FORM-A-THREAD®

STRIPPED THREAD REPAIR KIT

- Single component, gun-grade caulk that bonds, seals and waterproofs up to 180°F
- Adheres to concrete, masonry, glass, plastics, wood, aluminum and most other metals
- Maximum temperature resistance of 300°F
- Colour: Grey



MAGNAFLUX®

Model No.	Mfg. No.	Description	Price /Each
NP701	01-5149-68	SKL-SP1 Penetrant	16.53
NP702	01-5352-68	SKD-S2 Developer	16.33
NP703	01-5750-68	SKC-S Cleaner	13.35



Model No.	Mfg. No.	Size	Price /Each
AD054	C61016	16 oz	9.75
AD055	C61006	1 gal.	69.49

LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA458	28654	4.8 ml	16.56

FIXMASTER® RAPID RUBBER REPAIR URETHANE

Our premium quality, belt repair product is designed to repair conveyor belts and other damaged rubber equipment quickly and easily. Repairs will have the same durability and flexibility as the belt. The 400 ml cartridge requires the use of a *Rapid Rubber Repair Gun*. The 400 ml kit contains a 400 ml cartridge, etching agent, cleaner, brushes, and plastic trowels.

- 88 in.² of coverage, at 1/4" thickness
- 180°F maximum operating temperature
- 1300 PSI adhesive tensile strength
- 1 minute working time
- Functional cure in 2 hours
- Colour: Black



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC323	96677	400 ml kit	215.67

FIXMASTER® RAPID RUBBER REPAIR GUNS

Use to dispense *Fixmaster® Rapid Rubber Repair* 400 ml cartridges. Gun is hand-held and operates manually.

Model No. AC342
Mfg. No. 39635
Price/Each \$191.60

LOCTITE



FIXMASTER® RAPID RUBBER REPAIR STATIC MIXERS

For mixing and dispensing *Rapid Rubber Repair* in 400 ml cartridges. Packaged 6 per bag.

Model No. AC366
Mfg. No. 39633
Price/Each \$29.99

LOCTITE



PIPE REPAIR KITS

- Urethane impregnated fibreglass tape, activated by water, for reliable, temporary repairs of metal, plastic, and composite pipes
- Cures in 30 minutes
- Includes: *Loctite® Fixmaster® Metal Magic Steel™* epoxy stick, urethane impregnated fibreglass tape, and gloves



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA641	96321	2" x 6' tape	49.65

Can't find what you're looking for?
Call us today!



CHEMICALS

FIXMASTER® STEEL PUTTY

- Steel filled, non-sagging, two-part epoxy that cures to a metal-like finish for rebuilding or repairing metal parts
- 0.3 ft.² coverage, at 1/4" thickness
- 225°F maximum operating temperature
- 4900 PSI tensile strength
- 30 minutes working time
- Functional cure in 6 hours
- Colour: Grey



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC341	99913	1 lb. kit	45.17

FIXMASTER® ALUMINUM PUTTY

- Rebuilds and repairs aluminum equipment, forming a non-rusting finish
- 0.5 ft.² coverage, at 1/4" thickness
- 225°F maximum operating temperature
- 4000 PSI tensile strength
- 20 minutes working time
- Functional cure in 6 hours
- Colour: Aluminum



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC334	97463	1 lb. kit	61.46

FIXMASTER® STAINLESS STEEL PUTTY

- Forms a non-rusting, very hard, durable finish on damaged stainless steel surfaces
- 0.25 ft.² coverage, at 1/4" thickness
- 225°F maximum operating temperature
- 4600 PSI tensile strength
- 20 minutes working time
- Functional cure in 6 hours
- Colour: Grey



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC332	97443	1 lb. kit	74.89

FIXMASTER® STEEL LIQUID

- Steel filled
- Pourable and self-leveling
- Recommended for casting into hard to reach areas, anchoring and leveling, and forming molds and fixtures
- 13 in.³ coverage, at 1/4" thickness
- 225°F maximum operating temperature
- 6000 PSI tensile strength
- 25 minutes working time
- Functional cure in 6 hours
- Colour: Grey



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC340	97483	1 lb. kit	47.26

FIXMASTER® ALUMINUM LIQUID

- Two-part, pourable epoxy system heavily reinforced with aluminum powder
- For casting and repairing of aluminum parts, and for making molds and fixtures
- 17 in.³ coverage, at 1/4" thickness
- 200°F maximum operating temperature
- 6000 PSI tensile strength
- 20 minutes working time
- Functional cure in 6 hours
- Colour: Aluminum



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC333	97453	1 lb. kit	66.58

FIXMASTER® HIGH PERFORMANCE EPOXY

- For forming permanent, water-resistant bonds in production and maintenance applications
- 180°F temperature resistance
- 3800 PSI adhesive tensile shear
- 30 minutes working time
- Fixtures in 8 hours
- Full cure in 24 hours
- Colour: Tan



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA740	99393	1 oz.	13.73

FIXMASTER® FAST CURE EPOXY MIXER CUPS

- Excellent chemical resistance
- Fills porosities and can be used to build up worn parts
- For bonding glass, hard plastics, rubber, and metal
- 180°F temperature resistance
- 2000 PSI adhesive tensile shear
- 5 minutes working time
- Fixtures in 10 minutes
- Full cure in 12 hours
- Colour: Grey



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC124	21425	10 x 12 fl. oz.	30.27
AC125	21426	10 x 1 oz.	90.38

FIXMASTER® FAST CURE POXY PAK™ EPOXY

- Bonds virtually any material to repair, fill, and seal holes, cracks, and worn surfaces
- 300°F temperature resistance
- 2300 PSI adhesive tensile shear
- 1 minute working time
- Fixtures in 4-6 minutes
- Full cure in 1 hour
- Colour: Clear



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA739	134007	1 oz.	5.85

FIXMASTER® FAST SET STEEL PUTTY

- Faster setting version of the Loctite® Fixmaster® steel putty
- Sets in 3 minutes



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AD012	39917	1 lb.	53.07

ABS PREMIUM CEMENT

- Medium-bodied yellow coloured cement for ABS pipe and fittings up to 6" diameter
- For all types and grades of ABS pipe and fittings for DWV
- For all non-pressure applications
- Recommended application temperature: 40°F to 100°F
- Meets ASTM D-2235
- CSA approved

Oatey®



Model No.	Description	Size	Price /Each
AB417	ABS Premium Cement Yellow	473 ml	8.94
AB418	ABS Premium Cement Yellow	946 ml	14.87

ABS STANDARD CEMENT

- Medium-bodied yellow coloured cement for use on ABS pipe and fittings up to 6" diameter
- For all non-pressure applications
- For all types and grades of ABS pipe and fittings for DWV
- Meets ASTM D-2235
- CSA approved

Oatey®



Model No.	Description	Size	Price /Each
AB419	ABS Standard Cement Yellow	473 ml	8.49
AB420	ABS Standard Cement Yellow	946 ml	14.45

PVC HEAVY-DUTY GREY CEMENT

- Heavy-bodied grey coloured cement for use on PVC pipe and fittings up to 12" diameter for Sch. 40 and Sch. 80
- Thick formula fills gaps in large diameter pipe and fittings
- Recommended for all grades and types of PVC pipe and fittings, potable water, pressure pipe, gas, conduit and DWV
- Recommended application temperature 40°F to 100°F
- Meets ASTM D-2564
- CSA approved

Oatey®



Model No.	Description	Size	Price /Each
AB423	PVC Heavy-Duty Grey	473 ml	12.47
AB424	PVC Heavy-Duty Grey	946 ml	20.86

PVC MEDIUM-DUTY GREY CEMENT

- Medium-bodied grey coloured cement for use on PVC pipe and fittings up to 6" diameter for Sch. 40 and Sch. 80
- Recommended for all grades and types of PVC pipe and fittings, potable water, pressure pipe, gas, conduit and DWV
- Recommended application temperature: 40°F to 100°F
- Meets ASTM D-2564
- CSA approved

Oatey®



Model No.	Description	Size	Price /Each
AB421	PVC Medium Grey	473 ml	9.76
AB422	PVC Medium Grey	946 ml	16.72

PLUMBER'S PUTTY

- Stainless fixture setting compound for setting frames, faucets, strainer baskets, etc.
- Stays flexible and will not crack or shrink
- Soft pliable material is easy to work with
- Not for use on marble or plastic
- Meets Military Spec. TT-P-1536A

Oatey®



Model No.	Description	Size	Price /Each
AB436	Putty – Plastic Container	14 oz.	2.27

CLEAR PRIMER

- A clear aggressive primer for use on PVC and CPVC pipe and fittings
- All schedules and all diameters
- Removes all surface dirt, grease and grime as well as softens pipe in preparation for solvent cement
- Meets ASTM F-656

Oatey®



Model No.	Description	Size	Price /Each
AB434	Clear Primer – NSF Listed	473 ml	14.65
AB435	Clear Primer – NSF Listed	946 ml	20.44

GREAT BLUE™ PIPE JOINT COMPOUND

- All the benefits of a Teflon® based thread sealant without the mess
- Flexible blue, non-hardening, non-separating, non-toxic paste, no odour, easy clean-up
- Withstands up to 3000 PSI on gases from –50° to 400°F and 10 000 PSI on liquids from –50° to 500°F
- Lubricates and seals threads on water, natural gas, steam, air lines, caustics and dilute acids
- Use on PVC CPVC, ABS, polyethylene, polypropylene, iron, steel, copper or brass threads up to and including 2"
- Meets CAN/UL standard S642-M87

Oatey®



Model No.	Description	Size	Price /Each
AB430	Great Blue™ Pipe Joint Compound	8 fl. oz.	11.58
AB431	Great Blue™ Pipe Joint Compound	16 fl. oz.	17.90

PLASTIC WOOD® WOOD FILLERS

- Fills small holes and cracks in wood and hardboard
- Waterproof, takes nails and screws
- Can be stained or painted
- Fast drying

LEPAGE®



Model No.	Size	Price /Each
AC179	250 ml	7.98
AC180	500 ml	14.05
AC181	946 ml	26.92

CHEMICALS

FASTSTEEL®



- Molds like clay, hardens like steel
- Repair ferrous and aluminum metals
- Rebuild engine parts, fill cracks and seal leaks
- Form nuts and bolts, repair stripped threads
- Repair metal tools, equipment, pipes, appliances and auto bodies
- Will not rust or shrink

Model No.	Size	Price /Each
AA261	114 g	16.25

AQUAMEND®



- Repairs to damp wet areas are done quickly and easily
- Rebuild holes in fibreglass, metal and wooden boat decks and hulls
- Repair leaking gaskets, water tanks, spas, hot tubs, pools, etc.
- Excellent adhesion to PVC, will not yellow when exposed to UV and cures to fibreglass white colour

Model No.	Size	Price /Each
AA266	114 g	15.93

INSTACRETE™



- Seal tie-rod holes
- Ideal for anchoring
- Repair of chipped concrete floors, curbing and steps
- Instant concrete repair
- Safe and solvent free
- Cures to a concrete colour
- Repair and rebuild decorative concrete trim, moldings, statues, birdbaths, and other concrete lawn ornaments

Model No.	Size	Price /Each
AA268	114 g	15.93

REPAIRITQUICK®



- Repair loose or cracked wall and floor tiles
- Patch chipped concrete, bricks and masonry
- Electrical use in place of tape or plastic connector
- Fabricate small parts and mend holes
- Attach fixtures, machines, tags and signs
- 1001 household and industrial purposes

Model No.	Size	Price /Each
AA267	114 g	15.93

QUICKCOPPER®



- Repairs copper, brass, bronze and other non-ferrous metals
- Repair plumbing leaks in 15 minutes
- Bonds to damp and slow leaking surfaces
- Seals leaks in pipes, elbows, joints, sleeves, traps and drains

Model No.	Size	Price /Each
AA264	114 g	15.93

QUICK TITANIUM®



- Hand kneadable, for high temperature applications
- Consistency provides a "no mess" gap filling application without the use of tools
- No solvents
- Low odour
- Larger pot life
- Service Temperature -40°F to 500°F

Model No.	Size	Price /Each
AB482	114 g	17.07

QUICKWOOD®



- Fill holes, scratches, gouges, cracks, dry rot and knot holes
- Repair furniture, molding and frames
- Reshape woodcarvings, remold wood knobs and handles
- Can be sanded, sawed, painted or stained
- Interior and exterior applications

Model No.	Size	Price /Each
AA265	57 g	15.93

QUICKPLASTIK®



- Ideal for repairs to automotive parts, plastic trim and appliances
- Seals leaks and bonds to major types of plastic approved for plumbing pipe
- Excellent for plastic outdoor furniture

Model No.	Size	Price /Each
AA263	114 g	15.93

QUICKALUMINUM®



- Many industrial and home maintenance applications: storm doors, aluminum tanks, aluminum boats, refrigeration units, recreational vehicles, aluminum tubing and aluminum castings

Model No.	Size	Price /Each
AA262	114 g	15.93

ULTRA SEAL LOW EXPANDING STRAW FOAM

- A one component polymeric insulating foam/sealant that cures to a rigid seal which will allow for normal movement between building components
- Fills and seals gaps, cracks and holes within most types of construction materials to eliminate drafts
- Ideal for sealing around wall outlets, sill plates, foundation walls, behind baseboards, windows and doors
- Colour: White



Model No.	Size	Price /Each
AC612	12 oz.	9.15
AC613	24 oz.	21.30

ULTRA SEAL PF-100 GUN FOAM

- Quality moisture-curing polyurethane foam that seals, insulates, sound-deadens and bonds many common building materials together
- Fills gaps in new and retrofit construction such as around windows, doors and wall corners which are difficult to draft stop and insulate
- Seals out radon, drafts, gases, odours, water, dust, sound and pests
- AC608 professional dispensing gun



Model No.	Size	Colour	Price /Each
AC609	24 oz.	White	19.26
AC610	32 oz.	White	28.60
AC611	31 oz.	Black	32.17
AC608	Gun		320.95

URETHANE SEALANT

- Single component, gun-grade caulk
- Bonds, seals, and waterproofs up to 180°F
- Adheres to concrete, masonry, glass, plastics, wood, aluminum and most other metals



LOCTITE

Model No.	Mfg. No.	Size	Colour	Price /Each
AA724	39916	10.2 oz.	Grey	11.41

CAULKING GUNS

STANDARD RATCHET TYPE

This improved caulking gun is recommended for medium and light consistency caulks, sealants and adhesives.

Its sturdy steel construction will ensure long lasting use.



Model No.	Size	Price/Each
TX604	300 ml	5.40

E-Z THRUST[®] HEX-ROD PARALLEL FRAME

Uniquely designed for professionals to develop a powerful thrust ratio, making extension of stiff caulks and sealants easy and comfortable. The extra long trigger and pivot above the post on rod delivers

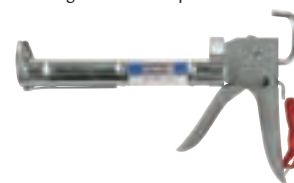
3 times more thrust power than comparable guns. Other features include E-Z Thrust[®] mechanism, seal-puncture tool and spout cutter with ladder hook.



Model No.	Size	Price/Each
TZ936	300 ml	10.71

INDUSTRIAL ZINC - CHROMATE PLATED

This *Super Hex Smooth Rod* caulker is uniquely designed for professionals to develop a powerful thrust ratio, making the extrusion of stiff caulks and sealants easy and comfortable. Extra-long trigger and pivot above the piston rod delivers 3 times more thrust power than comparable guns. Other features include built-in spout cutter, seal-puncture tool, convenient D-ring and wrist strap.



Model No.	Size	Price/Each
TZ939	300 ml	19.26

WEXFORD & CHILTON

Compact size skeleton guns that fit in your tool box. Designed for comfortable operation over long periods of time. Smooth hexagonal drive rod and precision catch-plate provide effortless action.

Finished with a corrosion-resistant orange epoxy powder coat. Barrel rotates 360° (model AC132).



Model No.	Description	Size	Price/Each
AC130	Wexford	300 ml	9.03
AC132	Chilton	300 ml	48.05

SUPERIOR PROFESSIONAL QUALITY

Ratchet type caulking guns are recommended for extruding all grades of caulks, sealants and adhesives from light to heavy consistencies. Equipped with built-in spout cutter, seal-puncture tool and ladder hook.



Model No.	Size	Price/Each
TX606	300 ml	10.21
TX607	850 ml	20.13

SUPER INDUSTRIAL GRADE

This chrome plated caulker is designed for the professionals who prefer ratchet guns. Will outlast, outperform all other ratchet guns, and is engineered to withstand heavy use. Equipped with ladder hook, built-in spout cutter, seal-puncture tool and convenient D-ring and wrist strap.



Model No.	Size	Price/Each
TX610	300 ml	24.32

SUPER RATCHET TYPE

Professional quality *Drip-Free Spring Clip Drive™* ratchet type caulking gun is recommended for extruding all grades of caulks, sealants and adhesives from light to heavy consistency. Also equipped with built-in spout cutter and seal-puncture tool.



Model No.	Size	Price/Each
TZ938	300 ml	12.27

DRIP-FREE E-Z THRUST[®] HEX ROD PARALLEL FRAME

The patented *Adjust-A-Stroke™* mechanism allows for easier or faster extrusion of heavy or light viscosity materials in warm or cold weather at the turn of a knob. In the E-Z position, you will develop a 10:1 thrust ratio. The *Dripless on Demand™* feature allows you to instantly stop the caulk flow by quickly and fully releasing the trigger. Other features include built-in spout cutter, seal puncture tool, ladder hook, *Drip-Free Spring Clip™*, E-Z load open front cap and cartridge retainer spring.



Model No.	Size	Price/Each
TZ937	300 ml	14.94

AIR CAULKING GUNS

Caulk Master[®]

Designed to apply low and medium viscosity materials. Lightweight, high-impact, non-corrosive *Valox™* construction. 3 foot hose with 1/4" NPT fitting. 70 PSI max.

STANDARD CARTRIDGE GUN

Uses standard 10.3-oz. cartridges.

Model No. WJ072
Mfg. No. PG100
Price/Each \$68.58

MULTI CARTRIDGE GUN

Uses both 10.3 and 30-oz. cartridges.

Model No. WJ073
Mfg. No. PG151
Price/Each \$124.10



CHEMICALS

SUPERFLEX™ BLUE RTV SILICONE ADHESIVE SEALANT

- Cures to a tough, flexible rubber
- "Formed in Place" gaskets resist shrinking, cracking and migrating
- Fills gaps to 0.25"
- Coats pre-cut gaskets
- Low volatility
- Tack free in 30 min. 24 hrs., full strength
- Temperature range -65°F to 500°F (-54°C to 260°C) intermittent
- Colour: Blue



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC198	30560	80 ml tube	5.74
AC199	30533	300 ml cartridge	10.21

PREMIUM 100% RTV SILICONE SEALANT

- Excellent adhesion to non-porous materials
- Provides a watertight seal
- Highly, permanently flexible
- Will not crack, crumble or shrink
- Resists moisture and mildew
- Interior/exterior use
- Size: 10 oz.



Model No.	Colour	Price /Each
AD892	Clear	6.48
AD893	White	6.48
AD894	Aluminum	6.48
AD895	Black	6.48

SUPERFLEX™ SILICONE ADHESIVE SEALANT

- General purpose, one part silicone adhesive, cures at room temperature to form a tough rubber seal
- Will not slump in overhead or vertical applications
- Withstands extreme temperature cycling, U.V. light and ozone
- Cannot be painted
- Tack free in 30 min. 24 hrs., full strength
- Temperature range -65°F to 450°F (-54°C to 232°C) intermittent



LOCTITE

Model No.	Mfg. No.	Size	Price Colour /Each
AC157	59330	80 ml tube	Black 5.30
AC158	59375	300 ml cartr.	Black 10.41
AC196	59530	80 ml tube	Clear 5.30
AC197	59575	300 ml cartr.	Clear 10.02
AC121	59430	80 ml tube	White 5.74
AC113	59475	300 ml cartr.	White 11.27

3006™ ALL PURPOSE ADHESIVE CAULK

- High quality acrylic latex formulation with silicone additives
- Cured caulk resists rust and mildew
- Applies a smooth, professional bead without gaps or bubbles
- Maintains excellent flexibility and elasticity
- Excellent colour retention
- Can be painted or stained after curing
- Interior/exterior use
- Exceeds ASTM Spec. C-834
- Size: 10 oz.



Model No.	Colour	Price /Each
AD884	White	3.98
AD885	Brown	4.39
AD886	Almond	4.39
AD887	Bronze	3.56

SUPERFLEX™ RED HIGH TEMP RTV SILICONE

- Resists aging, weather and thermal cycling without shrinking, cracking or hardening
- Fills gaps to .25"
- Tack free in 30 min. 24 hrs., full strength
- Resist temperatures to 600°F (315°C) intermittent
- Colour: Red



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC166	59630	80 ml tube	6.40
AC167	59675	300 ml cartridge	11.08

598™ BLACK RTV SILICONE GASKET MAKER

- Adheres well to oily surfaces
- Low odour and volatility
- Fills gaps to 0.25"
- Forms tough, flexible gaskets directly on the flange
- Resistant to most chemicals and solvents
- Non-corrosive
- Tack free in 30 min. 24 hrs., full strength
- Withstands temperatures to 500°F (260°C) intermittent
- Colour: Blue



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA488	59830	70 ml tube	9.11
AC195	59875	300 ml cartridge	19.44

CONTRACTOR RTV SILICONE SEALANT

- Made with 100% silicone
- Flexible watertight seal
- Minimal shrinking
- Interior/exterior use
- Size: 10 oz.



Model No.	Colour	Price /Each
AD890	Clear	4.76
AD891	White	4.76

PAINTER'S PREFERRED™ CAULK

- High quality acrylic latex formulation
- Cured caulk resists rust and mildew
- Applies a smooth, professional bead without gaps or air bubbles
- Can be painted when thoroughly dry
- Meets performance requirements of ASTM C-834 for extension recovery and adhesion
- Colour: White



Model No.	Size	Price /Each
AD882	10 oz.	2.69

ZENITH®
Safety Products

We guarantee your safety!

587™ BLUE RTV SILICONE GASKET MAKER

- Adheres well to oily surfaces
- Low odour and volatility
- Fills gaps to 0.25"
- Forms tough, flexible gaskets directly on the flange
- Resistant to most chemicals and solvents
- Non-corrosive
- Tack free in 30 min. 24 hrs., full strength
- Withstands temperatures to 500°F (260°C) intermittent
- Colour: Blue



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA489	58730	70 ml tube	8.78
AC201	58775	300 ml cartridge	19.44

518™ GASKET ELIMINATOR® FLANGE SEALANT

- Forms a flexible, solvent-resistant seal that will not tear or decay
- Seals to 300°F and fills gaps to 0.050"
- For flexible metal including aluminum
- 0.010" unprimed gap fill, 0.020" primed gap fill
- -65°F to 300°F
- Cures 4 to 24 hours (unprimed), 30 mins. to 4 hrs. (primed)
- Colour: Red



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA490	51831	50 ml	17.32
AB367	51845	300 ml	60.78

515™ GASKET ELIMINATOR® FLANGE SEALANT

- Flexible gaskets for rigid machined flanges with less than 0.050" gap
- Flexes with flanges that move in service
- For flexible applications
- 0.010" unprimed gap fill, 0.020" primed gap fill
- -65°F to 300°F
- Cures 1 to 12 hours (unprimed), 15 mins. to 2 hrs. (primed)
- Colour: Purple



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC088	51531	50 ml	17.32
AC089	51580	300 ml	60.78

QUICKSTIX™ 548™ GASKET ELIMINATOR® FLANGE SEALANT

- Formulated with excellent oil resistance for rigid flange sealing
- Ideal for on-the-spot repairs
- For use on a variety of metal surfaces, including aluminum
- Seals up to 300°F (149°C)
- Fills gaps to 0.010"



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AB938	39152	18 g	19.38

565™ PST® CONTROLLED STRENGTH THREAD SEALANT

- General purpose instant sealant for tapered and straight/tapered fittings
- Controlled strength for ease of disassembly
- Withstands temperatures to 300°F
- Colour: White



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA540	56531	50 ml	15.70
AA541	56541	250 ml	56.66

567™ PST® HIGH TEMPERATURE THREAD SEALANT

- Locks and seals tapered pipe threads and fittings, including high pressure applications
- Disassembles with hand tools
- Withstands temperatures to 400°F
- Colour: White



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA543	56747	50 ml	15.70
AA431	56765	250 ml	57.79

592™ PST® SLOW CURE THREAD SEALANT

- Locks and seals threaded fittings
- Parts may be repositioned up to 24 hours after application
- Withstands temperatures to 400°F
- Colour: White



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC100	59231	50 ml	16.18
AB349	59241	250 ml	59.49

PST® 561™ THREAD SEALANT STICK WITH TEFLON®

- Immediate low pressure sealing to 100 PSI
- Protects threads from rust and corrosion
- Exceptional fluid compatibility and chemical resistance
- Will not contaminate or clog lines
- Eases disassembly
- Seals all types of metal tapered threads and fittings to NPT specs
- For chemical processing, waste water treatment, and automotive
- Temperature resistance 300°F (150°C)
- Colour: White



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AB652	37127	19 g	11.90

545™ THREAD SEALANT HYDRAULIC/ PNEUMATIC SEALANT

- Liquid sealant for locking and sealing high pressure, fluid power systems with tapered fittings
- No fillers and will not foul valves or fluid filtering systems
- For locking and sealing hydraulic and pneumatic fittings, servomechanisms, and fine-filtration systems
- Specially formulated to offer lubricity for easy assembly
- Withstands temperatures to 300°F
- Colour: Purple



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC357	32429	10 ml	11.55
AA542	54531	50 ml	35.02

CHEMICALS

609™ GENERAL PURPOSE RETAINING COMPOUND

- Low viscosity retaining compound that bonds rigid metal assemblies
- Ideal for gap distances up to 0.005"
- Fixtures in 10 minutes, full in 24 hrs.
- Provides a shear strength of 3000 PSI after 24 hours
- Withstands temperatures to 300°F
- Locks keys and splines - eliminates backlash in worn assemblies
- Locks bushings and sleeves in housings and on shafts
- Augments press fits
- Colour: Green



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA538	60921	10 ml	10.75
AA539	60931	50 ml	35.01

620™ HIGH TEMPERATURE RETAINING COMPOUND

- High temperature, high viscosity retaining compound
- Ideal for gap distances up to 0.015"
- Fixtures in 30 minutes, full in 24 hrs.
- Provides a shear strength of 3800 PSI on steel
- Withstands temperatures to 450°F
- Seals against leakage
- For retaining pins and sealing threads in steam platens and retaining valve seats
- Colour: Green



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA457	62015	10 ml	12.54
AC102	62040	50 ml	35.01

641™ CONTROLLED STRENGTH RETAINING COMPOUND

- For cylindrical parts that require disassembly
- Ideal for gap distances up to 0.008"
- Fixtures in 20 minutes, full in 24 hrs.
- Provides a shear strength of 1700 PSI
- Withstands temperatures to 300°F
- Colour: Yellow



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC355	28802	10 ml	12.54
AA546	21458	50 ml	35.01

660™ QUICK METAL® PRESS FIT REPAIR RETAINING COMPOUND

- Creamy, non-running adhesive/sealant
- Repairs worn machine parts
- Restores correct fit to mating assemblies
- Ideal for gap distances up to 0.020"
- For worn shafts and housings, bearing spinouts, keyways, and splines
- Fixtures in 20 minutes, full in 24 hrs.
- Shear strength of 3300 PSI on steel
- Withstands temperatures to 300°F
- Colour: Silver



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC103	66010	6 ml	10.50
AC104	66040	50 ml	36.78

QUICKSTIX™ 668™ RETAINING COMPOUND

- Used for bonding non-threaded, cylindrical metal assemblies with gaps up to 0.005" (0.13 mm)
- Prevents fretting and corrosion of metal assemblies up to 400°F (204°C)



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AB937	39148	19 g	28.04

INSULATED & SEALING WRAP

- Non-sticky, self fusing, multipurpose wrap
- Withstand extreme conditions: -65°F to 500°F
- Tensile strength up to 700 PSI and dielectric strength up to 400 VPM
- UV, saltwater, fuel and acid resistant



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AD155	1212164	1" x 10 ft. roll	9.31

TEFLON® THREAD SEALANT TAPE

- For sealing threaded pipe joints
- Easy disassembly even after years of service
- Works under pressures up to 2000 PSI and temperatures from -450°F to 550°F
- 144 rolls per case



Markal®
High Performance Industrial Markers

Model No.	Size"	Price /Each
PA684	1/2 x 520	1.25
PA685	3/4 x 520	2.91

290™ WICKING GRADE THREADLOCKER

- For pre-assembled bolts up to 1/2" (12 mm)
- Penetrates threads by capillary action
- Secures set screws and other assemblies after settings are completed
- Localized heating and hand tools are needed for disassembly
- For preassembled fasteners, instrumentation screws, electrical connectors and carburetors
- Withstands temperatures to 300°F
- Torque: 85/250 in.-lbs.
- Fixtures in 6 minutes, full in 24 hrs.
- Colour: Green



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA454	29021	10 ml	9.93
AA455	29031	50 ml	35.02
AA024	29041	250 ml	130.31

THREADLOCKER STICKS



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
248™ MEDIUM STRENGTH - BLUE			
AB649	37087	19 gr.	25.99
AB648	37684	9 gr.	12.30
268™ HIGH STRENGTH - RED			
AB651	37686	19 gr.	25.99
AB650	37685	9 gr.	13.29

2760™ HIGH STRENGTH THREADLOCKER

- Lock and seal threaded fasteners in applications that require continuous temperature resistance up to 650°F (range: -65°F to 650°F or -54°C to 343°C)
- Particularly fast curing, eliminating the need for priming, develops usable strength within one hour
- Particularly suitable for heavy duty applications where resistance to heavy shock, vibration and stress levels are required
- Best for inactive metal part (metals that do not rust)
- For fasteners up to 3/4"
- Fixtures in 30 minutes, full in 24 hrs.
- Colour: Blue



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AD187	32526	10 ml	14.49
AD821	32525	50 ml	42.93

262™ HIGH STRENGTH THREADLOCKER

- For fasteners up to 3/4" (20 mm) dia.
- High lubrication for easy assembly
- Excellent for preventing rust and corrosion in extreme chemical/ environmental conditions
- For all fasteners that must withstand heavy shock, vibration, or extreme environmental or chemical conditions
- Withstands temperatures to 300°F
- Torque: 190/275 in.-lbs.
- Fixtures in 5 minutes, full in 24 hrs.
- Colour: Red



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA452	26221	10 ml	9.99
AA453	26231	50 ml	31.50
AA741	26241	250 ml	111.69

272™ HIGH TEMP./HIGH STRENGTH THREADLOCKER

- Recommended for bolts up to 1 1/2" (36 mm) in diameter
- Provides a fast cure on most surfaces including "as received" fasteners
- Heat and hand tools are required for disassembly
- Withstands temperatures to 450°F
- Torque: 200/220 in.-lbs.
- Fixtures in 30 minutes, full in 24 hrs.
- Colour: Red



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA552	27240	50 ml	35.02
AC324	27270	250 ml	130.31

263™ HIGH STRENGTH THREADLOCKER

- Designed for the permanent locking and sealing of threaded fasteners
- Product cures when confined in the absence of air between close fitting metal surfaces and prevents loosening and leakage from shock and vibration
- Ideal for heavy-duty applications such as studs into motor housings, nuts onto studs in pump housings and other fasteners where high strength is required
- Provides robust curing performance
- Works on active metals such as brass, copper and passive substrates such as stainless steel and plated surfaces
- Offers high temperature performance and oil tolerance
- Torque: 325/320 in.-lbs.
- Withstands temperature from -65°F to 300°F
- Fixture in 4 min., full 24 hrs.
- Colour: Red
- Accepted for use in Canadian food processing facilities



LOCTITE

Model No.	Mfg. No.	Size ml	Price /Each
AD289	1330583	10	11.64
AD290	1330585	50	37.94
AD291	1330335	250	130.31

242® MEDIUM STRENGTH THREADLOCKER

- Removable threadlocker for fasteners between 1/4" and 3/4" (6 to 20 mm) diameters
- Controlled lubricity for accurate clamp loads
- Parts can be separated using hand tools
- For machine tools, presses, pumps, compressors, mounting bolts and gearboxes
- Withstands temperatures to 300°F
- Torque: 115/53 in.-lbs.
- Fixtures in 10 minutes, full in 24 hrs
- Colour: Blue



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA450	24221	10 ml	9.99
AA451	24231	50 ml	31.50
AA652	24241	250 ml	111.69

243™ OIL RESISTANT/ MEDIUM STRENGTH THREADLOCKER

- For fasteners between 1/4" and 3/4" (6 to 20 mm) diameters
- Medium strength threadlocker with improved oil tolerance
- Parts can be separated using hand tools
- For machine tools, presses, pumps, compressors, mounting bolts and gearboxes
- Withstands temperatures to 300°F
- Torque: 180/62 in.-lbs.
- Fixtures in 5 minutes, full in 24 hrs
- Colour: Blue



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA188	24077	10 ml	10.75
AA555	24078	50 ml	35.02
AC322	24079	250 ml	120.28

246™ HIGH TEMP./ MEDIUM STRENGTH THREADLOCKER

- Suitable for fasteners between 1/4" and 3/4" (6 to 20 mm) diameters
- Resists oil and mild surface contamination at continuous temperatures to 450°F
- Torque: 170/48 in.-lbs.
- Fixtures in 20 minutes, full in 24 hrs.
- Colour: Blue



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC353	29513	10 ml	12.75
AC330	29514	50 ml	40.86
AC321	29515	250 ml	154.52

222MS™ LOW STRENGTH THREADLOCKER

- Ideal for fastener diameters of 1/4" (6 mm) and smaller
- Controlled lubricity for accurate clamp loads
- Parts can be separated using hand tools
- For set screws, adjustment screws, calibration screws, meters and gauges
- Withstands temperatures to 300°F
- Torque: 62/27 in.-lbs.
- Fixtures in 20 minutes, full in 24 hrs
- Colour: Purple



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA014	22221	10 ml	10.75
AA015	22231	50 ml	35.02
AA513	22241	250 ml	130.31

QUICKTAPE® MEDIUM STRENGTH THREADLOCKER

- No mess, no waste, the first threadlocker in tape form
- Same reliability and performance as Loctite® removable grade threadlocking liquids
- General purpose and removable with hand tools
- Can be pre-applied for bolts 1/4" and up
- Temperature range -65°F (-54°C to 150°C)
- 74/47 torque in.-lbs.
- Colour: Blue



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AD287	1372603	1/2" x 260' Roll	17.03

CHEMICALS

POWER GRAB® INDUSTRIAL CONSTRUCTION ADHESIVE

- Heavy-duty, high strength, grabs instantly and is repositionable for 15 minutes
- Non-solvent, low-odour, latex formula cleans up with soap and water
- Low emissions/VOC content and meets Greenguard® certification



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AD154	1210760	300 ml cartridge	5.68

LEPAGE® PL® 400

- High grab; minimizes nailing requirements
- Bonds well to dry, wet, treated or frozen lumber
- Ideal for installing sub-floors, exterior sheathing, siding and decking
- Recommended for wood, fibreglass, drywall, fibreboard, hardboard, metal, concrete, masonry decks, fences and gazebos
- Not recommended for polystyrene foam board insulation or tub surrounds, mirrors, applications over hygroscopic salt-treated wood, such as zinc chloride treatments, continuous water immersion, installation of tiles and floor coverings
- Easy gunning outdoors in sub-zero temperatures
- Colour: Tan



LEPAGE.

Model No.	Mfg. No.	Size	Price /Each
AA908	1421917	295 ml	5.16
AA906	526370	825 ml	9.07

LEPAGE® OUTDOOR WOOD GLUE

- Durable, high performance, water and moisture resistant interior/exterior wood glue
- Invisible glue lines: dries to a translucent brown colour, sandable and paintable once fully dried
- Recommended for wood, wood compositions, veneer, paper, cardboard, leather, fabric, patio furniture, bird and doghouses, mailboxes, counter tops, windowsills and laminated woodworking
- Not recommended for joints that require gap filling, plastic or metal, structural applications, storage in metal containers
- Colour: Tan



LEPAGE.

Model No.	Mfg. No.	Size	Price /Each
AB472	442185	400 ml	10.62
AD009	524644	800 ml	18.59

LEPAGE® PRES-TITE® BLUE CONTACT CEMENT

- Premium grade solvent-based adhesive offers high strength bond resistant to heat, creep, water and oil
- Dries quickly and bonds on contact
- Recommended for plastic laminates, veneers, plywood, particleboard, wallboard, metals, cork, fabric and rubber
- Not recommended for polystyrene and polyurethane foam, hard plastics, painted surfaces, brass, copper and other copper alloys
- Colour: Yellow/Tan



LEPAGE.

Model No.	Mfg. No.	Size	Price /Each
AC147	1504637	30 ml	3.01
AC146*	1504724	250 ml	9.40
AD435	1504725	500 ml	15.10
AD436	1504619	946 ml	21.58
AD382	1504629	3.8 L	169.20

*Comes with brush

LEPAGE® PL® PREMIUM

- Bonds well to dry, wet, frozen or treated lumber
- Water resistant, low odour, long open time
- Recommended for wood, hardwood flooring, concrete, stone, marble, slate, masonry, brick, foam insulation, carpets, metal, lead, cement-based products, ceramic, fibreglass, drywall and mirrors
- Not recommended for polystyrene tub surrounds, water submersion applications, polystyrene, polyethylene or polypropylene; certain materials such as rubbers and plastics may have bonding difficulties
- Colour: Bronze



LEPAGE.

Model No.	Mfg. No.	Size	Price /Each
SE119	1403221	295 ml	8.40
AD434	1403222	825 ml	23.98

LEPAGE® CARPENTER'S GLUE

- Ready-to-use, multi-purpose, high tack, polyvinyl acetate woodworking adhesive
- Invisible glue lines, not damaged by freezing
- Recommended for cabinet making, carpentry work, furniture and general wood gluing
- Bonds porous substrates such as wood, wood compositions, veneer, cardboard, leather and cork
- Not recommended for joints that require gap filling; bonding non-porous substrates (e.g. plastic or metal), structural applications
- Bonds with two tons of strength
- Colour: Yellow



LEPAGE.

Model No.	Mfg. No.	Size	Price /Each
AD432	530539	150 ml	4.84
AB471	442184	400 ml	9.02
AC085	530538	3 L	32.48

LEPAGE® PRES-TITE® GEL CONTACT CEMENT

- Unique no-drip, no-spill
- Dries fast and bonds on contact
- Recommended for vertical laminations, plastic laminates, veneers, plywood, particleboard, wallboard, metals, cork, fabric and rubber
- Not recommended for polystyrene and polyurethane foam, hard plastics, painted surfaces brass, copper and other copper alloys
- Colour: Yellow/Tan



LEPAGE.

Model No.	Mfg. No.	Size	Price /Each
AC140	1504628	946 ml	26.31
AC141	1504627	3.8 L	95.22

LEPAGE® NO MORE NAILS®

- Water-based adhesive: Low odour, easy soap and water clean-up
- Premium quality, heavy-duty, gap-filling adhesive for both indoor and outdoor projects
- Has an extremely high tack, is weather and water resistant, paintable and sandable
- Recommended for bonding wood, plywood, pressure-treated lumber, aluminum, cork, foamboard, ceramics, plaster, brick, concrete, chip board, PVC (rigid plastic), polystyrene and polyurethane foam covings
- Not recommended for garden walls, retaining walls or landscaping projects, mirrors and metals that will corrode, natural marble, continuously wet areas or water immersion, PE, PP, nylon, Teflon® and cement board
- Colour: White



LEPAGE.

Model No.	Mfg. No.	Description	Size	Price /Each
AD433	1469892	No More Nails® Ultra	295 ml	12.10

LEPAGE® WHITE GLUE

- Versatile, general-purpose, polyvinyl acetate woodworking adhesive
- Suited for high strength, permanent bonding on wood and a variety of other porous materials
- Invisible glue lines, sandable and paintable once fully dried, not damaged by freezing
- Recommended for wood, wood compositions, veneer, paper, cardboard, leather, fabric and cork
- Not recommended for joints that require gap filling, bonding non-porous substrates (i.e. plastic or metal)
- Colour: White



LEPAGE.

Model No.	Mfg. No.	Size	Price /Each
AD431	393889	150 ml	4.40
AB470	442183	400 ml	7.99
AD005	531252	3 L	35.64

PROFESSIONAL GLUE GUNS

- Perfect for light-duty carton sealing or small manufacturing projects
- Accepts 7/16" diameter regular glue sticks
- Trigger design for better grip control
- Features precise, even adhesive distribution
- 120 volts / 80 watts heater
- Comes with metal wire stand

Model No. PE339
Price/Each \$36.40

aurora tools®



HEAVY-DUTY GLUE GUNS

- Ideal for medium to heavy-duty applications
- Accepts 7/16" diameter regular glue sticks
- Ergonomic trigger design for better grip and comfort
- Features precise, even adhesive distribution
- Illuminated on/off switch
- 120 volts / 100 watts heater
- Comes with metal wire stand

Model No. PE340
Price/Each \$98.85

aurora tools®



GLUE STICKS

Model No.	Appearance	Viscosity	Softening Point	Typical Applications	Dimensions"	Qty/Box	Price/Each
PE341	Clear	356/F-11000	85°C/185°F	High strength, high temp, for non porous materials	7/16 x 4	235	0.25
PE342	Clear	302/F-9400	80°C/176°F	All-temp clear	7/16 x 10	94	0.55
PE343	Amber	338/F-4000	85°C/185°F	High temp for sealing corrugated boxes, fast set	7/16 x 15	250	0.85
PE541	Clear	9400	80°C/176°F	All temp. all purpose for porous and non-porous materials	7/16 x 10	803	0.50

POLYGUN™ EC

- Delivers 2.6 to 5.5 lbs of adhesive/hour
- Electric, 120 V - 350 W
- Temperature 260°-450°F

Model No. PC757
Price/Each \$519.38

3M



JET MELT™ GLUE STICKS

- Ideal for corrugated, beadboard, packaging etc.
- Low odour
- 8" long x 5/8" diameter
- Colour: Light amber

Model No. AB412
Price per 11-lb case \$129.30

3M



76 HIGH TACK ADHESIVE

- Bonds fabric, paper, cork, foil, rubber, etc.
- Bonds to themselves and to metal, wood, glass and other surfaces
- 24 oz.

Model No. PA002
Price/Each \$17.05



3M

SUPER 77 SPRAY ADHESIVE

- Ideal for permanently attaching cartons, foams, paper, foils, cardboard, carpeting, cloth fabric
- Other lightweight materials to painted or unpainted metals, wood, cardboard and themselves

Model No. PA003
Price/Each \$14.96



3M

72 PRESSURE SENSITIVE ADHESIVE

A fast holding strength, aggressive tack and repositionable adhesive. Precise spray control, wide spray pattern and low soak-in. Colour: Blue.

- 24 oz.
- Polyethylene film and foam bonding, carpet bonding
- Temporary positioning and holding fabric and paper
- Pipe insulation lap adhesive
- Swimming pool liners

Model No. AA556
Price/Each \$13.97



3M

90 HIGH STRENGTH ADHESIVE

- Adheres particle board, polyethylene, polypropylene and rubber to wood metal and many other materials
- Fast contact strength, yet needs only 1 to 2 minutes of drying time
- Colour: Transparent

Model No. PA001
Price/Each \$19.56



3M

3M SCOTCH® ADHESIVE REMOVER PENS

- Use it to prepare surfaces for bonding, remove tape residue, or clean small areas after abrading
- Convenient pen tip that allows precise surface cleaning
- Ideal for desks, workstations or toolboxes
- Small enough to carry in your pocket
- 12 pens per case

Model No. PC692 Price/Each \$5.67



3M



INSTANT ADHESIVES (CYANOACRYLATES)

- Widest selection of high-performance, application-specific, instant adhesives
- Available in a variety of viscosities, cure speeds, gap-filling capabilities and substrate compatibilities
- Ultra-high performance *Loctite Prism*® family offers toughened formulations, low odour, low blooming and thermally resistant formulations

431™ PRISM®

- Medium viscosity, clear, gap filling, surface insensitive, one part, room temperature cure instant adhesive
- Designed for the assembly of difficult-to-bond materials which require uniform stress distribution
- Particularly suited for bonding a wide range of materials, including metals, plastics, and elastomers
- Typical use: Gap filling
- Gap fill: 0.008 IN
- Viscosity: 1 000 cP
- Shear strength: 2300 PSI
- Temperature Range: -65°F to 180°F (-54°C - 82°C)
- Cure speed: Fixture - 15 sec., full: 24 hrs.
- Colour: Clear



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AD406	41254	3 g Tube	5.42
AD407	41255	20 g Bottle	21.77
AD408	41256	1 lb. Bottle	273.54

435™ PRISM®

- The first true clear, surface insensitive, elastomer-modified instant adhesive
- Low viscosity, clear, rubber toughened, one part, room temperature cure instant adhesive
- Designed for bonding metal, rubber and plastics
- Excellent peel, impact and shear strength on metals, plastics and rubbers
- Typical use: General purpose
- Gap fill: 0.006 IN
- Viscosity: 22 cP
- Shear strength: 2700 PSI
- Temperature range: -65°F to 240°F (-54°C to 115°C)
- Cure speed: fixture 30 sec., full 24 hrs.
- Colour: Clear



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AD414	40994	20 g Bottle	28.20
AD415	40995	1 lb. Bottle	289.32

410™ PRISM®

- High viscosity, black, rubber toughened, one part, room temperature cure, gap filling instant adhesive
- Designed for bonding metal, rubber and selected plastics
- Excellent peel, impact and shear strength
- Typical use: Gap filling
- Gap fill: 0.008 IN
- Viscosity: 3500 cP
- Shear strength: 3200 PSI
- Temperature range: -65°F to 225°F (-54°C to 107°C)
- Cure speed: Fixture - 90 sec., full - 24 hrs.
- Colour: Black



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AD410	41004	3 g Tube	5.74
AD411	41045	20 g Bottle	29.67
AD412	41061	1 lb. Bottle	276.14

PRISM® 401™ SURFACE INSENSITIVE

- A general purpose adhesive for difficult-to-bond surfaces
- For bonding porous or absorbent materials, such as wood, paper, leather or fabric
- Ideal for gap distances up to 0.005"
- Fixtures in 15 seconds, full in 24 hrs.
- Provides a shear strength of 3200 PSI
- Withstands temperatures to 180°F
- Colour: Clear



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA544	40104	3 g Tube	5.07
AA545	40140	20 g Bottle	20.09

454™ PRISM® SURFACE INSENSITIVE INSTANT ADHESIVE GEL

- A general purpose, no-run clear gel
- Excellent for almost all surfaces
- Ideal for porous substrates and rough and acidic surfaces
- Ideal for gap distances up to 0.010"
- Fixtures in 15 seconds, full in 24 hrs.
- Provides a shear strength of 3200 PSI
- Withstands temperatures to 180°F
- Colour: Clear



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA548	45404	3 g Tube	4.93
AB343	45440	20 g tube	29.76

495™ SUPER BONDER® THERMAL CYCLING RESISTANT

- A medium viscosity, high temperature product for all metals, and most plastics and rubbers
- Resists temperatures to 223°F continuous or up to 250°F intermittent
- Ideal for gap distances up to 0.004"
- Fixtures in 20 seconds, full in 24 hrs.
- Provides a shear strength of 2750 PSI
- Colour: Clear



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA456	49504	3 g Tube	4.13
AA487	49550	1 oz. Bottle	17.08

380™ BLACK MAX® TOUGHENED

- Bonds metal, rubber, and plastic
- For use in difficult environments
- Ideal for gap distances up to 0.006"
- Fixtures in 90 seconds, full in 24 hrs.
- Provides a shear strength of 3750 PSI
- Withstands temperatures to 225°F
- Colour: Black



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA493	38004	3 g Tube	5.19
AA494	38050	1 oz. Bottle	29.25

QUICKTITE® INSTANT ADHESIVE GEL

- A general purpose instant adhesive
- Precision flow control applicator
- Designed to be clog-free



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AB950	1695419	0.14 oz. bottle	5.63

404™ QUICK SET™

- A general purpose adhesive for general maintenance and repair
- Excellent for rubber bonding
- Ideal for gap distances up to 0.005"
- Fixtures in 30 seconds, full in 24 hrs.
- Provides a shear strength of 3500 PSI
- Withstands temperatures to 180°F
- Colour: Clear



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA550	46551	1/3 oz. bottle	20.81
AC325	46548	4 oz. bottle	163.45

403™ PRISM® INSTANT ADHESIVE

- Low-odour, low blooming, surface-insensitive
- Faster fixture speeds on plastics and metals
- Perfect for gap filling
- Cure speed: Fixture 50 sec, full 24 hrs.
- Viscosity: 1000 cP
- Temperature range: -65F to 160F (-54C to 71C)
- Shear strength: 2600 PSI
- Colour: Clear



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AD429	40340	20 g Bottle	27.22
AD430	40361	1 lb. Bottle	339.79

414™ SUPER BONDER® INSTANT ADHESIVE

- General purpose cyanoacrylate plastic bonder
- Mil Spec: Mil-A-46050C Type II Class II
- Commercial Item Description A-A-3097: Type II Class II
- Typical use: Plastic bonder
- Gap Fill: 0.006 in.
- Viscosity: 11 cP
- Shear Strength: 3200 PSI
- Temperature Range: -65°F (-54°C) to 180°F (82°C)
- Cure Speed: Fixture - 20 secs; Full - 24 hrs.
- Colour: Clear



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA654	41404	3 g Tube	4.47
AA655	41450	1 oz. Bottle	18.40
AA656	41461	1 lb. Bottle	200.96

425™ ASSURE™ INSTANT ADHESIVE, SURFACE CURING THREADLOCKER

- Low viscosity, one part, room temperature cure, instant adhesive designed for locking plastic to plastic and plastic to metal fasteners
- Low strength fast curing thread locker for plastic fasteners
- Can be used as a tamper proofing agent for the head of screws
- Can be applied before or after assembly
- Temperature range: -65°F to 180°F (-54°C to 83°C)
- Fixture in 1.5 minutes, full 24 hours
- Colour: Blue



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC302	42540	20 g	23.05

7452™ TAK PAK ACCELERATOR

- Aggressive cleaning properties, promote the cure speed of all Loctite® Cyanoacrylate Adhesives
- < 30 second dry time
- 1 minute on-part life
- Colour: clear/amber
- Spray-cap bottle



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC360	18580	1.75 fl. oz.	8.94

7649™ PRIMER N

- Speeds the cure of all Loctite® Anaerobic Products and ensures proper cure on inactive metals
- Ideal for cure conditions below room temperature
- For activators for Anaerobic Machinery Adhesives, Acrylic Structural Adhesives, and secondary cure of UV Curable Adhesives
- Colour: Clear/green



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA460	21348	4.5 oz.	16.04

770™ PRISM® PRIMER

- An adhesion promoter formulated for use with polyolefins and other low energy surfaces
- Use with Loctite® Cyanoacrylate Adhesives
- 30-second dry time
- 8-hour on-part life
- Colourless



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA041	18396	1.75 fl. oz.	15.13

STATIC MIX NOZZLES AND ACCESSORIES

	Model No.	Mfg. No.	Description	Package Quantity	Price/Each
	AC368	98473	50 ml Square Mix Nozzle, Luer/Stepped combo tip, 4.5". Overall length, 5.3 mm ² , 24 elements; 1:1, 2:1, 4:1 mix ratios	10	10.47
	AB345	98455	50 ml mix nozzle, stepped tip, 6.0". Overall length, 6.35 mm diameter, 21 elements; 1:1, 2:1, 4:1 mix ratios	10	8.07
	AD128	1034575	50 ml-S mix nozzle, stepped Tip, 6.2". Overall length, 6.5 mm ID, 20 elements; 10:1-S cartridges only	10	12.12
	AD932	98457	200/400 ml mix nozzle, stepped tip, 8.8". Overall length, 8 mm diameter, 24 elements; 1:1, 2:1 mix ratios	10	13.77
	AD438	1084092	490 ml mix nozzle, stepped tip, 11.2". Nozzle length, 10 mm diameter, 10:1 mix ratio	10	20.01

METAL BONDING STRUCTURAL ADHESIVES:

- Specially formulated to provide tough, long-lasting bonds to metal surfaces, such as steel galvanized steel, aluminum, sheet metal and stainless steel
- Capable of reducing or replacing the need for threaded fasteners, welds or rivets, resulting in a higher quality assembly

U-05FL™ HYSOL® ADHESIVE

- Fast setting, highly flexible adhesive for metal bonding
- 5-minute working life
- High strength, flexible
- Chemistry: Two-part urethane
- Viscosity: 100 000 cP
- Mix ratio: 1:2
- Cure time: 24 hrs.
- Shear strength: 930 PSI
- Colour: Off-white



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AD900	29348	50-ml Dual Cartridge	16.63
AD422	29350	400-ml Dual Cartridge	89.41

HYSOL® E-20NS

- Bonds on aluminum, stainless steel and other metals, as well as glass, ceramics, and plastics
- Well suited for use on vertical surfaces to avoid run-off
- Metal bonder, non-sag, high peel and shear
- 20 minutes worklife
- 2:1 mix ratio (resin:hardener)
- 2000-4000 PSI overlap shear strength
- Colour: Light tan



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC349	29334	50 ml	13.13

H3151 SPEED BONDER™ METAL BONDER

- Extend open time allows for adjustment of parts
- Excellent bond strength on aluminum and steel
- Impact and peel resistant
- 50 ml dual cartridge
- Colour: Pale yellow



LOCTITE

Model No.	Mfg. No.	Description	Price /Each
AC344	83015	H3151	17.46

H4500™ SPEED BONDER™ STRUCTURAL ADHESIVE

- High strength structural adhesive for metals
- Fast fixture metal bonder
- Chemistry: Two-part acrylic
- Low viscosity: 45 000 cP
- Mix Ratio: 10:1
- Cure speed: Fixture -15 min., full - 24 hrs.
- Shear Strength: 3355 PSI
- Colour: Grey



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AD417	996512	50-ml Dual Cartridge	14.06
AD428	83041	490-ml Dual Cartridge	73.52

H8000™ SPEED BONDER™ STRUCTURAL ADHESIVE, FAST FIXTURE

- Medium fixture time, high performance adhesive with excellent peel strength on multiple substrates, especially aluminum
- Two-part acrylic
- 15 minutes work time, 30 minutes fixture time, 24 hrs cure time
- 3250 PSI sheer strength
- Colour: Green



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AD134	996453	50 ml Dual Cartridge	16.14
AD897	36160	490 ml Dual Cartridge	67.86

H8600™ SPEED BONDER™

- Extended fixture time, high performance adhesive with excellent impact and shear strength on galvanized steel and aluminum
- Especially designed for severe environments
- Medium work life
- Chemistry: Two-part acrylic
- Viscosity: 86,000 cP
- Mix Ratio: 2:1
- Cure Time: 24 hrs.
- Shear strength: 3355 PSI
- Colour: Blue



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AD418	40875	50-ml Dual Cartridge	16.14
AD419	38762	400-ml Dual Cartridge	73.52
AD420	38760	5-Gallon Pail, Adhesive	1892.62
AD421	38761	5-Gallon Pail, Activator	2201.26

PLASTIC/COMPOSITE BONDING STRUCTURAL ADHESIVES

- Bonds a wide variety of materials, such as fibreglass, gel coat, thermoplastics, polycarbonate, ABS, PVC, polyethylene and polypropylene
- Specially formulated to provide UV resistance, high impact resistance and peel resistance

H4800™ SPEED BONDER™ STRUCTURAL ADHESIVE

- Provides extended open time, making it ideal for the assembly and adjustment of large parts
- Excellent peel and impact resistance
- Provides high bond strengths on composites
- Impact resistance
- Chemistry: Two-part acrylic
- Viscosity: 50 000 cP
- Mix Ratio: 10:1
- Fixture time: 35 minutes
- Cure time: 24 hours
- Shear strength: 3930 PSI
- Colour: Light yellow



Model No.	Mfg. No.	Size	Price /Each
AD425	996515	50-ml Dual Cartridge	14.06
AB968	83045	400-ml Dual Cartridge	62.48

H3101™ SPEED BONDER™ GENERAL PURPOSE ADHESIVE

- General purpose, medium viscosity adhesive ideal for bonding a variety of substrates
- Extended fixture time
- Medium work life
- Chemistry: Two-part acrylic
- Viscosity: 75 000 cP
- Mix Ratio: 1:1
- Fixture Time: 25 minutes
- Cure Time: 72 hours
- Shear Strength: 2510 PSI
- Colour: Cream



Model No.	Mfg. No.	Size	Price /Each
AD426	83007	50ml Dual Cartridge	17.46
AD427	83006	400ml Dual Cartridge	54.60

LOCTITE®

MULTIPLE SURFACE BONDING STRUCTURAL ADHESIVES

- Bonds a wide variety of materials, such as metal, ceramics and plastics
- Perfect for the following industries: machining & tooling, recreational vehicles, furniture making/repair, structural building components, appliances

330™ DEPEND® NO-MIX ADHESIVE

- A high viscosity adhesive for a wide range of materials including metal, wood, ferrite, ceramic and plastic
- For rough or porous surfaces
- Ideal for gap distances up to 0.030"
- Fixes in 5 minutes, full in 24 hrs.
- Provides a shear strength of 3300 PSI
- Withstands temperatures to 250°F
- Recommended 7387 primer
- Colour: Amber



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AB357	20251	25 ml kit*	33.27
AC329	20252	250 ml kit**	87.31

*Contains 25 ml syringe of Depend 330 and 25 g. aerosol can activator.

** Contains 250 ml tube of Depend 330 and 4.5 fl. oz. aerosol can activator.

332™ STRUCTURAL ADHESIVE/SEVERE ENVIRONMENT

- An activator-cured, no-mix adhesive that provides high temperature capability with thermal durability up to 350°F
- Ideal for gap distances up to 0.020"
- Fixes in 3 minutes, full in 24 hrs.
- Provides a shear strength of 3500 PSI
- Withstands temperatures to 400°F
- Recommended 7387/7380 primer
- Colour: Yellow



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC327	33201	25 ml syringe	36.08

H3000 SPEED BONDER™ GENERAL PURPOSE

- A low viscosity adhesive
- Ideal for bonding plastics and composites
- 50 ml dual cartridge
- Colour: Tan



LOCTITE

Model No.	Mfg. No.	Description	Price /Each
AC343	83001	H3000	16.47

HYSQL® E-00CL FAST SETTING

- Ideal for general purpose bonding, potting, or encapsulating
- Works on a variety of plastic, metal, glass, rubber, wood, and ceramic substrates
- Well suited for applications that require a clear bondline
- Flowable and low odour
- 3-5 minutes worklife
- 1:1 mix ratio (resin:hardener)
- 2000-4000 PSI overlap shear strength
- Colour: Clear



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC351	29289	50 ml	13.13

HYSQL® 1C GENERAL PURPOSE

- Bonds, seals, and repairs a wide variety of materials
- For metals, most plastics, and wood
- Alternative formulations are available in grey (6C) and black (11C)
- Gap filling for high temperatures
- 20 minutes worklife
- 2.5:1 mix ratio (resin:hardener)
- 1750 PSI overlap shear strength
- Colour: White



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC359	83200	4 oz. kit	9.79

HYSQL® E-20HP HIGH PERFORMANCE

- Bond strengths to a wide variety of plastics and metals
- Ideal for general purpose industrial assemblies
- High strength, peel, shear and rubber toughened
- 20 minutes worklife
- 2:1 mix ratio (resin:hardener)
- 3000-5000 PSI overlap shear strength
- Colour: Off-white



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC348	29314	50 ml	13.13

HYSQL® E-30CL

- Glass bonder, low viscosity, impact resistant
- 30 minutes worklife
- 2:1 mix ratio (resin:hardener)
- 2000-4000 PSI overlap shear strength
- Colour: Ultra clear



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC350	29329	50 ml	13.13

HYSQL® E-60NC POTTING COMPOUND

- Bonding, potting and encapsulating electrical components which are sensitive to corrosion caused by traditional epoxies
- Use in electronic applications, for component attachment to boards, housing assembly and potting
- Non-corrosive, low viscosity
- 60 minutes worklife
- 1:1 mix ratio (resin:hardener)
- 1000-3000 PSI overlap shear strength
- Colour: Black opaque



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC354	29324	50 ml	12.35

RMP-ECO® cleaning products are the Green solution to industrial cleaning.
All RMP-ECO® products are EcoLogo™ certified. RMP-ECO® is safe for you and the environment.

T.S.P.

- Trisodium Phosphate
- All purpose cleaner
- Prepares surfaces for painting
- Removes wax and grease
- Cleans garage floors and driveways
- Aids in restoring paint brushes

Model No.	Size	Price /Each
AB725	2 kg. box	10.11
AC318	4 litre concentrate	7.22



PURE TURPENTINE

- Thins varnishes, paints and enamels
- Cleans surfaces and brushes

Model No.	Size	Price /Each
AB723	3.78 L bottle	53.04



RECORDSOL PAINT THINNER

- Low odour mineral spirits
- Ideal as paint thinner, brush cleaner and all purpose household cleaner
- For floors, woodwork, grease stains, etc.

Model No.	Size	Price /Each
AB706	4 L bottle	13.91
AB707	20 L pail	72.49
AB721	205 L drum	655.76



ACETONE

- Thins fibreglass resin mixes
- Dissolves 2-part epoxies
- Cleans tools and brushes used for epoxies and lacquers

Model No.	Size	Price /Each
AB722	3.78 L can	24.48



CLASS™ FIRE RETARDANT SPRAY

PROFESSIONAL GRADE FIRE RETARDANT

- Meets the highest standards of fire retardancy as established by the N.F.P.A.
- Reduces dangerous flame spread on a range of materials including draperies, furniture, mattresses, wooden structures, cardboard and external clothing
- All flame treated items must be able to absorb moisture and have a minimum content of 30% natural fibre
- Non toxic • Low odour
- ASTM - EB4-81 A earned a flame spread of 25 "A" rating
- Easy to apply



Model No.	Size	Price /Each
AA904	500 ml spray bottle	11.14

AEROSOLV™ CAN PUNCTURING SYSTEM

A safe and economical means to empty and dispose of aerosol cans. Easy-to-use, hand-operated, no power source necessary. Handle moves a puncture pin through a fluid-tight chamber and pierces can; no worker contact required.

Unique carbon filter coalesces VOC's in filter reservoir. Residual contents safely collected in drum.

- Excellent savings on hazardous waste disposal costs
- Punctured cans may be recycled as scrap metal
- Residual liquids collected in drum may be eligible for reclamation through a hazardous waste handler, resulting in waste minimization credit
- Accommodates cans in wide assortment of shapes and sizes
- Puncture pin designed for long-term use; no visible wear after puncturing 10,000 cans
- For use with any 20-30 or 55-gallon drum

AA155 - Aerosolv™ Venting System consists of one puncturing unit, one filter and one anti-static wire which is required under several federal and local codes.

AA153 - Two-stage coalescing filter with replaceable carbon cartridge.

AA154 - Replacement carbon cartridge.

Model No. AA155 Price/Each \$1259.67

Model No. AA153 Price/Each \$340.06

Model No. AA154 Price/Each \$290.08



AIR TOOL OIL

- Preserves and maintains internal seals and mechanisms present in most hand-held air tools
- Lubricates under high pressure to fine tolerances
- Resists moisture induced corrosion, maximizing the service life and performance of your air tools
- Contains no silicone

Lloyds



Model No.	Size	Price /Each
AA091	8 oz. poly bottle	5.24
AA090	4 L jug	46.43

BATTERY EQUALIZERS

- Restorative fluid doubles the life of any voltage lead/acid battery
- Save 25% on recharge time
- For use on lift truck and golf cart fleets and many more



Model No.	Size	Price /Each
AA893	500 ml	37.11
AB476	4 L	253.88

BATTERY ACID NEUTRALIZER

- Safely neutralizes sulphuric acid spills on skin, clothing and battery box
- Spray battery box regularly to keep terminals and battery clean

kleen-flo



Model No.	Size	Price /Each
AA773	198 g	9.81