

METALWORKING & WELDING



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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")

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



NORTON

Model No.	Mfg. No.	D"	x	Size T"	x	A"	Max RPM	Price /Each
NS138	C0303514N2P	3	x	1/32	x	1/4	25 465	5.70
NS139	C0303538N2P	3	x	1/32	x	3/8	25 465	5.70
NS140	C0311614N2P	3	x	1/16	x	1/4	25 465	5.70
NS142	C0311638N2P	3	x	1/16	x	3/8	25 465	5.75
NS145	C031838N2P	3	x	1/8	x	3/8	25 465	7.09
NR003	C0403538N2P	4	x	1/32	x	3/8	19 100	7.92
NR004	C0411614N2P	4	x	1/16	x	1/4	19 100	7.92
NR005	C0411638N2P	4	x	1/16	x	3/8	19 100	7.92

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	Size T"	x	A"	Max RPM	Price /Each
NS172	C0303514GFC	3	x	1/32	x	1/4	25 465	2.04
NS174	C0303538GFC	3	x	1/32	x	3/8	25 465	2.04
NS176	C0311614GFC	3	x	1/16	x	1/4	25 465	2.04
NS178	C0311638GFC	3	x	1/16	x	3/8	25 465	2.04
NS180	C031814GFC	3	x	1/8	x	1/4	25 465	3.15
NS182	C031838GFC	3	x	1/8	x	3/8	25 465	3.30
NS184	C0403514GFC	4	x	1/32	x	1/4	19 100	2.82
NS186	C0403538GFC	4	x	1/32	x	3/8	19 100	2.82
NS188	C0411614GFC	4	x	1/16	x	1/4	19 100	2.82
NS189	C0411638GFC	4	x	1/16	x	3/8	19 100	2.82
NS191	C041814GFC	4	x	1/8	x	1/4	19 100	3.97
NS192	C041838GFC	4	x	1/8	x	3/8	19 100	3.84

D x T x A: Diameter x Thickness x Arbor Size

ZIP™ TYPE 01

- Performance cutting and grinding with straight shaft and die grinders
- These wheels are formulated for high performance cutting, notching and grinding
- Made not to contaminate stainless steel
- Fast, cool and free cutting allowing the operator to work with minimal pressure for best control



WALTER
Surface Technologies

Model No.	Mfg. No.	D"	x	Size T"	x	A"	Grade	Max RPM	Price /Each
2"									
UE749	11-L-221	2	x	1/8	x	5/16	A-24-ZIP	31 000	5.30
UE751	11-L-231	2	x	1/4	x	5/16	A-24-ZIP	31 000	7.75
UE753	11-L-251	2	x	1/2	x	5/16	A-24-ZIP	31 000	11.40
UE748	11-L-213	2	x	1/16	x	3/8	A-24-ZIP	31 000	4.95
UE750	11-L-223	2	x	1/8	x	3/8	A-24-ZIP	31 000	5.30
UE752	11-L-233	2	x	1/4	x	3/8	A-24-ZIP	31 000	7.75
UE754	11-L-253	2	x	1/2	x	3/8	A-24-ZIP	31 000	11.40
3"									
UE755	11-L-302	3	x	1/32	x	1/4	A-60-ZIP	25 470	4.95
UE756	11-L-312	3	x	1/16	x	1/4	A-24-ZIP	25 470	5.30
UE758	11-L-322	3	x	1/8	x	1/4	A-24-ZIP	25 470	5.90
TE280	11-L-303	3	x	1/32	x	3/8	A-60-ZIP	25 470	4.95
UE757	11-L-313	3	x	1/16	x	3/8	A-24-ZIP	25 470	5.30
UE759	11-L-323	3	x	1/8	x	3/8	A-24-ZIP	25 470	5.90
UE760	11-L-333	3	x	1/4	x	3/8	A-24-ZIP	25 470	8.50
UE761	11-L-353	3	x	1/2	x	3/8	A-24-ZIP	25 470	12.40
4"									
UE762	11-L-403	4	x	1/32	x	3/8	A-60-ZIP	19 100	5.60
UE764	11-L-413	4	x	1/16	x	3/8	A-24-ZIP	19 100	5.60
UE766	11-L-423	4	x	1/8	x	3/8	A-24-ZIP	19 100	6.30
UE767	11-L-433	4	x	1/4	x	3/8	A-24-ZIP	19 100	9.50
UE763	11-L-405	4	x	1/32	x	5/8	A-60-ZIP	19 100	5.60
UE765	11-L-415	4	x	1/16	x	5/8	A-24-ZIP	19 100	5.60

PREMIUM 2 IN 1 THINCUT

- Superior comfort and performance
- Offers a fast, cool and burr free cut
- Free cutting reduces workload and increases productivity
- Highly reinforced cutting wheel
- For use on steel & stainless steel



TYROLIT

Model No.	Mfg. No.	D"	x	Size T"	x	A"	Max RPM	Price /Each
TYPE 01								
NU404	384142	4 1/2	x	0.045	x	7/8	13 300	3.45
NU405	384143	5	x	0.045	x	7/8	12 250	3.49
NU406	401205	6	x	0.045	x	7/8	10 200	4.49
TYPE 27								
NU554	34042238	4 1/2	x	0.045	x	7/8	13 300	3.45
NU397	34042239	5	x	0.045	x	7/8	12 250	3.49
NU408	34042240	6	x	0.045	x	7/8	10 200	4.49

CUBITRON™ II CUT-OFF WHEELS

- Designed to provide high cut rates and long life on all types of ferrous metals, stainless steels, alloy steels and cast iron
- Cool cutting for a higher quality and faster cut
- Fast cool cutting helps extend the life of the tool



Model No.	Mfg. No.	D"	x	Size T"	x	A"	Max RPM	Price /Each
TYPE 01								
NU222	051115-66518	4	x	0.035	x	3/8	19 100	6.14
NU224	051115-66520	4	x	0.06	x	3/8	19 100	6.83
NU228	051115-66524	4	x	0.125	x	3/8	19 100	8.89
NU229	051115-66525	4 1/2	x	0.045	x	7/8	13 300	4.83
NU230	051115-66526	5	x	0.045	x	7/8	12 250	5.49
NU231	051115-66527	6	x	0.045	x	7/8	10 200	5.81
NU232	051115-66528	7	x	0.045	x	7/8	8 500	7.91
TYPE 27								
NU362	051115-66531	4 1/2	x	0.045	x	7/8	13 300	5.11
NU236	051115-66535	4 1/2	x	0.125	x	7/8	13 300	8.45
NU237	051115-66537	5	x	0.045	x	7/8	12 250	5.99
NU238	051115-66539	5	x	0.09	x	7/8	12 250	6.36
NU363	051115-66541	6	x	0.045	x	7/8	10 200	6.49
NU240	051115-66543	7	x	0.09	x	7/8	8 500	11.74

3M™ SILVER CUT-OFF WHEEL

- Ceramic cut-off wheel that is designed to cut quickly through all types of metals
- Optimized for use on carbon steel and stainless steel
- 3M™ Precision-Shaped Ceramic Grain cuts fast and cool
- No plowing
- Abrasive Material: Ceramic



Model No.	Type	D"	x	Size T"	x	A"	Max RPM	Price /Each
NV195	1	3	x	0.035	x	1/4	25 465	2.17
NV196	1	3	x	0.035	x	3/8	25 465	2.17
NV197	1	3	x	0.060	x	3/8	25 465	2.17
NV198	1	4	x	0.035	x	1/4	19 100	1.78
NV199	1	4	x	0.035	x	3/8	19 100	2.33
NV200	1	4	x	0.050	x	3/8	19 100	2.33
NV201	1	4	x	0.060	x	3/8	19 100	2.33
NV202	1	4-1/2	x	0.040	x	7/8	13 300	2.83
NV203	1	4-1/2	x	0.045	x	7/8	13 300	2.83
NV204	1	5	x	0.045	x	7/8	12 250	3.22
NV205	1	6	x	0.045	x	7/8	10 200	4.87
NV206	1	7	x	0.045	x	7/8	8 500	5.63
NV207	27	4-1/2	x	0.045	x	7/8	13 300	2.83
NV208	27	5	x	0.045	x	7/8	12 250	3.22
NV209	27	6	x	0.045	x	7/8	10 200	4.87

ZIPCUT™

- Cut faster, freer and cooler, requiring less power than standard thin cut-off wheel
- Heavily reinforced for extra safety and very flexible and resilient to resist twisting and bending
- Zipcut™ with integrated rib design
- Raised ribs reduces friction surface
- Air cooling action for cooler cutting
- Increased rigidity for straighter cuts



Model No.	Mfg. No.	D"	x	Size T"	x	A"	Grade	Max RPM	Price /Each
TYPE 01									
VV150	11-T-042	4 1/2	x	3/64	x	7/8	A-60-ZIP	13 300	4.78
VV151	11-T-052	5	x	3/64	x	7/8	A-60-ZIP	12 200	5.15
VV152	11-T-062	6	x	3/64	x	7/8	A-60-ZIP	10 200	7.65
VV154	11-T-072	7	x	1/16	x	7/8	A-30-ZIP	8 600	9.55
TYPE 27									
NS766	11-T-142	4 1/2	x	3/64	x	7/8	A-60-ZIP	13 300	5.49
NS767	11-T-152	5	x	3/64	x	7/8	A-60-ZIP	12 200	6.05
NS768	11-T-162	6	x	3/64	x	7/8	A-60-ZIP	10 200	8.21

D x T x A: diameter x thickness x arbor size

ZIP™ STAINLESS

- Superior cutting of nickel alloyed steels
- These extra thin cut-off wheels cut all stainless steels fast, free and cool for burr-free finishes
- Will not contaminate stainless steel
- Type 01:** Specially designed for stainless steel fabricators; extra fast cutting of pipes or solids
- Type 27:** Allows more clearance for flush cutting; metal hub cladding for extra strength, control and safety



Model No.	Mfg. No.	D"	x	Size T"	x	A"	Grade	Max RPM	Price /Each
TYPE 01									
NS771	11-F 042	4 1/2	x	3/64	x	7/8	A-60-SS-ZIP	13 300	5.30
NS772	11-F 052	5	x	3/64	x	7/8	A-60-SS-ZIP	12 200	5.80
NS773	11-F 062	6	x	3/64	x	7/8	A-60-SS-ZIP	10 200	7.75
NS774	11-F 072	7	x	1/16	x	7/8	A-30-SS-ZIP	8 600	9.65
NS775	11-F 092	9	x	5/64	x	7/8	A-30-SS-ZIP	6 800	13.30
TYPE 27									
NS776	11-F 142	4 1/2	x	3/64	x	7/8	A-60-SS-ZIP	13 300	5.60
NS777	11-F 152	5	x	3/64	x	7/8	A-60-SS-ZIP	12 200	6.10
NS778	11-F 162	6	x	3/64	x	7/8	A-60-SS-ZIP	10 200	8.20
NS779	11-F 172	7	x	1/16	x	7/8	A-30-SS-ZIP	8 600	9.85
NS780	11-F 192	9	x	5/64	x	7/8	A-30-SS-ZIP	6 800	14.30

COMBO ZIP™

- 5/64" thickness allows for cutting and light grinding/deburring
- Wheel is reinforced like a grinding wheel to bear the force of light lateral pressure
- Zip family formulation guarantees fast cutting time and long life
- Equipped with metal protective hub for extra strength, control and safety
- Can be used for notching, root pass cleaning and chamfering
- Type 27



Model No.	Mfg. No.	D"	x	Size T"	x	A"	Grade	Max RPM	Price /Each
VV470	11-T-842	4 1/2	x	5/64	x	7/8	A-60-COMBO ZIP	13 300	5.55
VV471	11-T-852	5	x	5/64	x	7/8	A-60-COMBO ZIP	12 200	6.23
VV472	11-T-862	6	x	5/64	x	7/8	A-60-COMBO ZIP	10 200	8.35

ZIP+™

- Superior performance cutting
- Feature an integrated rib design for better rigidity, cooler cutting and straighter cuts
- Used daily by metal fabricators, maintenance departments, sheet metal shops, welding shops, mechanical contractors, equipment manufacturers, automotive shops, etc.
- Type 01:** Cut fast, cool and free allowing the operator to work with minimal pressure for best control
- Type 27:** Equipped with a metal hub cladding for extra strength, control and safety; the preferred wheel for flush cutting in confined spaces

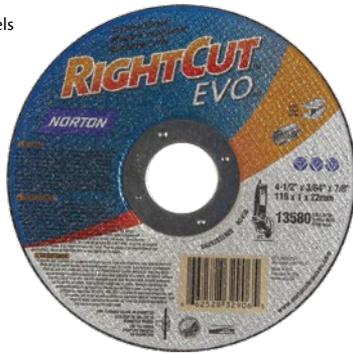


Model No.	Mfg. No.	D"	x	Size T"	x	A"	Grade	Max RPM	Price /Each
TYPE 01									
VE484	11-T-242	4 1/2	x	1/16	x	7/8	A-46-ZIP	13 300	5.10
VE485	11-T-252	5	x	1/16	x	7/8	A-46-ZIP	12 200	5.73
VV651	11-T-262	6	x	1/16	x	7/8	A-46-ZIP	10 200	7.81
TYPE 27									
VV087	11-T-453	4 1/2	x	1/16	x	7/8	A-46-ZIP	13 300	5.65
VV088	11-T-503	5	x	1/16	x	7/8	A-46-ZIP	12 200	6.34
VV089	11-T-603	6	x	1/16	x	7/8	A-46-ZIP	10 200	8.39

ABRASIVES

GEMINI RIGHTCUT

- 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
- Type 27



NORTON

Model No.	Mfg. No.	D"	x	Size T"	x	A"	Max RPM	Price /Each
NS093	RC45G27	4 1/2	x	3/64	x	7/8	13 580	2.79
NS094	RC5G27	5	x	3/64	x	7/8	12 225	3.30
NS096	RC7G27	7	x	1/16	x	7/8	8730	4.49

BLUEFIRE RIGHT ANGLE GRINDERS

- Upgraded zirconia alumina grain chemistry and shape, blended with premium aluminum oxide grain provides 2-3 times the life of aluminum oxide wheels
- Broad utility: from light- to heavy-pressure applications, on a wide range of materials: stainless steel, carbon steel, and alloys, to grey iron



NORTON

Model No.	Mfg. No.	D"	x	Size T"	x	A"	Max RPM	Price /Each
TYPE 01								
NR991	66252843208	4 1/2	x	0.045	x	7/8	13 580	3.49
NO015	66252843209	5	x	0.045	x	7/8	12 225	3.84
TYPE 27								
NR994	66252843219	4 1/2	x	1/16	x	7/8	13 580	3.72
NO018	66252843220	5	x	0.045	x	7/8	12 225	4.45

QUANTUM3™ RIGHTCUT™ CUT-OFF WHEEL

- 100% advanced ceramic alumina grain with a special shape for comfort and performance
- Unique bond system prevents premature grain released maximizing wheel life
- Great choice for stainless steel and carbon steel applications



NORTON

Model No.	Mfg. No.	D"	x	Size T"	x	A"	Max RPM	Price /Each
TYPE 01								
NV619	66252838454	4-1/2	x	0.045	x	7/8	13 580	5.17
NV029	66252838455	4-1/2	x	1/16	x	7/8	13 580	5.17
NV031	66252838460	5	x	0.045	x	7/8	12 225	5.90
NV877	66252838462	5	x	1/16	x	7/8	12 225	5.95
NV033	66252838465	6	x	1/16	x	7/8	10185	6.60
TYPE 27								
NV631	66252838456	4 1/2	x	1/16	x	7/8	13 580	6.22
NV030	66252838457	4 1/2	x	1/16	x	5/8-11	13 580	7.80
NV032	66252838464	5	x	1/16	x	7/8	12 225	6.77
NV034	66252838466	6	x	1/16	x	7/8	10185	6.94

D x T x A: Diameter x Thickness x Arbor Size

TOUGH CUT™ TYPE 01

- Cut fast and free without binding to minimize the load on the tool and maintain high RPM for a clean cut and best all-around performance



WALTER
Surface Technologies

Model No.	Mfg. No.	D"	x	Size T"	x	A"	Grade	Max RPM	Price /Each
VV155	11-R-042	4 1/2	x	3/32	x	7/8	A-30	13 300	5.05
VV156	11-R-052	5	x	3/32	x	7/8	A-30	12 200	5.90
VV157	11-R-062	6	x	3/32	x	7/8	A-30	10 200	7.05
VV158	11-R-072	7	x	3/32	x	7/8	A-30	8600	8.30

CIRCULAR SAW REINFORCED CUT-OFF WHEELS



MASONRY & METAL TYPE 01

- Versatile, ideal for slotting and cutting when initial cost is a main consideration
- **Gemini all purpose:** Quality aluminum oxide abrasive, sets the aluminum oxide general purpose industry standard for cutting rough sides all material in metal fabrication applications
- **Norton masonry:** Sharp, silicon carbide grain, engineered for all masonry materials such as concrete, brick and asphalt
- **Norton metal:** Quality aluminum oxide abrasive, designed for cutting alloys, steels and ferrous metals



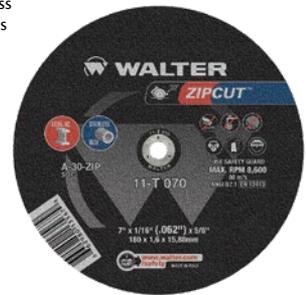
NORTON

Model No.	Mfg. No.	D"	x	Size T"	x	A"	Description	Max RPM	Price /Each
NS216	C0716G	7	x	1/16	x	5/8	Metal	8730	5.24
NS217	C0718M	7	x	1/8	x	DM*	Metal	8730	3.15
NS218	C0718MA	7	x	1/8	x	DM*	Masonry	8730	3.40
NS220	C0816G	8	x	1/16	x	5/8	Metal	7640	6.22
NS221	C0818M	8	x	1/8	x	DM*	Metal	7640	3.77
NS222	C0818MA	8	x	1/8	x	DM*	Masonry	7640	4.39

* DM: denotes diamond mount; 5/8" hole bushing included

ZIPCUT™ TYPE 01

- Cut faster, freer and cooler, requiring less power than standard thin cut-off wheels
- Heavily reinforced for extra safety and very flexible and resilient to resist twisting and bending



WALTER
Surface Technologies

Model No.	Mfg. No.	D"	x	Size T"	x	A"	Grade	Max RPM	Price /Each
VV153	11-T-070	7	x	1/16	x	5/8	A-30-ZIP	8600	9.54
VE482	11-T-080	8	x	1/16	x	5/8	A-30-ZIP	7600	11.00

CUT & GRIND WHEEL

- Designed to be a cost-effective solution that doesn't compromise on performance
- Made with 3M Precision Shaped Grain Technology, providing a super-sharp, micro-replicated abrasive
- Cuts fast and stays sharper, longer than conventional grinding wheels
- Grinds with less pressure, helping to reduce operator fatigue
- Engineered for a long performance life
- Can function as both a depressed centre grinding wheel and cut-off wheel
- Type: 27



Model No.	Mfg. No.	D" x T" x A"	Abrasive Material	Price /Each
TCS990	7100214084	4-1/2 x 1/8 x 7/8	Ceramic	4.68
TCS991	7100214086	5 x 1/8 x 7/8	Ceramic	5.18
TCS992	7100219761	6 x 1/8 x 7/8	Ceramic	10.07
TCS993	7100219187	7 x 1/8 x 7/8	Ceramic	11.05

QUANTUM3™ GRINDING & CUTTING WHEEL

- Ideal for stainless steel and carbon steel applications
- Advanced grain with a special shape for comfort and performance
- Unique bond system prevents premature grain release, maximizing wheel life
- Designed for off hand stock removal, smoothing welds and beveling, 90° grinding and pipe notching
- Abrasive Material: Ceramic Alumina
- Type: 27
- Grit: 24



Model No.	Mfg. No.	D" x T" x A"	Max. RPM	Price /Each
NY035	66252839427	6 x 1/8 x 5/8-11	10185	15.50
NY036	66252839428	6 x 1/8 x 7/8	10185	14.10
NY037	66252839429	7 x 1/8 x 5/8-11	8600	17.00
NY038	66252839430	7 x 1/8 x 7/8	8600	15.00
NY039	66252839431	9 x 1/8 x 5/8-11	6600	21.70
NY040	66252839432	9 x 1/8 x 7/8	6600	19.30

CUBITRON™ II CUT & GRIND WHEEL TYPE 27

- 3M precision-shaped grain for ultra fast cut and long life
- Versatile – use as both a grinding wheel and cut-off wheel
- Specially formulated for use on stainless and mild steel
- Cool cutting for a higher quality and faster cut



Model No.	Mfg. No.	D" x T" x A"	Max RPM	Price /Each
NU358	82279	4 1/2 x 1/8 x 7/8	13300	9.56
NU357	82278	5 x 1/8 x 7/8	12250	11.03
NU355	28758	6 x 1/8 x 7/8	10200	13.45
NU356	28760	7 x 1/8 x 7/8	8500	14.11
NU361	28761	9 x 1/8 x 7/8	6650	18.68

CERABOND X COMBINATION WHEEL

- New structure of ceramic grain provides users with never before seen grinding speed
- Combination of new bonding system and ceramic grain allows the wheel to stay sharp until the end
- Offers extreme lifetime, resulting in less wheel changes
- Ideal for cutting, fitting, light grinding and root pass grinding in steel and stainless steel
- Abrasive Material: Ceramic
- Type: 27
- Grit: 24



Model No.	Mfg. No.	D" x T" x A"	Max RPM	Price /Each
NV611	34401827	4 1/2 x 5/32 x 7/8	13300	7.65
NV612	34401841	5 x 5/32 x 7/8	12250	8.65
NV613	34401843	6 x 5/32 x 7/8	10200	11.90
NV614	34401849	7 x 5/32 x 7/8	8600	13.50
NV615	34401852	9 x 5/32 x 7/8	6650	21.90

See page 1112
for Cordless
Grinders



D x T x A: Diameter x Thickness x Arbor Size

ABRASIVES

CHOP SAW REINFORCED CUT-OFF WHEELS



BLUEFIRE CHOP SAW WHEELS

- Upgraded zirconia alumina grain chemistry and shape, blended with premium aluminum oxide grain provides 2-3 times the life of aluminum oxide wheel.
- Broad utility: from light to heavy pressure applications, on a wide range of materials: stainless steel, carbon steel and alloys, to gray iron
- Excellent performance-to-price ratio lowers total grinding costs
- Long Life:** Side reinforced; ideal for small cross-section work pieces, resist breakage and provide straight cuts
- Rapid Cut:** Centrally reinforced, non-binding, free-cutting, rough sides, burr- and burr-free cuts



NORTON

Model No.	Mfg. No.	Additional Description	D" x T" x A"	Max RPM	Price /Each
NO021	66252843250	Rapid Cut / Long Life	12 x 01/41 x 1	5095	15.00
NR996	66252843253	Long Life	14 x 7/64 x 1	4365	19.40
NO010	66252843254	Rapid Cut	14 x 01/41 x 1	4365	20.30
NR987	66252843257	Long Life	16 x 01/41 x 1	3820	28.40

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 T" x A"	Max RPM	Price /Each
GEMINI LONG LIFE				
NS255	C010764G	10 x 3/32 x 1	6110	10.10
NS256	C012764G	12 x 3/32 x 1	5095	8.20
NS259	C014764GLL	14 x 3/32 x 1	4365	10.40
NS261	C016764G	16 x 3/32 x 1	3820	18.20
GEMINI RAPID CUT				
NS257	C012764GRC	12 x 3/32 x 1	5095	7.30
NS260	C014764GRC	14 x 3/32 x 1	4365	9.17
GEMINI ALUMINUM				
NS258	C014764GALU	14 x 3/32 x 1	4365	13.30

BASIC TYPE 01

- All purpose, thin or heavy gauge cutting
- Centre-reinforced for fast cutting
- Non glazing on thin or heavy gauges
- For use on steel & stainless steel



TYROLIT

Model No.	Mfg. No.	D" x T" x A"	Max RPM	Price /Each
NU402	20041210	14 x 3/32 x 1	4400	9.29

D x T x A: Diameter x Thickness x Arbor Size

CHOPCUT™ TYPE 01

- These wheels have been specifically developed for use on portable abrasive chop saws
- They put minimum load on the motor and are therefore easy on the operator as well as on the saw
- General purpose:** The wheel of choice for solids; fast cutting rate with long wheel life
- High performance:** The wheel of choice for tubing and extrusions; optimized for use on low power chop saws reduces load on machine and creates less burr
- Alu:** Fast and free cutting in all types of aluminum and non-ferrous metals; unique formulation which guarantees no clogging



WALTER
Surface Technologies

Model No.	Mfg. No.	Size D" x T" x A"	Grade	Max RPM	Price /Each
GENERAL PURPOSE					
VV160	10-Q-123	12 x 3/32 x 1	A-30-HC+	5200	9.95
VV161	10-Q-143	14 x 3/32 x 1	A-30-HC+	4400	13.40
VV162	10-Q-163	16 x 7/64 x 1	A-30-HC+	3800	26.30
HIGH PERFORMANCE					
VV163	10-P-123	12 x 3/32 x 1	A-30	5200	13.80
VV164	10-P-143	14 x 3/32 x 1	A-30	4400	17.50
VV165	10-P-163	16 x 7/64 x 1	A-30	3800	23.80
ALUMINUM					
VV166	10-L-123	12 x 3/32 x 1	A-30-ALU	5200	22.10
VV167	10-L-143	14 x 3/32 x 1	A-30-ALU	4400	28.70

14" ABRASIVE CHOP SAWS

- Powerful 15 Amp, 4.0 max. HP motor: Delivers maximum cutting performance in a wide variety of materials
- Large cutting capacity: Provides versatility for a wide range of cutting applications, up to 5" pipe
- 45° miter capacity with adjustable fence
- Quick adjust vise clamp: Allows clamp to be adjusted quickly when cutting different material sizes
- All ball bearing construction: Delivers maximum durability
- Includes:** Chop saw, vise, abrasive wheel, hex wrench

Model No. TLV202
Mfg. No. 6177-20
Price/Each \$275.00

SPECIFICATIONS

Amperage: 15.0
Motor Horsepower: 4.0
No Load RPM: 3900
Blade Diameter: 14"
Tool Weight: 40.0 lbs.



Milwaukee

PERFORMANCE PLUS 14" CHOP SAWS

- Ball bearing induction motor
- Spark deflector for safe operation
- Quick release vise for holding workpiece, which allows cuts up to a 45° angle

Model No. WK772
Mfg. No. 8342
Price/Each \$193.00

SPECIFICATIONS

Amperage: 15.0
No Load RPM: 3750
Blade Diameter: 14"
Max. Depth of Cut: 4"
Max. Width of Cut: 7 1/4"
Tool Weight: 45.0 lbs.



KING
MAS

HIGH SPEED REINFORCED CUT-OFF WHEELS

- **Universal arbor:** 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
- **Ductile:** Special blend of silicon carbide and aluminum oxide ideal for cutting ductile, cast iron pipe, concrete lined water pipes, sewer construction and heavy-duty PVC
- **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 T" x A	Max RPM	Price /Each
FOR ASPHALT				
NR146	70184670243	12 x 1/8 x 1"/20 mm	6360	8.87
NR147	70184672877	14 x 1/8 x 1"/20 mm	5400	12.90
FOR CONCRETE				
NR865	66252837839	12 x 1/8 x 1"/20 mm	6360	7.04
NR868	66252837842	14 x 1/8 x 1"/20 mm	5400	11.70
NS234	70184623029	16 x 1/8 x 1"/20 mm	4800	19.40
FOR DUCTILE				
NR866	66252837840	12 x 1/8 x 1"/20 mm	6360	7.45
NR869	66252837843	14 x 1/8 x 1"/20 mm	5400	12.60
FOR METALWORKING				
NR864	66252837838	12 x 1/8 x 1"/20 mm	6360	6.97
NR867	66252837841	14 x 1/8 x 1"/20 mm	5400	11.70

PORTACUT™ TYPE 01

- These premium wheels stand out as the most reliable cut-off wheels for all on-site cutting jobs
- Specially reinforced for added safety and formulated for an optimal cutting speed and wheel life ratio



WALTER
Surface Technologies

Model No.	Mfg. No.	D" x T" x A	Max RPM	Price /Each
FOR STEEL & CAST IRON				
VV168	11-A-121	12 x 1/8 x 20 mm STIHL	6300	15.90
VV169	11-A-122	12 x 1/8 x 7/8" partner	6300	15.90
VV170	11-A-123	12 x 1/8 x 1" A-24	6300	15.90
VV171	11-A-141	14 x 1/8 x 20 mm STIHL	5400	24.90
VV172	11-A-142	14 x 1/8 x 7/8" partner	5400	24.90
VV173	11-A-143	14 x 1/8 x 1" A-24	5400	24.90
FOR REINFORCED CONCRETE, DUCTILE IRON, PVC & OTHER PLASTIC PIPES				
VV174	11-D-121	12 x 1/8 x 20 mm STIHL	6300	15.90
VV175	11-D-122	12 x 1/8 x 7/8" partner	6300	15.90
VV176	11-D-123	12 x 1/8 x 1" C-24	6300	15.90
VV177	11-D-141	14 x 1/8 x 20 mm STIHL	5400	24.90
VV178	11-D-142	14 x 1/8 x 7/8" partner	5400	24.90
VV179	11-D-143	14 x 1/8 x 1" C-24	5400	24.90

D x T x A: Diameter x Thickness x Arbor Size

LARGE DIAMETER REINFORCED CUT-OFF WHEELS FOR STATIONARY SAWS



RIPCUT™ TYPE 01

- These wheels are formulated for use on stationary cut-off machines to make more and faster cuts
- **General purpose:** The most versatile wheel; cuts thin walled profiles to heavy solids; the preferred wheel for low power machines
- **High performance:** Cut most anything from thin wall shapes to solid shafts; fast and cool cutting, long wheel life
- **Stainless:** Specially formulated to cut all types of stainless and alloyed steels; fast and cool cutting with less burr and discoloration



WALTER
Surface Technologies

Model No.	Mfg. No.	Size D" x T" x A	Grade	Max RPM	Price /Each
GENERAL PURPOSE					
YC431	10-B-123	12 x 1/8 x 1"	A-24-FC	5100	18.90
VE489	10-B-143	14 x 1/8 x 1"	A-24-FC	4400	28.80
YC479	10-B-163	16 x 5/32 x 1"	A-24-FC	3800	40.10
VE490	10-B-183	18 x 3/16 x 1"	A-24-FC	3400	65.70
VE491	10-B-203	20 x 3/16 x 1"	A-24-FC	3000	74.90
VE492	10-B-246	24 x 1/4 x 40 mm	A-24-FC	2550	138.00
HIGH PERFORMANCE					
VE493	10-A-123	12 x 1/8 x 1"	A-24-RIP	5100	20.30
VE494	10-A-143	14 x 1/8 x 1"	A-24-RIP	4400	30.80
TAV067	10-A-163	16 x 5/32 x 1"	A-24-RIP	3800	43.40
VE495	10-A-183	18 x 3/16 x 1"	A-24-RIP	3400	70.40
VE496	10-A-203	20 x 3/16 x 1"	A-24-RIP	3000	81.20
VE497	10-A-206	20 x 3/16 x 40 mm	A-24-RIP	3000	81.20
VE498	10-A-246	24 x 1/4 x 40 mm	A-24-RIP	2550	155.00
STAINLESS					
YB798	10-C-123	12 x 1/8 x 1"	A-36-SS	5100	21.00
WN964	10-C-143	14 x 1/8 x 1"	A-36-SS	4400	32.70
VE499	10-C-163	16 x 5/32 x 1"	A-36-SS	3800	43.50
VE500	10-C-203	20 x 3/16 x 1"	A-36-SS	3400	83.50
VE501	10-C-206	20 x 3/16 x 40mm	A-36-SS	3000	83.50

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.	Size D" x T" x A"	Max RPM	Price /Each
GEMINI FREE CUT				
NS242	C01418GFC	14 x 1/8 x 1	4365	22.70
NS244	C016532GFC	16 x 5/32 x 1	3820	31.00
NS246	C018532G	18 x 5/32 x 1	3015	52.50
NS247	C020532GFC	20 x 5/32 x 1	2710	51.80
NS249	C020316GFC	20 x 3/16 x 1	2710	57.00
GEMINI LONG LIFE				
NS241	C01218GLL	12 x 1/8 x 1	5095	15.10
NS243	C01418GLL	14 x 1/8 x 1	4365	22.70
NS245	C016532GLL	16 x 5/32 x 1	3820	31.00
NS248	C020532GLL	20 x 5/32 x 1	2710	51.80
NS250	C020316GLL	20 x 3/16 x 1	2710	57.00



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



Model No.	Mfg. No.	D" x T" x A"	Max RPM	Price /Each
FOR STEEL CUTTING/NOTCHING & LIGHT GRINDING				
NS053	DC4518NZP	4 1/2 x 1/8 x 7/8	13 580	9.90
NS054	DC518NZP	5 x 1/8 x 7/8	12 225	11.20
NS055	DC718NZP	7 x 1/8 x 7/8	8600	14.60
NS056	DC918NZP	9 x 1/8 x 7/8	6600	18.80
FOR STEEL GRINDING				
NS044	DC4514NZP	4 1/2 x 1/4 x 7/8	13 580	10.70
NS039	DC514NZP	5 x 1/4 x 7/8	12 225	12.40
NS059	DC614NZP	6 x 1/4 x 7/8	10 185	15.20
NS036	DC714NZP	7 x 1/4 x 7/8	8600	15.90
NS032	DC914NZP	9 x 1/4 x 7/8	6600	21.50

HP™ TYPE 27

- High performance grinding and cutting
- These wheels are formulated to give highest productivity, safety and operator comfort on all types of grinders – air grinders, electric grinders/sanders and portable high speed angle grinders.
- Exceptional performance in grinding down welds, preparing weld edges, deburring, shaping, cleaning and cutting
- The wheel of choice for steel
- **With Spin-On arbor:** Fast and easy changeover of wheel for minimum downtime; perfectly centred wheel each and every time for best performance
- **With 3/8" arbor, 1/8" thick:** Ideal for both cutting and light grinding work; hold their cutting edge longer to give you a cutting life beyond compare; equipped with an exclusive metal hub cladding for extra strength and control
- **With 3/8" arbor, 1/4" thick:** High performance wheels grind off metal faster; smooth grinding with an aggressive, controlled bite; extra long wheel life



Model No.	Mfg. No.	D" x T" x A	Grade	Max RPM	Price /Each
WITH SPIN-ON ARBOR – 1/8" HP COMBO					
VV403	08-B-452	4 1/2 x 1/8 x 5/8"-11	A-30-COMBO	13 300	5.39
VV404	08-B-502	5 x 1/8 x 5/8"-11	A-30-COMBO	12 200	6.15
WITH SPIN-ON ARBOR – 1/4" HP					
VV401	08-B-450	4 1/2 x 1/4 x 5/8"-11	A-24-HPS	13 300	6.15
VV402	08-B-500	5 x 1/4 x 5/8"-11	A-24-HPS	12 200	6.65
7/8" ARBOR					
VV082	08-B-462	4 1/2 x 1/8 x 7/8"	A-30-COMBO	13 300	5.39
VV083	08-B-512	5 x 1/8 x 7/8"	A-30-COMBO	12 200	6.15
VV084	08-B-602	6 x 1/8 x 7/8"	A-30-COMBO	10 200	7.89
VV085	08-B-712	7 x 1/8 x 7/8"	A-30-COMBO	8600	8.39
VV086	08-B-912	9 x 1/8 x 7/8"	A-30-COMBO	6800	11.80
VV074	08-B-460	4 1/2 x 1/4 x 7/8"	A-24-HPS	13 300	6.15
VV075	08-B-510	5 x 1/4 x 7/8"	A-24-HPS	12 200	6.65
VV076	08-B-600	6 x 1/4 x 7/8"	A-24-HPS	10 200	8.39
VV077	08-B-710	7 x 1/4 x 7/8"	A-24-HPS	8600	9.65
VV078	08-B-910	9 x 1/4 x 7/8"	A-24-HPS	6800	15.30

1/4" wheels to be used with flange TAV109, 1/8" wheels to be used with flange UG580

D x T x A: Diameter x Thickness x Arbor Size

BLUEFIRE TYPE 27

- Upgraded zirconia alumina grain chemistry and shape, blended with premium aluminum oxide grain provide 2-3 times the life of aluminum oxide wheels
- Broad utility: from light- to heavy-pressure applications, on a wide range of materials: stainless steel, carbon steel, and alloys, to gray iron
- Excellent performance-to-price ratio lowers total grinding costs
- Contaminate-free INOX wheels contain <0.1% iron, sulfur, or chlorine for rust-free and corrosion-free results; will not contaminate stainless steel
- Foundry wheels have zirconia alumina/silicon carbide abrasive and an exceptionally strong reinforcement structure



Model No.	Mfg. No.	D" x T" x A"	Max RPM	Price /Each
FOR STEEL CUTTING/NOTCHING & LIGHT GRINDING				
NR992	66252843212	4 1/2 x 1/8 x 7/8	13 580	5.35
NO016	66252843216	5 x 1/8 x 7/8	12 225	6.09
NO014	66252843202	6 x 1/8 x 7/8	10 185	8.20
NO031	66252843234	7 x 1/8 x 7/8	8600	8.92
NO020	66252843245	9 x 1/8 x 7/8	6600	13.80
FOR STEEL GRINDING				
NR981	66252843214	4 1/2 x 1/4 x 7/8	13 580	5.70
NO017	66252843218	5 x 1/4 x 7/8	12 225	6.54
NO005	66252843203	6 x 1/4 x 7/8	10 185	8.30
NO032	66252843236	7 x 1/4 x 7/8	8600	9.67
NR985	66252843247	9 x 1/4 x 7/8	6600	15.20

Ask us about volume prices!



In many cases you will benefit from quantity prices.

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"	Size	Max RPM	Price /Each
FOR STEEL CUTTING/NOTCHING & LIGHT DEBURRING					
NR881	DC4518M	4 1/2 x 1/8 x 7/8		13 580	1.69
NR882	DC518M	5 x 1/8 x 7/8		12 225	2.15
NR883	DC718M	7 x 1/8 x 7/8		8600	3.75
FOR GRINDING					
NS130	DC4514M	4 1/2 x 1/4 x 7/8		13 580	1.92
NS132	DC514M	5 x 1/4 x 7/8		12 225	2.35
NS134	DC714M	7 x 1/4 x 7/8		8600	3.97

ALLSTEEL™ TYPE 27

- Our most versatile grinding wheel
- These grinding wheels are designed to deliver top performance when working on both steel and stainless steel
- They incorporate the latest developments in grain and bonding technology to lower your grinding costs
- Operator safety and comfort, fast removal rates and outstanding life are key features that will let you do more work in less time
- 1/8" thick:** Fastest cutting wheel in its class; cool and free cutting; resists bending and twisting for extra safety
- 1/4" thick:** Fast removal rates and cool grinding action for entire life of wheel; excellent comfort and handling; heavily reinforced for absolute safety



WALTER
Surface Technologies

Model No.	Mfg. No.	D" x T" x A"	Size	Grade	Max RPM	Price /Each
VE808	08-C-452	4 1/2 x 1/8 x 7/8		A-30-AS	13 300	4.55
VE809	08-C-502	5 x 1/8 x 7/8		A-30-AS	12 200	4.95
VE810	08-C-602	6 x 1/8 x 7/8		A-30-AS	10 200	6.45
VE811	08-C-702	7 x 1/8 x 7/8		A-30-AS	8600	6.75
VE812	08-C-902	9 x 1/8 x 7/8		A-30-AS	6800	9.45
VE803	08-C-450	4 1/2 x 1/4 x 7/8		A-24-AS	13 300	5.39
VE804	08-C-500	5 x 1/4 x 7/8		A-24-AS	12 200	5.95
VE805	08-C-600	6 x 1/4 x 7/8		A-24-AS	10 200	7.35
VE806	08-C-700	7 x 1/4 x 7/8		A-24-AS	8600	8.09
VE807	08-C-900	9 x 1/4 x 7/8		A-24-AS	6800	12.35

CUBITRON™ II TYPE 27

- Produces very high cut rates on a wide variety of metals
- Used for heavy weld removal and many other grinding applications
- 3M precision-shaped grain for ultra fast cut and long life
- Specially formulated for use on stainless and mild steel
- Cool cutting for higher quality and faster cut



3M

Model No.	Mfg. No.	D" x T" x A"	Size	Max RPM	Price /Each
NU206	051115-66598	4 x 1/4 x 3/8		15 300	9.41
NU207	051115-66597	4 x 1/4 x 5/8		15 300	9.41
NU208	051115-66587	4 1/2 x 1/4 x 7/8		13 300	9.76
NU205	051115-66588	5 x 1/4 x 7/8		12 250	11.27
NU209	051115-66589	6 x 1/4 x 7/8		10 000	13.77
NU210	051115-66590	7 x 1/4 x 7/8		8500	14.43
NU211	051115-66591	9 x 1/4 x 7/8		6650	19.53

D x T x A: Diameter x Thickness x Arbor Size

3M™ SILVER GRINDING WHEEL

- Ceramic grinding wheel that is designed to grind quickly through all types of metals
- Optimized for use on carbon steel and stainless steel
- 3M™ Precision-Shaped Ceramic Grain grinds fast and cool
- No plowing
- Type: 27
- Abrasive Material: Ceramic



3M

Model No.	D" x T" x A"	Size	Max RPM	Price /Each
NV210	4 x 1/4 x 3/8		15 300	3.53
NV211	4 x 1/4 x 5/8		15 300	3.53
NV212	4-1/2 x 1/4 x 7/8		13 300	3.68
NV213	5 x 1/4 x 7/8		12 250	3.90
NV214	6 x 1/4 x 7/8		10 200	7.94
NV215	7 x 1/4 x 7/8		8500	8.84
NV216	9 x 1/4 x 7/8		6650	13.32

HP XX™ GRINDING WHEEL

- Exceptional grinding with less sweat
- Manufactured with productivity in mind these wheels will not only get the job done faster and last longer but are also easier to control requiring less pressure to do the same job
- Grain, bond and reinforcement are of the highest quality and each wheel is perfectly balanced for superior control in the most demanding applications
- Use them for removing welds, preparing weld edges, deburring, shaping or cleaning with powerful angle grinders and see for yourself how you can do more work in less time and with less sweat
- Exceptional grinding with less pressure and better control
- Outstanding life in both steel and stainless steel
- Wheels are balance-controlled within tolerances twice as strict for absolute safety



WALTER
Surface Technologies

Model No.	Mfg. No.	D" x T" x A"	Size	Grade	Max RPM	Price /Each
VV455	08-H-450	4 1/2 x 1/4 x 7/8"		A-24-AXX	13 300	6.59
VV456	08-H-500	5 x 1/4 x 7/8"		A-24-AXX	12 200	7.29
VV457	08-H-600	6 x 1/4 x 7/8"		A-24-AXX	10 200	9.03
VV458	08-H-700	7 x 1/4 x 7/8"		A-24-AXX	8600	10.90

WITH SPIN-ON ARBOR

VV409	08-K-450	4 1/2 x 1/4 x 5/8"-11		A-20-X	13 300	7.92
VV410	08-K-500	5 x 1/4 x 5/8"-11		A-20-X	12 200	9.05



ZENITH

**SAFETY PRODUCTS
FOR INDUSTRY**

ABRASIVES



STAINLESS TYPE 27

- Superior grinding and cutting
- These wheels are excellent for use on all nickel alloyed steels in tough and demanding applications
- They hug the work piece for minimum bounce or vibration for controlled grinding and a smooth, high quality finish
- They are made with highly refined ingredients that will not contaminate stainless steel
- **1/8" thick:** High performance cutting and intermittent light grinding; maintain a superior cutting edge; cool cutting, excellent wheel life with superior control
- **1/4" thick:** Fast and cool stock removal; high performance and superior control in the most demanding grinding applications
- **With Spin-On arbor:** Fast and easy changeover of wheel for minimum downtime; perfectly centred wheel each and every time for best performance



Model No.	Mfg. No.	D" x T" x A	Grade	Max RPM	Price /Each
WITH SPIN-ON ARBOR					
VV407	08-F-452	4 1/2 x 1/8 x 5/8"-11	A-30-SS	13 300	6.50
VV408	08-F-502	5 x 1/8 x 5/8"-11	A-30-SS	12 200	6.94
VV405	08-F-450	4 1/2 x 1/4 x 5/8"-11	A-30-SS	13 300	7.74
VV406	08-F-500	5 x 1/4 x 5/8"-11	A-30-SS	12 200	8.50
WITH 7/8" ARBOR					
VV114	08-F-462	4 1/2 x 1/8 x 7/8"	A-30-SS-COMBO	13 300	6.50
VV115	08-F-512	5 x 1/8 x 7/8"	A-30-SS-COMBO	12 200	6.94
VV116	08-F-602	6 x 1/8 x 7/8"	A-30-SS-COMBO	10 200	9.04
VV117	08-F-702	7 x 1/8 x 7/8"	A-30-SS-COMBO	8600	9.80
VV109	08-F-460	4 1/2 x 1/4 x 7/8"	A-30-SS	13 300	7.80
VV110	08-F-510	5 x 1/4 x 7/8"	A-30-SS	12 200	8.50
VV111	08-F-600	6 x 1/4 x 7/8"	A-30-SS	10 200	11.10
VV112	08-F-700	7 x 1/4 x 7/8"	A-30-SS	8600	11.35

ALUMINUM TYPE 27

- Performance grinding and cutting in soft metals
- These wheels grind all types of aluminum and non-ferrous metals smoothly and at removal rates never thought possible
- The specially impregnated bonding of these wheels resists loading even when grinding very soft, pure aluminum
- They do not contain any waxes or lubricants and do not contaminate the material worked on – ground surfaces are therefore clean and ready for welding without further clean-up
- **1/8" Thick:** Formulated for cutting but may also be used for intermittent light grinding; fast and free cutting
- **1/4" Thick:** Fast removal rate and long wheel life; no clogging in any type of aluminum



Model No.	Mfg. No.	D" x T" x A	Grade	Max RPM	Price /Each
VV123	08-L-452	4 1/2 x 1/8 x 7/8	A-24-ALU	13 300	6.60
VV125	08-L-502	5 x 1/8 x 7/8	A-24-ALU	12 200	7.75
VV127	08-L-602	6 x 1/8 x 7/8	A-24-ALU	10 200	10.40
VV129	08-L-702	7 x 1/8 x 7/8	A-24-ALU	8600	11.40
VV124	08-L-450	4 1/2 x 1/4 x 7/8	A-24-ALU	13 300	8.05
VV126	08-L-500	5 x 1/4 x 7/8	A-24-ALU	12 200	8.95
VV128	08-L-600	6 x 1/4 x 7/8	A-24-ALU	10 200	12.80
VV130	08-L-700	7 x 1/4 x 7/8	A-24-ALU	8600	13.60

D x T x A: Diameter x Thickness x Arbor Size

BLUEFIRE DEPRESSED CENTER WHEELS

- Upgraded zirconia alumina grain chemistry and shape, blended with premium aluminum oxide grain provides 2-3 times the life of aluminum oxide wheel.
- Broad utility: from light to heavy pressure applications, on a wide range of materials: stainless steel, carbon steel and alloys, to grey iron
- Excellent performance-to-price ratio lowers total grinding costs
- Will not contaminate stainless steel



Model No.	Mfg. No.	Size D" x T" x A"	Max RPM	Price /Each
FOR CUTTING/NOTCHING & LIGHT GRINDING				
NR989	66252843190	4 1/2 x 1/8 x 7/8	13 580	4.99
NO027	66252843194	5 x 1/8 x 7/8	12 225	5.52
NO030	66252843198	6 x 1/8 x 7/8	10 185	7.04
NO025	66252843182	7 x 1/8 x 7/8	8600	8.27
FOR GRINDING				
NR978	66252843192	4 1/2 x 1/4 x 7/8	13 580	5.20
NO004	66252843188	9 x 1/4 x 7/8	6600	13.20

CONCRETE TYPE 27

- High performance grinding and cutting
- These wheels for use on portable angle grinders have multiple high strength reinforcement and a matched super tough bond for extra safety in tough grinding and cutting applications
- They are made for fast material removal and smooth grinding and cutting of concrete, masonry, stone and similar building materials
- **1/8" Thick:** Fast and free cutting; formulated for cutting but may also be used for intermittent light grinding
- **1/4" Thick:** Excellent control in demanding applications; extra hard silicon carbide grain for fast material removal and long wheel life



Model No.	Mfg. No.	Size D" x T" x A"	Grade	Max RPM	Price /Each
UE693	08-D-452	4 1/2 x 1/8 x 7/8	C-24	13 300	6.50
UE694	08-D-502	5 x 1/8 x 7/8	C-24	12 200	6.80
UE696	08-D-702	7 x 1/8 x 7/8	C-24	8600	9.29
UE698	08-E-450	4 1/2 x 1/4 x 7/8	C-24	13 300	7.65
UE699	08-E-500	5 x 1/4 x 7/8	C-24	12 200	8.40
UE701	08-E-700	7 x 1/4 x 7/8	C-24	8600	12.30

PREMIUM 2 IN 1 TYPE 27

- Offers comfort, high stock removal and long life
- Fast removal & operator comfort
- Used in various applications
- Exclusive blend of bonding & grain system
- For use on steel & stainless steel



Model No.	Mfg. No.	Size D" x T" x A"	Max RPM	Price /Each
NU410	5293	4 1/2 x 9/32 x 7/8	13 300	4.39
NU411	5313	5 x 9/32 x 7/8	12 250	4.85
NU412	5330	6 x 9/32 x 7/8	10 200	6.05

PIPEFITTER™ GRINDING WHEEL

- Outstanding performer in pipeline construction
- These wheels are specially formulated and reinforced for grinding joint welds between passes in pipeline construction and pipe fabrication
- They do not contain iron, sulfur or chlorine (Fe, S, Cl) and will not contaminate stainless steel
- **3/32" Thick:** Thin for fast and free cutting and grooving; can also be used for cutting sheet metal
- **5/32" Thick:** Formulated for light grinding, cutting and notching
- **1/8" Thick:** Ideal for use with low power angle grinders; grind joint welds with ease; can be used for intermittent light grinding, facing and bevelling work



Model No.	Mfg. No.	Size			Grade	Max RPM	Price /Each
		D"	x	A"			
VV103	08-N-453	4 1/2	x 3/32	x 7/8	A-36-PIPE	13 300	6.10
VV104	08-N-503	5	x 3/32	x 7/8	A-36-PIPE	12 200	6.50
VV380	08-N-603	6	x 3/32	x 7/8	A-36-PIPE	10 200	8.05
VV106	08-N-703	7	x 3/32	x 7/8	A-36-PIPE	8 600	8.85
VV385	08-N-454	4 1/2	x 5/32	x 7/8	A-36-PIPE	13 300	6.10
VV386	08-N-504	5	x 5/32	x 7/8	A-36-PIPE	12 200	6.50
VV105	08-N-604	6	x 5/32	x 7/8	A-20-PIPE	10 200	9.15
VV107	08-N-704	7	x 5/32	x 7/8	A-20-PIPE	8 600	10.40
VV381	08-N-452	4 1/2	x 1/8	x 7/8	A-36-PIPE	13 300	6.10
VV382	08-N-502	5	x 1/8	x 7/8	A-36-PIPE	12 200	6.50
VV383	08-N-602	6	x 1/8	x 7/8	A-36-PIPE	10 200	8.05
VV384	08-N-702	7	x 1/8	x 7/8	A-36-PIPE	8 600	9.15

FLEXCUT™ TYPE 27

- Premium performance flexible grinding wheel especially formulated to deliver superior performance on all ferrous and non-ferrous metals
- Deep Diamond-Cut™ pattern and optimized formulation
- More flexibility
- Best handling on flat and curved surfaces
- Cooler grinding
- Better stock removal in all materials (steel, stainless steel, aluminum)
- 4 1/2" and 5" Flexcut™ flexible grinding wheels with the unique Spin-on quick change mounting system for better comfort and maximum productivity
- Always use flange model UG580



Model No.	Mfg. No.	Size			Grade	Max RPM	Price /Each
		D"	x	A"			
VV411	15-L-453	4 1/2	x 5/8"-11		A-36-X-FLEX	13 300	9.39
VV412	15-L-456	4 1/2	x 5/8"-11		A-60-X-FLEX	13 300	9.39
VV413	15-L-460	4 1/2	x 5/8"-11		A-100-X-FLEX	13 300	9.39
VV414	15-L-503	5	x 5/8"-11		A-36-X-FLEX	12 200	9.99
VV415	15-L-506	5	x 5/8"-11		A-60-X-FLEX	12 200	9.99
VV416	15-L-510	5	x 5/8"-11		A-100-X-FLEX	12 200	9.99
UG128	15-L-602	6	x 5/8"-11		A-24-X-FLEX	10 200	12.90
UG129	15-L-603	6	x 5/8"-11		A-36-X-FLEX	10 200	12.90
UG130	15-L-606	6	x 5/8"-11		A-60-X-FLEX	10 200	12.90
VV139	15-L-702	7	x 7/8"		A-24-X-FLEX	8 600	13.40
VV140	15-L-703	7	x 7/8"		A-36-X-FLEX	8 600	13.40
VV141	15-L-706	7	x 7/8"		A-60-X-FLEX	8 600	13.40
VV142	15-L-710	7	x 7/8"		A-100-X-FLEX	8 600	12.95

D x T x A: Diameter x Thickness x Arbor Size
D x A: Diameter x Arbor Size

ANGLE GRINDERS WITH TRIGGER GRIP

- Trigger grip handle provides better control, reach and leverage
 - Debris baffles protect internal components by deflecting damaging debris out of the airflow at the intake vents
 - External brush doors reduces service time by providing easy access to brushes
 - Includes: Side handle, spanner wrench and type 27 guard
 - Wheel Diameter: 5"
 - Voltage: 120 V
 - Amps: 11 A
 - No Load RPM: 11 000
 - Spindle Size: 5/8"
 - Tool Weight: 5.6 lbs.
- Model No. TLZ810**
Mfg. No. 6121-31A
Price/Each \$173.00



HEAVY-DUTY ANGLE GRINDERS

- High power-to-weight ratio for greater efficiency and reduced user fatigue
 - External brush doors for easy servicing
 - Sealed ball and roller bearings for extended motor life
 - Includes: Grinding wheel, wrench, keyless adjustable guard and two position side handle
 - Wheel Diameter: 5"
 - Voltage: 120 V
 - Amps: 12 A
 - No Load RPM: 10 000
 - Spindle Size: 5/8"
 - Tool Weight: 7.4 lbs.
- Model No. VE980**
Mfg. No. DW831
Price/Each \$148.00



ANGLE GRINDERS

- Rear handle design for greater control
 - Trigger lock
 - Light weight for high production work with less fatigue
 - Includes: 5" grinding wheel 24 grit and side handle
- Model No. TF719**
Mfg. No. 9005B
Price/Each \$189.00

SPECIFICATIONS

Wheel Diameter: 5"
Voltage: 120 V
Amperage: 10 Amp
No Load RPM: 10 000
Spindle Size: 5/8"
Tool Weight: 6.6 lbs.



ABRASIVES



BENCH GRINDING WHEELS

Typical Applications

- Offhand deburring and sharpening of parts and tools



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
- All wheels supplied with bushings



NORTON

Model No.	Mfg. No.	Size			Grit	Max RPM	Price /Each		
ALUMINUM OXIDE WHEELS FOR STEEL APPLICATION									
NS320	36132	6	x	1/2	x	1	Coarse	4140	21.70
NS321	36131	6	x	1/2	x	1	Medium	4140	21.70
NS322	36133	6	x	1/2	x	1	Fine	4140	21.70
NS323	88245	6	x	3/4	x	1	Coarse	4140	25.40
NS324	88240	6	x	3/4	x	1	Medium	4140	25.40
NS325	88235	6	x	3/4	x	1	Fine	4140	25.40
NS326	88260	6	x	1	x	1	Coarse	3600	29.30
NS327	88255	6	x	1	x	1	Medium	3600	29.30
NS328	88250	6	x	1	x	1	Fine	3600	29.30
NS329	88275	7	x	1	x	1	Coarse	3600	35.80
NS330	88270	7	x	1	x	1	Medium	3600	35.80
NS331	88265	7	x	1	x	1	Fine	3600	35.80
NS332	88278	8	x	3/4	x	1	Coarse	3600	37.20
NS333	88277	8	x	3/4	x	1	Medium	3600	37.20
NS334	42317	8	x	3/4	x	1	Fine	3600	37.20
NS335	44454	8	x	1	x	1	Very coarse	3600	43.90
NS336	88286	8	x	1	x	1	Coarse	3600	43.90
NS337	88285	8	x	1	x	1	Medium	3600	43.90
NS338	88280	8	x	1	x	1	Fine	3600	43.90
NS339	60788	10	x	1	x	1	Very coarse	2485	69.10
NS340	88295	10	x	1	x	1	Coarse	2485	69.10
NS341	88290	10	x	1	x	1	Medium	2485	69.10
NS342	60350	10	x	1	x	1	Fine	2485	69.10
NS343	61250	10	x	1 1/4	x	1 1/4	Coarse	2485	80.20
NS344	61251	10	x	1 1/4	x	1 1/4	Medium	2485	80.20
NS345	61393	10	x	1 1/2	x	1 1/4	Coarse	2485	95.00
NS346	61395	10	x	1 1/2	x	1 1/4	Medium	2485	95.00
NS347	63052	12	x	1 1/2	x	1 1/2	Coarse	2070	131.00
NS348	63053	12	x	1 1/2	x	1 1/2	Medium	2070	131.00
NS349	63054	12	x	2	x	1 1/2	Very coarse	2070	171.00
NS350	63055	12	x	2	x	1 1/2	Coarse	2070	171.00
NS351	63056	12	x	2	x	1 1/2	Medium	2070	171.00

SILICON CARBIDE WHEELS FOR NON-STEEL APPLICATIONS

NS352	36571	6	x	1/2	x	1	Medium	4140	33.50
NS353	36572	6	x	1/2	x	1	Fine	4140	33.50
NS354	36573	6	x	1/2	x	1	Extra-fine	4140	33.50
NS355	37190	6	x	3/4	x	1	Medium	4140	39.80
NS356	37191	6	x	3/4	x	1	Fine	4140	39.80
NS357	37192	6	x	3/4	x	1	Extra-fine	4140	39.80
NS358	37187	6	x	1	x	1	Medium	3600	46.10
NS359	37193	6	x	1	x	1	Fine	3600	46.10
NS360	37194	6	x	1	x	1	Extra-fine	3600	46.10
NS361	42300	7	x	1	x	1	Medium	3600	57.50
NS362	42301	7	x	1	x	1	Fine	3600	57.50
NS363	42302	7	x	1	x	1	Extra-fine	3600	57.50
NS364	44087	8	x	1	x	1	Medium	3600	68.90
NS365	44534	8	x	1	x	1	Fine	3600	68.90
NS366	44535	8	x	1	x	1	Extra-fine	3600	68.90
NS367	44536	10	x	1	x	1 1/4	Medium	2485	110.00
NS368	60366	10	x	1	x	1 1/4	Fine	2485	110.00
NS369	63359	12	x	2	x	1 1/4	Medium	2070	288.00
NS370	63360	12	x	2	x	1 1/4	Fine	2070	288.00

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"						•

BENCH & PEDESTAL GRINDING WHEELS

- For general purpose grinding work on bench and pedestal grinders
- Grits 24 and 36 for fast and rough grinding
- Grit 46 for intermediate requirements
- Grits 60 and 80 for a finer finish work
- All 6", 7", 8" and 10" wheels are supplied with nested reducer bushings to fit on 1", 3/4" and 1/2" shafts



Model No.	Mfg. No.	Size			Grit	Max RPM	Price /Each		
D"	x	T"	x	A"					
VE775	12-E-324	6	x	3/4	x	1	36 Coarse	4100	36.90
VE776	12-E-325	6	x	3/4	x	1	46 Medium	4100	36.90
YB806	12-E-328	6	x	3/4	x	1	80 Fine	4100	36.90
VE777	12-E-344	6	x	1	x	1	36 Coarse	4100	43.70
VE778	12-E-345	6	x	1	x	1	46 Medium	4100	43.70
VE779	12-E-348	6	x	1	x	1	80 Fine	4100	43.70
VE780	12-E-444	7	x	1	x	1	36 Coarse	3600	54.70
VE781	12-E-447	7	x	1	x	1	80 Fine	3600	54.70
VE783	12-E-533	8	x	7/8	x	1	24 Coarse	3600	64.40
VE784	12-E-537	8	x	7/8	x	1	60 Fine	3600	64.40
VE785	12-E-543	8	x	1	x	1	24 Coarse	3600	65.80
VE786	12-E-545	8	x	1	x	1	46 Medium	3600	65.80
VE787	12-E-547	8	x	1	x	1	60 Fine	3600	65.80
VE788	12-E-553	8	x	1 1/4	x	1	24 Coarse	3600	78.90
VE789	12-E-557	8	x	1 1/4	x	1	60 Fine	3600	81.50
VE790	12-E-643	10	x	1	x	1	24 Coarse	3600	96.30
VE791	12-E-647	10	x	1	x	1	60 Fine	3600	96.30
YC465	12-E-657	10	x	1 1/4	x	1	60 Fine	3600	110.00

D x T x A: Diameter x Thickness x Arbor Size

HEAVY-DUTY BENCH GRINDER

- Induction motor provides superior power for industrial grinding applications
- Rugged cast iron base and motor housing provide durability and prolonged life
- Precision-machined aluminum tool rests allow the user to accurately position work
- Rear exhaust ports in wheel guards for smoother operation
- 12-1/2" distance between wheels for larger and longer grinding applications
- Includes: 36 grit wheel, 60 grit wheel, eye shields, spark deflectors, tool rests
- Wheel Diameter: 8"
- HorsePower: 3/4 HP
- No Load Speed: 3600 RPM
- Amps: 4.2 A
- Spindle Diameter: 5/8"
- Tool Length: 16"
- Tool Weight: 39.5 lbs.

Model No. VE370
Mfg. No. DW758
Price/Each \$264.00



FLAP DISCS

Typical Applications

- Stock removal
- Deburring
- Blending welds
- Edge chamfering
- Rust removal
- Cleaning and finishing

NEON R766 ALUMINUM OXIDE

- Great for difficult-to-grind material such as aluminum, brass, bronze, stainless, carbon steel and titanium
- Good-performing, economically priced, general purpose discs
- Longer life and faster cut rate
- High-strength, lightweight & absorbs vibration
- Plastic wears away as disc grinds, allowing for full use of flap
- **Type 27 flat face:** High flap density, flexible plastic back discs
- **Type 29 conical shape:** Standard flap density



QUICK TRIM SG BLAZE R980P – TYPE 27

- 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
- Ideal for: Stock removal, edge chamfering, weld blending, deburring/deflashing, cleaning/finishing
- Best/highest productivity on stainless steel, titanium, and super alloys



Model No.	Mfg. No.	Size D" x A"	Grit	Price /Each
TYPE 27				
N0083	66623399062	4 1/2 x 7/8	36	6.52
N0084	66623399063	4 1/2 x 7/8	40	6.52
N0085	66623399064	4 1/2 x 7/8	60	6.52
N0086	66623399212	5 x 7/8	40	6.57
N0087	66623399213	5 x 7/8	60	6.57
N0088	66623399214	5 x 7/8	80	6.57
N0089	66623399071	7 x 7/8	40	13.90
TYPE 29				
N0092	66623399032	4 1/2 x 7/8	36	5.45
N0093	66623399033	4 1/2 x 7/8	40	5.45
N0094	66623399034	4 1/2 x 7/8	60	5.45
N0095	66623399035	4 1/2 x 7/8	80	5.45
N0096	66623399175	4 1/2 x 7/8	120	5.45
N0097	66623399036	5 x 7/8	36	5.49
N0098	66623399037	5 x 7/8	40	5.49
N0099	66623399038	5 x 7/8	60	5.49
N0100	66623399039	5 x 7/8	80	5.49
N0101	66623399181	5 x 7/8	120	5.49
N0103	66623399046	7 x 7/8	40	11.60

Model No.	Mfg. No.	Size D" x A"	Grit	Max RPM	Price /Each
NR954	66254400253	4 1/2 x 7/8"	40	13 300	8.20
NR955	66254400254	4 1/2 x 7/8"	60	13 300	8.20
NR956	66254400255	4 1/2 x 7/8"	80	13 300	8.20
NR957	66254400256	4 1/2 x 7/8"	120	13 300	8.20
NR958	66254400262	5 x 7/8"	40	12 000	10.30
NR959	66254400264	5 x 7/8"	60	12 000	10.30
NR960	66254400265	5 x 7/8"	80	12 000	10.30
NR961	66254400519	5 x 7/8"	120	12 000	10.30
NR966	66254461059	7 x 7/8"	40	8 600	15.80
NR967	66254461060	7 x 7/8"	60	8 600	15.80
NR968	66254461061	7 x 7/8"	80	8 600	15.80
NR969	66254461063	7 x 7/8"	120	8 600	15.80
NR950	66254400257	4 1/2 x 5/8"-11	40	13 300	10.20
NR951	66254400258	4 1/2 x 5/8"-11	60	13 300	10.20
NR952	66254400259	4 1/2 x 5/8"-11	80	13 300	10.20
NR953	66254400261	4 1/2 x 5/8"-11	120	13 300	10.20
NR962	66254461066	7 x 5/8"-11	40	8 600	19.80
NR963	66254461067	7 x 5/8"-11	60	8 600	19.80
NR964	66254461068	7 x 5/8"-11	80	8 600	19.80
NR965	66254461069	7 x 5/8"-11	120	8 600	19.80

747D (CERAMIC ALUMINUM OXIDE - TYPE 27)

- Premium ceramic mineral provides exceptional cut and life on the hardest metals



Model No.	Mfg. No.	Size D" x A"	Grit	Max RPM	Price /Each
BZ778	49613	4 1/2 x 7/8	36	13 300	6.30
BZ779	49614	4 1/2 x 7/8	50	13 300	6.30
BZ780	49615	4 1/2 x 7/8	60	13 300	6.30
BZ781	49616	4 1/2 x 7/8	80	13 300	6.30
BZ782	49617	4 1/2 x 7/8	120	13 300	6.30

D x A: Diameter x Arbor Size

CUBITRON™ II 967A

- Ideal for a wide range of low to medium-high pressure applications
- Used for paint prep and stainless steel fabrication where finish and gouge resistance are important
- Safe on stainless steel, carbon steel, aluminum and non-ferrous metals
- Grinding aid helps keep product cool on heat-sensitive metals
- All discs have Y-weight poly-cotton backing



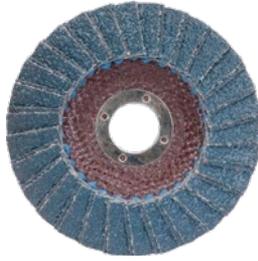
Model No.	Mfg. No.	Size D" x A"	Grit	Max RPM	Price /Each
TYPE 27					
NU325	051141-55605	4 1/2 x 7/8	40+	13 300	6.90
NU326	051141-55606	4 1/2 x 7/8	60+	13 300	6.90
NU327	051141-55607	4 1/2 x 7/8	80+	13 300	6.90
NU345	051125-86715	5 x 7/8	40+	12 000	7.57
NU348	051125-86718	5 x 7/8	60+	12 000	7.57
NU349	051125-86719	5 x 7/8	80+	12 000	7.57
NU328	051141-55611	7 x 7/8	40+	8 600	13.52
NU329	051141-55612	7 x 7/8	60+	8 600	13.52
NU330	051141-55613	7 x 7/8	80+	8 600	13.52
TYPE 29					
NU331	051141-55623	4 1/2 x 7/8	40+	13 300	6.90
NU332	051141-55624	4 1/2 x 7/8	60+	13 300	6.90
NU333	051141-55625	4 1/2 x 7/8	80+	13 300	6.90
NU346	051125-86716	5 x 7/8	40+	12 000	7.57
NU347	051125-86717	5 x 7/8	60+	12 000	7.57
NU350	051125-86720	5 x 7/8	80+	12 000	7.57
NU334	051141-55629	7 x 7/8	40+	8 600	13.52
NU335	051141-55630	7 x 7/8	60+	8 600	13.52
NU336	051141-55631	7 x 7/8	80+	8 600	13.52

ABRASIVES



NORTON METAL R828

- 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, fiberglass 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



NORTON

Model No.	Mfg. No.	Size D" x A"	Grit	Max RPM	Price /Each
NORTON METAL TYPE 27 - FIBREGLASS PLATE					
NR884	66254472653	4 1/2 x 7/8	36	13 300	4.27
NR885	66254437004	4 1/2 x 7/8	40	13 300	4.27
NR886	66254448989	4 1/2 x 7/8	60	13 300	4.27
NR887	66254448990	4 1/2 x 7/8	80	13 300	4.27
NR888	66254472659	5 x 7/8	36	12 000	4.39
NR889	66254472660	5 x 7/8	40	12 000	4.30
NR890	66254472661	5 x 7/8	60	12 000	4.30
NR891	66254472662	5 x 7/8	80	12 000	4.30
NR893	66254472665	7 x 7/8	40	8 600	9.14
NR894	66254472666	7 x 7/8	60	8 600	9.14
NR895	66254472667	7 x 7/8	80	8 600	9.14

Model No.	Mfg. No.	Size D" x A"	Grit	Max RPM	Price /Each
NORTON METAL TYPE 29 - FIBREGLASS PLATE					
NR148	66254419963	4 1/2 x 7/8	36	13 300	4.27
NR149	66254419978	4 1/2 x 7/8	40	13 300	4.27
NR150	66254419984	4 1/2 x 7/8	60	13 300	4.27
NR151	66254419987	4 1/2 x 7/8	80	13 300	4.27
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	8 600	9.22
NR157	66254420006	7 x 7/8	40	8 600	9.22

PREMIUM 2 IN 1 - TYPE 29

- Grinding & finishing in just 1 step
- Offers high removal and an aggressive angle
- Superior combination of life & removal with a trimmable backing
- Lowers your blending & finishing costs
- For use on steel & stainless steel
- Material: Zirconium



TYROLIT

Model No.	Mfg. No.	Size D" x A"	Grit	Max RPM	Price /Each
NU413	34043471	4 1/2 x 7/8	40	13 300	9.09
NU415	34043473	4 1/2 x 7/8	80	13 300	9.09
NU416	34043475	5 x 7/8	40	12 250	10.90
NU417	34043476	5 x 7/8	60	12 250	10.90
NU418	34043477	5 x 7/8	80	12 250	10.90

D x A: Diameter x Arbor Size

Canada's Best Value in Industrial Tools

aurora tools

ENDURO-FLEX™

The one step finishing disc

- One-step finishing discs not only meet but surpass the challenges that the metal fabricating and finishing industry faces daily
- Ultra sharp and refined zirconium grain stays sharper longer to remove more material faster
- Special top coat continuously cools and lubricates the disc for smooth, vibration-free grinding and sanding from start to finish
- **With Spin-On arbor:** Will not smear or contaminate the work piece; patented backing has now even more reinforcing ribs for added safety; packing can be trimmed down easily for a customized feel
- **With 7/8" arbor:** Quiet and vibration-free grinding; complete control and total operator comfort; will not smear or contaminate the work piece; flexible backing wears down without the nuisance dust often associated with fiberglass backed discs
- Always use flange model **UG580**



WALTER
Surface Technologies

Model No.	Mfg. No.	Size D" x A"	Grit	Max RPM	Price /Each
SPIN-ON ARBOR					
BZ653	06-B-454	4 1/2 x 5/8"-11	40	13 300	14.90
BZ654	06-B-456	4 1/2 x 5/8"-11	60	13 300	14.90
BZ655	06-B-458	4 1/2 x 5/8"-11	80	13 300	14.90
BZ656	06-B-462	4 1/2 x 5/8"-11	120	13 300	14.90
BZ657	06-B-504	5 x 5/8"-11	40	12 200	17.20
BZ658	06-B-506	5 x 5/8"-11	60	12 200	17.20
BZ659	06-B-508	5 x 5/8"-11	80	12 200	17.20
BZ660	06-B-512	5 x 5/8"-11	120	12 200	17.20
BZ661	06-B-604	6 x 5/8"-11	40	10 200	20.50
BZ662	06-B-606	6 x 5/8"-11	60	10 200	20.50
BZ663	06-B-608	6 x 5/8"-11	80	10 200	20.50
BZ664	06-B-612	6 x 5/8"-11	120	10 200	20.50

7/8" ARBOR

TE229	15-R-454	4 1/2 x 7/8"	40	13 300	16.40
TE230	15-R-456	4 1/2 x 7/8"	60	13 300	16.40
TE231	15-R-458	4 1/2 x 7/8"	80	13 300	16.40
TE232	15-R-462	4 1/2 x 7/8"	120	13 300	16.40
TE233	15-R-504	5 x 7/8"	40	12 200	18.90
TE234	15-R-506	5 x 7/8"	60	12 200	18.90
TE235	15-R-508	5 x 7/8"	80	12 200	18.90
TE236	15-R-512	5 x 7/8"	120	12 200	18.90
TE237	15-R-704	7 x 7/8"	40	8 600	33.40
TE238	15-R-706	7 x 7/8"	60	8 600	33.40
TE239	15-R-708	7 x 7/8"	80	8 600	33.40
TE240	15-R-712	7 x 7/8"	120	8 600	33.40

STANDARD 2 IN 1 - TYPE 29

- Standard aggressive fiber backed Zirconium
- High removal rate
- For use on steel & stainless steel
- Material: Zirconium



TYROLIT

Model No.	Mfg. No.	Size D" x A"	Grit	Max RPM	Price /Each
NU423	572473	4 1/2 x 7/8	40	13 300	4.15
NU424	454393	4 1/2 x 7/8	60	13 300	4.15
NU425	455312	4 1/2 x 7/8	80	13 300	4.15
NU426	824385	5 x 7/8	40	12 250	4.85
NU427	455303	5 x 7/8	60	12 250	4.85
NU428	458587	5 x 7/8	80	12 250	4.85

769F QUICK CHANGE FLAP DISC

- Contains 3M precision-shaped grain, which cuts faster and lasts longer than conventional abrasive grain
- Individual flaps break down, exposing fresh mineral to deliver consistent cut rate for the life of the disc



Model No.	Mfg. No.	Grit	D"	Size x A	Abrasive Material	Max RPM	Price /Each
TYPE 27							
NV670	AB05903	40+	4-1/2	x 7/8"	Ceramic	13 300	4.04
NV648	AB05904	60+	4-1/2	x 7/8"	Ceramic	13 300	4.04
NV660	AB05905	80+	4-1/2	x 7/8"	Ceramic	13 300	4.04
NV659	AB05924	120+	4-1/2	x 7/8"	Ceramic	13 300	4.04
NV658	AB05915	40+	5	x 7/8"	Ceramic	12 000	5.38
NV653	AB05918	60+	5	x 7/8"	Ceramic	12 000	5.38
NV662	AB05919	80+	5	x 7/8"	Ceramic	12 000	5.38
NV651	AB05928	120+	5	x 7/8"	Ceramic	12 000	5.38
NV645	AB05940	40+	7	x 5/8"-11	Aluminum Oxide, Ceramic	8600	11.14
NV657	AB05941	60+	7	x 5/8"-11	Aluminum Oxide, Ceramic	8600	11.14
NV666	AB05942	80+	7	x 5/8"-11	Aluminum Oxide, Ceramic	8600	11.14
NV668	AB05909	40+	7	x 7/8"	Aluminum Oxide, Ceramic	8600	7.88
NV655	AB05910	60+	7	x 7/8"	Aluminum Oxide, Ceramic	8600	7.88
NV664	AB05911	80+	7	x 7/8"	Aluminum Oxide, Ceramic	8600	7.88
NV649	AB05926	120+	7	x 7/8"	Aluminum Oxide, Ceramic	8600	7.88

Model No.	Mfg. No.	Grit	D"	Size x A	Abrasive Material	Max RPM	Price /Each
TYPE 29							
NV654	AB05906	40+	4-1/2	x 7/8"	Ceramic	13 300	4.04
NV643	AB05907	60+	4-1/2	x 7/8"	Ceramic	13 300	4.04
NV652	AB05908	80+	4-1/2	x 7/8"	Ceramic	13 300	4.04
NV656	AB05925	120+	4-1/2	x 7/8"	Ceramic	13 300	4.04
NV647	AB05916	40+	5	x 7/8"	Ceramic	12 000	5.38
NV663	AB05917	60+	5	x 7/8"	Ceramic	12 000	5.38
NV625	AB05920	80+	5	x 7/8"	Ceramic	12 000	5.38
NV665	AB05929	120+	5	x 7/8"	Ceramic	12 000	5.38
NV661	AB05943	40+	7	x 5/8"-11	Aluminum Oxide, Ceramic	8600	11.14
NV646	AB05944	60+	7	x 5/8"-11	Aluminum Oxide, Ceramic	8600	11.14
NV644	AB05912	40+	7	x 7/8"	Aluminum Oxide, Ceramic	8600	7.88
NV669	AB05913	60+	7	x 7/8"	Aluminum Oxide, Ceramic	8600	7.88
NV650	AB05914	80+	7	x 7/8"	Aluminum Oxide, Ceramic	8600	7.88
NV667	AB05927	120+	7	x 7/8"	Aluminum Oxide, Ceramic	8600	7.88

LONG LIFE C-TRIM FLAP DISC

- For edge grinding and weld seam finishing on steel and stainless steel
- Long life technology for maximum lifetime
- Easy trim plastic backing allows the complete disc to be utilized
- Compressed edge ensures stability during edge grinding and provides a "built-in grinding angle"
- Best results when used on powerful angle grinders
- Abrasive Material: Zirconia Alumina
- Type: 27



Model No.	Mfg. No.	Grit	D"	Size x A	Price /Each
TCT359	34464900	40	4-1/2	x 5/8"-11	7.09
TCT360	34464921	60	4-1/2	x 5/8"-11	7.09
TCT361	34464922	80	4-1/2	x 5/8"-11	7.09
TCT362	34464923	120	4-1/2	x 5/8"-11	7.09
TCT363	34464924	40	5	x 5/8"-11	8.79
TCT364	34464925	60	5	x 5/8"-11	8.79
TCT365	34464926	80	5	x 5/8"-11	8.79
TCT366	34464927	120	5	x 5/8"-11	8.79

D x A: Diameter x Arbor Size

FLAP DISC

- For demanding grinding applications on different stainless steel grades
- Maximum stock removal on the workpiece thanks to ceramic grain
- Top size coating allows for cool grinding and prevents discolouration of the workpiece
- Even surface finish thanks to the self-sharpening characteristic of the abrasive grain over the entire lifetime of the disc
- Abrasive Material: Ceramic
- Type: 27



Model No.	Mfg. No.	Grit	D"	Size x A	Price /Each
TCT367	34464928	40	4-1/2	x 5/8"-11	6.49
TCT368	34464929	60	4-1/2	x 5/8"-11	6.49
TCT369	34464930	80	4-1/2	x 5/8"-11	6.49
TCT370	34464931	40	4-1/2	x 5/8"-11	8.49
TCT371	34464932	60	5	x 5/8"-11	8.49
TCT372	34464933	80	5	x 5/8"-11	8.49

TWIN FLAP DISC

- For steel and stainless steel
- Double flap arrangement for maximum lifetime
- Ceramic grain for highest stock removal rate
- Reduced thermal load
- Abrasive Material: Ceramic, Zirconia Alumina
- Type: 27



Model No.	Mfg. No.	Grit	D"	Size x A"	Price /Each
TCT355	34474190	40	4-1/2	x 7/8	9.99
TCT356	34474211	60	4-1/2	x 7/8	9.99
TCT357	34474212	40	5	x 7/8	12.90
TCT358	34474213	60	5	x 7/8	12.90

CERABOND FLAP DISC

- Easy-Trim plastic backing
- Can be used on steel and stainless steel
- Ideal for weld removal, edge work and finishing applications
- Abrasive Material: Ceramic
- Type: 27



Model No.	Mfg. No.	Grit	D"	Size x A"	Price /Each
NV268	34315841	40	4-1/2	x 7/8	6.35
NV269	34315842	60	4-1/2	x 7/8	6.35
NV270	34315843	80	4-1/2	x 7/8	6.35
NV271	34315845	40	5	x 7/8	8.25
NV272	34315846	60	5	x 7/8	8.25
NV273	34315847	80	5	x 7/8	8.25

FLAP DISC

- Ideal for weld removal and edge work
- Used on steel, stainless steel, and aluminum
- Trimable plastic back
- Abrasive Material: Zirconium
- Type: 27



Model No.	Mfg. No.	Grit	D"	Size x A"	Max. RPM	Price /Each
NV013	34299592	40	4-1/2	x 7/8	13 300	7.09
NV014	34299593	60	4-1/2	x 7/8	13 300	7.09
NV015	34299594	80	4-1/2	x 7/8	13 300	7.09
NV016	34299595	40	5	x 7/8	12 250	8.79
NV017	34299596	60	5	x 7/8	12 250	8.79
NV018	34299597	80	5	x 7/8	12 250	8.79



ENDURO-FLEX™ STAINLESS

- With Eco-Trim™ backing made from natural and sustainable plant fibres this backing can easily be trimmed
- Heat absorbent, high-tech material ensures cooler grinding
- Flap discs contain no fibreglass, no mineral fibres and no epoxy resin
- Feature an ultra resistant built-in threaded arbor for quick and easy disc changes
- A new raised hub fits all standard angle grinder back flanges
- **With Spin-On arbor:** FE free abrasive cloth; consistent finish without any discoloration; cool cutting will not load up or glaze; superior performance on all heat sensitive metals
- **With 7/8" arbor:** A small, universal grinding angle ensures optimal abrasive contact with the work piece for quiet, vibration-free grinding, complete control and total operator comfort



Model No.	Mfg. No.	D"	Size x A	Grit	Max RPM	Price /Each
SPIN-ON ARBOR						
BZ665	06-F-454	4 1/2	x 5/8"-11	40	13 300	15.80
BZ666	06-F-456	4 1/2	x 5/8"-11	60	13 300	15.80
BZ667	06-F-458	4 1/2	x 5/8"-11	80	13 300	15.80
BZ668	06-F-462	4 1/2	x 5/8"-11	120	13 300	15.80
BZ669	06-F-504	5	x 5/8"-11	40	12 200	18.99
BZ670	06-F-506	5	x 5/8"-11	60	12 200	19.99
BZ671	06-F-508	5	x 5/8"-11	80	12 200	18.99
BZ672	06-F-512	5	x 5/8"-11	120	12 200	18.99
BZ673	06-F-604	6	x 5/8"-11	40	10 200	22.60
BZ674	06-F-606	6	x 5/8"-11	60	10 200	22.60
BZ675	06-F-608	6	x 5/8"-11	80	10 200	22.60
BZ676	06-F-612	6	x 5/8"-11	120	10 200	22.60

Model No.	Mfg. No.	D"	Size x A"	Grit	Max RPM	Price /Each
7/8" ARBOR						
TE241	15-Q-454	4 1/2	x 7/8	40	13 300	17.40
TE242	15-Q-456	4 1/2	x 7/8	60	13 300	17.40
TE243	15-Q-458	4 1/2	x 7/8	80	13 300	17.40
TE244	15-Q-462	4 1/2	x 7/8	120	13 300	17.40
TE245	15-Q-504	5	x 7/8	40	12 200	20.90
TE246	15-Q-506	5	x 7/8	60	12 200	20.90
TE247	15-Q-508	5	x 7/8	80	12 200	20.90
TE248	15-Q-512	5	x 7/8	120	12 200	20.90
TE249	15-Q-704	7	x 7/8	40	8 600	36.90
TE250	15-Q-706	7	x 7/8	60	8 600	36.90
TE251	15-Q-708	7	x 7/8	80	8 600	36.90
TE252	15-Q-712	7	x 7/8	120	8 600	36.90

FLAP DISC

- Ideal for blending sharp corners, heavy, and fillet welds
- High-performance flap disc optimized for use on low powered angle grinders
- Trimmable backing extends disc life
- Abrasive Material: Zirconia Alumina
- Type 27



Model No.	Mfg. No.	Arbor Hole Size"	Diameter"	Grit	Max RPM	Price /Each
NV019	15W454	7/8	4-1/2	40	13 300	7.73
NV020	15W456	7/8	4-1/2	60	13 300	7.73
NV021	15W458	7/8	4-1/2	80	13 300	7.73
NV022	15W462	7/8	4-1/2	120	13 300	7.73
NV023	15W504	7/8	5	40	12 200	8.51
NV024	15W506	7/8	5	60	12 200	8.51
NV025	15W508	7/8	5	80	12 200	8.51
NV026	15W512	7/8	5	120	12 200	8.51
NV027	15W604	7/8	6	40	10 200	11.50
NV028	15W606	7/8	6	60	10 200	11.50
NV029	15W608	7/8	6	80	10 200	11.50
NV030	15W612	7/8	6	120	10 200	11.50
NV031	15W704	7/8	7	40	8 600	17.80
NV032	15W706	7/8	7	60	8 600	17.80
NV033	15W708	7/8	7	80	8 600	17.80
NV034	15W712	7/8	7	120	8 600	17.80

LONG LIFE C-TRIM FLAP DISC

- Designed for heavy-duty use on steel and stainless steel
- Trimmable plastic booking
- Fe, s, and Cl free
- Type: 29



Model No.	Mfg. No.	Diameter"	Grit	Max RPM	Price /Each
7/8" ARBOR, TYPE 29, ZIRCONIUM					
NU780	34239191	4-1/2	40	13 300	6.95
NU781	34239192	4-1/2	60	13 300	6.95
NU584	34239193	4-1/2	80	13 300	6.95
NU585	34239194	4-1/2	120	13 300	6.95
NU784	34239195	5	40	12 250	8.55
NU785	34239196	5	60	12 250	8.55
NU582	34239197	5	80	12 250	8.55
NU581	34239198	5	120	12 250	8.55
5/8"-11 ARBOR, TYPE 27, ZIRCONIA ALUMINA					
TCT359	34464900	4-1/2	40	-	7.09
TCT360	34464921	4-1/2	60	-	7.09
TCT361	34464922	4-1/2	80	-	7.09
TCT362	34464923	4-1/2	120	-	7.09
TCT363	34464924	5	40	-	8.79
TCT364	34464925	5	60	-	8.79
TCT365	34464926	5	80	-	8.79
TCT366	34464927	5	120	-	8.79

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.

COOLCUT™ FLAP WHEELS

These flap wheels are made of the highest industrial quality abrasive cloth and have an optimal number of flaps that are securely bonded and balanced around the hub for highest quality finishing. They are ideal for general purpose blending, shaping and deburring and will give a consistent and uniform grained satin finish in no time.



Model No.	Mfg. No.	D"	Size T" x A"	Grit	Max RPM	Price /Each
BZ950	15-F-056	1	x 3/8 x 1/4	60	30 000	7.98
BZ951	15-F-058	1	x 3/8 x 1/4	80	30 000	7.98
BZ952	15-F-062	1	x 3/8 x 1/4	120	30 000	7.98
BZ953	15-F-156	1	x 1 x 1/4	60	30 000	7.16
BZ954	15-F-158	1	x 1 x 1/4	80	30 000	7.16
BZ955	15-F-162	1	x 1 x 1/4	120	30 000	7.16
YC398	15-F-006	1 1/2	x 3/8 x 1/4	60	25 000	8.27
UG072	15-F-008	1 1/2	x 3/8 x 1/4	80	25 000	8.27
YC402	15-F-012	1 1/2	x 3/8 x 1/4	120	25 000	8.27
UG073	15-F-106	1 1/2	x 1 x 1/4	60	25 000	8.55
UG074	15-F-108	1 1/2	x 1 x 1/4	80	25 000	8.55
UG075	15-F-112	1 1/2	x 1 x 1/4	120	25 000	8.55
UG076	15-F-124	1 1/2	x 1 x 1/4	240	25 000	8.55
YB811	15-F-206	2	x 3/8 x 1/4	60	25 000	9.16
UG077	15-F-208	2	x 3/8 x 1/4	80	25 000	9.16
UG078	15-F-212	2	x 3/8 x 1/4	120	25 000	9.16
YC035	15-F-306	2	x 1 x 1/4	60	25 000	9.16
UG079	15-F-308	2	x 1 x 1/4	80	25 000	9.16
UG080	15-F-312	2	x 1 x 1/4	120	25 000	9.16
UG081	15-F-324	2	x 1 x 1/4	240	25 000	9.16
YC036	15-F-506	2 1/2	x 1 1/2 x 1/4	60	20 000	14.16
UG084	15-F-508	2 1/2	x 1 1/2 x 1/4	80	20 000	14.16
UG085	15-F-512	2 1/2	x 1 1/2 x 1/4	120	20 000	14.16
UG086	15-F-524	2 1/2	x 1 1/2 x 1/4	240	20 000	14.16
UG089	15-F-706	3	x 1 x 1/4	60	15 000	214.16
UG090	15-F-708	3	x 1 x 1/4	80	15 000	214.16
UG091	15-F-712	3	x 1 x 1/4	120	15 000	214.16
UG092	15-F-808	3	x 1 1/2 x 1/4	80	15 000	218.43
UG093	15-F-812	3	x 1 1/2 x 1/4	120	15 000	218.43
UG094	15-F-824	3	x 1 1/2 x 1/4	240	15 000	218.43
YC448	15-F-906	3	x 2 x 1/4	60	11 000	320.24
UG095	15-F-908	3	x 2 x 1/4	80	11 000	320.24
YC449	15-F-912	3	x 2 x 1/4	120	11 000	320.24

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.	Size			Grit	Max RPM	Price /Each
	D" x	T" x	S"			
BQ700	1 x	5/8 x	1/4	40	30000	4.79
BQ696	1 x	5/8 x	1/4	60	30000	4.79
BQ697	1 x	5/8 x	1/4	80	30000	4.79
BQ698	1 x	5/8 x	1/4	120	30000	4.79
BQ571	1 x	5/8 x	1/4	180	30000	4.79
BQ699	1 x	5/8 x	1/4	240	30000	4.79
BQ567	1 x	1 x	1/4	40	30000	5.04
BQ730	1 x	1 x	1/4	60	30000	5.04
BQ731	1 x	1 x	1/4	80	30000	5.04
BQ732	1 x	1 x	1/4	120	30000	5.04
BQ733	1 x	1 x	1/4	180	30000	5.04
BQ701	1 x	1 x	1/4	240	30000	5.04
BQ734	1 x	1 x	1/4	320	30000	5.04
BQ736	13/8 x	5/8 x	1/4	60	30000	4.79
BQ737	13/8 x	5/8 x	1/4	80	30000	4.79
BQ738	13/8 x	5/8 x	1/4	120	30000	4.79
BQ739	13/8 x	5/8 x	1/4	180	30000	4.79
BQ740	13/8 x	5/8 x	1/4	240	30000	4.79
BQ677	11/2 x	1 x	1/4	40	25000	6.40
BQ741	11/2 x	1 x	1/4	60	25000	6.40
BQ707	11/2 x	1 x	1/4	80	25000	6.40
BQ708	11/2 x	1 x	1/4	120	25000	6.40
BQ742	11/2 x	1 x	1/4	180	25000	6.40
BQ613	11/2 x	1 x	1/4	240	25000	6.40

Model No.	Size			Grit	Max RPM	Price /Each
	D" x	T" x	S"			
BQ710	2 x	3/4 x	1/4	40	25000	7.21
BQ711	2 x	3/4 x	1/4	60	25000	7.21
BQ712	2 x	3/4 x	1/4	80	25000	7.21
BQ713	2 x	3/4 x	1/4	120	25000	7.21
BQ714	2 x	3/4 x	1/4	180	25000	7.21
BQ754	2 x	1 x	1/4	40	25000	8.12
NP723	2 x	1 x	1/4	50	25000	8.12
BQ748	2 x	1 x	1/4	60	25000	8.12
BQ749	2 x	1 x	1/4	80	25000	8.12
BQ750	2 x	1 x	1/4	120	25000	8.12
BQ751	2 x	1 x	1/4	180	25000	8.12
BQ752	2 x	1 x	1/4	240	25000	8.12
BQ753	2 x	1 x	1/4	320	25000	8.12
BQ716	2 x	1 1/2 x	1/4	40	25000	9.33
BQ755	2 x	1 1/2 x	1/4	60	25000	9.33
BQ756	2 x	1 1/2 x	1/4	80	25000	9.33
BQ757	2 x	1 1/2 x	1/4	120	25000	9.33
BQ760	2 1/2 x	1 x	1/4	40	20000	9.17
BQ761	2 1/2 x	1 x	1/4	60	20000	9.17
BQ762	2 1/2 x	1 x	1/4	80	20000	9.17
BQ763	2 1/2 x	1 x	1/4	120	20000	9.17
BQ764	2 1/2 x	1 x	1/4	180	20000	9.17
BQ847	2 1/2 x	1 x	1/4	240	20000	9.17
BQ765	2 1/2 x	1 x	1/4	320	20000	9.17

Model No.	Size			Grit	Max RPM	Price /Each
	D" x	T" x	S"			
BQ766	2 1/2 x	1 1/2 x	1/4	60	20000	10.55
BQ767	2 1/2 x	1 1/2 x	1/4	80	20000	10.55
BQ768	2 1/2 x	1 1/2 x	1/4	120	20000	10.55
BQ770	3 x	3/4 x	1/4	60	20000	9.17
BQ771	3 x	3/4 x	1/4	80	20000	9.17
BQ775	3 x	1 x	1/4	40	20000	10.17
BQ773	3 x	1 x	1/4	60	20000	10.17
BQ774	3 x	1 x	1/4	80	20000	10.17
BQ722	3 x	1 x	1/4	120	20000	10.17
BQ723	3 x	1 x	1/4	180	20000	10.17
BQ685	3 x	1 x	1/4	240	20000	10.17
BQ686	3 x	1 x	1/4	320	20000	10.17
BQ776	3 x	2 x	1/4	40	12000	17.48
BQ724	3 x	2 x	1/4	60	12000	17.48
BQ725	3 x	2 x	1/4	80	12000	17.48
BQ726	3 x	2 x	1/4	120	12000	17.48
BQ727	3 x	2 x	1/4	180	12000	17.48

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.	Size			Grit	Max RPM	Price /Each
	D" x	T" x	A"			
BQ268	5 x	1 1/2 x	5/8	40	12000	27.99
BQ269	5 x	1 1/2 x	5/8	50	12000	27.99
BQ270	5 x	1 1/2 x	5/8	60	12000	28.83
BQ271	5 x	1 1/2 x	5/8	80	12000	30.69
BQ272	5 x	1 1/2 x	5/8	120	12000	33.29
BQ274	5 x	1 1/2 x	5/8	180	12000	36.36
BQ275	5 x	1 1/2 x	5/8	240	12000	36.36
BQ276	5 x	1 1/2 x	5/8	320	12000	36.36
BQ302	6 x	1/2 x	1	40	6000	41.57
BQ303	6 x	1/2 x	1	60	6000	43.80
BQ305	6 x	1/2 x	1	120	6000	44.64
BQ280	6 x	1/2 x	1	150	6000	48.27
BQ306	6 x	1/2 x	1	180	6000	48.55
BQ308	6 x	1 x	1	40	6000	31.16
BQ309	6 x	1 x	1	50	6000	31.16
BQ310	6 x	1 x	1	60	6000	31.90
BQ311	6 x	1 x	1	80	6000	34.13
BQ312	6 x	1 x	1	120	6000	36.92
BQ313	6 x	1 x	1	150	6000	39.34
BQ314	6 x	1 x	1	180	6000	40.36
BQ315	6 x	1 x	1	240	6000	40.36
BQ316	6 x	1 x	1	320	6000	40.36

Model No.	Size			Grit	Max RPM	Price /Each
	D" x	T" x	A"			
BQ317	6 x	1 1/2 x	1	40	6000	34.97
BQ318	6 x	1 1/2 x	1	50	6000	34.97
BQ319	6 x	1 1/2 x	1	60	6000	35.90
BQ320	6 x	1 1/2 x	1	80	6000	38.32
BQ321	6 x	1 1/2 x	1	120	6000	41.48
BQ323	6 x	1 1/2 x	1	180	6000	45.38
BQ324	6 x	1 1/2 x	1	240	6000	45.38
BQ325	6 x	1 1/2 x	1	320	6000	45.38
BQ328	6 x	2 x	1	60	6000	53.48
BQ329	6 x	2 x	1	80	6000	56.73
BQ330	6 x	2 x	1	120	6000	62.03
BQ332	6 x	2 x	1	180	6000	67.70
BQ333	6 x	2 x	1	240	6000	67.70
BQ334	6 x	2 x	1	320	6000	67.70
BQ336	6 x	3 x	1	50	6000	75.24
BQ337	6 x	3 x	1	60	6000	77.56
BQ338	6 x	3 x	1	80	6000	82.40
BQ339	6 x	3 x	1	120	6000	90.49
BQ340	6 x	3 x	1	180	6000	104.16
BQ341	6 x	3 x	1	240	6000	104.16

Model No.	Size			Grit	Max RPM	Price /Each
	D" x	T" x	A"			
BQ342	8 x	1 x	1	40	4500	56.45
BQ343	8 x	1 x	1	50	4500	56.45
BQ344	8 x	1 x	1	60	4500	57.75
BQ345	8 x	1 x	1	80	4500	62.22
BQ346	8 x	1 x	1	120	4500	68.08
BQ347	8 x	1 x	1	180	4500	73.38
BQ350	8 x	2 x	1	40	4500	85.65
BQ351	8 x	2 x	1	50	4500	85.65
BQ353	8 x	2 x	1	80	4500	92.16
BQ355	8 x	2 x	1	180	4500	115.32
BQ356	8 x	2 x	1	240	4500	118.11
BQ357	8 x	2 x	1	320	4500	118.11
BQ281	10 x	1 x	1 3/4	40	4000	85.75
BQ360	10 x	1 x	1 3/4	80	4000	96.72
BQ361	10 x	1 x	1 3/4	120	4000	107.88
BQ363	10 x	1 x	1 3/4	180	4000	119.97
BQ364	10 x	1 x	1 3/4	320	4000	119.97

D x T x A: Diameter x Thickness x Arbor Size



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	5.40
BP107	1	Straight	80	Yellow	30 000	5.40
BP105	1	Straight	120	White	30 000	5.40
BP109	2	Tapered	50	Green	25 000	8.69
BP110	2	Tapered	80	Yellow	25 000	8.69
BP108	2	Tapered	120	White	25 000	8.69
BP112	3	Tapered	50	Green	18 000	12.78
BP113	3	Tapered	80	Yellow	18 000	12.78
BP111	3	Tapered	120	White	18 000	12.78

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	9.36
BP104	80	Yellow	9.36
BP102	120	White	9.36



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	17.27
BP011	2	Soft	20 000	20.79
BP008	2	Medium	25 000	22.68
BP005	2	Hard	25 000	20.79
BP003	2	Extra hard	25 000	25.17
BP012	3	Soft	15 000	25.39
BP009	3	Medium	18 000	25.39
BP006	3	Hard	20 000	25.39
BP004	3	Extra hard	20 000	27.89
BP010	4	Medium	12 000	27.89

ROLOC™ THREADED SHAFT

Model No. BP013 Price/Each \$4.01

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	57.60
BP097	9/16	1/16	P220X	Red	30 000	48	57.60
BP098	9/16	1/16	P400X	Blue	30 000	48	57.60
BP091	3/4	1/16	80X	Yellow	30 000	48	62.88
BP089	3/4	1/16	P220X	Red	30 000	48	62.88
BP090	3/4	1/16	P400X	Blue	30 000	192	251.52
BP092	3/4	1/16	Pumice	Pink	30 000	48	62.88
BP083	1	1/8	36X	Dark brown	30 000	24	35.76
BP084	1	1/8	50X	Green	30 000	24	35.76
BP085	1	1/8	80X	Yellow	30 000	24	35.76
BP082	1	1/8	120X	White	30 000	24	35.76
BP087	3	3/8	50	Green	25 000	10	93.60
BP088	3	3/8	80	Yellow	25 000	10	93.60

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	52.29
BP094	6	50X	Green	10 000	52.29
BP095	6	80X	Yellow	10 000	52.29

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	33.25
BP079	4 1/2	50	Green	33.25
BP080	4 1/2	80	Yellow	33.25
BP078	4 1/2	120	White	33.25

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

Model No.	Mfg. No.	D"	Size x A"	Grit	Price /Each
BZ560	66623353315	4 1/2	x 7/8	24	1.60
BZ561	66623353316	4 1/2	x 7/8	36	1.52
BZ562	66623353318	4 1/2	x 7/8	50	1.49
BZ563	66623353319	4 1/2	x 7/8	60	1.34
BZ564	66623353320	4 1/2	x 7/8	80	1.24
BZ577	66623357290	5	x 7/8	24	1.94
BZ579	66623357292	5	x 7/8	50	1.60
BZ580	66623357293	5	x 7/8	60	1.49
BZ581	66623357294	5	x 7/8	80	1.39
BZ582	66623357295	7	x 7/8	24	2.77
BZ583	66623357296	7	x 7/8	36	2.77
BZ584	66623357297	7	x 7/8	50	2.57
BZ585	66623357298	7	x 7/8	60	2.75
BZ586	66623357299	7	x 7/8	80	2.67

NORTON METAL F240 DISCS

- Quality aluminum oxide grain on heavy fibre backing
- Good for small job around the shop and general purpose applications



NORTON

Model No.	Mfg. No.	D"	Size x A"	Grit	Price /Each
BQ035	66623353309	4 1/2	x 7/8	24	0.80
BQ036	66623353306	4 1/2	x 7/8	36	0.77
BQ037	66623353310	4 1/2	x 7/8	50	0.77
BQ038	66623353311	4 1/2	x 7/8	60	0.72
BQ039	66623353312	4 1/2	x 7/8	80	0.67
BQ040	66623353313	4 1/2	x 7/8	100	0.64
BQ041	66623353314	4 1/2	x 7/8	120	0.64
BQ042	66623357276	5	x 7/8	24	0.90
BQ043	66623357277	5	x 7/8	36	0.87
BQ044	66623357278	5	x 7/8	50	0.84
BQ045	66623357279	5	x 7/8	60	0.82
BQ046	66623357280	5	x 7/8	80	0.79
BQ047	66623357281	5	x 7/8	100	0.79
BQ048	66623357282	5	x 7/8	120	0.77
BQ049	66623357283	7	x 7/8	24	1.52
BQ050	66623357284	7	x 7/8	36	1.47
BQ051	66623357285	7	x 7/8	50	1.35
BQ052	66623357286	7	x 7/8	60	1.27
BQ053	66623357287	7	x 7/8	80	1.24
BQ054	66623357288	7	x 7/8	100	1.19
BQ055	66623357289	7	x 7/8	120	1.15

D x A: Diameter x Arbor Size

MERIT CERAMIC DISCS

- High performance ceramic alumina abrasive on heavy fibre backing
- Economical choice for heavy stock removal



MERIT

Model No.	Mfg. No.	D"	Size x A"	Grit	Price /Each
BZ573	66623355601	4 1/2	x 7/8	24	2.10
BZ574	66623355602	4 1/2	x 7/8	36	2.04
BZ575	66623355603	4 1/2	x 7/8	50	1.95
BZ576	66623355604	4 1/2	x 7/8	60	1.74
NS489	66623365598	4 1/2	x 7/8	80	1.50
BZ569	66623355597	5	x 7/8	24	2.52
BZ570	66623355598	5	x 7/8	36	2.30
BZ571	66623355599	5	x 7/8	50	2.10
BZ572	66623355600	5	x 7/8	60	1.89
NS494	66623366015	5	x 7/8	80	1.72
BZ565	66623355578	7	x 7/8	24	3.97
BZ566	66623355594	7	x 7/8	36	3.84
BZ567	66623355595	7	x 7/8	50	3.69
BZ568	66623355596	7	x 7/8	60	3.60
NS499	66623365600	7	x 7/8	80	3.09

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



Model No.	Mfg. No.	Description	Max RPM	Price /Each
BZ056	08834195006	4 1/2" back up pad	11 000	23.34
BZ053	08834195002	5" back up pad	10 000	27.99
BZ054	08834195003	7" back up pad	8500	38.41
BZ052	08834195000	Disc pad nut 5/8"-11	-	7.41
BY731	08834192776	Spanner wrench fits 5/8" and 3/8"	-	10.45

Industrial Multi-Purpose Cleaning Products

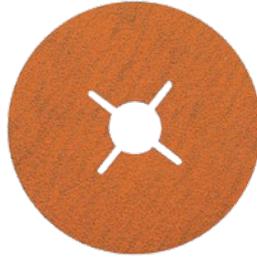


ABRASIVES



COOLCUT™ XX

- Featuring cyclone technology, exclusive high tech blend of abrasive grains, bond and cooling agents
- Impressive removal rate
- Work equally well in steel, stainless steel and aluminum



Model No.	Mfg. No.	Size"	Grit	Price /Each
VV437	15-X 453	4 1/2	36	2.57
VV438	15-X 455	4 1/2	50	2.33
VV439	15-X 456	4 1/2	60	2.33
VV440	15-X 458	4 1/2	80	2.24
VV441	15-X 460	4 1/2	100	2.24
VV442	15-X 462	4 1/2	120	2.24
VV443	15-X 503	5	36	2.85
VV444	15-X 505	5	50	2.69
VV445	15-X 506	5	60	2.69
VV446	15-X 508	5	80	2.50
VV447	15-X 510	5	100	2.50
VV448	15-X 512	5	120	2.50
VV449	15-X 703	7	36	4.84
VV450	15-X 705	7	50	4.05
VV451	15-X 706	7	60	4.05
VV452	15-X 708	7	80	3.91
VV453	15-X 710	7	100	3.91
VV454	15-X 712	7	120	3.91

COOLCUT™

- For general purpose sanding, light weld removal, surface cleaning and finishing
- High removal rate, cool cutting



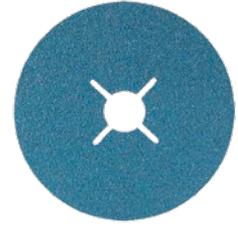
COOLCUT

Model No.	Mfg. No.	D"	Size x	A"	Grit	Price /Each
UG017	15-C-452	4 1/2	x	7/8	24	1.29
BZ797	15-C-453	4 1/2	x	7/8	36	1.21
YB809	15-C-454	4 1/2	x	7/8	40	1.21
BZ798	15-C-455	4 1/2	x	7/8	50	1.09
UG018	15-C-456	4 1/2	x	7/8	60	1.09
UG019	15-C-458	4 1/2	x	7/8	80	1.00
UG020	15-C-460	4 1/2	x	7/8	100	1.00
UG022	15-C-502	5	x	7/8	24	1.41
BZ799	15-C-503	5	x	7/8	36	1.29
UG023	15-C-504	5	x	7/8	40	1.29
BZ800	15-C-505	5	x	7/8	50	1.21
UG024	15-C-506	5	x	7/8	60	1.21
UG025	15-C-508	5	x	7/8	80	1.09
UG026	15-C-510	5	x	7/8	100	1.09
UG027	15-C-512	5	x	7/8	120	1.09
UG034	15-C-702	7	x	7/8	24	2.57
UG035	15-C-703	7	x	7/8	36	2.44
UG036	15-C-705	7	x	7/8	50	2.33
UG037	15-C-706	7	x	7/8	60	2.33
UG038	15-C-708	7	x	7/8	80	2.24
UG039	15-C-710	7	x	7/8	100	2.24
UG040	15-C-712	7	x	7/8	120	2.24

D x A: Diameter x Arbor Size

TOPCUT™

- For the toughest weld removal, grinding and blending applications
- Blue zirconium abrasive grain to remove more material faster
- High strength heat resistant bond for longest disc life



Model No.	Mfg. No.	D"	Size x	A"	Grit	Price /Each
UG134	15-P-452	4 1/2	x	7/8	24	2.03
UG135	15-P-453	4 1/2	x	7/8	36	1.94
UG137	15-P-502	5	x	7/8	24	2.13
UG140	15-P-702	7	x	7/8	24	3.35
UG141	15-P-703	7	x	7/8	36	3.23

ACCESSORIES



BACKING PAD ASSEMBLIES (5/8"-11 THREAD)

High quality impact resistant plastic with excellent heat dissipation characteristics; individually packaged, one clamping nut included



Model No.	For sanding disc diameters"	Price /Each
VE827	4 1/2	13.90
UG060	5	15.50
UG062	6	22.50
UG055	7	23.20

TURBO ACTION BACKING PADS (5/8"-11 THREAD)

Special saucer shaped backing pad with ribbed backing, assures a continuous stream of air between pad and disc for cool operation and long disc life; complete with 5/8"-11 clamping nut



Model No.	Description	Dia."	Price/Each
TAV092	Standard Pad, Black	4 1/2	23.30
TAV086	Turbo Action Backing Pads	5	26.80
TAV071	Turbo Action Backing Pads	6	36.30
UG131	Turbo Action Backing Pads	7	40.40
UG132	Soft pad, White	7	40.40

3M™ 787C FIBRE DISC

- Ideal for use on stainless steel and non-ferrous metals
- Requires less pressure than a conventional ceramic disc
- Abrasive Material: Ceramic



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"		
NV037	4 1/2	x	7/8	36	1.80
NV039	4 1/2	x	7/8	60	1.60
NV042	4 1/2	x	7/8	80	1.50
NV045	4 1/2	x	7/8	120	1.50
NV038	5	x	7/8	36	2.06
NV040	5	x	7/8	60	1.83
NV043	5	x	7/8	80	1.71
NV046	5	x	7/8	120	1.71
NV716	7	x	7/8	36	2.66
NV041	7	x	7/8	60	2.58
NV044	7	x	7/8	80	2.42
NV047	7	x	7/8	120	2.42



Model No.	Size			Grit	Price /Each
	D"	x	A"		
BP228	4 1/2	x	7/8	24	2.85
BP240	4 1/2	x	7/8	60	2.65
BP244	4 1/2	x	7/8	80	2.38
BP230	5	x	7/8	24	2.91
BP234	5	x	7/8	36	2.91
BP242	5	x	7/8	60	2.73
BP246	5	x	7/8	80	2.42
BP231	7	x	7/8	24	3.67
BP247	7	x	7/8	80	3.42

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

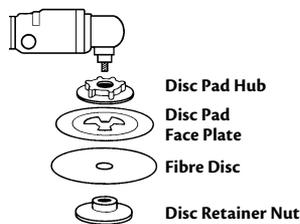


Model No.	Size"	Price/Each
DISC PAD HUBS		
BP212	2 1/2	56.65
BP213	4 1/2	57.22
DISC RETAINER NUTS		
BP219	5/8	23.39
BP217	1/2	23.39
BP218	3/8	23.39



DISC PAD FACE PLATES

Model No.	Size"	Max. RPM	Hardness - Colour	Price /Each
NS715	4 1/2	13 300	Medium - Grey	26.12
BP188	5	12 000	Medium - Grey	35.01
BP187	5	12 000	Hard - Black	35.01
BP190	5	12 000	Extra Hard - Red	35.01
BP192	7	8 600	Medium - Grey	50.60
BP191	7	8 600	Hard - Black	50.60
BP194	7	8 600	Extra Hard - Red	50.60



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	1.34
BP422	4 1/2	x	7/8	36	1.43
BP425	4 1/2	x	7/8	50	1.34
BP428	4 1/2	x	7/8	60	1.35
BP431	4 1/2	x	7/8	80	1.34
BP420	5	x	7/8	24	1.34
BP423	5	x	7/8	36	1.43
BP426	5	x	7/8	50	1.34
BP429	5	x	7/8	60	1.34
BP432	5	x	7/8	80	1.34
BP415	5	x	7/8	100	1.34
BP421	7	x	7/8	24	3.36
BP424	7	x	7/8	36	3.31
BP427	7	x	7/8	50	3.36
BP430	7	x	7/8	60	3.36
BP433	7	x	7/8	80	2.80
BP418	7	x	7/8	120	2.80

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



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 R980P 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



Size"	Grit	TS (Type II) Discs			TR (Type III) Discs		
		Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each
1 1/2	36	NS547	66261162307	1.09	NS559	66261162308	1.09
1 1/2	50	NS548	66261162309	0.97	NS560	66261162310	0.97
1 1/2	60	NS549	66261162311	1.00	NS561	66261162312	1.00
1 1/2	80	NS550	66261162313	1.00	NS562	66261162314	1.00
2	36	NS551	66261162317	1.60	NS563	66261162318	1.60
2	50	NS552	66261162319	1.52	NS564	66261162320	1.52
2	60	NS553	66261162321	1.40	NS565	66261162322	1.40
2	80	NS554	66261162323	1.40	NS566	66261162324	1.40
3	36	NS555	66261162327	2.02	NS567	66261162328	2.02
3	50	NS556	66261162329	1.94	NS568	66261162330	1.94
3	60	NS557	66261162331	1.84	NS569	66261162332	1.84
3	80	NS558	66261162333	1.84	NS570	66261162334	1.84

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



Size"	Grit	TS (Type II) Discs			TR (Type III) Discs		
		Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each
1 1/2	60	BR818	08834167061	0.84	BR842	08834167103	0.84
1 1/2	80	BR819	08834167062	0.84	BR843	08834167104	0.84
2	36	BQ023	08834167065	1.39	BR845	08834167107	1.39
2	50	BQ025	08834165583	1.30	BR847	08834167109	1.30
2	60	BQ026	08834167068	1.22	BR848	08834167110	1.22
2	80	BQ027	08834167069	1.22	BR849	08834167111	1.22
3	36	BQ029	08834167072	1.92	BR851	08834167114	1.92
3	50	BQ031	08834167074	1.84	BR853	08834167116	1.84
3	60	BQ032	08834167075	1.74	BR854	08834167117	1.74
3	80	BQ033	08834167076	1.69	BR855	08834167118	1.69

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



Size"	Grit	TS (Type II) Discs			TR (Type III) Discs		
		Model No.	Mfg. No.	Price /Each	Model No.	Mfg. No.	Price /Each
1-1/2	36	N0045	69957399626	0.54	-	-	-
1-1/2	40	N0046	69957399627	0.54	N0066	69957399695	0.54
1-1/2	50	N0047	69957399628	0.54	-	-	-
1-1/2	60	N0048	69957399629	0.54	-	-	-
1-1/2	80	N0049	69957399630	0.54	N0067	69957399698	0.54
1-1/2	100	N0050	69957399631	0.54	-	-	-
1-1/2	120	N0051	69957399632	0.54	N0068	69957399700	0.54
2	36	N0052	69957399638	0.79	N0069	69957399706	0.79
2	40	N0053	69957399639	0.79	N0070	69957399707	0.79
2	50	N0054	69957399640	0.79	N0071	69957399708	0.79
2	60	N0055	69957399641	0.79	N0072	69957399709	0.79
2	80	N0056	69957399642	0.79	N0073	69957399710	0.79
2	100	N0057	69957399643	0.79	N0074	69957399711	0.79
2	120	N0058	69957399644	0.79	N0075	69957399712	0.79
3	36	N0059	69957399650	1.14	N0076	69957399718	1.14
3	40	N0060	69957399651	1.14	N0077	69957399719	1.14
3	50	N0061	69957399652	1.14	N0078	69957399720	1.14
3	60	N0062	69957399653	1.14	N0079	69957399721	1.14
3	80	N0063	69957399654	1.14	N0080	69957399722	1.14
3	100	N0064	69957399655	1.14	N0081	69957399723	1.14
3	120	N0065	69957399656	1.14	N0082	69957399724	1.14



BACK UP PADS

Description	Max RPM	TS (Type II)		Price /Each	TR (Type III)		Price /Each
		Model No.	Mfg. No.		Model No.	Mfg. No.	
1 1/2" Medium	30000	BR283	08834164146	15.70	-	-	-
1 1/2" Hard	30000	BR434	08834164622	15.70	-	-	-
2" Medium	30000	BR284	08834164198	17.20	BR469	08834164922	17.20
2" Hard	30000	BR435	08834164624	17.20	BR439	08834164643	17.20
3" Medium	20000	BR281	08834164113	19.00	BR475	08834164949	19.00
3" Hard	20000	BR164	08834161626	19.00	BR272	08834164036	19.00

Maintain the ideal temperature in your workplace.

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	1.48
AC436	2	36	1.38
AC437	2	50	1.27
AC438	2	60	1.24
AC439	2	80	1.19
AC440	2	100	1.19
AC441	2	120	1.19

Model No.	Size"	Grit	Price /Each
AC442	3	24	1.92
AC443	3	36	1.78
AC444	3	50	1.62
AC446	3	80	1.55
AC448	3	120	1.53

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	1.02
BP338	2	36	0.96
BP340	2	50	0.90
BP342	2	60	0.86
BP344	2	80	0.83
BP346	2	P100	0.83
BP348	2	P120	0.83
BP350	2	P150	0.83
BP352	2	P180	0.83
BP353	2	P240	0.83
BP337	3	24	1.30
BP339	3	36	1.23
BP341	3	50	1.13
BP343	3	60	1.10
BP345	3	80	1.08
BP347	3	P100	1.08
BP349	3	P120	1.08
BP351	3	P150	1.08
BP354	3	P240	1.08

ROLOC™ TSM

Model No.	Size"	Grit	Price /Each
BP326	2	36	1.24
BP328	2	60	1.09
BP332	2	P100	1.06
BP335	3	P120	1.38

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	22.68
BP005	2	Hard	25 000	20.79
BP009	3	Medium	18 000	25.39
BP006	3	Hard	20 000	25.39

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	29.35
BP516	2	Hard	25 000	30.68
BP518	3	Hard	20 000	36.17

1/4" THREADED SHAFTS

Needed with all Roloc™ disc pads.

Model No.	Size"	Hardness	Price /Each
BP013	1/4 x 1/4	Thread	4.01

ALUMINUM OXIDE 2 PLY DISCS

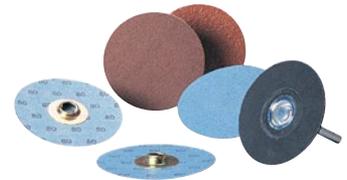
- Best disc for general purpose grinding, deburring and blending on ferrous metals

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	1.14
VU393	2	36	0.97
VU394	2	40	1.02
VU395	2	50	0.99
VU396	2	60	0.95
VU397	2	80	0.94
VU398	2	100	0.92
VU399	2	120	0.92
VU400	2	150	0.84
VU401	2	180	0.84
VU402	2	240	0.93
VU403	2	320	0.92

Model No.	Size"	Grit	Price /Each
VU405	3	36	1.35
VU406	3	40	1.30
VU407	3	50	1.21
VU408	3	60	1.23
VU409	3	80	1.21
VU410	3	100	1.18
VU411	3	120	1.18
VU413	3	180	1.29
VU414	3	240	1.18

LOCKIT® DISCS

Model No.	Size"	Grit	Price /Each
VU429	2	36	1.07
VU430	2	40	1.02
VU432	2	60	0.95
VU433	2	80	0.94
VU434	2	100	0.92
VU435	2	120	0.92
VU437	2	180	0.92
VU438	2	240	0.92
VU439	2	320	0.92

Model No.	Size"	Grit	Price /Each
VU442	3	40	1.43
VU443	3	50	1.26
VU445	3	80	1.21
VU447	3	120	1.18

HOLDER PADS

- With mandrel



Model No.	Dia."	Density	Price /Each
FOR SMALL DIAMETER SOCATT® DISCS			
VU601	2	Soft	20.03
VU602	2	Medium	19.22
VU603	2	Firm	22.89
VU605	3	Medium	22.22
VU606	3	Firm	26.47
FOR SMALL DIAMETER LOCKIT® DISCS			
VU611	2	Medium	19.22
VU612	2	Firm	22.89
VU613	3	Soft	24.39
VU614	3	Medium	22.22



PSA & HOOK & 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



MERIT

Model No.	Mfg. No.	Size"	Grit	Price /Each
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HOOK & LOOP PAPER DISCS

NZ005	66261131549	5	P80	0.80
NZ006	66261131548	5	P100	0.73
NZ007	66261131547	5	P120	0.73
NZ008	66261131546	5	P150	0.73
NZ009	66261131545	5	P180	0.73
NZ010	66261131544	5	P220	0.73
NZ011	66261131543	5	P240	0.73
NZ012	66261131542	5	P280	0.73
NZ013	66261131541	5	P320	0.73
NZ014	66261131539	5	P400	0.73
NZ015	66261131538	5	P500	0.73
NZ016	66261131537	5	P600	0.84
NZ017	66261131536	5	P800	0.84
NZ021	6626113566	6	P80	1.17
NZ022	6626113565	6	P100	1.03
NZ023	6626113564	6	P120	1.03
NZ024	6626113563	6	P150	1.03
NZ025	6626113562	6	P180	1.03
NZ026	6626113561	6	P220	1.03
NZ027	6626113560	6	P240	1.03
NZ028	6626113559	6	P280	1.03
NZ029	6626113558	6	P320	1.03
NZ030	6626113556	6	P400	1.03
NZ031	6626113555	6	P500	1.03
NZ032	6626113554	6	P600	1.03
NZ033	6626113553	6	P800	1.03

STICK & SAND PAPER DISCS

NS025	66261131464	5	P80	62.60
NS675	66261131463	5	P100	57.70
NS030	66261131462	5	P120	57.70
NS029	66261131461	5	P150	57.70
NS028	66261131460	5	P180	57.70
NS027	66261131459	5	P220	57.70
NS026	66261131458	5	P240	57.70
NS676	66261131457	5	P280	57.70
NS677	66261131456	5	P320	57.70
NS678	66261131455	5	P400	57.70
NS679	66261131453	5	P500	57.70
NS680	66261131452	5	P600	57.70
NS681	66261131451	5	P800	57.70
NS018	66261131481	6	P80	88.40
NS019	66261131480	6	P100	81.70
NS020	66261131479	6	P120	81.70
NS682	66261131478	6	P150	81.70
NS021	66261131477	6	P180	81.70
NS022	66261131476	6	P220	81.70
NS023	66261131475	6	P240	81.70
NS683	66261131474	6	P280	81.70
NS024	66261131473	6	P320	81.70
NZ001	66261131471	6	P400	81.70
NZ002	66261131470	6	P500	81.70
NZ003	66261131469	6	P600	81.70
NZ004	66261131468	6	P800	81.70

Model No.	Mfg. No.	Size"	Grit	Price /Each
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HOOK & LOOP DISCS

NR896	66623362950	5	P80-B	0.57
NR897	66623365788	5	P100-B	0.50
NR898	66623362949	5	P120-B	0.50
NR899	66623362948	5	P150-B	0.50
NR900	66623362947	5	P180-B	0.50
NR901	66623362946	5	P220-B	0.50
NR902	66623362945	5	P240-B	0.50
NR903	66623362944	5	P320-B	0.50
NR904	66623362943	5	P400-B	0.50
NR906	66623362942	5	P600-B	0.50
NR907	66623362941	5	P800-B	0.50
NR908	66623362960	6	P80-B	0.60
NR909	66623365789	6	P100-B	0.52
NR910	66623362959	6	P120-B	0.52
NR911	66623362958	6	P150-B	0.52
NR912	66623362957	6	P180-B	0.52
NR913	66623362956	6	P220-B	0.52
NR914	66623362955	6	P240-B	0.52
NR915	66623362954	6	P320-B	0.52
NR916	66623362953	6	P400-B	0.52
NR917	66623362952	6	P600-B	0.52
NR918	66623362951	6	P800-B	0.52

PSA DISCS

NR919	66623362930	5	P80-B	43.00
NR921	66623362929	5	P120-B	37.40
NR922	66623362928	5	P150-B	37.40
NR923	66623362927	5	P180-B	37.40
NR924	66623362926	5	P220-B	37.40
NR925	66623362925	5	P240-B	37.40
NR926	66623362924	5	P320-B	37.40
NR927	66623362923	5	P400-B	37.40
NR928	66623362922	5	P600-B	37.40
NR929	66623362921	5	P800-B	37.40
NR930	66623362940	6	P80-B	58.90
NR931	66623362939	6	P120-B	51.20
NR932	66623362938	6	P150-B	51.20
NR933	66623362937	6	P180-B	51.20
NR934	66623362936	6	P220-B	51.20
NR935	66623362935	6	P240-B	51.20
NR936	66623362934	6	P320-B	51.20
NR937	66623362933	6	P400-B	51.20
NR938	66623362932	6	P600-B	51.20
NR939	66623362931	6	P800-B	51.20

CUBITRON™ II STIKIT™ 732U PAPER DISC ROLL

- For best results, use with 3M® Elite Orbital Sanders
- 3M® precision-shaped ceramic grain technology provides fast cut and long life
- Ideal for a wide variety of substrates and applications focused primarily on stock removal
- 3M® Stikit™ attachment makes changing discs fast and easy
- Convenient disc rolls eliminate the need to remove disc liners from individual discs
- Diameter: 6"
- Abrasive Material: Ceramic
- Backing Weight: C-Weight
- Max. RPM: 10000
- Colour: Purple
- Qty/Roll: 50



Model No.	Mfg. No.	Grit	Price /Each
NV721	AB86836	80	15.17
NV742	AB86837	120	124.65
NV736	AB87067	180	124.65
NV760	AB87101	220	124.65

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	38.30
NR941	63642506131	5" PSA Medium Low Profile	15 000	23.40
NR943	63642506129	5" NorGrip Soft Low Profile	15 000	41.10
NZ049	63642506135	5" NorGrip Medium Low Profile	15 000	25.50
NR945	63642506127	6" PSA Soft Low Profile	15 000	40.80
NR946	63642506133	6" PSA Medium Low Profile	15 000	40.80
NR948	63642506130	6" NorGrip Soft Low Profile	15 000	50.90
NR947	63642506137	6" NorGrip Medium Low Profile	15 000	50.90

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	41.05
NX282	AB86489	5	P100	41.05
NX283	AB88700	5	P120	41.05
NX284	AB86490	5	P150	41.05
NX285	AB86492	5	P180	41.05
NX286	AB86493	5	P220	41.05
NX287	AB86494	5	P240	41.05
NX289	AB86496	5	P400	41.05
NX290	AB86497	5	P500	41.05
NX301	AB86468	6	P80	54.43
NX292	AB86469	6	P100	54.43
NX293	AB86470	6	P120	54.43
NX294	AB86471	6	P150	54.43
NX295	AB86472	6	P180	54.43
NX296	AB86473	6	P220	54.43
NX297	AB86474	6	P240	54.43
NX298	AB86475	6	P320	54.43
NX299	AB86476	6	P400	54.43
NX300	AB86477	6	P500	54.43

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 10000



Model No.	Dimensions	For use with	Price /Each
BP215	5" x 3/4" x 5/16"-24 Ext	5" Stikit™ Discs	23.66
BP216	6" x 3/4" x 5/16"-24 Ext	6" Stikit™ Discs	61.72

LARGE DIAMETER CLOTH PSA DISCS

Typical Applications

- Used on stationary disc machines
- For finishing metal workpieces
- Made without centre holes for full-face usage
- Pressure sensitive adhesive offers fast, convenient mounting

NORZON PLUS R821P 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	18.10
NZ058	66261138319	12	36	17.10
NZ059	66261138320	12	40	15.90
NZ060	66261138321	12	50	14.90
NZ061	66261138322	12	60	14.00
NZ062	66261138323	12	80	13.00

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	10.30
NZ078	66261136630	12	40	9.70
NZ079	66261136625	12	50	9.19
NZ080	66261136620	12	60	8.67
NZ081	66261136615	12	80	8.14
NZ082	66261136614	12	100	7.72
NZ083	66261136613	12	120	7.72

ABRASIVES



CUBITRON™ II HOOKIT™ FILM DISC 775L

- To be used with random orbital sanders
- 3M® precision-shaped ceramic grain technology provides fast cut and long life
- Film backing for greater tear-resistance and edge retention
- Ideal for a wide variety of substrates and applications focused primarily on stock removal
- 3M® Hookit™ attachment makes changing discs fast and easy



Model No.	Mfg. No.	Grit	Diameter	Price /Each
NV465	AB86822	80	5"	1.13
NV466	AB86823	120	5"	0.95
NV467	AB64270	220	5"	0.95
NV468	AB47081	320	5"	0.95
NY202	AB86824	80+	6"	1.60
NY203	AB86825	120+	6"	1.34
NY205	AB64259	150+	6"	1.34
NV471	AB64265	180	6"	2.79
NY204	AB64271	220+	6"	1.34
NY207	AB47098	240+	6"	1.34
NY206	AB47082	320+	6"	1.34
NY208	AB05059	400+	6"	1.34

CUBITRON™ II HOOKIT™ FILM DISC 775L

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Model No.	Mfg. No.	Grit	Diameter	Price /Each
NV734	AB86818	80	5"	0.95
NV754	AB86819	120	5"	0.79
NV748	AB64263	180	5"	0.79
NV759	AB47080	320	5"	0.79
NU579	AB86820	80	6"	1.33
NU576	AB86821	120	6"	1.11
NV703	AB87041	150	6"	1.11
NU577	AB87040	180	6"	1.11
NV192	AB87089	220	6"	1.11
NV691	AB47096	240	6"	1.11
NV193	AB47099	320	6"	1.11
NV693	AB05056	400	6"	1.11

CLOTH BELT 241D

- Tube-shaped band fits inner and outer contours to remove parting lines, imperfections and burrs
- X-weight cloth backing withstands heavy sanding and grinding
- Resin bond withstands high heat and pressure
- Tough aluminum oxide abrasive mineral cuts fast and performs well on many substrates
- Abrasive Material: Aluminum Oxide



Model No.	Mfg. No.	Grit	Width	Length	Price /Each
BP033	AB66616	36	3"	24"	3.58
BP034	AB66604	40	3"	24"	3.42
BP035	AB66617	50	3"	24"	3.17
BP037	AB66611	80	3"	24"	2.67
BP031	AB66607	100	3"	24"	2.49
BP032	AB66608	120	3"	24"	2.49
BP043	AB66610	P60	4"	24"	5.21
BP044	AB66611	P80	4"	24"	4.46

777F CLOTH BELT

- 3M™ ceramic aluminum oxide grain blend surpasses aluminum oxide abrasives in cut-rate
- Durable ceramic/aluminum oxide blend extends belt life, producing more parts per belt and requiring fewer belt changes
- Heavyweight polyester backing supports high-pressure, tough applications and can be run wet or dry
- Contains a grinding aid to reduce heat and increase performance when used stainless steel and other exotic metals
- Long life
- Fast cutting



Model No.	Mfg. No.	Grit	Width	Length	Price /Each
NU341	AB84409	40	1/2"	18"	2.64
NU338	AB80551	60	1/2"	18"	2.64
NU337	AB80232	80	1/2"	18"	2.43
NU306	AB27436	100	1/2"	18"	2.15
NU340	AB84304	120	1/2"	18"	2.36
NU359	AM39061	180	1/2"	18"	3.69

CUBITRON™ II 984F ABRASIVE BELT

- To be used with back stands, bench top motors, centreless grinders, cylindrical grinders, disc sanders, edge sanders, file belt sanders, inline sanders, manual back stands, pressure assist back stands and wide belt sanders
- 3M® precision-shaped ceramic grain continuously fractures into sharp points that cut exceptionally fast, helping increase productivity
- Engineered to run cooler, reducing metal discoloration/oxidation and the chance of heat related stress cracks
- 3M® precision-shaped ceramic grain requires less pressure, which means less operator fatigue
- YF-weight backing excels in medium to high-pressure stainless steel, cobalt chrome and nickel alloy applications
- Abrasive Material: Ceramic
- Backing Weight: YF-Weight
- Backing Material: Polyester
- Colour: Orange



Model No.	Mfg. No.	Grit	Width	Length	Price /Each
NU310	AB27511	36	1/2"	18"	3.79
NU323	AB55041	60	1/2"	18"	3.66
NV720	AB55064	36	3/4"	18"	4.16
NV747	AM39679	36	1"	18"	5.52
NU324	AB55048	80	1/2"	18"	3.56
NV717	AB27512	36	1/2"	24"	4.07
NV731	AB55031	60	1/2"	24"	3.88
NV739	AB55054	80	1/2"	24"	3.75

FILE BELTS

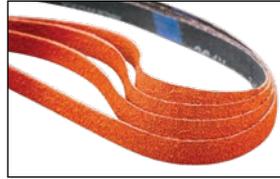
Typical Applications

- 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 R980P 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"	x	Size L"	Grit	Price /Each
NR091	69957398018	1/2	x	12	40	2.29
NR092	69957698019	1/2	x	12	60	2.20
NR093	69957398020	1/2	x	12	80	2.14
NR094	69957398021	1/2	x	18	40	2.47
NR095	69957398022	1/2	x	18	60	2.32
NR096	69957398023	1/2	x	18	80	2.24
NR097	69957398024	1/2	x	24	40	2.74
NR098	69957398025	1/2	x	24	60	2.54
NR099	69957398026	1/2	x	24	80	2.32
NR100	69957398027	3/4	x	18	40	2.77
NR101	69957398028	3/4	x	18	60	2.60
NR102	69957398029	3/4	x	18	80	2.44

NORZON PLUS R823P 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"	x	Size L"	Grit	Price /Each
NZ178	78072728745	1/2	x	12	60	1.30
NZ179	78072728744	1/2	x	12	80	1.14
NZ180	78072728742	1/2	x	12	120	0.92
NZ181	78072728569	1/2	x	18	60	1.34
NZ182	78072728568	1/2	x	18	80	1.30
NZ183	78072728567	1/2	x	18	120	1.02
NZ184	78072728564	1/2	x	24	60	1.39
NZ185	78072728566	1/2	x	24	80	1.34
NZ187	78072728565	1/2	x	24	120	1.24
NZ188	78072709590	3/4	x	18	60	1.57
NZ189	78072758953	3/4	x	18	80	1.49
NZ194	78072728583	1	x	30	60	2.80
NZ195	78072728582	1	x	30	80	2.59

METALITE R228 BELTS

- Aluminum oxide abrasive
- Aggressive cutting; resistant to heat
- Strong X-wt rayon backing
- For metal and wood



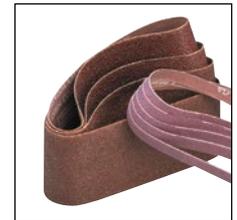
NORTON

Model No.	Mfg. No.	W"	x	Size L"	Grit	Price /Each
NV700	78072732112	3/8	x	13	Coarse, P60	0.89
NV701	78072771323	3/8	x	13	Coarse, P80	0.80
NZ410	78072727557	1/2	x	12	40	0.89
NZ411	78072727555	1/2	x	12	60	0.89
NZ412	78072727554	1/2	x	12	80	0.80
NZ414	78072727552	1/2	x	12	120	0.74
NZ415	78072727561	1/2	x	18	40	0.92
NZ416	78072727560	1/2	x	18	60	0.90
NZ417	78072727559	1/2	x	18	80	0.89
NZ418	78072727558	1/2	x	18	120	0.80
NZ419	78072727568	1/2	x	24	40	0.95
NZ421	78072727566	1/2	x	24	60	0.95
NZ422	78072727565	1/2	x	24	80	0.90
NZ423	78072727564	1/2	x	24	120	0.95
NZ424	78072727573	3/4	x	20-1/2	40	1.19
NZ425	78072727571	3/4	x	20-1/2	60	1.15
NZ426	78072727570	3/4	x	20-1/2	80	1.09
NZ427	78072727569	3/4	x	20-1/2	100	1.05
NZ428	78072727575	3/4	x	20-1/2	120	1.05
NZ429	78072727579	1	x	30	80	1.79
NZ430	78072727577	1	x	30	120	1.97

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"	x	Size L"	Grit	Price /Each
NZ283	78072727927	3	x	21	40	2.70
NZ284	78072727926	3	x	21	50	2.60
NZ285	78072727925	3	x	21	60	2.54
NZ286	78072727924	3	x	21	80	2.40
NZ287	78072727923	3	x	21	100	2.32
NZ288	78072727922	3	x	21	120	2.32
NZ289	78072781847	3	x	24	36	3.07
NZ290	78072727937	3	x	24	40	2.90
NZ291	78072727936	3	x	24	50	2.75
NZ292	78072727935	3	x	24	60	2.70
NZ293	78072727934	3	x	24	80	2.59
NZ294	78072727933	3	x	24	100	2.47
NZ295	78072727932	3	x	24	120	2.47
NZ302	78072780438	4	x	24	36	5.19
NZ303	78072727947	4	x	24	40	4.67
NZ304	78072727946	4	x	24	50	4.50
NZ305	78072727945	4	x	24	60	4.35
NZ306	78072727944	4	x	24	80	4.12
NZ307	78072727943	4	x	24	100	3.97
NZ308	78072727942	4	x	24	120	3.97



STATIONARY BELTS

Typical Applications

- Benchstand and backstand belts
- Grinding and deburring of all metals
- Heavy stock removal
- Blending, dimensioning and shaping
- Polishing

NORZON PLUS R823P 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.	Size		Grit	Price /Each
		W"	L"		
NZ196	78072728596	1	x 42	60	2.82
NZ197	78072728594	1	x 42	80	2.67
NZ198	78072728592	1	x 42	100	2.54
NZ199	78072728590	1	x 42	120	2.54
NZ200	78072728586	1	x 42	180	2.54
NZ215	78072728827	4	x 36	60	7.50
NZ216	78072728825	4	x 36	80	6.89
NZ217	78072728821	4	x 36	120	6.59
NZ218	78072728937	6	x 48	60	12.60
NZ219	78072728935	6	x 48	80	11.40
NZ220	78072728933	6	x 48	100	11.10
NZ221	78072728931	6	x 48	120	11.10

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.	Size		Grit	Price /Each
		W"	L"		
NZ309	78072720910	1	x 42	40	2.45
NZ310	78072720905	1	x 42	50	2.40
NZ311	78072720900	1	x 42	60	2.35
NZ312	78072720895	1	x 42	80	2.25
NZ313	78072720890	1	x 42	100	2.20
NZ314	78072720885	1	x 42	120	2.20
NZ315	78072720880	1	x 42	150	2.20
NZ316	78072720875	1	x 42	180	2.20
NZ317	78072720871	1	x 42	220	2.20
NZ318	78072720870	1	x 42	240	2.20
NZ319	78072720865	1	x 42	320	2.20
NZ354	78072722110	4	x 36	36	6.54
NZ355	78072722105	4	x 36	40	8.62
NZ356	78072722100	4	x 36	50	8.30
NZ357	78072722095	4	x 36	60	8.00
NZ358	78072722090	4	x 36	80	7.62
NZ359	78072722085	4	x 36	100	7.42
NZ360	78072722080	4	x 36	120	7.42
NZ361	78072722079	4	x 36	150	5.40
NZ362	78072722075	4	x 36	180	5.40
NZ363	78072722071	4	x 36	320	5.40
NZ371	78072722590	6	x 48	36	16.20
NZ372	78072722585	6	x 48	40	15.40
NZ373	78072722580	6	x 48	50	14.70
NZ374	78072722575	6	x 48	60	14.10
NZ375	78072722570	6	x 48	80	10.30
NZ376	78072722565	6	x 48	100	13.00
NZ377	78072722560	6	x 48	120	13.00
NZ378	78072722555	6	x 48	150	9.92
NZ379	78072722550	6	x 48	180	9.92
NZ380	78072722546	6	x 48	220	9.92
NZ381	78072722545	6	x 48	240	9.92
NZ382	78072722543	6	x 48	320	9.92

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
		W"	L"		
BZ251	08834196068	1/2	x 1/2	60	88.40
BZ288	08834196179	1/2	x 1/2	80	58.40
BZ252	08834196069	1/2	x 1/2	120	58.40
BZ307	08834196212	1/2	x 1	60	63.40
BZ309	08834196215	1/2	x 1	80	63.40
BZ305	08834196210	1/2	x 1	120	93.40
BZ401	08834196554	3/4	x 1	60	75.00
BZ328	08834196249	3/4	x 1	80	75.00
BZ244	08834196057	3/4	x 1	120	112.00
BZ257	08834196074	1	x 1	80	70.00
BZ278	08834196167	1	x 1	100	100.00
BZ286	08834196177	1	x 1	120	70.00
BZ247	08834196060	1	x 1 1/2	60	81.70
BZ274	08834196162	1	x 1 1/2	80	81.70
BZ443	08834196677	1	x 1 1/2	120	117.00
BZ289	08834196181	2	x 2	80	184.00
BZ298	08834196193	2	x 2	100	179.00
BZ412	08834196585	2	x 2	120	179.00
BZ296	08834196188	3	x 3	60	232.00
BZ272	08834196159	3	x 3	80	232.00
BZ407	08834196572	3	x 3	120	315.00

CLOTH BELT 241D

- Tube-shaped band fits inner and outer contours to remove parting lines, imperfections and burrs
- X-weight cloth backing withstands heavy sanding and grinding
- Resin bond withstands high heat and pressure
- Tough aluminum oxide abrasive mineral cuts fast and performs well on many substrates
- Abrasive Material: Aluminum Oxide

3M



Model No.	Mfg. No.	Size"		Grit	Price /Each
		W"	L"		
BP054	AB66625	6	x 48	36	12.50
BP055	AB66629	6	x 48	40	11.99
BP056	AB66630	6	x 48	50	11.09
BP057	AB66631	6	x 48	60	11.22
BP058	AB66634	6	x 48	80	10.18
BP053	AB66636	6	x 48	120	9.59

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



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



NORTON

Model No.	Mfg. No.	Grit	Price /Each
1" X 50 YARD			
NS204	66261058716	40	38.30
NS205	66261127728	50	38.00
NS206	66261127729	60	37.40
NS212	66261126276	80	39.20
NS213	66261126275	100	37.90
NS214	66261126274	120	37.90
NS215	66261126273	150	37.90
NZ846	66261126270	240	37.90
NZ847	66261126268	320	37.90
NZ887	66261126267	400	37.90
1 1/2" X 50 YARD			
NZ888	66261058715	40	54.30
NZ890	66261127731	60	52.20
NZ891	66261126288	80	54.80
NZ892	66261126287	100	53.00
NZ893	66261126286	120	53.00

Model No.	Mfg. No.	Grit	Price /Each
1 1/2" X 50 YARD			
NZ894	66261126285	150	53.00
NZ951	66261126284	180	53.00
NZ953	66261126282	240	53.00
NZ955	66261126280	320	53.00
NZ957	66261126279	400	53.00
2" X 50 YARD			
NZ959	66261058714	40	70.50
NZ995	66261127732	50	69.90
NZ996	66261127733	60	68.50
NS048	66261126299	80	69.70
NZ997	66261126298	100	67.40
NS049	66261126297	120	67.40
NS050	66261126296	150	67.40
NS051	66261126295	180	67.40
NZ998	66261126293	240	67.40
NZ999	66261126291	320	67.40
NR001	66261126290	400	67.40

9" X 11" SHEETS

Model No.	Mfg. No.	Grit	Price /Each
BP672	60333	50X	1.23
BP673	60334	60X	1.16
BP671	60342	80J	1.02
BP664	60343	100J	0.99
BP665	60344	120J	0.99
BP666	60345	150J	0.99
BP667	60346	180J	0.99
BP668	60347	220J	0.99
BP669	60348	240J	0.99
BP670	60349	280J	0.99

ROLLS

Model No.	Mfg. No.	Grit	Price /Each
1" X 50 YARD			
BP660	60326	50X	25.21
BP662	60325	60X	23.76
BP657	60686	80J	20.82
BP643	60687	100J	19.64
BP645	60688	120J	19.64
BP647	60689	150J	19.64
BP649	60690	180J	19.64
BP651	60691	220J	19.64
BP653	60692	240J	19.64
BP655	60693	280J	19.64



ROLLS

Model No.	Mfg. No.	Grit	Price /Each
1 1/2" X 50 YARD ROLLS			
BP624	60327	50X	37.80
BP625	60328	60X	35.65
BP623	60697	80J	31.28
BP616	60698	100J	29.31
BP617	60699	120J	29.31
BP618	60700	150J	29.31
BP619	60701	180J	29.31
BP620	60702	220J	29.31
BP621	60703	240J	29.31
BP622	60704	280J	29.31
2" X 50 YARD ROLLS			
BP659	60329	40X	54.19
BP661	60330	50X	50.37
BP663	60331	60X	47.51
BP658	60708	80J	41.65
BP644	60709	100J	39.10
BP646	60710	120J	39.10
BP648	60711	150J	39.10
BP650	60712	180J	39.10
BP652	60713	220J	39.10
BP654	60714	240J	39.10
BP656	60715	280J	39.10

R243 HANDY SANDING ROLL

- Quality P-graded aluminum oxide abrasive grain delivers fast cut rate and consistent finish on metals
- Smooth, flexible backing provides superior conformability to complex surfaces and better finishes
- Advanced full resin bond system provides exceptional grain adhesion for longer life on aluminum, fiberglass, composites, hard woods and soft woods
- Used for polishing lathe turnings, rolls and cylinders, light deburring, blending machine tool marks, removing rust and scale, and fine sanding and polishing
- Abrasive Material: Aluminum Oxide
- Backing Weight: J-Weight
- Backing Type: Cloth
- Length of Roll: 150'



Model No.	Mfg. No.	Grit	Width"	Price /Each
NV106	66261136178	60	1	27.30
NV107	66261136179	80	1	22.90
NV108	66261136180	100	1	22.10
NV109	66261136181	120	1	22.10
UAJ256	66261136182	150	1	22.90
NV110	66261136186	180	1	22.10
NV111	66261136187	240	1	22.10
NV112	66261136188	320	1	22.10
NV266	66261136192	80	1-1/2	32.00
NV113	66261136195	120	1-1/2	31.00
NV442	66261136196	150	1-1/2	31.00
NV353	66261136199	180	1-1/2	31.00
NV145	66261136201	320	1-1/2	31.00

Model No.	Mfg. No.	Grit	Width"	Price /Each
NV114	66261136203	60	2	48.50
NV115	66261136204	80	2	40.70
NV116	66261136205	100	2	39.40
NV117	66261136206	120	2	39.40
NR142	66261136207-DISC	150	2	39.40
NV141	66261136207	150	2	39.40
NR141	66261136207-DISC	150	2	39.40
NV118	66261136208	180	2	39.40
NV119	66261136209	240	2	39.40
NV120	66261136210	320	2	39.40
NV144	66261136211	400	2	39.40

NORTON



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	2.05
NR104	66261101862	50	1.89
NR105	66261101861	60	1.75
NZ455	66261126340	80	1.52
NZ456	66261126339	100	1.40
NZ457	66261126338	120	1.40
NZ458	66261126337	150	1.40
NZ459	66261126336	180	1.40
NZ460	66261126335	220	1.40
NZ461	66261126334	240	1.40
NZ462	66261126333	280	1.40
NZ463	66261126332	320	1.40
NZ464	66261126331	400	1.40
NZ465	66261126330	600	1.40

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	1.10
NZ432	66261131633	100	1.00
NZ433	66261131632	120	1.00
NZ434	66261131631	150	1.00
NZ435	66261131630	180	1.00
NZ436	66261131629	220	1.00
NZ437	66261131628	240	1.00
NZ438	66261131627	280	1.00
NZ439	66261131626	320	1.00
NZ440	66261131624	400	1.00
NZ441	66261131623	500	1.00
NZ442	66261131622	600	1.00
NZ443	66261131621	800	1.00

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	1.19
NZ448	66261139366	240	1.19
NZ449	66261139365	280	1.19
NZ450	66261139364	320	1.19
NZ451	66261139363	360	1.19
NZ452	66261139362	400	1.19
NZ453	66261139361	500	1.19
NZ454	66261139360	600	1.19

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	0.92
NR857	66254487394	P100-B	0.80
NR858	66254487395	P120-B	0.80
NR859	66254487396	P150-B	0.80
NR860	66254487397	P180-B	0.80
NR861	66254487398	P220-B	0.80
NR862	66254487399	P240-B	0.80
NR863	66254487400	P320-B	0.80

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	0.79
NR115	66261101500	100	0.69
NR116	66261101495	120	0.69
NR117	66261101490	150	0.69
NR118	66261101489	180	0.69
NR119	66261101488	220	0.69

GARNET ABRASIVE PAPER

140N - (D weight paper)

- Open coat for non-loading
- Choice of cabinet makers and woodworkers

110N - (A weight paper)

- Open coat for non-loading
- Traditional choice for woodworkers for producing fine finishes



Model No.	Size"	Grit	Price /Each
140N			
BP539	9 x 11	50	0.95
BP540	9 x 11	60	0.95
110N			
BP531	9 x 11	100	0.48
BP532	9 x 11	120	0.48
BP534	9 x 11	180	0.48
BP535	9 x 11	220	0.48

TRI-M-ITE FRE-CUT ABRASIVE PAPER

415U/415N (A weight paper - open coat)

- Silicon carbide mineral cuts fast and smooth
- Ideal for sanding between coats of varnish, paint and other finishes
- Especially suited to wood and sealer sanding



Model No.	Size"	Grit	Price /Each
BP548	9 x 11	100	0.87
BP549	9 x 11	120	0.87
BP550	9 x 11	150	0.87
BP552	9 x 11	180	0.87
BP554	9 x 11	220	0.87
BP555	9 x 11	240	0.87
BP556	9 x 11	280	0.87
BP557	9 x 11	320	0.87

WETORDRY™ ABRASIVE PAPER

- Reduces clogging, eliminates dust, extends abrasive life and improves finish

431Q - (Silicon carbide - C weight paper)

- Heavyweight paper backing for increased durability

413Q - (Silicon carbide - A weight paper)

- Excellent conformability



Model No.	Size"	Grit	Price /Each
431Q			
BP572	9 x 11	80	1.94
BP565	9 x 11	100	1.68
BP566	9 x 11	120	1.46
BP567	9 x 11	150	1.38
BP568	9 x 11	180	1.29
413Q			
BP559	9 x 11	220	1.88
BP560	9 x 11	240	1.88
BP562	9 x 11	320	1.88
BP564	9 x 11	400	1.88

Ask us about volume prices!

In many cases you will benefit from quantity prices.





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	3.46
BP482	Blending	Grey	Medium	2.34
BP484	General purpose	Maroon	Very Fine	1.11
BP492	Ultra fine	Light Grey	Ultra fine	1.13
BP488	Cleaning	White	Cleaning	1.53
NC871	General purpose #96	Green	Scouring	1.08

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	3,70
BP628	Fine	3,70
BP630	Super Fine	3,70

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	Priced per Each	
					Qty /Pkg.	Price /Each
NZ811	White	Light-Duty Cleaning Pad	Non-Abrasive	-	60	1.57
NZ812	Grey	Clean and Finish Pad	Silicon Carbide	Ultra Fine	60	1.40
NZ813	Light Green	Food Pro Pad	Aluminum Oxide	Very Fine	60	0.59
NS046	Dark Tan	Heavy-Duty Pad	Aluminum Oxide	Medium	40	3.64
NZ814	Grey	Metal Blend Pad	Silicon Carbide	Medium	40	2.34
NS045	Maroon	General Purpose Pad	Aluminum Oxide	Very Fine	60	1.40
NZ815	Grey	Final Shine Pad	Silicon Carbide	Micro Fine	60	1.40
NZ816	Maroon	Long Life Pad	Aluminum Oxide	Very Fine	60	1.40
NZ817	Green	Scouring Pad	Aluminum Oxide	Very Fine	60	1.40
NZ818	Maroon	General Purpose Perforated Pad	Aluminum Oxide	Very Fine	60	1.47
NZ819	Grey	General Purpose Pad	Silicon Carbide	Very Fine	40	2.17
NZ820	-	Hand Pad Holder	-	-	10	6.72

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 \$57.28

Model No. BP002
Ultra Fine Roll
Price/Each \$57.28



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 \$1.41



HAND PAD HOLDERS

- Used with Scotch-Brite™ hand pads and roll material cut to 4" x 6" size

Model No. BP500
Price/Each \$9.39



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	Priced per Each	
			Qty /Pkg	Price /Each
NU022	Tan heavy duty	Coarse	10	1.49
NU023	Green industrial	Scouring	20	0.72
NU024	Maroon GP	Medium	20	0.72
NU025	Grey ultra fine	Ultra-fine	20	0.87
NU026	White non-abrasive	Non-abrasive	20	0.84

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	110.47
BP612	00274	6" x 30'	Maroon	Medium	165.21
BP603	00265	4" x 30'	Maroon	Fine	83.46
BP611	00275	6" x 30'	Maroon	Fine	120.01
BP605	00266	4" x 30'	Maroon	Very fine	69.02
BP609	00270	4" x 30'	Grey	Very fine	70.40
BP613	00276	6" x 30'	Maroon	Very fine	101.92
BP608	69006	4" x 30'	Grey	Ultra fine	69.02
BP607	69009	4" x 30'	Grey	Super fine	69.02
BP606	69010	4" x 30'	White	Cleaning	69.02

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 \$19.70



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 \$43.69

Model No. BP615 2" x 30' Roll
Price/Each \$83.84



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



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.



Sold/Priced individually

Model No.	Size"	Max RPM	Qty /Pkg.	Price /Each
TYPE 1 - BEAR-TEX RAPID STRIP WHEELS				
NZ842	4 x 1/4	8000	25	14.20
NZ843	4 x 1/2	8000	25	14.20
NZ844	6 x 1/2	5500	15	23.00
TYPE 27 - BEAR-TEX RAPID STRIP CLEANING DISCS				
NS047	4 1/2 x 7/8	11000	10	16.30
NS136	7 x 7/8	8000	10	26.00

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	10.65
BP254	6 x 1/2	4000	17.03
BP255	8 x 1/2	3000	26.62

MANDRELS

- Furnished complete with washers to fit available disc sizes

Model No.	Mfg. No.	Size"	Price /Each
BP502	933	2	8.99
BP503	934	3 1/16	29.91



Model No.	Colour	Grit	Size	Price /Each
NZ821	Tan	Medium	4" x 30'	162.00
NZ822	Maroon	Very Fine	4" x 30'	65.30
NZ823	Grey	Very Fine	4" x 30'	62.20



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	14.08
BP274	5	Extra coarse	10 000	15.52
BP275	7	Extra coarse	6 000	26.09

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	1.40
BP359	2	Medium	Maroon	23 000	1.40
BP363	3	Coarse	Brown	20 000	2.86
BP365	3	Medium	Maroon	20 000	2.86
BP376	4	Coarse	Brown	13 000	3.66
BP380	4	Very Fine	Blue	13 000	3.56
BP369	4 1/2	Coarse	Brown	13 000	4.43
BP371	4 1/2	Medium	Maroon	13 000	3.87
BP381	5	Coarse	Brown	10 000	5.01
BP383	5	Medium	Maroon	10 000	4.16
BP388	7	Coarse	Brown	6 000	8.62
BP390	7	Medium	Maroon	6 000	6.44
BP392	7	Very Fine	Blue	6 000	7.01

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	9.74
BP208	3	1/4"	20 000	12.40
BP209	4	1/4"	13 000	13.70
BP206	5	5/16"-24	10 000	39.74
HUB MOUNTED DISC PAD HOLDERS				
BP199	4	5/8"-11	13 000	38.91
BP201	4 1/2	5/8"-11	13 000	38.91
BP202	5	5/8"-11	10 000	41.00
BP204	7	5/8"-11	6 000	38.91



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	1.32
BP397	2	Medium	Maroon	1.32
BP398	2	Very Fine	Blue	1.32
BP400	3	Coarse	Brown	2.63
BP401	3	Medium	Maroon	2.63
BP403	3	Very Fine	Blue	2.63
ROLOC™ TSM				
BP404	2	Coarse	Brown	1.62
BP405	2	Medium	Maroon	1.62
BP406	2	Very Fine	Blue	1.62
BP407	3	Coarse	Brown	3.25
BP408	3	Medium	Maroon	3.25
BP409	3	Very Fine	Blue	3.25

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	22.68
BP005	2	25 000	Hard	20.79
BP009	3	18 000	Medium	25.39
BP006	3	20 000	Hard	25.39

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	29.35
BP516	2	25 000	Hard	30.68
BP518	3	20 000	Hard	36.17

1/4" THREADED SHAFTS

- Needed with all Roloc™ disc pads

Model No. BP013 Price/Each \$4.01

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

SOCATT® DISCS

Model No.	Size"	Grit	Price /Each
VU676	2	Medium	1.64
VU677	2	Fine	1.53
VU678	2	Very Fine	1.55
VU679	3	Medium	2.69
VU680	3	Fine	2.42
VU681	3	Very Fine	2.42

HP MATERIAL

- Durable and aggressive
- Recommended starting point for deburring applications

Model No.	Size"	Grit	Price /Each
VU697	6 x 1/2	Very Fine	4.27
VU705	8 x 1/2	Very Fine	6.62

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	22 100	5.50
NW070	2A	Medium	2	22 100	4.57
NW071	2S	Fine	2	22 100	4.57
NW072	6A	Medium	3	15 100	9.69
NW073	2A	Medium	3	15 100	8.06
NW074	2S	Fine	3	15 100	8.08



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 (Scrim) 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
NP136	2	Coarse	1.65
NW105	2	Medium	1.65
NP137	2	Very Fine	1.67
NW104	3	Coarse	3.14
NP131	3	Medium	3.14
NP132	3	Very Fine	3.14



LOCKIT® DISCS

Model No.	Size"	Grit	Price /Each
NP138	2	Coarse	1.67
NP139	2	Medium	1.67
NP140	2	Very Fine	1.67
NP133	3	Coarse	3.14
NP134	3	Medium	3.14
NP135	3	Very Fine	3.14

HOLDER PADS

- With mandrel



FOR SMALL DIAMETER SOCATT® DISCS

Model No.	Dia."	Density	Price /Each
VU601	2	Soft	20.03
VU602	2	Medium	19.22
VU603	2	Firm	22.89
VU605	3	Medium	22.22
VU606	3	Firm	26.47

FOR SMALL DIAMETER LOCKIT® DISCS

Model No.	Dia."	Density	Price /Each
VU611	2	Medium	19.22
VU612	2	Firm	22.89
VU613	3	Soft	24.39
VU614	3	Medium	22.22

CANADA'S LEADING MATERIAL HANDLING SUPPLIER

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	5.23
BP068	1/4 x 24	Maroon	Medium	5.23
BP067	1/4 x 24	Brown	Coarse	5.23
BP063	1/2 x 18	Blue	Very fine	7.66
BP062	1/2 x 18	Maroon	Medium	7.66
BP061	1/2 x 18	Brown	Coarse	7.66
BP066	1/2 x 24	Blue	Very fine	8.08
BP065	1/2 x 24	Maroon	Medium	8.08
BP064	1/2 x 24	Brown	Coarse	8.08
BP076	3/4 x 18	Blue	Very fine	10.62
BP075	3/4 x 18	Maroon	Medium	10.62
BP074	3/4 x 18	Brown	Coarse	10.62
BP073	3 x 24	Maroon	Medium	29.57
BP071	3 1/2 x 15	Maroon	Medium	33.44
BP070	3 1/2 x 15	Brown	Coarse	33.44

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.

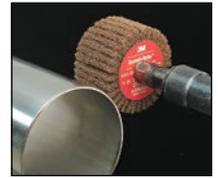
Sisal Buffing Wheels: Made of sisal cloth #64 and cotton. 6 ply sisal/4 ply cotton. For aggressive buffing and polishing of steel, cast aluminum, iron, brass and bronze. Also excellent for deburring, breaking sharp edges in casting and removing stains, abrasive belt lines and light die marks.



Model No.	Dia."	Arbor"	Ply	Stitching	Price/Each
#60 SOFT COTTON WHEELS					
TD164	6	1/2	20	1/4" Spiral Sewn	38.06
TD167	6	1/2	25	Loose Style	22.84
TT161	6	1/2	36	1/2" Square Sewn	38.47
TD165	8	5/8	20	1/4" Spiral Sewn	39.48
TD168	8	5/8	25	Loose Style	23.47
TT150	10	5/8	20	1/4" Spiral Sewn	45.00
TT151	10	5/8	25	Loose Style	31.26
#80 COTTON BUFFING WHEELS					
TT152	6	1/2	20	1/4" Spiral Sewn	32.38
TT153	6	1/2	25	Loose Style	21.21
TT154	8	5/8	20	1/4" Spiral Sewn	37.05
TT155	8	5/8	25	Loose Style	28.19
TT156	10	5/8	20	1/4" Spiral Sewn	45.00
SISAL BUFFING WHEELS					
TT158	6	1/2	6 Sisal/4 Cotton	1/4" Spiral Sewn	42.54
TT159	8	5/8	6 Sisal/4 Cotton	1/4" Spiral Sewn	55.25
TT160	10	5/8	6 Sisal/4 Cotton	1/4" Spiral Sewn	58.32

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	19.33
BP446	3 x 13/4 x 1/4	8500	Medium	34.91

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
BP442	3 x 13/4 x 1/4	8500	Coarse	34.75

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 13/4 x 1/4	8000	36.19
NW067	P120	3 x 13/4 x 1/4	8000	37.82
NW068	P180	3 x 13/4 x 1/4	8500	36.19

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	27.30
TT144	Brown Tripoli	General purpose bar for buffing brass and aluminum	14.72
TT149	Green	For fine stainless steel and other metals, general purpose	34.50
TT218	White Rouge	Provides a bright luster to stainless steel, aluminum, iron, chrome and nickel surfaces	27.90
TT219	Red Jewelers Rouge	Enhances luster of buffed precious metals, gold, sterling, silver, platinum etc.	25.88
TT220	General Purpose	All round general purpose buffing compound	24.90

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	25	Coarse	6 x 1 x 1	6000	64.13
BP717	25	Medium	6 x 1 x 1	6000	64.13
BP718	25	Coarse	6 x 2 x 1	6000	99.89
BP720	25	Medium	6 x 2 x 1	6000	99.89
BP721	25	Coarse	8 x 1 x 3	4500	89.31
BP723	25	Medium	8 x 1 x 3	4500	91.08

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	69.25
BP695	8S	Fine	6 x 1/2 x 1	6000	69.26
BP696	9S	Fine	6 x 1/2 x 1	6000	69.26
BP690	8A	Medium	6 x 1 x 1	6000	91.82
BP692	8S	Fine	6 x 1 x 1	6000	91.82
BP693	9S	Fine	6 x 1 x 1	6000	91.82
BP697	8A	Medium	8 x 1 x 3	4500	117.37
BP698	8S	Fine	8 x 1 x 3	4500	117.37
BP700	9S	Fine	8 x 1 x 3	4500	117.37
BP704	8A	Medium	8 x 2 x 3	4500	199.89
BP705	8S	Fine	8 x 2 x 3	4500	199.89
BP706	9S	Fine	8 x 2 x 3	4500	199.89

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	4.86
BP738	2S	Fine	1 x 1 x 3/16	30 100	4.86
BP739	6A	Medium	1 x 1 x 3/16	35 100	5.14
BP741	8A	Coarse	1 x 1 x 3/16	35 100	5.84
BP742	8A	Medium	1 x 1 x 3/16	35 100	5.84
BP743	2A	Medium	3 x 1/4 x 3/8	12 100	8.60
BP744	2S	Fine	3 x 1/4 x 3/8	12 100	7.82
BP745	4A	Fine	3 x 1/4 x 3/8	18 100	8.56
BP746	6A	Medium	3 x 1/4 x 3/8	18 100	9.34
BP747	6S	Fine	3 x 1/4 x 3/8	18 100	9.34
BP748	8A	Coarse	3 x 1/4 x 3/8	18 100	10.31
BP749	8A	Medium	3 x 1/4 x 3/8	18 100	10.31

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	3.27
NW052	6 x 1/2	Medium	4000	6.47
NW053	6 x 1/2	Very Fine	4000	3.27
NW054	8 x 1/2	Medium	3000	9.90

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	143.64
BP682	7A	Medium	6 x 1 x 1	6000	143.65
BP681	7A	Fine	6 x 1 x 1	6000	143.64

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
NW081	1 x 1 x 1/2	18.93

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	9.47
NW076	1 3/4 x 1/4 x 1/2	35 200	12.97
BP508	1 3/4 x 1/4	18 200	19.02



ABRASIVES & BRUSHES



STEEL WOOL

UTILITY PADS

- 16 large pads of steel wool per package



Model No.	Grit	Price /Each
VS118	0000 (finest)	13.90
VS119	000 (extra fine)	11.90
VS120	00 (very fine)	9.50
VS121	0 (fine)	7.80
VS122	1 (medium)	7.80
VS123	2 (coarse)	7.80
VS124	3 (very coarse)	7.80

UTILITY ROLLS

- 6 large rolls per package

Model No.	Grit	Price /Each
VS133	0 (fine)	2.10
VS134	1 (medium)	2.10
VS135	2 (coarse)	2.10



ONE POUND TUBES

- One pound of continuous ribbon per package

Model No.	Grit	Price /Each
VS127	00 (very fine)	9.70
VS128	0 (fine)	7.80



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



Dia."	Grain	Alum. oxide Model No.	Price /Each	Crocus Model No.	Price /Each	S. Carbide Model No.	Price /Each
0.150	120	-	-	-	-	VS101	189.00
0.125	120	-	-	-	-	VS102	179.00
0.093	150	VS078	87.40	-	-	-	-
0.082	120	VS079	53.50	VS090	60.60	VS103	71.40
0.070	180	VS080	48.70	VS091	57.40	VS104	69.90
0.055	120	VS081	39.90	-	-	VS105	57.50
0.055	150	VS082	39.90	VS092	46.20	VS106	57.50
0.040	180	VS083	39.90	VS093	46.20	VS107	57.50
0.030	200	VS084	39.60	VS094	46.20	VS108	62.10
0.025	200	-	-	VS095	51.40	VS109	41.40
0.018	200	-	-	VS096	51.40	VS110	41.40
0.015	200	-	-	VS097	51.40	VS111	43.40
0.012	280	-	-	VS098	83.40	VS112	82.70
1/16	180	VS085*	46.30	-	-	VS113	62.30
3/32	180	VS086*	41.10	VS099*	46.90	VS114*	57.80
1/8	180	VS087*	43.00	-	-	VS115*	58.70
6/32	150	VS088*	46.90	-	-	VS116*	62.60
1/4	150	VS089*	52.10	VS100*	63.30	VS117*	68.40

*Tapes

PRO COUNTER DUSTERS

- Sturdy, light-weight brushing tools
- Recommended for dusting and chip removal
- Can be used wet or dry, will not load



BZ986

Model No.	Length of brush"	Description	Trim Length"	Price /Each
BZ986	8	Black Tampico	2 1/2	8.73
NP243	8	Light Blue Polypro	2 1/2	8.45

V-GROOVE LONG HANDLE SCRATCH BRUSHES

- Designed for use in hard-to-reach areas that require a narrow face



BZ985

Model No.	Description	Wire Rows	Trim Length"	Price /Each
BZ985	Stainless Steel	3 x 14	1 1/2	10.97
NP245	Steel	3 x 14	1 1/2	7.89

STRAIGHT HANDLE SCRATCH BRUSHES W/SCRAPER



BZ979

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	12.00

SMALL CLEANING SCRATCH BRUSHES

- Fill Diameter: 0.006"
- Brush Width: 3/4"



TC070

Model No.	Brush Length"	O.A. Length"	Fill Material	Wire Rows	Trim Length"	Price /Each
WOOD						
TC070	1 1/2	7 3/4	Stainless Steel	3 x 7	1/2	3.73
TC073	1 1/2	7 3/4	Brass	3 x 7	1/2	3.88
NU537	1 1/2	7 3/4	Nylon	3 x 7	1/2	3.76
PLASTIC						
NU538	1 1/2	7 3/4	Stainless Steel	3 x 7	1/2	3.76
NU539	1 1/2	7 3/4	Brass	3 x 7	1/2	3.56
NT947	1 1/2	7 3/4	Nylon	3 x 7	1/2	3.03
ANGLED BACK						
NP247	17/16	7 3/4	Brass	3 x 7	7/16	5.99
NP250	17/16	7 3/4	Polypro	3 x 7	7/16	5.29
BZ976	17/16	7 3/4	Stainless Steel	3 x 7	7/16	5.29
NP249	17/16	7 3/4	Steel	3 x 7	7/16	5.49
CURVED BACK						
NP255	2 1/2	8 5/8	Brass	2 x 9	5/8	3.99
NP256	2 1/2	8 5/8	Stainless	2 x 9	5/8	4.09

V-TRIM SMALL HANDLE SCRATCH BRUSHES



BZ982

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	7.49
NP244	Stainless Steel	1 1/2	7 7/8	3 x 7	1/2	8.69
BZ982	Brass	1 1/2	7 7/8	3 x 7	1/2	7.89

CURVED HANDLE SCRATCH BRUSHES



BZ606

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	12.00
BZ606	6	13 11/16	Steel	3 x 19	1 1/8	5.49
NP248*	6	13 11/16	Steel	3 x 19	1 1/8	7.29
BZ607**	6	13 11/16	Steel	4 x 19	1 1/8	6.89

*With scraper ** Heavy-duty

CURVED-HANDLE SCRATCH BRUSHES

- Durable hardwood handles that have a smooth finish for extra comfort



TC065



Model No.	Brush Width"	Brush Length"	O.A. Length"	Fill Material	Wire Rows	Trim Length"	Price /Each
TC065	15/16	6	14	Steel	3 x 19	1 1/8	3.77
TC068	15/16	6	14	Stainless Steel	3 x 19	1 1/8	9.15
TT167	15/16	6	14	Brass	3 x 19	1 1/8	9.76
TC066	1 1/8	6	14	Steel	4 x 19	1 1/8	5.62
TT170	1 1/8	6	14	Stainless Steel	4 x 19	1 1/8	10.41
TT169	1 1/8	6	14	Brass	4 x 19	1 1/8	11.71

SHOE HANDLE SCRATCH BRUSHES

- Durable hardwood handles that have a smooth finish for extra comfort
- Brush Width: 1 1/16"



TC067



Model No.	Brush Length"	O.A. Length"	Fill Material	Wire Rows	Trim Length"	Price /Each
TC067	5 1/4	10	Steel	5 x 13	1 1/8	4.47
TC074	5 1/4	10	Stainless Steel	5 x 13	1 1/8	10.59
TT168	5 1/4	10	Brass	5 x 13	1 1/8	12.86

SCRATCH BRUSHES WITH SCRAPER

- Durable hardwood handles that have a smooth finish for extra comfort
- Hang-up hole for easy storage



NUS40



Model No.	Brush Width"	Brush Length"	O.A. Length"	Fill Material	Wire Rows	Trim Length"	Price /Each
STRAIGHT HANDLE							
TT171	1 1/2	5 1/2	11 3/8	Steel	5 x 13	1 1/8	13.24
CURVED HANDLE							
NUS40	15/16	5 3/4	13	Steel	3 x 19	1	7.29
NUS41	2	4	20	Steel	3 x 10	1	19.70
NUS42	2	4	20	Stainless Steel	3 x 10	1	27.10

FLAT WIRE BUTCHER BLOCK BRUSHES

- Flat wire butcher block that offers a more aggressive scrub than round wire counterparts
- Durable hardwood block



NUS48



Model No.	Brush Width"	Brush Length"	O.A. Length"	Fill Material	Wire Rows	Trim Length"	Price /Each
NUS46*	4	8 1/2	9	Flat Steel Wire	8 x 12	1 1/8	26.05
NUS48	2 5/8	7	7 5/8	Flat Steel Wire	5 x 10	1	22.88

* Comes with a wood handle

ROUND WIRE BUTCHER BLOCK BRUSHES

- Round wire butcher block that offers a gentler scrub than flat wire counterparts
- Durable hardwood block
- Brush Width: 2 1/2"



Model No.	Brush Length"	O.A. Length"	Fill Material	Wire Rows	Trim Length"	Price /Each
NW102	7	7 1/4	Steel	6 x 19	1 1/8	8.49

INDUSTRIAL-DUTY SCRATCH BRUSHES

- Wood handle
- Choice of carbon or stainless steel bristles



NT607

NT609

NT615



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	2.95
NT608	5 3/4	13 3/4	Carbon Steel	4 x 19	1	3.70
NT611	5 3/4	13 3/4	Stainless Steel	3 x 19	1	4.60
NT612	6	10 1/4	Stainless Steel	4 x 19	1	5.50
SHOE HANDLE BRUSHES						
NT609	5 1/4	10 1/2	Carbon Steel	3 x 16	1	2.95
NT610	5 1/4	10 1/2	Carbon Steel	4 x 16	1	3.15
NT613	5	10 1/2	Stainless Steel	3 x 16	1	5.60
NT614	5	10 1/4	Stainless Steel	4 x 16	1	5.90
"TOOTHBRUSH" CLEANING BRUSH						
NT615	1 1/2	7 3/4	Stainless Steel	3 x 7	1/2	1.45

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

OSBORN®

JACKSONLEA



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	15.40
NU097	99010	8	2	0.014	Steel	5/8	4500	22.00



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	28.70
NU104	99023	8	2	0.014	Steel	1 1/2	4500	52.20



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	28.30
NU099	99015	6	2	0.014	Steel	3/4	6000	19.80
NU100	99016	7	2	0.014	Steel	3/4	6000	29.80
NU101	99013	8	2	0.008	Steel	3/4	6000	40.50
NU102	99017	8	2	0.014	Steel	3/4	4500	37.10



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	12000	20.60
NU106	99089	6	5/8-11	0.02	Stainless	1/4	12000	48.20
NU107	99084	6	5/8-11	0.02	Steel	1/4	12000	16.20
NU108	99086	6 1/2"	5/8-11	0.02	Steel	3/16	12000	17.20



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	20000	10.30
NU110	99099	3/4	0.02	1/4	Steel	20000	7.59
NU111	99100	1	0.012	1/4	Steel	20000	12.00
NU112	99101	1	0.014	1/4	Steel	20000	8.49
NU113	99102	1	0.02	1/4	Steel	20000	8.09
NU114	99103	1	0.014	1/4	Stainless	20000	19.40

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



OSBORN

JACKSONLEA

Model No.	Brush Dia."	Grit	Filament Diameter (mm)	Arbor Hole"	Face Width"	Trim Length"	Price /Each
NT733	6	80	0.04	2	1	1 1/4	86.40
NT735	6	120	0.028	2	1	1 1/4	86.40
NT736	6	120	0.04	2	1	1 1/4	86.40
NT737	6	180	0.035	2	1	1 1/4	89.70
NT738	6	320	0.022	2	1	1 1/4	89.70
NT740	8	80	0.04	1 1/4	1	2 1/4	129.00
NT741	8	120	0.04	1 1/4	1	2 1/4	129.00
NT742	8	180	0.035	1 1/4	1	2 1/4	129.00
NT743	8	320	0.022	1 1/4	1	2 1/4	129.00

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

Model No.	Brush Dia."	O.A. Length"	Wire Gauge"	Trim Length"	Max RPM	Price /Each
STEEL						
BX374	1/2	2 3/4	0.0104	1	25 000	8.89
BX375	1/2	2 3/4	0.02	1	25 000	8.49
BX378	3/4	2 3/4	0.02	1	20 000	12.40
STAINLESS						
BX359	1/2	2 3/4	0.0104	1	25 000	15.40
BX360	1/2	2 3/4	0.014	1	25 000	13.20

CRIMPED WIRE END BRUSHES

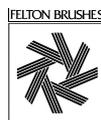
- Ideal for flash, scale, rust, corrosion and paint removal
- Softer impact and more flexible than knotted brushes
- Great tool for polishing, edge blending and surface preparation
- Efficient, light cleaning of small hard-to-reach surface areas



Model No.	Brush Dia."	Fill Dia."	Shank Size"	Fill Length"	Max RPM	Price /Each
STEEL						
NU447	1/2	0.005	1/4	1	20 000	12.62
TT316	1/2	0.014	1/4	1	20 000	12.07
NU449	3/4	0.005	1/4	1	20 000	11.06
NU451	1	0.005	1/4	1	20 000	15.12
TT317	1	0.014	1/4	1	20 000	15.18
STAINLESS						
NU448	1/2	0.005	1/4	1	20 000	17.32
TC135	3/4	0.014	1/4	1	20 000	12.97
NU450	3/4	0.006	1/4	1	20 000	22.45
NU452	1	0.005	1/4	1	20 000	33.66

KNOT WIRE END BRUSHES

- Ideal for flash, scale, rust, corrosion and paint removal
- Great tool to reach into holes and hard to reach areas
- More aggressive brushing action than crimped brushes
- Low flexibility knotted wire for high impact brushing



Model No.	Brush Dia."	Fill Dia."	Shank Size"	Fill Length"	Max RPM	Price /Each
STEEL						
NU456	1/2	0.014	1/4	1	22 000	27.44
NU457	3/4	0.014	1/4	1	22 000	28.51
MLP989	1	0.012	1/4	1	25 000	20.05
TT300	1	0.014	1/4	1	25 000	18.79
TC134	1	0.020	1/4	1	25 000	18.14
STAINLESS						
NU453	1	0.012	1/4	1	25 000	34.30
NU454	1	0.014	1/4	1	25 000	37.75
NU455	1	0.020	1/4	1	25 000	37.58

KNOT WIRE END BRUSHES

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

Model No.	Brush Dia."	O.A. Length"	Wire Gauge"	Trim Length"	Max RPM	Price /Each
STEEL						
BX350	1/2	2 3/4	0.014	1 1/8	22 000	19.80
BX353	3/4	2 3/4	0.014	1 1/8	20 000	19.80
BX357	1	2 3/4	0.014	1	20 000	22.00
STAINLESS						
BX481	1/2	2 3/4	0.014	1 1/8	22 000	19.80
BX484	3/4	2 3/4	0.014	1 1/8	20 000	22.00
BX487	1	2 3/4	0.014	1	20 000	27.10

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



Model No.	Brush Dia."	Brush Length"	O.A. Length"	Fill Dia."	Trim Length"	Max RPM	Price /Each
BX364	1/2	1 1/8	2 3/4	0.006	1 1/8	22 000	34.90
BX366	1/2	1 1/8	2 3/4	0.014	1 1/8	22 000	28.30
BX367	3/4	1 1/8	2 3/4	0.006	1 1/8	20 000	39.40
BX369	3/4	1 1/8	2 3/4	0.014	1 1/8	20 000	29.40
BX370	1	1	2 3/4	0.006	1 1/8	20 000	48.20
BX372	1	1	2 3/4	0.014	1	20 000	38.70

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

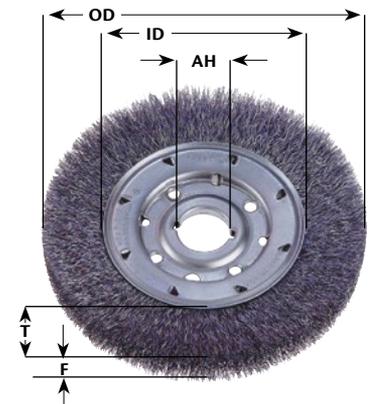
Assuming a fixed O.D., increasing the I.D. produces a stiffer, less flexible brush.

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



Model No.	Brush Dia."	Arbor Hole"	Wire Gauge"	Trim Length"	Face Width"	Max RPM	Price /Each
STEEL							
BW882	6	1 1/4	0.014	1 1/8	5/8	6000	26.50
BW886	8	1 1/4	0.014	1 1/2	5/8	4500	44.20
BW888	10	1 1/4	0.014	2 1/2	5/8	3600	57.60
STAINLESS							
BW899	6	1 1/4	0.014	1 1/8	5/8	6000	65.30
BW900	8	1 1/4	0.014	3/4	1/2	4500	78.20

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



Model No.	Brush Dia."	Arbor Hole"	Wire Gauge"	Trim Length"	Face Width"	Max RPM	Price /Each
STEEL							
BW964	4 1/4	2	0.0118	3/4	1	6000	73.10
BW968	6	2	0.0118	1	1 1/4	6000	98.60
BW980	8	2	0.0118	1 1/2	1 1/2	4500	139.00
BW983	10	2	0.0118	2 1/8	2	3600	249.00
STAINLESS							
BX017	8	2	0.0118	1 1/2	1 1/2	4500	229.00

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



Model No.	Brush Dia."	Shank Dia."	Wire Gauge"	Trim Length"	Max RPM	Price /Each
STEEL						
BW737	1 1/2	1/4	0.008	0.281	25 000	13.20
BW743	2	1/4	0.014	0.438	25 000	15.40
BW753	3	1/4	0.014	0.75	25 000	15.00
STAINLESS						
BW741	1 1/2	1/4	0.012	0.281	25 000	17.30
BW746	2	1/4	0.014	0.438	25 000	24.90
BW756	3	1/4	0.014	0.75	25 000	29.30



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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



Model No.	Brush Dia."	Arbor Hole"	Wire Gauge"	Trim Length"	Face Width"	Max RPM	Price /Each
STEEL							
BW996	6	2	0.0118	1	7/8	6000	51.60
BX006	8	2	0.0118	1 1/2	5/8	4500	72.00
BX022	10	2	0.0118	2	1 1/4	3600	129.00
STAINLESS							
BX040	6	2	0.0118	1	7/8	6000	88.20
BX038	8	2	0.0118	1 1/2	5/8	4500	129.00

CENTERING BUSHINGS

- Use only one
- For use with Osborn® brushes only



Model No.	Fits AH"	Reduces to"	Price /Each
BY231	1/2	1/4	0.67
BY232	1/2	3/8	0.67
BY234	5/8	3/8	0.67
BY233	5/8	1/2	0.67

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



Model No.	Brush Dia."	Arbor Hole"	Wire Gauge"	Trim Length"	Face Width"	Max RPM	Price /Each
STEEL							
BB458	1 1/2	3/8	0.014	3/8	7/32	20 000	7.49
BB470	2	1/2	0.014	1/2	1/4	20 000	9.29
BW680	3	1/2	0.014	1	1/4	20 000	12.00
STAINLESS							
BB440	2	1/2	0.014	1/2	1/4	20 000	12.00
BW700	3	1/2	0.014	1	1/4	20 000	18.30

MAJOR WIRE WHEEL BRUSHES

- Top grade wire for long service life and reduced wire breakage
- Efficient, light cleaning of off-hand work pieces
- Good for edge blending and surface preparation

FELTON BRUSHES



Model No.	Brush Dia."	Fill Dia."	Arbor Size"	Face Width"	Max RPM	Price /Each
STEEL						
NU474	4	0.014	1 1/8	7/8	6000	51.50
NU475	6	0.012	2	7/8	6000	61.25
NU477	6	0.014	2	1	6000	64.75
NU478	6	0.020	2	1	6000	50.12
NU479	8	0.005	2	7/8	4500	73.87
NU480	8	0.012	2	7/8	4500	64.74
NU482	8	0.012	2	1 1/4	4500	103.29
NU483	8	0.014	2	1 1/4	4500	84.42
QM346	6	0.014	2	7/8	6000	47.24
QM404	8	0.014	2	7/8	4500	57.88

CIRCULAR CRIMPED WIRE END BRUSHES

- Ideal for burr, weld scale, corrosion and paint removal
- Softer impact and more flexible than knotted brushes
- Efficient, light cleaning of small surfaces areas
- Great for cleaning pipes and grooves

FELTON BRUSHES



Model No.	Brush Dia."	Fill Dia."	Shank Size"	Face Width"	Max RPM	Price /Each
STEEL						
NU458	1 1/2	0.005	1/4	1/4	20000	19.85
QM452	1 1/2	0.014	1/4	-	20000	14.28
NU460	2	0.012	1/4	3/8	20000	17.40
NU461	2	0.014	1/4	3/8	20000	13.46
QM458	3	0.014	1/4	-	20000	19.10
STAINLESS						
NU459	1 1/2	0.014	1/4	1/4	20000	18.50
NU463	3	0.014	1/4	5/8	20000	23.41
NU464	4	0.008	1/4	5/8	20000	22.56

METAL ADAPTOR FOR 1 1/4" & 2" ARBOR HOLE

- Slip fit adaptor
- Comes in pair



OSBORN

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Model No.	Fits Arbor Hole"	Reduces to Arbor Hole"	Price /Each
BY224	1 1/4	1/2	4.59
BY225	1 1/4	5/8	4.49
BY226	1 1/4	3/4	4.59
BY204	2	1/2	4.49
BY205	2	5/8	4.49
BY206	2	3/4	4.49
BY207	2	7/8	4.59
BY208	2	1	4.59
BY210	2	1 1/4	4.59
BY211	2	1 1/2	4.59

COPPER CENTRE CRIMPED WIRE WHEELS

- Filled with high quality steel wire
- Used for deburring, stripping wire, removing rust, scale and corrosion or blending tool marks
- Can be used in singles or in multiples



FELTON BRUSHES



Model No.	Brush Dia."	Fill Dia."	Arbor Size"	Face Width"	Max RPM	Price /Each
STEEL						
NU486	1 1/2	0.005	3/8	1/4	20000	14.25
NU487	2	0.005	3/8	3/8	20000	12.20
NU488	2	0.012	3/8	3/8	20000	12.90
NU490	2 1/2	0.012	1/2	1/2	20000	10.46
NU492	3	0.012	1/2	5/8	20000	14.78
NU493	3	0.014	1/2	5/8	20000	15.37
NU495	4	0.012	1/2	5/8	20000	18.35

CIRCULAR KNOTTED WIRE END BRUSHES

- Ideal for burr, weld scale, corrosion and paint removal
- More aggressive brushing action than crimped brushes
- Reaches into corners and inside edges

FELTON BRUSHES



Model No.	Brush Dia."	Fill Dia."	Shank Size"	Max RPM	Price /Each
STEEL					
NU467	3 1/2	0.014	1/4	25000	31.04
STAINLESS					
NU468	3 1/2	0.014	1/4	25000	45.16

CRIMPED WIRE CONCAVE END BRUSHES

- Crimped wire wheel has a concave face to reach into corners
- Acts as an off-hand sweeping tool
- For use on drill presses for internal or external cleaning



FELTON BRUSHES



Model No.	Brush Dia."	Fill Dia."	Shank Size"	Max RPM	Application Type	Price /Each
NU469	1 1/2	0.012	1/4	20000	Steel	25.50

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

OSBORN

JACKSONLEA



Model No.	Overall Diameter"	Shank Length"	Dia."	Price /Each
BY198	1/4	1 1/2	3/16	9.99
BY199	3/8	1 3/4	1/4	9.79
BY200	1/2	1 3/4	1/4	10.50
BY201	5/8	1 3/4	1/4	10.60

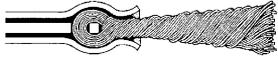


KNOT WIRE WHEEL BRUSHES

- 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

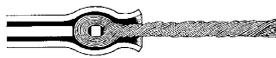
STANDARD TWIST KNOT

- 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.

STRINGER BEAD

- Small width allows this brush to be used in recessed area such as welding junctions
- **Application:** Cleaning stringer bead welds



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



Model No.	Brush Dia."	Arbor Hole	Wire Gauge"	Trim Length"	Face Width"	Max RPM	Price /Each
STEEL							
BX338	4 7/8	5/8"-11NC	0.02	1	3/16	12 000	26.00
BX161	6 1/2	5/8"-11NC	0.02	1 1/4	3/16	12 000	42.70
STAINLESS							
BX270	4 7/8	5/8"-11NC	0.02	1	3/16	12 000	48.20
BX273	6 1/2	5/8"-11NC	0.02	1 1/4	3/16	12 000	66.40

HIGH SPEED STEEL SMALL GRINDER, STRINGER BEAD

- Works aggressively, smoothly and efficiently on air or portable power tools
- **Application:** Bead scale removal



Model No.	Brush Dia."	Arbor Hole	Colour	Wire Gauge"	Trim Length"	Max RPM	Price /Each
STEEL							
BX288	4	5/8"-11NC	Steel	0.02	7/8	20 000	25.40
BX284	4	M-14 x 2.0	Red	0.02	7/8	20 000	27.10
STAINLESS STEEL							
BX311	4	5/8"-11NC	Steel	0.02	7/8	20 000	40.50

STANDARD TWIST KNOT WITH 1/4" SHANK

- Designed to operate at high speeds
- **Applications:** Maintenance and metal surface cleaning



Model No.	Brush Dia."	Wire Gauge"	Trim Length"	Max RPM	Price /Each
STEEL					
BX193	3	0.014	5/8	25 000	30.50
BX196	4	0.014	7/8	20 000	31.20
STAINLESS					
BX195	3	0.014	5/8	25 000	53.10
BX198	4	0.014	7/8	20 000	56.40

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



Model No.	Brush Dia."	Arbor Hole	Wire Gauge"	Trim Length"	Face Width"	Max RPM	Price /Each
STEEL							
BX125	4	3/8"	0.014	7/8	5/16	20 000	38.20
BX137	6	5/8"-11NC	0.025	1 1/2	1/2	9 000	36.50
BX144	8	5/8"	0.025	1 11/16	5/8	8 500	71.50
STAINLESS							
BX202	4	3/8"	0.014	7/8	5/16	20 000	56.40
BX272	6	5/8"-11NC	0.025	1 1/2	1/2	9 000	66.00

Model No.	Brush Dia."	Arbor Hole	Colour	Wire Gauge"	Trim Length"	Max RPM	Price /Each
STEEL							
BX305	4	5/8"-11NC	Steel	0.02	7/8	20 000	29.80
BX206	5	5/8"-11NC	Steel	0.02	1	12 000	34.90
STAINLESS							
BX299	4	5/8"-11NC	Steel	0.02	7/8	20 000	51.60
BX207	5	5/8"-11NC	Steel	0.02	1	12 000	86.00

WIRE WHEEL BRUSHES

- Narrow face for confined and hard to reach contact areas
- Low flex high impact aggressive brush action
- Perfect for expansion joints and filler welds
- For root and hot pass weld cleaning
- Customization available



Model No.	Brush Dia."	Face Width"	Fill Dia."	Arbor Size	Knot Type	No. of Knots	RPM	Price /Each
STEEL								
TT265	4	3/16	0.020	5/8"-11	Stringer	32	20 000	24.07
TT271	4-7/8	3/16	0.020	5/8"-11	Stringer	48	12 500	31.54
TC019	5-7/8	3/16	0.020	5/8"-11	Stringer	48	12 500	43.23
NU438	4	1/2	0.020	5/8"-11	Standard	20	20 000	26.79
NU440	6	1/2	0.014	5/8"-11	Standard	28	9 000	45.76
NU442	8	5/8	0.014	5/8"-11	Standard	40	6 000	56.54
STAINLESS								
TT270	4	3/16	0.020	5/8"-11	Stringer	32	20 000	33.45
TT272	4-7/8	3/16	0.020	5/8"-11	Stringer	48	12 500	45.23
TT273	5-7/8	3/16	0.020	5/8"-11	Stringer	48	12 500	57.36
NU439	4	1/2	0.020	5/8"-11	Standard	20	20 000	45.76
NU441	6	1/2	0.014	5/8"-11	Standard	28	9 000	60.37
NU443	8	5/8	0.014	5/8"-11	Standard	40	6 000	78.82

KNOTTED WIRE WHEEL SAUCER BRUSHES

- More aggressive brushing action than crimped brushes
- Ideal for burr, weld scale, corrosion and paint removal
- Reaches into corners and inside edges for a more effective clean



Model No.	Brush Dia."	Face Width"	Fill Dia."	Arbor Size"	RPM	Price /Each
STEEL						
NU470	4	1/2	0.020	5/8-11	20 000	25.36
NU472	5	7/8	0.020	5/8-11	15 000	29.97
STAINLESS						
NU471	S4	1/2	0.020	5/8-11	20 000	55.31
NU473	S5	7/8	0.020	5/8-11	15 000	63.17

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.



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.

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



Model No.	Brush Dia."	Arbor Hole"	Trim Length"	Max RPM	Price /Each
STEEL					
BX593	1 3/4	0.0118	1/2	13000	13.20
BX530	2 1/2	0.0104	5/8	4500	42.70
STAINLESS					
BX595	1 3/4	0.0118	1/2	13000	24.30
BX572	2 1/2	0.0104	5/8	4500	53.30

Model No.	Brush Dia."	Arbor Hole"	Wire Gauge"	Trim Length"	Max RPM	Price /Each
STEEL						
BX547	2 3/4	5/8-11NC	0.014	1	14000	23.10
BX544	2 3/4	M-10 x 1.25	0.014	1	14000	23.80
BX543	2 3/4	M-14 x 2.0	0.014	1	14000	24.30
STAINLESS						
BX574	2 3/4	5/8-11NC	0.014	1	14000	39.40

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



CRIMPED WIRE CUP END BRUSHES

- Removes rust, paint and scale in hard-to-reach areas
- Crimped wire for light to medium-duty applications



Model No.	Brush Dia."	Arbor Hole"	Wire Gauge"	Trim Length"	Max RPM	Price /Each
STEEL						
NT969	3	5/8-11NC	0.020	5/8	12 000	17.60
STAINLESS						
NT970	3	5/8-11NC	0.020	5/8	12 000	33.20

Model No.	Brush Dia."	Fill Dia."	Shank Size"	Max RPM	Price /Each
STEEL					
NU465	1 3/4	0.012	1/4	25 000	11.90
NU466	2 3/4	0.014	1/4	25 000	17.50



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

Model No.	Brush Dia."	Arbor Hole"	Wire Gauge"	Row Wide	Trim Length"	Max RPM	Price /Each
BX635	4	5/8-11NC	0.02	2	1	6000	54.20
BX622	6	5/8-11NC	0.035	2	1 3/4	6000	139.00

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



Model No.	Brush Dia."	Arbor Hole"	Colour	Wire Gauge"	Trim Length"	Max RPM	Price /Each
STEEL							
BX652	2 3/4	1/2-13NC	Black	0.014	7/8	14000	29.40
BX653	2 3/4	5/8-11NC	Steel	0.014	7/8	14000	26.00
BX650	2 3/4	M-10 x 1.25	Gold	0.014	7/8	14000	29.40
BX651	2 3/4	M-10 x 1.5	Silver	0.014	7/8	14000	29.40
STAINLESS							
BX659	2 3/4	5/8-11NC	Steel	0.014	7/8	14000	34.00
BX656	2 3/4	M-10 x 1.25	Gold	0.014	7/8	14000	46.50

KNOTTED WIRE WHEEL CUP BRUSHES

- Strong and effective for heavy duty cleaning
- Top-quality USA steel
- Removes weld scale, rust, old paint and corrosion
- Designed for the most rugged jobs



Model No.	Brush Dia."	Fill Length"	Fill Dia."	Arbor Size"	Flared Dia.	RPM	Price /Each
STEEL							
TC030	2 3/4	1	0.014	5/8-11	3	14000	27.40
NU445	2 3/4	1	0.020	5/8-11	3	14000	36.61
TT306	3 1/2	1	0.020	5/8-11	3 3/4	12500	59.19
TT287	4	1 1/4	0.020	5/8-11	4 1/4	9000	55.18
NU446	5	1 3/8	0.020	5/8-11	5 1/4	7000	72.18
STAINLESS							
TT279	2 3/4	1	0.020	5/8-11	3	14000	31.50

TWISTED TUBE BRUSHES

- For cleaning out small tubes, drill holes or any other small spaces



Model No.	Brush Dia."	Brush Length"	O.A. Length"	Fill Dia."	Price /Each
STEEL					
NU511	1/4	1 1/2	7	0.003	6.76
NU512	3/8	2	8	0.005	7.15
NU513	1/2	2	8	0.005	7.43
NU514	3/4	2 1/2	9	0.005	8.01
NU515	1	3	10	0.008	9.03
STAINLESS					
NU516	1/4	1 1/2	7	0.003	9.81
NU517	3/8	2	8	0.005	10.13
NU519	3/4	2 1/2	9	0.005	10.66
NU520	1	3	10	0.008	10.88
BRASS					
NV689	1/4	1 1/2	7	0.003	6.55
NU522	3/8	2	8	0.005	6.98
NU523	1/2	2	8	0.005	7.47
NU524	3/4	2 1/2	9	0.005	6.69
NU525	1	3	10	0.008	9.00
NYLON					
NU526	1/4	4 1/2	12	0.010	8.26
NU527	3/8	4 1/2	12	0.014	11.26
NU528	1/2	4 1/2	12	0.014	7.46
NU529	3/4	4 1/2	12	0.012	7.89
NU530	1	4 1/2	12	0.014	7.98
HAIR					
NU531	1/4	3 1/4	12	0.003	8.00
NU532	3/8	3 1/4	12	0.003	6.79
NU533	1/2	3 1/4	12	0.003	8.32
NU534	3/4	3 1/4	12	0.003	7.86
NU535	1	3 1/4	12	0.003	8.07

FLUE BRUSHES

- Mainly used for pipe, boiler tube and flue cleaning
- Filled with round carbon steel wires
- Comes with a 1/4" NPT fitting



Model No.	Brush Dia."	Brush Length"	O.A. Length"	Flue Dia."	Fill Dia."	Price /Each
NU496	1/2	4	7 1/2	3/4	0.012	16.32
NU497	5/8	4	7 1/2	7/8	0.012	16.85
NU498	3/4	4	7 1/2	1	0.012	17.49
NU499	7/8	4	7 1/2	1 1/8	0.012	17.70
NU500	1	4	7 1/2	1 1/4	0.012	17.81
NU501	1 1/4	4	7 1/2	1 1/2	0.012	18.02
NU502	1 1/2	4	7 1/2	1 3/4	0.012	12.08
NU503	1 3/4	4	7 1/2	2 1/4	0.012	18.45
NU393	2	4	7 1/2	2 1/4	0.012	18.66
NU504	2 1/4	4	7 1/2	2 1/2	0.012	18.87
NU505	2 1/2	4	7 1/2	2 3/4	0.012	16.36
NU506	2 3/4	4	7 1/2	3	0.012	19.30
NU507	3	4	7 1/2	3 1/4	0.012	19.62
NU508	3 1/4	4	7 1/2	3 1/2	0.012	20.01
NU509	3 1/2	4	7 1/2	3 3/4	0.012	20.26
NU510	3 3/4	4	7 1/2	4	0.012	21.43

KLETON



CANADA'S
LEADING
MATERIAL
HANDLING
SUPPLIER



BURRS

SOLID CARBIDE BURRS - 1/4" SHANK

SC90 DOUBLE CUT

- 1/4" shank
- Double cut
- Ideal for extra tough materials
- Excellent control allows for clean finish

OVAL SHAPE



Model No.	Mfg. No.	No.	Head Dia. "	Flute Length"	Price /Each
TBM290	SC90064	SE-11	3/16	5/16	18.90
BL301	SC90065	SE-1	1/4	3/8	18.90
BL302	SC90066	SE-3	3/8	5/8	22.50
BL303	SC90067	SE-5	1/2	7/8	33.50
BL304	SC90068	SE-6	5/8	1	46.50
BL305	SC90069	SE-7	3/4	1	61.90



TREE SHAPE - WITH RADIUS END

Model No.	Mfg. No.	No.	Head Dia. "	Flute Length"	Price /Each
BL306	SC90070	SF-11	1/8	1/2	17.50
BL307	SC90071	SF-1	1/4	5/8	17.50
BL308	SC90072	SF-3	3/8	3/4	22.50
BL309	SC90073	SF-4	7/16	1	30.90
BL310	SC90074	SF-5	1/2	1	32.90
BL311	SC90075	SF-13	1/2	3/4	32.90
BL312	SC90076	SF-6	5/8	1	45.50
BL313	SC90077	SF-7	3/4	1	59.90
BL314	SC90078	SF-14	3/4	1 1/4	74.90
BL315	SC90079	SF-15	3/4	1 1/2	88.50



TREE SHAPE - POINTED END

Model No.	Mfg. No.	No.	Head Dia. "	Flute Length"	Price /Each
BL316	SC90080	SG-1	1/4	5/8	17.50
BL317	SC90081	SG-2	5/16	3/4	21.50
BL318	SC90082	SG-3	3/8	3/4	23.90
BL319	SC90083	SG-5	1/2	1	32.50
BL320	SC90084	SG-13	1/2	3/4	32.50
BL321	SC90085	SG-6	5/8	1	44.90
BL322	SC90086	SG-7	3/4	1	59.90
TBM291	SC90087	SG-15	3/4	1 1/2	88.50



FLAME SHAPE

Model No.	Mfg. No.	No.	Head Dia. "	Flute Length"	Price /Each
BL323	SC90088	SH-1	1/4	5/8	20.50
BL324	SC90089	SH-2	5/16	3/4	23.50
BL325	SC90090	SH-5	1/2	1 1/4	47.50
BL326	SC90091	SH-6	5/8	1 7/16	65.90
BL327	SC90092	SH-7	3/4	1 5/8	83.50



60° CONE SHAPE

Model No.	Mfg. No.	No.	Head Dia. "	Flute Length"	Price /Each
BL328	SC90093	SI-1	1/4	3/16	15.50
BL329	SC90094	SI-3	3/8	5/16	20.50
BL330	SC90095	SI-5	1/2	7/16	24.50
BL331	SC90096	SI-6	5/8	9/16	32.90
BL332	SC90097	SI-7	3/4	1 1/16	43.50
BL333	SC90098	SI-9	1	1 5/16	69.50



90° CONE SHAPE

Model No.	Mfg. No.	No.	Head Dia. "	Flute Length"	Price /Each
BL334	SC90099	SK-1	1/4	1/8	15.50
BL335	SC90100	SK-3	3/8	3/16	20.50
BL336	SC90101	SK-5	1/2	1/4	24.50
BL337	SC90102	SK-6	5/8	5/16	32.90
BL338	SC90103	SK-7	3/4	3/8	43.50
BL339	SC90104	SK-9	1	1/2	69.50

SOLID CARBIDE BURRS - 1/4" SHANK

SC90 DOUBLE CUT



TAPER - RADIUS END - 14°

Model No.	Mfg. No.	No.	Head Dia. "	Flute Length"	Price /Each
BL340	SC90105	SL-1	1/4	5/8	17.90
BL341	SC90106	SL-2	5/16	7/8	23.50
TBM292	SC90107	SL-3	3/8	1 1/16	28.50
BL342	SC90108	SL-4	1/2	1 1/8	34.50
BL343	SC90109	SL-5	5/8	1 3/16	61.90
BL344	SC90110	SL-6	5/8	1 5/16	68.50
BL345	SC90111	SL-7	3/4	1 1/2	89.90

CONE SHAPE



Model No.	Mfg. No.	No.	Head Dia. "	Flute Length"	Price /Each
BL346	SC90112	SM-1	1/4	1/2	16.90
BL347	SC90113	SM-2	1/4	3/4	17.90
BL348	SC90114	SM-3	1/4	1	19.50
BL349	SC90115	SM-4	3/8	5/8	28.50
BL350	SC90116	SM-5	1/2	7/8	35.50
BL351	SC90117	SM-6	5/8	1	47.50



INVERTED CONE SHAPE

Model No.	Mfg. No.	No.	Head Dia. "	Flute Length"	Price /Each
BL352	SC90118	SN-1	1/4	5/16	15.50
BL353	SC90119	SN-2	3/8	3/8	20.50
BL354	SC90120	SN-4	1/2	1/2	24.50
BL355	SC90121	SN-6	5/8	3/4	32.90
BL356	SC90122	SN-7	3/4	5/8	43.50

CLARKSON OSBORN

8 PIECE SOLID CARBIDE BURR SET - 1/4" SHANK

Model No. BL445
Mfg. No. SC90801
Price/Each \$315.00



KIT CONTAINS:

No.	Head Dia. "	Flute Length"
SA-5	1/2	1
SC-3	3/8	3/4
SC-5	1/2	1
SD-5	1/2	7/16
SE-3	3/8	3/4
SF-5	1/2	1
SG-3	3/8	3/4
SL-4	1/2	1 1/8

SOLID CARBIDE BURRS - 1/4" SHANK

SC90 DOUBLE CUT

- 1/4" shank
- Double cut
- Ideal for extra tough materials
- Excellent control allows for clean finish

CYLINDER SHAPE

Model No.	Mfg. No.	No.	Head Dia."	Flute Length"	Price /Each
BL240	SC90002	SA-12	1/8	5/8	14.50
BL241	SC90003	SA-13	5/32	5/8	14.50
BL242	SC90004	SA-14	3/16	5/8	14.50
BL243	SC90005	SA-1	1/4	5/8	14.50
BL244	SC90006	SA-1 L	1/4	1	20.90
BL245	SC90007	SA-2	5/16	3/4	18.90
BL246	SC90008	SA-3	3/8	3/4	20.50
BL247	SC90009	SA-3L	3/8	1	24.50
BL248	SC90010	SA-3X	3/8	1 1/2	26.90
BL249	SC90011	SA-4	7/16	1	29.50
BL250	SC90012	SA-5	1/2	1	31.90
BL251	SC90013	SA-6	5/8	1	39.90
BL252	SC90014	SA-7	3/4	1	59.90
BL253	SC90015	SA-15	3/4	1/2	54.50
BL254	SC90016	SA-16	3/4	3/4	59.90
BL255	SC90017	SA-8	7/8	1	74.90
BL256	SC90018	SA-9	1	1	83.50

CYLINDER SHAPE WITH END CUT

Model No.	Mfg. No.	No.	Head Dia."	Flute Length"	Price /Each
BL258	SC90020	SB-12	1/8	5/8	15.90
BL259	SC90021	SB-13	5/32	5/8	15.90
BL260	SC90022	SB-14	3/16	5/8	15.90
BL261	SC90023	SB-1	1/4	5/8	15.90
BL262	SC90024	SB-1 L	1/4	1	23.50
BL263	SC90025	SB-2	5/16	3/4	20.90
BL264	SC90026	SB-3	3/8	3/4	22.50
BL265	SC90027	SB-3L	3/8	1	26.50
BL266	SC90028	SB-3X	3/8	1 1/2	27.90
BL267	SC90029	SB-4	7/16	1	32.50
BL268	SC90030	SB-5	1/2	1	34.90
BL269	SC90031	SB-6	5/8	1	43.90
BL270	SC90032	SB-7	3/4	1	65.90
BL271	SC90033	SB-15	3/4	1/2	59.90
BL272	SC90034	SB-16	3/4	3/4	65.90
BL273	SC90035	SB-8	7/8	1	82.90
BL274	SC90036	SE-9	1	1	91.90

SOLID CARBIDE BURRS - 1/4" X 6" LONG SHANK

SC90 DOUBLE CUT

- 6" overall length
- 1/4" shank
- Double cut
- Ideal for extra tough materials
- Excellent control allows for clean finish

CYLINDER SHAPE

Model No.	Mfg. No.	No.	Head Dia."	Flute Length"	Price/Each
BL422	SC90601	SA-1L6	1/4	1/2	18.90
BL423	SC90602	SA-3L6	3/8	3/4	18.90
BL424	SC90603	SA-5L6	1/2	1	22.50

CYLINDER SHAPE WITH RADIUS END

Model No.	Mfg. No.	No.	Head Dia."	Flute Length"	Price/Each
BL425	SC90604	SC-1L6	1/4	1/2	23.50
BL426	SC90605	SC-3L6	3/8	3/4	31.90
BL427	SC90606	SC-5L6	1/2	1	49.90

BALL SHAPE

Model No.	Mfg. No.	No.	Head Dia."	Flute Length"	Price/Each
BL428	SC90607	SD-1L6	1/4	3/16	21.90
BL429	SC90608	SD-3L6	3/8	5/16	26.50
BL430	SC90609	SD-5L6	1/2	7/16	35.50

OVAL SHAPE

Model No.	Mfg. No.	No.	Head Dia."	Flute Length"	Price/Each
BL431	SC90610	SE-1L6	1/4	3/8	26.50
BL432	SC90611	SE-3L6	3/8	5/8	31.90
BL433	SC90612	SE-5L6	1/2	7/8	46.50

CYLINDER SHAPE WITH RADIUS END

Model No.	Mfg. No.	No.	Head Dia."	Flute Length"	Price /Each
BL275	SC90037	SC-11	1/8	1/2	16.90
BL276	SC90038	SC-12	1/8	5/8	16.90
BL277	SC90039	SC-3	5/32	5/8	16.90
BL278	SC90040	SC-14	3/16	5/8	16.90
BL279	SC90041	SC-1	1/4	5/8	16.90
BL280	SC90042	SC-1L	1/4	1	22.90
BL281	SC90043	SC-2	5/16	3/4	20.50
BL282	SC90044	SC-3	3/8	3/4	22.50
BL283	SC90045	SC-3L	3/8	1	26.90
BL284	SC90046	SC-3X	3/8	1 1/2	29.50
BL285	SC90047	SC-4	7/16	1	32.50
BL286	SC90048	SC-5	1/2	1	35.57
BL287	SC90049	SC-6	5/8	1	44.90
BL288	SC90050	SC-7	3/4	1	64.50
TBM293	SC90051	SC-15	3/4	1/2	58.50
BL289	SC90052	SC-16	3/4	3/4	64.50
BL290	SC90053	SSC-9	1	1	97.90

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BALL SHAPE

Model No.	Mfg. No.	No.	Head Dia."	Flute Length"	Price /Each
BL291	SC90054	SD-11	1/8	3/32	15.50
BL292	SC90055	SD-14	3/16	1/8	15.50
BL293	SC90056	SD-1	1/4	3/16	15.50
BL294	SC90057	SD-2	5/16	1/4	16.90
BL295	SC90058	SD-3	3/8	5/16	18.50
BL296	SC90059	SD-4	7/16	3/8	16.50
BL297	SC90060	SD-5	1/2	7/16	25.50
BL298	SC90061	SD-6	5/8	9/16	31.50
BL299	SC90062	SD-7	3/4	11/16	42.90
BL300	SC90063	SD-9	1	15/16	73.90

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	24.50
BL435	SC90614	SF-3L6	3/8	3/4	30.90
BL436	SC90615	SF-5L6	1/2	1	45.90

TREE SHAPE - POINTED END

Model No.	Mfg. No.	No.	Head Dia."	Flute Length"	Price/Each
BL437	SC90616	SG-1L6	1/4	1/2	24.50
BL438	SC90617	SG-3L6	3/8	3/4	32.90
BL439	SC90618	SG-5L6	1/2	1	45.50

FLAME SHAPE

Model No.	Mfg. No.	No.	Head Dia."	Flute Length"	Price/Each
BL440	SC90619	SH-2L6	5/16	3/4	32.50
BL441	SC90620	SH-5L6	1/2	1 1/4	66.50

14° DEGREE TAPER - RADIUS END

Model No.	Mfg. No.	No.	Head Dia."	Flute Length"	Price/Each
BL442	SC90621	SL-1L6	1/4	5/8	25.50
BL443	SC90622	SL-3L6	3/8	1 1/16	39.50
BL444	SC90623	SL-4L6	1/2	1 1/8	48.50

STEP DRILLS

STEP DRILL BIT SET

- Dual-flute design provides greater speed and control means a jam-free performance
- Rapid Strike™ Tip creates fast, accurate starts and generates less heat
- **Includes:**
 - #4 Step drill bit (3/16" - 7/8" by 1/16")
 - #2 Step drill bit (3/16" - 1/2" by 1/16")
 - #1 Step drill bit (1/8" - 1/2" by 1/32")



Model No.	Mfg. No.	No. of Pieces	Material	Price /Each
TYE901	48-89-9221	3	High Speed Steel	159.00

STEP DRILL BIT SET

- Dual-flute design provides greater speed and control means a jam-free performance
- Rapid Strike™ Tip creates fast, accurate starts and generates less heat
- **Includes:**
 - (1) #7 Step drill bit (7/8" single hole)
 - (1) #4 Step drill bit (3/16" - 7/8" by 1/16")
 - (1) #12 Step drill bit (7/8" - 1-3/8")
 - (1) #1 Step drill bit (1/8" - 1/2" by 1/32")
 - (1) Carrying case



Model No.	Mfg. No.	No. of Pieces	Material	Price /Each
TYE903	48-89-9223	4	High Speed Steel	234.00

STEP DRILL BIT SET

- Dual-flute design provides greater speed and control means a jam-free performance
- Rapid Strike™ Tip creates fast, accurate starts and generates less heat
- **Includes:**
 - (1) #9 Step drill bit (7/8" & 1-1/8"),
 - (1) #8 Step drill bit (1/2" - 1" by 1/16")
 - (1) #7 Step drill bit (7/8" single hole)
 - (1) #6 Step drill bit (3/8" - 1/2" by 1/16")
 - (1) #4 Step drill bit (3/16" - 7/8" by 1/16")
 - (1) #1 Step drill bit (1/8" - 1/2" by 1/32")
 - (1) Carrying case



Model No.	Mfg. No.	No. of Pieces	Material	Price /Each
TYE904	48-89-9224	6	High Speed Steel	396.00

SHOCKWAVE™ IMPACT DUTY™ STEP DRILL BIT SET

- **Includes:**
 - #1 Shockwave™ Impact Duty™ drill bit,
 - #2 Shockwave™ Impact Duty™ drill bit,
 - #4 Shockwave™ Impact Duty™ drill bit



Model No.	Mfg. No.	No. of Pieces	Material	Price /Each
TCR722	48-89-9254	3	Titanium	186.00

COMBINED DRILLS & COUNTERSINKS

- Solid carbide 10% cobalt
- Right-hand cut
- Each drill has 2 hole diameters
- 118° angle point
- 60° countersink angle
- Bright finish

CLARKSON OSBORN



Applications:
Designed to produce accurate centre holes in components which require machining between centres.

Model No.	Size No.	Small Dia."	Large Dia."	Overall Length"	Price /Each
BK813	00	1/32	1/8	1 1/2	21.50
BK820	0	0.025	1/8	1 1/2	23.90
BK814	1	3/64	1/8	1 1/2	19.90
BK815	2	5/64	3/16	1 7/8	30.90
BK816	3	7/64	1/4	2	34.90
BK817	4	1/8	5/16	2 1/8	47.90
BK818	5	3/16	7/16	2 3/4	71.50
BK819	6	7/32	1/2	3"	105.00

MULTI-STEP DRILL BIT SET

WALTER
Surface Technologies

- Special AlCrN coating provides additional toughness and wear-resistance to prolong tooling life
- 2 wide, cylindrical flutes eliminate chip build-up for faster drilling and produce holes with minimum vibration or distortion
- Each shank has three flats for easy mounting
- Perfect for cutting or enlarging holes in sheet material
- Special bronze SST heat and surface treatment
- **Includes:**
 - (1) 13 step from 1/8" to 1/2"
 - (1) 12 step from 3/16" to 7/8"
 - (1) 10 step from 1/4" to 1-3/8"



Model No.	Mfg. No.	No. of Pieces	Material	Price /Each
TC0443	01W951	3	High Speed Steel	270.00

STEP DRILLS

CLARKSON OSBORN

- High speed steel
- Bright finish

Applications:
Stepped cone design provides better control of hole sizes in materials up to 1/8" thick. One step drill does job of up to 13 different size drills. Holes are automatically deburred by cutting edge of next larger size. Ideal for sheet metal and hole-enlarging work.



Model No.	Size No.	# of holes	Range from - to	Increments	Price /Each
TJZ795	1	13	1/8 to 1/2	1/32	25.50
TJZ796	2	6	3/16 to 1/2	1/16	23.90
TJZ797	3	9	1/4 to 3/4	1/16	42.50
TJZ798	4	12	3/16 to 7/8	1/16	28.90
TJZ799	5	10	1/4 to 1 3/8	1/8	49.90

Step drill 3-piece set – contains #1, #2 and #3 step drills in plastic case
Model No. TJZ800 Price/Each \$91.90

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

IRWIN.



Model No.	Size No.	Number of holes	Cutting Ø"	Increments"	Shank Ø	Price /Each
TQ651	1	13	1/8 to 1/2	1/32	1/4	36.30
TH080	2	6	3/16 to 1/2	1/16	1/4	36.30
TH094	3	9	1/4 to 3/4	1/16	3/8	65.40
TH113	4	12	3/16 to 7/8	1/16	3/8	77.30

THREAD STEEL HAWG CARBIDE TIPPED CUTTERS

2" CUTTING DEPTH

- Carbide-tipped multiple alternating inside and outside cutting edges
- For steel, cast iron or aluminum
- 3 times faster than twist drills in steel, stainless or non-ferrous metals



VH110

Dia."	Model No.	Price /Each	Dia."	Model No.	Price /Each	Dia."	Model No.	Price /Each
3/4	VH101	146.00	1 3/16	VH180	462.00	3 3/8	VH241	1083.00
13/16	VH106	158.00	1 7/8	VH185	487.00	3 1/2	VH242	1149.00
7/8	VH110	166.00	1 15/16	VH190	520.00	3 5/8	VH244	1214.00
15/16	VH115	179.00	2	VH194	541.00	3 3/4	VH245	1280.00
1	VH119	195.00	2 1/16	VH198	563.00	3 7/8	VH247	1339.00
1 1/16	VH124	196.00	2 1/8	VH201	586.00	4	VH249	1403.00
1 1/8	VH129	232.00	2 1/4	VH205	612.00	4 1/8	VH250	1415.00
1 3/16	VH133	243.00	2 5/16	VH208	634.00	4 1/4	VH251	1479.00
1 1/4	VH139	248.00	2 3/8	VH210	660.00	4 3/8	VH252	1558.00
1 5/16	VH143	265.00	2 1/2	VH215	688.00	4 1/2	VH253	1639.00
1 3/8	VH148	277.00	2 9/16	VH217	716.00	4 5/8	VH254	1741.00
1 7/16	VH153	318.00	2 5/8	VH220	745.00	4 3/4	VH255	1947.00
1 1/2	VH157	331.00	2 3/4	VH224	774.00	5	VH256	2197.00
1 9/16	VH162	371.00	2 7/8	VH228	853.00	5 1/2	VH257	2804.00
1 5/8	VH166	400.00	3	VH232	896.00	6	VH258	3424.00
1 11/16	VH171	414.00	3 1/8	VH236	954.00			
1 3/4	VH175	441.00	3 1/4	VH239	1022.00			

ARBOR ASSEMBLIES FOR THREADED SHANK STEEL HAWG CUTTERS

3/4" SHANK ARBOR ASSEMBLY

For use on motors TF328. Oil hose and hand pump not included.

Model No. VH080 Price/Each \$198.00



VH080

NO. 3 MORSE TAPER QUICK ARBOR ASSEMBLY

For use on motors TF334 and TF335. Oil hose and hand pump not included.

Model No. TEA295 Price/Each \$244.00



TEA295

NO. 3 MORSE TAPER ASSEMBLY

For use on motors TF328. No. 3 Morse taper assembly will allow 3/4" Weldon® style shank cutters to be used with Milwaukee's large magnetic drill stands.

Model No. VH074 Price/Each \$198.00

ANNULAR CUTTERS

- M2 quality high speed steel
- Right-hand cutting direction
- 3/4" Weldon shank

Applications:

- For general purpose cutting of steel plate, structural steel, steel pipe, etc
- 3 to 5x faster cutting than conventional drills
- Produces quality burr-free hole in a single pass
- Ideal for magnetic base drill, drill presses and milling machines



CLARKSON OSBORN

1" DEPTH OF CUT

2" DEPTH OF CUT

3" DEPTH OF CUT

Fractional Size"	Model No.	Price /Each	Fractional Size"	Model No.	Price /Each	Fractional Size"	Model No.	Price /Each
1/2	TFX101	42.50	1/2	TFX129	68.90	3/4	TFX156	185.00
9/16	TFX102	47.50	9/16	TFX130	74.90	13/16	TFX157	195.00
5/8	TFX103	49.50	5/8	TFX131	81.50	7/8	TFX158	205.00
11/16	TFX104	52.90	11/16	TFX132	89.90	15/16	TFX159	209.00
3/4	TFX105	53.90	3/4	TFX133	93.50	1	TFX160	225.00
13/16	TFX106	60.50	13/16	TFX134	105.00	1 1/16	TFX161	245.00
7/8	TFX107	62.90	7/8	TFX135	105.00	1 1/8	TFX162	255.00
15/16	TFX108	67.50	15/16	TFX136	115.00	1 3/16	TFX163	275.00
1	TFX109	69.90	1	TFX137	115.00	1 1/4	TFX164	305.00
1 1/16	TFX110	73.50	1 1/16	TFX138	125.00	1 5/16	TFX165	335.00
1 1/8	TFX111	79.90	1 1/8	TFX139	135.00	1 3/8	TFX166	365.00
1 3/16	TFX112	82.50	1 3/16	TFX140	139.00	1 7/16	TFX167	369.00
1 1/4	TFX113	109.00	1 1/4	TFX141	159.00	1 1/2	TFX168	385.00
1 5/16	TFX114	115.00	1 5/16	TFX142	165.00	1 9/16	TFX169	405.00
1 3/8	TFX115	149.00	1 3/8	TFX143	185.00	1 5/8	TFX170	435.00
1 7/16	TFX116	165.00	1 7/16	TFX144	195.00	1 11/16	TFX171	445.00
1 1/2	TFX117	169.00	1 1/2	TFX145	199.00	1 3/4	TFX172	465.00
1 9/16	TFX118	179.00	1 9/16	TFX146	215.00	1 13/16	TFX173	499.00
1 5/8	TFX119	185.00	1 5/8	TFX147	225.00	1 7/8	TFX174	539.00
1 11/16	TFX120	199.00	1 11/16	TFX148	239.00	1 15/16	TFX175	549.00
1 3/4	TFX121	215.00	1 3/4	TFX149	245.00	2	TFX176	565.00
1 13/16	TFX122	235.00	1 13/16	TFX150	265.00	2 1/16	TFX177	639.00
1 7/8	TFX123	245.00	1 7/8	TFX151	285.00	-	-	-
1 15/16	TFX124	255.00	1 15/16	TFX152	289.00	-	-	-
2	TFX125	269.00	2	TFX153	299.00	-	-	-
2 1/16	TFX126	289.00	2 1/16	TFX154	329.00	-	-	-
2 1/4	TFX127	375.00	2 1/4	TFX155	389.00	-	-	-

Cut pin required TFX178
Price/Each \$8.35

Cut pin required TFX179
Price/Each \$9.74

Cut pin required TFX180
Price/Each \$17.50

CORE BITS

THIN WALL CORE BITS

CUP, CENTRE PIN & GUIDE PLATE ONLY

Bit Size"	Model No.	Price /Each
1 1/2	TE977	86.30
1 3/4	TE978	97.10
2	TE979	148.00
2 1/2	TE980	103.00
3	TE981	142.00
3 1/2	TE982	170.00
4	TE983	255.00
5	TE984	312.00
6	TE985	425.00



Usable cut depth of 3".

THICK WALL CORE BITS

CUP, CENTRE PIN & GUIDE PLATE ONLY

Bit Size"	Model No.	Price /Each
1 1/2	TJ012	159.00
1 3/4	TJ013	149.00
2	TJ014	177.00
2 1/2	TJ015	212.00
3	TJ016	263.00
3 1/2	TJ017	303.00
4	TJ018	319.00
5	TJ019	359.00
6	TJ020	446.00



Usable cut depth of 4 3/8".

SDS+ THIN WALL CORE BIT ADAPTERS

(Not included with core bit)

Model No.	Mfg. No.	Length"	Price /Each
FOR USE WITH 1" TO 1 1/2" CORE BITS			
TE997	48-03-3545	8	54.00
TE998	48-03-3551	12	62.00
FOR USE WITH 1 3/4" TO 3 1/2" CORE BITS			
TE999	48-03-3555	8	54.00
TJ001	48-03-3561	12	62.00



SPLINE THIN WALL CORE BIT ADAPTERS

(Not included with core bit)

Model No.	Mfg. No.	Length"	Price /Each
FOR USE WITH 1 3/4" TO 6" CORE BITS			
TJ004	48-03-3540	12	58.00



REPLACEMENT GUIDE PLATES

Bit Size"	Model No.	Price /Each
1 1/2	TE988	5.02
1 3/4	TE989	5.34
2	TE990	5.79
2 1/2	TE991	6.37
3	TE992	7.33
3 1/2	TE993	8.48
4	TE994	9.50
5	TE995	15.80
6	TE996	17.70



REPLACEMENT GUIDE PLATES

Bit Size"	Model No.	Price /Each
1 1/2	TJ023	9.39
1 3/4	TJ024	10.50
2	TJ025	11.50
2 1/2	TJ026	13.60
3	TJ027	14.60
3 1/2	TJ028	17.70
4	TJ029	20.00
5	TJ030	24.70
6	TJ031	29.00



SPLINE THICK WALL CORE BIT ADAPTERS

(Not included with core bit)

Model No.	Mfg. No.	Length"	Price /Each
FOR USE WITH 1 1/2" TO 6" CORE BIT			
TJ034	48-03-3564	12	106.00
TJ035	48-03-3565	18	130.00



REPLACEMENT CENTRE PINS

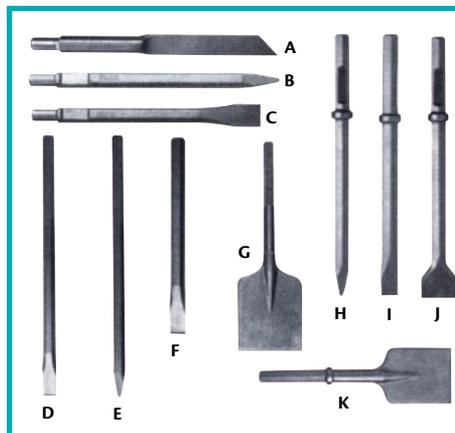
For 1 1/4" to 1 1/2" core bit

Model No. TJ006
Mfg. No. 48-20-6150
Price/Each \$20.80

For 1 3/4" to 6" core bit

Model No. TJ007
Mfg. No. 48-20-6155
Price/Each \$20.80

1" and 1/8" core bits do not require centre pins



POINTS & CHISELS

Model No.	Mfg. No.	Description	Code	Shank Type	Price /Each
TJ154	48-62-2080	Mortar cutting chisel 12"	A	For spline drive hammers	46.90
TJ156	48-62-2000	Bull point 12"	B	For spline drive hammers	21.50
TJ157	48-62-2010	Bull point 18"	B	For spline drive hammers	28.10
TJ158	48-62-2040	Scaling chisel 1 1/4" W x 12" L	C	For spline drive hammers	33.80
TJ159	48-62-2050	Scaling chisel 2" W x 12" L	C	For spline drive hammers	37.10
TJ160	48-62-3000	Bull point 12"	D	3/4" hex	16.00
TJ161	48-62-3005	Bull point 18"	E	3/4" hex	21.60
TJ162	48-62-3010	Flat chisel 12"	F	3/4" hex	16.00
TJ164	48-62-3090	Asphalt cutter 16 1/2"	G	3/4" hex	122.00
TJ165	48-62-4000	Moil point 20"	H	Ringed 1 1/8" hex	40.00
TJ166	48-62-4005	Narrow chisel 20 1/2"	I	Ringed 1 1/8" hex	41.60
TJ167	48-62-4010	Chisel 3" - 20 1/2"	J	Ringed 1 1/8" hex	52.20
TJ168	48-62-4020	Asphalt cutter 5" W x 17 1/2" L	K	Ringed 1 1/8" hex	116.00

DIAMOND PREMIUM WET CORE BIT

- Long life in cured concrete with hard aggregate and medium steel reinforcement
- Threaded cap allows for bit extension
- V-shaped turbo segment provides faster cutting action
- Designed to be used Wet
- 15" Drilling Depth



Model No.	Mfg. No.	Size	Thread	Max RPM	Price /Each.
TCR442	48-17-3007	3/4"	5/8"-11	3800	152.00
TCR454	48-17-3009	7/8"	5/8"-11	3470	156.00
TCR450	48-17-3010	1"	5/8"-11	3200	124.00
TCR452	48-17-3012	1-1/4"	5/8"-11	2380	141.00
TCR444	48-17-3015	1-1/2"	5/8"-11	2000	146.00
TCR440	48-17-3060	6"	1-1/4"-7	550	723.00
TCR433	48-17-3080	8"	1-1/4"-7	400	1211.00
TCR435	48-17-3100	10"	1-1/4"-7	300	1334.00
TCR432	48-17-3120	12"	1-1/4"-7	265	2095.00
TCR436	48-17-3140	14"	1-1/4"-7	225	2266.00

DIAMOND ULTRA DRY CORE DRILL BIT

- Ideal for concrete, brick, and block
- Designed to be used dry
- For Use With: MX Fuel™ Core Drill and Corded Tools
- Depth of Cut: 13"
- Kerf Thickness: 3 mm
- Segment Height: 9 mm



Model No.	Mfg. No.	Size	Thread	Max RPM	Price /Each.
UAI637	48-17-0112	1-1/4"	1-1/4"-7	3310	180.00
UAI638	48-17-0120	2"	1-1/4"-7	2070	255.00
UAI639	48-17-0125	2-1/2"	1-1/4"-7	1655	330.00
UAI640	48-17-0130	3"	1-1/4"-7	1380	345.00
UAI641	48-17-0135	3-1/2"	1-1/4"-7	1180	375.00
UAI642	48-17-0140	4"	1-1/4"-7	1035	420.00
UAI643	48-17-0150	5"	1-1/4"-7	830	495.00
UAI644	48-17-0160	6"	1-1/4"-7	690	570.00

PRE-STRESSED CONCRETE DIAMOND WET CORE BITS

- Designed specifically for demands of drilling pre-stressed concrete
- Designed to be used Wet
- 15" Drilling Depth



Model No.	Mfg. No.	Size	Thread	Max RPM	Price /Each.
TCR428	48-17-1010	1"	5/8"-11	3200	167.00
TCR426	48-17-1015	1-1/2"	5/8"-11	2000	201.00
TCR453	48-17-1020	2"	1-1/4"-7	1600	248.00
TCR438	48-17-1025	2-1/2"	1-1/4"-7	1220	303.00
TCR431	48-17-1030	3"	1-1/4"-7	1050	349.00
TCR451	48-17-1035	3-1/2"	1-1/4"-7	800	400.00
TCR430	48-17-1040	4"	1-1/4"-7	800	437.00
TCR446	48-17-1045	4-1/2"	1-1/4"-7	674	493.00
TCR736	48-17-1050	5"	1-1/4"-7	674	535.00
TCR434	48-17-1060	6"	1-1/4"-7	550	602.00

DIAMOND CORE BIT ACCESSORIES

THREADED ADAPTORS

- Reduces thread size of 1 1/4"-7 to 5/8"-11 for diamond core bits and extensions

Model No. VF172
Price/Each \$75.00



SPACER ASSEMBLIES

- Mounts between cradle and DYMODRILL motor to increase DYMO-RIG bit capacity from 10" to 14"

Model No. VH433

For use with models TF308, TF309 and TW092
Price/Each \$160.00



Model No. VH434

For use with models TEA016, TEA017, VH886 and VH889
Price/Each \$194.00

CORE BIT EXTENSION

- Extends Milwaukee core bits by 12"
- For core bits with 5/8"-11 threads
- Apply anti-seize lubricant to threads before use
- Shank Size: 5/8"
- Overall Length: 12"
- Max. Diameter: 5/8"

Model No. TCR609
Mfg. No. 48-17-6012
Price/Each \$156.00



DIAMOND THREADED CORE BIT EXTENSION

- Designed for Milwaukee threaded core bits
- Apply anti-seize lubricant to threads before use
- Overall Length: 12"
- Thread Size: 1-1/4"-7

Model No. TCR739
Mfg. No. 48-17-6016
Price/Each \$162.00



DRILL BITS

JOBBER LENGTH – HIGH SPEED STEEL

HYPER

- Hyper series - maintenance duty
- Straight shank, 2 flute design
- Right hand cutting direction
- 118° point
- Black oxide finish

Applications:

General purpose machine and hand drilling in a variety of steels, alloys and other non-ferrous materials.



CLARKSON  **OSBORN**



Model No.	Fractional Size"	Decimal Size"	L2"	L1"	Price /Each
QR954	3/64	0.0469	7/8	1 7/8	1.25
QR955	1/16	0.0625	7/8	1 7/8	0.85
QR927	5/64	0.0781	1	2	0.85
QR925	3/32	0.0938	1 1/4	2 1/4	0.85
QR919	7/64	0.1094	1 1/2	2 5/8	0.85
QR953	1/8	0.1250	1 5/8	2 3/4	0.99
QR920	9/64	0.1406	1 3/4	2 7/8	1.09
QR921	5/32	0.1562	2	3 1/8	1.19
QR922	11/64	0.1719	2 1/8	3 1/4	1.35
QR923	3/16	0.1875	2 5/16	3 1/2	1.55
QR924	13/64	0.2031	2 7/16	3 5/8	1.65
QR936	7/32	0.2188	2 1/2	3 3/4	1.99
QR926	15/64	0.2344	2 5/8	3 7/8	2.15
QR917	1/4	0.2500	2 3/4	4	2.09
QR928	17/64	0.2656	2 7/8	4 1/8	2.75

Model No.	Letter Size	Decimal Size"	L2"	L1"	Price /Each
BM802	A	0.2340	2 5/8	3 7/8	2.39
BM803	B	0.2380	2 3/4	4	2.39
BM804	C	0.2420	2 3/4	4	2.39
BM805	D	0.2460	2 3/4	4	2.39
BM806	E	0.2500	2 3/4	4	2.39
BM807	F	0.2570	2 7/8	4 1/8	3.25
BM808	G	0.2610	2 7/8	4 1/8	3.25
BM809	H	0.2660	2 7/8	4 1/8	3.25
BM810	I	0.2720	2 7/8	4 1/8	3.25
BM811	J	0.2770	2 7/8	4 1/8	3.25
BM812	K	0.2810	2 15/16	4 1/4	3.55
BM813	L	0.2900	2 15/16	4 1/4	3.55
BM814	M	0.2950	3 1/16	4 3/8	3.95

Model No.	Wire Ga. Size	Decimal Size"	L2"	L1"	Price /Each
BM887	60	0.0400	11/16	1 5/8	1.25
BM886	59	0.0410	11/16	1 5/8	1.25
BM885	58	0.0420	11/16	1 5/8	1.25
BM884	57	0.0430	3/4	1 3/4	1.25
BM883	56	0.0465	3/4	1 3/4	1.25
BM882	55	0.0520	7/8	1 7/8	0.85
BM881	54	0.0550	7/8	1 7/8	0.85
BM880	53	0.0595	7/8	1 7/8	0.85
BM879	52	0.0635	7/8	1 7/8	0.85
BM878	51	0.0670	1	2	0.85
BM877	50	0.0700	1	2	0.85
BM876	49	0.0730	1	2	0.85
BM875	48	0.0760	1	2	0.85
BM874	47	0.0785	1	2	0.85
BM873	46	0.0810	1 1/8	2 1/8	0.85
BM872	45	0.0820	1 1/8	2 1/8	0.85
BM871	44	0.0860	1 1/8	2 1/8	0.85
BM870	43	0.0890	1 1/4	2 1/4	0.85
BM869	42	0.0935	1 1/4	2 1/4	0.85
BM868	41	0.0960	1 3/8	2 3/8	0.85
BM867	40	0.0980	1 3/8	2 3/8	0.97
BM866	39	0.0995	1 3/8	2 3/8	0.97
BM865	38	0.1015	1 7/16	2 1/2	0.97
BM864	37	0.1040	1 7/16	2 1/2	0.97
BM863	36	0.1065	1 7/16	2 1/2	0.97
BM862	35	0.1100	1 1/2	2 5/8	1.25
BM861	34	0.1110	1 1/2	2 5/8	1.25
BM860	33	0.1130	1 1/2	2 5/8	1.25
BM859	32	0.1160	1 5/8	2 3/4	1.25
BM858	31	0.1200	1 5/8	2 3/4	1.25

Model No.	Fractional Size"	Decimal Size"	L2"	L1"	Price /Each
QR929	9/32	0.2812	2 15/16	4 1/4	2.95
QR930	19/64	0.2969	3 1/16	4 3/8	3.38
QR948	5/16	0.3125	3 3/16	4 1/2	3.55
QR083	21/64	0.3281	3 5/16	4 5/8	3.95
QR082	11/32	0.3438	3 7/16	4 3/4	4.45
QR071	23/64	0.3594	3 1/2	4 7/8	5.29
QR080	3/8	0.3750	3 5/8	5	4.99
QR090	25/64	0.3906	3 3/4	5 1/8	5.89
QR078	13/32	0.4062	3 7/8	5 1/4	6.95
QR077	27/64	0.4219	3 15/16	5 3/8	7.15
QR076	7/16	0.4375	4 1/16	5 1/2	8.49
QR104	29/64	0.4531	4 3/16	5 5/8	8.65
QR074	15/32	0.4688	4 5/16	5 3/4	9.29
QR084	31/64	0.4844	4 3/8	5 7/8	9.99
QR099	1/2	0.5000	4 1/2	6	9.75

Model No.	Letter Size	Decimal Size"	L2"	L1"	Price /Each
BM815	N	0.3020	3 1/16	4 3/8	3.95
BM816	O	0.3160	3 3/16	4 1/2	4.29
BM817	P	0.3230	3 5/16	4 5/8	4.59
BM818	Q	0.3320	3 7/16	4 3/4	5.25
BM819	R	0.3390	3 7/16	4 3/4	5.25
BM820	S	0.3480	3 1/2	4 7/8	6.45
BM821	T	0.3580	3 1/2	4 7/8	6.45
BM822	U	0.3680	3 5/8	5	6.45
BM823	V	0.3770	3 5/8	5	6.45
BM824	W	0.3860	3 3/4	5 1/8	7.25
BM825	X	0.3970	3 3/4	5 1/8	7.25
BM826	Y	0.4040	3 7/8	5 1/4	7.25
BM827	Z	0.4130	3 7/8	5 1/4	7.25

Model No.	Wire Ga. Size	Decimal Size"	L2"	L1"	Price /Each
BM857	30	0.1285	1 5/8	2 3/4	1.25
BM856	29	0.1360	1 3/4	2 7/8	1.25
BM855	28	0.1405	1 3/4	2 7/8	1.25
BM854	27	0.1440	1 7/8	3	1.39
BM853	26	0.1470	1 7/8	3	1.39
BM852	25	0.1495	1 7/8	3	1.39
BM851	24	0.1520	2	3 1/8	1.39
BM850	23	0.1540	2	3 1/8	1.39
BM849	22	0.1570	2	3 1/8	1.39
BM848	21	0.1590	2 1/8	3 1/4	1.55
BM847	20	0.1610	2 1/8	3 1/4	1.55
BM846	19	0.1660	2 1/8	3 1/4	1.55
BM845	18	0.1695	2 1/8	3 1/4	1.55
BM844	17	0.1730	2 3/16	3 3/8	1.75
BM843	16	0.1770	2 3/16	3 3/8	1.75
BM842	15	0.1800	2 3/16	3 3/8	1.75
BM841	14	0.1820	2 3/16	3 3/8	1.75
BM840	13	0.1850	2 5/16	3 1/2	1.75
BM839	12	0.1890	2 5/16	3 1/2	1.99
BM838	11	0.1910	2 5/16	3 1/2	1.99
BM837	10	0.1935	2 7/16	3 5/8	1.99
BM836	9	0.1960	2 7/16	3 5/8	1.99
BM835	8	0.1990	2 7/16	3 5/8	1.99
BM834	7	0.2010	2 7/16	3 5/8	1.99
BM833	6	0.2040	2 1/2	3 3/4	2.19
BM832	5	0.2055	2 1/2	3 3/4	2.19
BM831	4	0.2090	2 1/2	3 3/4	2.19
BM830	3	0.2130	2 1/2	3 3/4	2.19
BM829	2	0.2210	2 5/8	3 7/8	2.39
BM828	1	0.2280	2 5/8	3 7/8	2.39

JOBBER LENGTH – HIGH SPEED STEEL

BLACK & GOLD

- Industrial-duty
- Straight shank, 2-flute design
- Right hand cutting direction
- 135° split point, self-centering eliminates walking
- Two-tone treatment increases resistance to abrasion and chip flow

Applications:

General purpose and heavy drilling operations. Ideal for ferrous metals: steel, cast iron, ferrous metals and alloys, non-metallic material.



Model No.	Fractional Size"	Decimal Size"	L2"	L1"	Price /Each
QD657	1/64	0.0156	3/16	13/16	2.95
QD658	1/32	0.0312	13/32	13/16	1.89
QD659	3/64	0.0469	7/8	17/8	1.85
QD660	1/16	0.0625	7/8	17/8	1.85
QD661	5/64	0.0781	1	2	1.85
QD662	3/32	0.0938	1 1/4	2 1/4	1.85
QD663	7/64	0.1094	1 1/2	2 5/8	1.99
QD664	1/8	0.1250	1 5/8	2 3/4	2.35
QD665	9/64	0.1406	1 3/4	2 7/8	2.35
QD666	5/32	0.1562	2	3 1/8	2.49
QD667	11/64	0.1719	2 1/8	3 1/4	2.69
QD668	3/16	0.1875	2 5/16	3 1/2	2.99
QD669	13/64	0.2031	2 7/16	3 5/8	3.49
QD670	7/32	0.2188	2 1/2	3 3/4	3.89
QD671	15/64	0.2344	2 5/8	3 7/8	4.09
QD672	1/4	0.2500	2 3/4	4	4.29
QD673	17/64	0.2656	2 7/8	4 1/8	5.29
QD674	9/32	0.2812	2 15/16	4 1/4	5.39
QD675	19/64	0.2969	3 1/16	4 3/8	6.25
QD676	5/16	0.3125	2 3/16	4 1/2	6.85
QD677	21/64	0.3281	3 5/16	4 5/8	7.59
QD678	11/32	0.3438	3 7/16	4 3/4	8.55
QD679	23/64	0.3594	3 1/2	4 7/8	9.49

Model No.	Wire Ga. Size	Decimal Size"	L2"	L1"	Price /Each
BF675	80	0.0135	5/32	3/4	3.59
BF674	79	0.0145	5/32	3/4	3.59
BF673	78	0.0160	3/16	13/16	3.05
BF672	77	0.0180	3/16	13/16	3.05
BF671	76	0.0200	1/4	7/8	3.05
BF670	75	0.0210	9/32	15/16	3.05
BF669	74	0.0225	9/32	15/16	3.05
BF668	73	0.0240	5/16	1	3.05
BF667	72	0.0250	5/16	1	3.05
BF666	71	0.0260	5/16	1	3.05
BF665	70	0.0280	11/32	1 1/8	2.69
BF664	69	0.0292	11/32	1 1/8	2.69
BF663	68	0.0310	13/32	1 3/16	2.29
BF662	67	0.0320	13/32	1 3/16	2.29
BF661	66	0.0330	13/32	1 3/16	2.29
QD721	65	0.0350	7/16	1 1/4	2.29
BF660	64	0.0360	7/16	1 1/4	2.29
BF659	63	0.0370	7/16	1 1/4	2.29
BF658	62	0.0380	15/32	1 5/16	2.29
BF657	61	0.0390	15/32	1 5/16	2.29
BF656	60	0.0400	11/16	1 5/8	2.29
BF655	59	0.0410	11/16	1 5/8	2.29
BF654	58	0.0420	11/16	1 5/8	2.29
BF653	57	0.0430	3/4	1 3/4	2.29
BF652	56	0.0465	3/4	1 3/4	2.25
BF651	55	0.0520	7/8	1 7/8	2.25
BF650	54	0.0550	7/8	1 7/8	2.25
BF649	53	0.0595	7/8	1 7/8	2.09
BF648	52	0.0635	7/8	1 7/8	2.09
QD720	51	0.0670	1	2	2.09
BF647	50	0.0700	1	2	2.09
QD719	49	0.0730	1	2	2.09
BF646	48	0.0760	1	2	2.09
QD718	47	0.0785	1	2	2.09
BF645	46	0.0810	1 1/8	2 1/8	2.09
BF644	45	0.0820	1 1/8	2 1/8	2.09
BF643	44	0.0860	1 1/8	2 1/8	2.09
QD717	43	0.0890	1 1/4	2 1/4	2.09
QD716	42	0.0935	1 1/4	2 1/4	2.09
BF642	41	0.0960	1 3/8	2 3/8	2.19

Model No.	Letter Size	Decimal Size"	L2"	L1"	Price /Each
BF603	A	0.2340	2 5/8	3 7/8	4.45
BF604	B	0.2380	2 3/4	4	4.69
BF605	C	0.2420	2 3/4	4	4.69
BF606	D	0.2460	2 3/4	4	4.69
-	E	0.2500	2 3/4	4	-
BF608	F	0.2570	2 7/8	4 1/8	5.39
BF609	G	0.2610	2 7/8	4 1/8	5.69
BF610	H	0.2660	2 7/8	4 1/8	5.69
BF611	I	0.2720	2 7/8	4 1/8	5.69
BF612	J	0.2770	2 7/8	4 1/8	5.89
BF613	K	0.2810	2 15/16	4 1/4	6.25
BF614	L	0.2900	2 15/16	4 1/4	6.75
BF615	M	0.2950	3 1/16	4 3/8	7.15

Model No.	Fractional Size"	Decimal Size"	L2"	L1"	Price /Each
QD680	3/8	0.3750	3 5/8	5	9.15
QD681	25/64	0.3906	3 3/4	5 1/8	10.90
QD682	13/32	0.4062	3 7/8	5 1/4	11.50
QD683	27/64	0.4219	3 15/16	5 3/8	12.50
QD684	7/16	0.4375	4 1/16	5 1/2	13.20
QD685	29/64	0.4531	4 3/16	5 5/8	15.50
QD686	15/32	0.4688	4 5/16	5 3/4	15.90
QD687	31/64	0.4844	4 3/8	5 7/8	16.50
QD688	1/2	0.5000	4 1/2	6	15.90
BF590	33/64	0.5156	4 13/16	6 5/8	24.50
BF591	17/32	0.5313	4 13/16	6 5/8	23.90
BF592	35/64	0.5469	4 13/16	6 5/8	25.50
BF593	9/16	0.5625	4 13/16	6 5/8	26.50
BF594	37/64	0.5781	4 13/16	6 5/8	27.90
BF595	19/32	0.5938	5 3/16	7 1/8	46.90
BF596	39/64	0.6094	5 3/16	7 1/8	29.90
BF597	5/8	0.6250	5 3/16	7 1/8	30.50
BF598	41/64	0.6406	5 3/16	7 1/8	38.90
BF599	21/32	0.6563	5 3/16	7 1/8	53.50
BF600	43/64	0.6719	5 5/8	7 5/8	54.90
BF601	11/16	0.6875	5 5/8	7 5/8	57.50
BF602	3/4	0.7500	5 1/2	8 1/16	52.90

Model No.	Wire Ga. Size	Decimal Size"	L2"	L1"	Price /Each
BF641	40	0.0980	1 3/8	2 3/8	2.19
QD715	39	0.0995	1 3/8	2 3/8	2.25
BF640	38	0.1015	1 7/16	2 1/2	2.15
BF639	37	0.1040	1 7/16	2 1/2	2.15
QD714	36	0.1065	1 7/16	2 1/2	2.19
QD713	35	0.1100	1 1/2	2 5/8	2.25
BF638	34	0.1110	1 1/2	2 5/8	2.19
BF637	33	0.1130	1 1/2	2 5/8	2.25
QD712	32	0.1160	1 5/8	2 3/4	2.25
QD711	31	0.1200	1 5/8	2 3/4	2.19
QD709	29	0.1360	1 3/4	2 7/8	2.15
BF636	28	0.1405	1 3/4	2 7/8	2.15
BF635	27	0.1440	1 7/8	3	2.35
QD708	26	0.1470	1 7/8	3	2.35
QD707	25	0.1495	1 7/8	3	2.39
QD706	24	0.1520	2	3 1/8	2.55
QD705	23	0.1540	2	3 1/8	2.59
QD704	22	0.1570	2	3 1/8	2.59
QD703	21	0.1590	2 1/8	3 1/4	2.59
QD702	20	0.1610	2 1/8	3 1/4	2.75
BF634	19	0.1660	2 1/8	3 1/4	2.75
QD701	18	0.1695	2 1/8	3 1/4	2.75
BF633	17	0.1730	2 3/16	3 3/8	3.09
QD700	16	0.1770	2 3/16	3 3/8	3.09
QD699	15	0.1800	2 3/16	3 3/8	3.19
QD698	14	0.1820	2 3/16	3 3/8	3.19
QD697	13	0.1850	2 5/16	3 1/2	3.19
QD696	12	0.1890	2 5/16	3 1/2	3.49
QD695	11	0.1910	2 5/16	3 1/2	3.49
QD694	10	0.1935	2 7/16	3 5/8	3.49
BF632	9	0.1960	2 7/16	3 5/8	3.49
BF631	8	0.1990	2 7/16	3 5/8	3.49
QD693	7	0.2010	2 7/16	3 5/8	3.49
BF630	6	0.2040	2 1/2	3 3/4	3.89
BF629	5	0.2055	2 1/2	3 3/4	3.89
QD692	4	0.2090	2 1/2	3 3/4	3.89
QD691	3	0.2130	2 1/2	3 3/4	3.89
BF628	2	0.2210	2 5/8	3 7/8	4.35
BF627	1	0.2280	2 5/8	3 7/8	4.35

Model No.	Letter Size	Decimal Size"	L2"	L1"	Price /Each
QD689	N	0.3020	3 1/16	4 3/8	7.29
BF616	O	0.3160	3 3/16	4 1/2	7.45
BF617	P	0.3230	3 5/16	4 5/8	8.09
BF618	Q	0.3320	3 7/16	4 3/4	8.49
BF619	R	0.3390	3 7/16	4 3/4	8.79
QD690	S	0.3480	3 1/2	4 7/8	9.69
BF620	T	0.3580	3 1/2	4 7/8	9.89
BF621	U	0.3680	3 5/8	5	10.90
BF622	V	0.3770	3 5/8	5	11.20
BF623	W	0.3860	3 3/4	5 1/8	11.50
BF624	X	0.3970	3 3/4	5 1/8	13.20
BF625	Y	0.4040	3 7/8	5 1/4	14.50
BF626	Z	0.4130	3 7/8	5 1/4	15.50

DRILL BITS

JOBBER LENGTH – COBALT

- M42 cobalt provides wear and heat resistance
- Straight shank , 2 flute design
- Right hand cutting direction
- 135° split point, self-centring eliminates walking
- Bright finish

Applications

For general purpose drilling to heavy-duty operations in high tensile strength steel and alloys, stainless steels and other ferrous metals.



CLARKSON OSBORN



Model No.	Fractional Size"	Decimal Size"	L2"	L1"	Price /Each
BG098	1/64	0.0156	3/16	13/16	6.69
BG099	1/32	0.0312	13/32	1 3/16	5.29
BG100	3/64	0.0469	5/8	1 1/2	4.15
BG101	1/16	0.0625	25/32	1 11/16	3.99
BG102	5/64	0.0781	15/16	1 15/16	5.49
BG103	3/32	0.0938	1 3/16	2 1/4	3.55
BG104	7/64	0.1094	1 5/16	2 13/32	3.69
BG105	1/8	0.1250	1 7/16	2 9/16	3.79
QD740	9/64	0.1406	1 17/32	2 3/4	4.79
BG106	5/32	0.1562	1 11/16	2 15/16	4.79
BG107	11/64	0.1719	1 27/32	3 5/32	5.55
BG108	3/16	0.1875	2 1/16	3 3/8	5.99
BG109	13/64	0.2031	2 1/16	3 3/8	6.29
BG110	7/32	0.2188	2 1/4	3 21/32	6.55
BG111	15/64	0.2344	2 1/4	3 21/32	7.35
BG112	1/4	0.2500	2 1/2	3 31/32	8.15

Model No.	Fractional Size"	Decimal Size"	L2"	L1"	Price /Each
BG113	17/64	0.2656	2 23/32	4 9/32	9.35
BG114	9/32	0.2812	2 23/32	4 9/32	10.50
BG115	19/64	0.2969	2 15/16	4 19/32	11.90
BG116	5/16	0.3125	2 15/16	4 19/32	13.20
BG117	21/64	0.3281	2 15/16	4 19/32	14.90
QD741	11/32	0.3438	3 3/16	4 29/32	16.50
BG118	23/64	0.3594	3 3/16	4 29/32	17.90
BG119	3/8	0.3750	3 7/16	5 1/4	19.50
BG120	25/64	0.3906	3 7/16	5 1/4	20.50
BG121	13/32	0.4062	3 7/16	5 1/4	20.90
BG122	27/64	0.4219	3 11/16	5 9/32	22.90
QD742	7/16	0.4375	3 11/16	5 9/32	24.50
BG123	29/64	0.4531	3 11/16	5 9/32	35.50
BG124	15/32	0.4688	3 31/32	5 15/16	28.75
BG125	31/64	0.4844	3 31/32	5 15/16	30.50
BG126	1/2	0.5000	3 31/32	5 15/16	32.50

Model No.	Letter Size	Decimal Size"	L2"	L1"	Price /Each
BG127	A	0.2340	2 5/8	3 7/8	9.45
BG128	B	0.2380	2 3/4	4	10.90
BG129	C	0.2420	2 3/4	4	10.90
BG130	D	0.2460	2 3/4	4	12.20
BG112	E	0.2500	2 1/2	3 31/32	8.15
BG131	F	0.2570	2 7/8	4 1/8	10.90
BG132	G	0.2610	2 7/8	4 1/8	10.90
BG133	H	0.2660	2 7/8	4 1/8	12.20
BG134	I	0.2720	2 7/8	4 1/8	11.50
BG135	J	0.2770	2 7/8	4 1/8	12.20
BG136	K	0.2810	2 15/16	4 1/4	12.20
BG137	L	0.2900	2 15/16	4 1/4	13.90
BG138	M	0.2950	3 1/16	4 3/8	14.50

Model No.	Letter Size	Decimal Size"	L2"	L1"	Price /Each
BG139	N	0.3020	3 1/16	4 3/8	14.50
BG140	O	0.3160	3 3/16	4 1/2	16.50
BG141	P	0.3230	3 5/16	4 5/8	17.50
BG142	Q	0.3320	3 7/16	4 3/4	17.90
BG143	R	0.3390	3 7/16	4 3/4	17.90
BG144	S	0.3480	3 1/2	4 7/8	21.90
BG145	T	0.3580	3 1/2	4 7/8	21.90
BG146	U	0.3680	3 5/8	5	21.90
BG147	V	0.3770	3 5/8	5	23.90
BG148	W	0.3860	3 3/4	5 1/8	23.90
BG149	X	0.3970	3 3/4	5 1/8	23.90
BG150	Y	0.4040	3 7/8	5 1/4	25.50
BG151	Z	0.4130	3 7/8	5 1/4	27.90

Model No.	Wire Gauge Size	Decimal Size"	L2"	L1"	Price /Each
BG211	60	0.0400	15/32	1 5/16	4.49
BG210	59	0.0410	15/32	1 5/16	4.49
BG209	58	0.0420	9/16	1 7/16	4.49
BG208	57	0.0430	9/16	1 7/16	4.49
BG207	56	0.0465	5/8	1 1/2	4.49
BG206	55	0.0520	5/8	1 1/2	3.95
BG205	54	0.0550	11/16	1 9/16	3.95
BG204	53	0.0595	25/32	1 11/16	3.95
BG203	52	0.0635	25/32	1 11/16	3.65
BG202	51	0.0670	7/8	1 13/16	3.65
BG201	50	0.0700	7/8	1 13/16	3.65
BG200	49	0.0730	7/8	1 13/16	3.65
BG199	48	0.0760	15/16	1 15/16	3.65
BG198	47	0.0785	15/16	1 15/16	3.65
BG197	46	0.0810	15/16	1 15/16	3.65
BG196	45	0.0820	15/16	1 15/16	3.65
BG195	44	0.0860	1 1/16	2 3/32	3.65
BG194	43	0.0890	1 1/16	2 3/32	3.65
BG193	42	0.0935	1 3/16	2 1/4	3.65
BG192	41	0.0960	1 3/16	2 1/4	3.75
BG191	40	0.0980	1 3/16	2 1/4	3.75
BG190	39	0.0995	1 3/16	2 1/4	3.75
BG189	38	0.1015	1 3/16	2 1/4	3.75
BG188	37	0.1040	1 3/16	2 1/4	4.05
BG187	36	0.1065	1 5/16	2 13/32	4.05
BG186	35	0.1100	1 5/16	2 13/32	4.05
BG185	34	0.1110	1 5/16	2 13/32	4.05
BG184	33	0.1130	1 5/16	2 13/32	4.05
BG183	32	0.1160	1 5/16	2 13/32	4.29
BG182	31	0.1200	1 7/16	2 9/16	4.29

Model No.	Wire Gauge Size	Decimal Size"	L2"	L1"	Price /Each
BG181	30	0.1285	1 7/16	2 9/16	4.39
BG180	29	0.1360	1 17/32	2 3/4	4.59
BG179	28	0.1405	1 17/32	2 3/4	4.85
BG178	27	0.1440	1 17/32	2 3/4	5.15
BG177	26	0.1470	1 17/32	2 3/4	5.15
BG176	25	0.1495	1 11/16	2 15/16	5.15
BG175	24	0.1520	1 11/16	2 15/16	5.69
BG174	23	0.1540	1 11/16	2 15/16	5.69
BG173	22	0.1570	1 11/16	2 15/16	5.69
BG172	21	0.1590	1 11/16	2 15/16	5.69
BG171	20	0.1610	1 11/16	2 15/16	5.69
BG170	19	0.1660	1 11/16	2 15/16	5.69
BG169	18	0.1695	1 27/32	3 5/32	5.85
BG168	17	0.1730	1 27/32	3 5/32	6.39
BG167	16	0.1770	1 27/32	3 5/32	6.59
BG166	15	0.1800	1 27/32	3 5/32	7.05
BG165	14	0.1820	1 27/32	3 5/32	7.05
BG164	13	0.1850	1 27/32	3 5/32	7.05
BG163	12	0.1890	2 1/16	3 3/8	7.39
BG162	11	0.1910	2 1/16	3 3/8	7.39
BG161	10	0.1935	2 1/16	3 3/8	7.39
BG160	9	0.1960	2 1/16	3 3/8	7.39
BG159	8	0.1990	2 1/16	3 3/8	7.39
BG158	7	0.2010	2 1/16	3 3/8	7.39
BG157	6	0.2040	2 1/16	3 3/8	9.45
BG156	5	0.2055	2 1/16	3 3/8	9.45
BG155	4	0.2090	2 1/4	3 21/32	9.45
BG154	3	0.2130	2 1/4	3 21/32	9.45
BG153	2	0.2210	2 1/4	3 21/32	9.99
BG152	1	0.2280	2 1/4	3 21/32	9.99

JOBBER LENGTH – COBALT (CONT'D)

Model No.	Size mm	DEC	L2 mm	L1 mm	Price /Each
BI021	1.00	0.0394	12.0	34.0	7.09
BI022	1.50	0.0591	18.0	40.0	5.39
BI023	1.60	0.0630	20.0	43.0	7.85
BI024	1.70	0.0669	20.0	43.0	7.65
BI025	1.80	0.0709	22.0	46.0	7.45
BI026	1.90	0.0748	22.0	46.0	7.29
BI027	2.00	0.0787	24.0	49.0	4.79
BI028	2.10	0.0827	24.0	49.0	7.15
BI029	2.20	0.0866	27.0	53.0	7.09
BI030	2.25	0.0886	27.0	53.0	7.09
BI031	2.30	0.0906	27.0	53.0	7.09
BI032	2.40	0.0945	30.0	57.0	6.99
BI033	2.50	0.0984	30.0	57.0	4.69
BI034	2.60	0.1024	30.0	57.0	7.09
BI035	2.70	0.1063	33.0	61.0	7.15
BI036	2.80	0.1102	33.0	61.0	7.15
BI037	2.90	0.1142	33.0	61.0	7.25
BI038	3.00	0.1181	33.0	61.0	4.89
BI039	3.10	0.1220	36.0	65.0	7.49
BI040	3.20	0.1260	36.0	65.0	7.65
BI041	3.30	0.1299	36.0	65.0	5.15
BI042	3.40	0.1339	39.0	70.0	7.85
BI043	3.50	0.1378	39.0	70.0	5.35
BI044	3.60	0.1417	39.0	70.0	8.25
BI045	3.70	0.1457	39.0	70.0	8.39
BI046	3.75	0.1476	39.0	70.0	10.20
BI047	3.80	0.1496	43.0	75.0	8.55
BI048	3.90	0.1535	43.0	75.0	8.79
BI049	4.00	0.1575	43.0	75.0	5.99
BI050	4.10	0.1614	43.0	75.0	9.19
BI051	4.20	0.1654	43.0	75.0	9.39
BI052	4.25	0.1673	43.0	75.0	9.75
BI053	4.30	0.1693	47.0	80.0	9.59
BI054	4.40	0.1732	47.0	80.0	9.95
BI055	4.50	0.1772	47.0	80.0	6.75
BI056	4.60	0.1811	47.0	80.0	10.50
BI057	4.70	0.1850	47.0	80.0	10.90
BI058	4.80	0.1890	52.0	86.0	10.90
BI059	4.90	0.1929	52.0	86.0	11.20
BI060	5.00	0.1969	52.0	86.0	7.65

Model No.	Size mm	DEC	L2 mm	L1 mm	Price /Each
BI061	5.10	0.2008	52.0	86.0	11.90
BI062	5.20	0.2047	52.0	86.0	12.20
BI063	5.30	0.2087	52.0	86.0	12.50
BI064	5.40	0.2126	57.0	93.0	12.90
BI065	5.50	0.2165	57.0	93.0	8.85
BI066	5.60	0.2205	57.0	93.0	13.50
BI067	5.70	0.2244	57.0	93.0	13.90
TBL002	5.80	0.2283	57.0	93.0	14.50
TBL003	5.90	0.2323	57.0	93.0	14.50
BI068	6.00	0.2362	57.0	93.0	9.99
BI069	6.10	0.2402	63.0	101.0	15.50
BI070	6.20	0.2441	63.0	101.0	15.90
BI071	6.30	0.2480	63.0	101.0	16.50
BI072	6.40	0.2520	63.0	101.0	16.90
BI073	6.50	0.2559	63.0	101.0	11.50
BI074	6.60	0.2598	63.0	101.0	17.90
TBL004	6.70	0.2638	63.0	101.0	17.90
BI075	6.80	0.2677	69.0	109.0	18.50
BI076	6.90	0.2717	69.0	109.0	18.90
BI077	7.00	0.2756	69.0	109.0	13.20
TBL005	7.10	0.2795	69.0	109.0	20.50
BI078	7.20	0.2835	69.0	109.0	20.90
BI079	7.30	0.2874	69.0	109.0	21.50
BI080	7.40	0.2913	69.0	109.0	21.90
BI081	7.50	0.2953	69.0	109.0	14.90
BI082	7.60	0.2992	75.0	117.0	22.90
BI083	7.70	0.3031	75.0	117.0	23.50
BI084	7.80	0.3071	75.0	117.0	23.90
BI085	7.90	0.3110	75.0	117.0	24.90
BI086	8.00	0.3150	75.0	117.0	16.90
BI087	8.10	0.3189	75.0	117.0	25.90
BI088	8.20	0.3228	75.0	117.0	26.90
BI089	8.30	0.3268	75.0	117.0	27.50
BI090	8.40	0.3307	75.0	117.0	27.90
BI091	8.50	0.3346	75.0	117.0	18.90
BI092	8.60	0.3386	81.0	125.0	29.50
BI093	8.70	0.3425	81.0	125.0	30.50
BI094	8.80	0.3465	81.0	125.0	30.90
BI095	8.90	0.3504	81.0	125.0	31.50
BI096	9.00	0.3543	81.0	125.0	21.90

Model No.	Size mm	DEC	L2 mm	L1 mm	Price /Each
BI097	9.10	0.3583	81.0	125.0	32.90
BI098	9.20	0.3622	81.0	125.0	33.90
BI099	9.30	0.3661	81.0	125.0	34.90
BI100	9.40	0.3701	81.0	125.0	35.50
BI101	9.50	0.3740	81.0	125.0	23.90
TBL006	9.60	0.3780	87.0	133.0	36.90
BI102	9.70	0.3819	87.0	133.0	37.50
BI103	9.80	0.3858	87.0	133.0	38.90
BI104	9.90	0.3898	87.0	133.0	39.90
BI105	10.00	0.3937	87.0	133.0	26.90
BI106	10.10	0.3976	87.0	133.0	44.50
BI107	10.20	0.4016	87.0	133.0	42.50
BI108	10.30	0.4055	87.0	133.0	44.50
BI109	10.40	0.4094	87.0	133.0	46.50
BI110	10.50	0.4134	87.0	133.0	45.50
BI111	10.60	0.4173	87.0	133.0	52.90
BI112	10.70	0.4213	94.0	142.0	54.90
BI113	10.80	0.4252	94.0	142.0	56.90
BI114	10.90	0.4291	94.0	142.0	59.50
BI115	11.00	0.4331	94.0	142.0	33.50
BI116	11.10	0.4370	94.0	142.0	60.50
BI117	11.20	0.4409	94.0	142.0	61.90
BI118	11.30	0.4449	94.0	142.0	62.90
BI119	11.40	0.4488	94.0	142.0	63.50
BI120	11.50	0.4528	94.0	142.0	55.90
BI121	11.60	0.4567	94.0	142.0	64.90
BI122	11.70	0.4606	94.0	142.0	65.50
BI123	11.80	0.4646	94.0	142.0	65.50
BI124	11.90	0.4685	101.0	151.0	65.90
BI125	12.00	0.4724	101.0	151.0	40.90
BI126	12.10	0.4764	101.0	151.0	69.90
BI127	12.20	0.4803	101.0	151.0	80.90
BI128	12.30	0.4843	101.0	151.0	81.90
BI129	12.40	0.4882	101.0	151.0	83.90
BI130	12.50	0.4921	101.0	151.0	68.50
BI131	13.00	0.5118	101.0	151.0	65.90
BI132	13.50	0.5315	101.0	151.0	82.90
BI133	14.00	0.5512	101.0	151.0	90.50
BI134	14.50	0.5709	114.0	169.0	93.90



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DRILL BITS

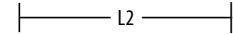
AIRCRAFT EXTENSION DRILLS

- NAS907B (National Aerospace Standard)
- M7 high speed steel
- Right hand cutting direction, standard spiral
- 135° split point, self-centring eliminates walking
- Black oxide finish

Application

Portable or machine drilling in hard steels, stainless steel and other hard materials.

CLARKSON OSBORN



FRACTIONAL SIZES

Fractional Size"	L2"	6" Model No.	Price /Each	12" Model No.	Price /Each
3/64	3/4	BH521	11.90	TBL179	22.50
1/16	7/8	BH522	5.25	BH584	16.90
5/64	1	BH523	5.25	BH585	16.90
3/32	1 1/4	BH524	4.29	BH586	16.90
7/64	1 1/2	BH525	4.35	BH587	13.50
1/8	1 5/8	BH526	4.35	BH588	13.50
9/64	1 3/4	BH527	5.59	TBL180	13.50
5/32	2	BH528	5.59	BH589	13.50
11/64	2 1/8	BH529	6.15	BH590	15.50
3/16	2 5/16	BH530	6.15	BH591	15.50
13/64	2 7/16	BH531	7.49	TBL181	19.50
7/32	2 1/2	BH532	7.49	BH592	17.50
15/64	2 5/8	BH533	7.59	TBL182	18.50
1/4	2 3/4	BH534	7.59	BH593	18.50
17/64	2 7/8	BH535	17.90	TBL183	22.50

Fractional Size"	L2"	6" Model No.	Price /Each	12" Model No.	Price /Each
9/32	2 15/16	BH536	19.50	BH594	23.50
19/64	3 1/16	BH537	21.90	TBL184	26.90
5/16	3 3/16	BH538	24.50	BH595	29.90
21/64	3 5/16	TBL160	25.50	TBL185	31.50
11/32	3 7/16	BH539	25.50	BH596	31.50
23/64	3 1/2	TBL161	28.50	TBL186	34.90
3/8	3 5/8	BH540	29.90	BH597	36.90
25/64	3 3/4	TBL162	31.90	BH598	38.90
13/32	3 7/8	TBL163	31.90	BH599	38.90
27/64	3 15/16	BH541	34.50	TBL187	41.90
7/16	4 1/16	TBL164	35.90	BH600	43.90
29/64	4 3/16	TBL165	38.50	BH601	46.50
15/32	4 5/16	TBL166	41.50	BH602	49.90
31/64	4 3/8	TBL167	41.50	BH603	49.90
1/2	4 1/2	TBL168	42.90	BH604	52.50

NUMBER GAUGE SIZES

Number Size	L2"	6" Model No.	Price /Each	12" Model No.	Price /Each
1	2 5/8	BH549	8.69	TBL188	20.50
2	2 5/8	BH550	8.69	TBL189	20.50
3	2 1/2	BH551	7.79	BH631	18.90
4	2 1/2	TBL169	7.79	BH632	19.50
5	2 1/2	BH552	7.79	BH633	18.90
6	2 1/2	TBL170	7.79	BH634	18.90
7	2 7/16	BH553	7.79	BH635	18.90
8	2 7/16	BH554	7.65	BH636	18.90
9	2 7/16	BH555	7.49	BH637	16.90
10	2 7/16	BH556	7.05	BH638	16.90
11	2 5/16	BH557	6.49	BH639	16.90
12	2 5/16	BH558	6.49	BH640	16.90
13	2 5/16	BH559	6.49	BH641	16.90
14	2 3/16	BH560	6.49	BH642	16.90
15	2 3/16	TBL171	6.49	BH643	16.90
16	2 3/16	TBL172	6.49	BH644	16.90
17	2 3/16	TBL173	6.49	BH645	16.90
18	2 1/8	BH561	6.49	BH646	16.90
19	2 1/8	TBL174	6.49	BH647	16.90
20	2 1/8	BH562	5.89	BH648	15.50
21	2 1/8	BH563	5.89	BH649	15.50
22	2	BH565	5.89	BH650	15.50
23	2	TBL175	5.89	BH651	15.50
24	2	TBL176	5.89	BH652	15.50
25	1 7/8	BH566	5.89	BH653	15.50
26	1 7/8	TBL177	5.89	BH654	15.50
27	1 7/8	BH567	5.89	BH655	15.50
28	1 3/4	TBL178	5.89	BH656	15.50
29	1 3/4	BH568	5.89	BH657	15.50
30	1 5/8	BH569	4.89	BH658	15.50

Number Size	L2"	6" Model No.	Price /Each	12" Model No.	Price /Each
31	1 5/8	BH570	4.89	BH659	15.50
32	1 5/8	TBL190	4.89	BH660	15.50
33	1 1/2	TBL191	4.89	BH661	15.90
34	1 1/2	TBL192	4.89	BH662	15.90
35	1 1/2	TBL193	4.89	BH663	15.90
36	1 7/16	BH571	4.95	BH664	15.90
37	1 7/16	TBL194	4.95	BH665	15.90
38	1 7/16	TBL195	4.95	BH666	15.90
39	1 3/8	BH572	5.15	BH667	15.90
40	1 3/8	BH573	4.39	BH668	15.50
41	1 3/8	TBL196	4.39	TBL225	15.50
42	1 1/4	BH574	4.39	TBL226	15.50
43	1 1/4	BH575	5.59	TBL227	19.50
44	1 1/8	TBL197	5.59	TBL228	19.50
45	1 1/8	TBL198	5.59	TBL229	19.50
46	1 1/8	BH576	5.59	TBL230	19.50
47	1	BH577	5.59	TBL231	19.50
48	1	TBL199	5.59	TBL232	19.50
49	1	TBL200	5.59	BH669	19.50
50	1	TBL201	5.59	TBL233	19.50
51	1	BH578	5.59	TBL234	20.90
52	7/8	BH579	5.59	BH670	20.90
53	7/8	BH580	10.90	TBL235	19.90
54	7/8	BH581	10.90	TBL236	19.90
55	7/8	BH582	10.90	TBL237	19.90
56	3/4	TBL202	10.90	TBL238	19.90
57	3/4	TBL203	13.50	TBL239	19.90
58	11/16	BH583	13.50	BH671	22.50
59	11/16	TBL204	13.50	TBL240	22.50
60	11/16	TBL205	13.50	TBL241	22.50

LETTER GAUGE SIZES

Letter Size	L2"	6" Model No.	Price /Each	12" Model No.	Price /Each
A	2 5/8	TBL206	11.50	BH605	22.50
B	2 3/4	BH542	11.50	BH606	22.50
C	2 3/4	TBL207	11.50	BH607	22.50
D	2 3/4	BH543	11.50	BH608	22.50
E	2 3/4	BH534	7.59	BH593	18.50
F	2 7/8	BH544	12.50	BH610	26.50
G	2 7/8	TBL209	19.90	BH611	26.50
H	2 7/8	BH545	20.90	BH612	26.50
I	2 7/8	TBL210	20.90	BH613	26.50
J	2 7/8	TBL211	20.90	BH614	26.50
K	2 15/16	TBL212	20.90	BH615	26.50
L	2 15/16	TBL213	23.90	BH616	27.90
M	3 1/16	TBL214	23.90	BH617	27.90

Letter Size	L2"	6" Model No.	Price /Each	12" Model No.	Price /Each
N	3 1/16	BH546	26.90	BH618	30.50
O	3 3/16	BH547	28.50	BH619	32.90
P	3 5/16	TBL215	28.50	BH620	32.90
Q	3 7/16	TBL216	28.50	BH621	34.50
R	3 7/16	TBL217	28.50	BH622	35.90
S	3 1/2	TBL218	31.50	BH623	37.50
T	3 1/2	TBL219	31.50	BH624	37.50
U	3 5/8	BH548	33.50	BH625	37.50
V	3 5/8	TBL220	34.90	BH626	39.90
W	3 3/4	TBL221	34.90	BH627	39.90
X	3 3/4	TBL222	34.90	BH628	41.90
Y	3 7/8	TBL223	34.90	BH629	41.90
Z	3 7/8	TBL224	37.50	BH630	44.50

TAPER LENGTH DRILLS

- High speed steel
- 118° angle point
- 2-flute design
- Black oxide finish

Applications:

Taper length drills are general purpose drills with increased cutting length. They are manufactured with straight shanks of the same diameter as that of the flute diameter.

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Model No.	Fractional Size"	Decimal Size" Equiv	L2"	L1"	Price /Each
BG665	1/16	0.0625	1 3/4	3	4.95
BG667	3/32	0.0938	2 1/4	4 1/4	6.59
BG668	7/64	0.1094	2 1/2	4 5/8	8.29
BG669	1/8	0.1250	2 3/4	5 1/8	8.59
BG670	9/64	0.1406	3	5 3/8	10.90
BG671	5/32	0.1562	3	5 3/8	10.20
BG672	11/64	0.1719	3 3/8	5 3/4	11.90
BG673	3/16	0.1875	3 3/8	5 3/4	10.50
BG674	13/64	0.2031	3 5/8	6	13.50
BG675	7/32	0.2188	3 5/8	6	14.50
BG676	15/64	0.2344	3 3/4	6 1/8	14.50
BG677	1/4	0.2500	3 3/4	6 1/8	12.20
BG678	17/64	0.2656	3 7/8	6 1/4	15.50
BG679	9/32	0.2812	3 7/8	6 1/4	14.90
BG680	19/64	0.2969	4	6 3/8	16.50
BG681	5/16	0.3125	4	6 3/8	14.90

Model No.	Fractional Size"	Decimal Size" Equiv	L2"	L1"	Price /Each
BG682	21/64	0.3281	4 1/8	6 1/2	17.50
BG683	11/32	0.3438	4 1/8	6 1/2	16.50
BG684	23/64	0.3594	4 1/4	6 3/4	19.50
BG685	3/8	0.3750	4 1/4	6 3/4	19.50
BG686	25/64	0.3906	4 3/8	7	20.90
BG687	13/32	0.4062	4 3/8	7	20.50
BG688	27/64	0.4219	4 5/8	7 1/4	22.50
BG689	7/16	0.4375	4 5/8	7 1/4	22.90
BG690	29/64	0.4531	4 3/4	7 1/2	25.50
BG691	15/32	0.4688	4 3/4	7 1/2	26.50
BG692	31/64	0.4844	4 3/4	7 3/4	28.50
BG693	1/2	0.5000	4 3/4	7 3/4	27.50
BG694	33/64	0.5156	4 3/4	8	33.50
BG695	17/32	0.5312	4 3/4	8	32.90
BG696	35/64	0.5469	4 7/8	8 1/4	37.50
BG697	9/16	0.5625	4 7/8	8 1/4	34.90
BG698	37/64	0.5781	4 7/8	8 3/4	41.50
BG699	19/32	0.5938	4 7/8	8 3/4	41.50
BG700	39/64	0.6094	4 7/8	8 3/4	43.50
BG701	5/8	0.6250	4 7/8	8 3/4	42.50

REDUCED SHANK DRILL BITS – HIGH SPEED STEEL

- Hyper series - maintenance duty
- 1/2" shank
- Right hand cutting direction
- 118° point, 2-flute design
- Black oxide finish

Applications:

General purpose machine drilling of larger diameter holes in steels, cast iron, alloys and other ferrous and non-ferrous materials.

Model No. BN052 5 pc set; 9/16, 5/8, 3/4, 7/8, 1

Model No. BN053 8 pc set; 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1



Model No.	Fractional Size"	L2"	L1"	Price /Each
BN029	33/64	3	6	22.50
QR069	17/32	3	6	22.50
BN030	35/64	3	6	26.50
QR189	9/16	3	6	26.50
BN031	37/64	3	6	28.50
QR062	19/32	3	6	28.50
BN032	39/64	3	6	30.90
QR041	5/8	3	6	30.90
BN033	41/64	3	6	30.90
QR039	21/32	3	6	31.50
BN034	43/64	3	6	31.50
QR059	11/16	3	6	31.90
BN035	45/64	3	6	32.50
QR063	23/32	3	6	32.50
BN036	47/64	3	6	32.90
QR033	3/4	3	6	32.90
BN037	49/64	3	6	32.90
QR037	25/32	3	6	33.50
BN038	51/64	3	6	33.90
QR034	13/16	3	6	33.90

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Model No.	Fractional Size"	L2"	L1"	Price /Each
BN045	53/64	3	6	35.50
BN039	27/32	3	6	34.50
BN046	55/64	3	6	36.50
QR035	7/8	3	6	35.90
BN047	57/64	3	6	38.50
BN040	29/32	3	6	36.50
BN048	59/64	3	6	40.90
QR065	15/16	3	6	39.50
BN049	61/64	3	6	43.50
BN041	31/32	3	6	43.50
BN050	63/64	3	6	47.90
QR036	1	3	6	48.50
QR053	1 1/16	3	6	58.50
QR067	1 1/8	3	6	64.50
QR068	1 3/16	3	6	75.50
QR056	1 1/4	3	6	83.90
BN051	1 5/16	3	6	88.50
BN042	1 3/8	3	6	105.00
BN043	1 7/16	3	6	109.00
BN044	1 1/2	3	6	119.00

DRILL BITS

REDUCED SHANK DRILL BITS – HIGH SPEED STEEL

- Industrial duty
- 1/2" shank
- Right hand cutting direction
- 118° point, 2-flute design
- Black oxide & bright finish

Applications:

General purpose machine drilling of larger diameter holes in steels, cast iron, alloys and other ferrous and non-ferrous materials.

FRACTIONAL SIZES

Model No.	Fractional Size"	Decimal Size" Equiv	L2"	L1"	Price /Each
BH387	17/32	0.5313	3	6	33.50
BH388	9/16	0.5625	3	6	35.50
BH389	19/32	0.5938	3	6	38.50
BH390	5/8	0.6250	3	6	39.90
BH391	21/32	0.6563	3	6	42.90
BH392	11/16	0.6875	3	6	44.50
BH393	23/32	0.7188	3	6	47.50
BH394	3/4	0.7500	3	6	49.50
BH395	25/32	0.7813	3	6	51.50
BH396	13/16	0.8125	3	6	53.50
BH397	27/32	0.8438	3	6	56.90
BH398	7/8	0.8750	3	6	58.50
BH399	29/32	0.9063	3	6	61.50

METRIC SIZES

Model No.	Metric mm	Decimal Size" Equiv	L2 mm	L1 mm	Price /Each
BH413	13.00	0.5118	75.0	150.0	39.50
BH414	13.50	0.5315	75.0	150.0	62.50
BH415	14.00	0.5512	75.0	150.0	43.90
BH416	14.50	0.5709	75.0	150.0	68.90
BH417	15.00	0.5906	75.0	150.0	48.50
BH418	15.50	0.6102	75.0	150.0	76.50
BH419	16.00	0.6299	75.0	150.0	53.50
BH420	16.50	0.6496	75.0	150.0	84.50
BH421	17.00	0.6693	75.0	150.0	58.90
BH422	17.50	0.6890	75.0	150.0	92.50

REDUCED SHANK DRILL BITS – COBALT

- M42 cobalt
- 1/2" shank
- Right hand cutting direction
- 118° point, 2-flute design
- Bright finish

Applications:

General purpose to heavy-duty operations in high tensile strength steels and alloys, stainless steels and other ferrous and non-ferrous materials.

Model No.	Fractional Size"	Decimal Size" Equiv	L2"	L1"	Price /Each
BH435	33/64	0.5156	3	6	42.50
BH436	17/32	0.5313	3	6	44.50
BH437	35/64	0.5469	3	6	45.90
BH438	9/16	0.5625	3	6	42.50
BH439	37/64	0.5781	3	6	53.90
BH440	19/32	0.5938	3	6	49.90
BH441	39/64	0.6094	3	6	51.90
BH442	5/8	0.6250	3	6	47.90
BH443	41/64	0.6406	3	6	60.90
BH444	21/32	0.6563	3	6	58.50
BH445	43/64	0.6719	3	6	60.90
BH446	11/16	0.6875	3	6	55.90
BH447	45/64	0.7031	3	6	66.50
BH448	23/32	0.7188	3	6	61.50
BH449	47/64	0.7344	3	6	69.90
BH450	3/4	0.7500	3	6	64.90
BH451	49/64	0.7656	3	6	70.90
BH452	25/32	0.7813	3	6	65.90

CLARKSON OSBORN



Model No.	Fractional Size"	Decimal Size" Equiv	L2"	L1"	Price /Each
BH400	15/16	0.9375	3	6	65.50
BH401	31/32	0.9688	3	6	69.90
BH402	1	1.0000	3	6	77.50
BH403	1 1/32	1.0313	3	6	93.50
BH404	1 1/16	1.0625	3	6	97.50
BH405	1 3/32	1.0938	3	6	105.00
BH406	1 1/8	1.1250	3	6	109.00
BH407	1 5/32	1.1563	3	6	109.00
BH408	1 3/16	1.1875	3	6	119.00
BH409	1 1/4	1.2500	3	6	135.00
BH411	1 3/8	1.3750	3	6	185.00
BH412	1 1/2	1.5000	3	6	219.00

Model No.	Metric mm	Decimal Size" Equiv	L2 mm	L1 mm	Price /Each
BH423	18.00	0.7087	75.0	150.0	64.50
BH424	18.50	0.7283	75.0	150.0	105.00
BH425	19.00	0.7480	75.0	150.0	70.90
BH426	19.50	0.7677	75.0	150.0	115.00
BH427	20.00	0.7874	75.0	150.0	77.50
BH428	21.00	0.8268	75.0	150.0	84.90
BH429	22.00	0.8661	75.0	150.0	92.50
BH430	23.00	0.9055	75.0	150.0	99.90
BH431	24.00	0.9449	75.0	150.0	109.00
BH432	25.00	0.9843	75.0	150.0	119.00

CLARKSON OSBORN

Model No.	Fractional Size"	Decimal Size" Equiv	L2"	L1"	Price /Each
BH453	51/64	0.7969	3	6	71.90
BH454	13/16	0.8125	3	6	66.90
BH455	53/64	0.8281	3	6	72.90
BH456	27/32	0.8438	3	6	67.50
BH457	55/64	0.8594	3	6	86.50
BH458	7/8	0.8750	3	6	79.90
BH459	57/64	0.8906	3	6	90.50
BH460	29/32	0.9063	3	6	83.90
BH461	59/64	0.9219	3	6	95.90
BH462	15/16	0.9375	3	6	88.90
BH463	61/64	0.9531	3	6	105.00
BH464	31/32	0.9688	3	6	94.50
BH465	63/64	0.9844	3	6	109.00
BH466	1	1.0000	3	6	94.50
BH471	1 5/32	1.1563	3	6	215.00
BH473	1 1/4	1.2500	3	6	249.00
BH474	1 5/16	1.3125	3	6	355.00

MORSE TAPER SHANK DRILLS

- High Speed Steel
- 2-flute design
- Right hand cutting direction
- 118° point
- Black finish

Applications:

Used with either portable or stationary machines with a taper socket spindle. General purpose drills for steels, cast iron and other ferrous and non-ferrous metals and alloys.

CLARKSON OSBORN



Model No.	Fractional Size"	Morse Taper#	Decimal Size" Equiv	L2 mm	L1 mm	Price /Each
BG786	1/8	1	0.1250	36.0	117.0	14.20
BG787	9/64	1	0.1406	39.0	120.0	15.90
BG788	5/32	1	0.1563	43.0	123.0	15.50
BG789	11/64	1	0.1719	47.0	128.0	17.90
BG790	3/16	1	0.1875	53.0	133.0	15.90
BG791	13/64	1	0.2031	53.0	133.0	17.90
BG792	7/32	1	0.2188	57.0	138.0	17.90
BG793	15/64	1	0.2344	57.0	138.0	19.50
BG794	1/4	1	0.2500	63.0	144.0	17.50
BG795	17/64	1	0.2656	69.0	150.0	17.90
BG796	9/32	1	0.2813	69.0	150.0	17.90
BG797	19/64	1	0.2969	75.0	156.0	20.90
BG798	5/16	1	0.3125	75.0	156.0	18.50
BG799	21/64	1	0.3281	75.0	156.0	23.90
BG800	11/32	1	0.3438	81.0	162.0	24.90
BG801	23/64	1	0.3594	81.0	162.0	28.50
BG802	3/8	1	0.3750	87.0	168.0	28.90
BG803	25/64	1	0.3906	87.0	168.0	29.50
BG804	13/32	1	0.4063	87.0	168.0	29.50
BG805	27/64	1	0.4219	94.0	175.0	30.50
BG806	7/16	1	0.4375	94.0	175.0	31.50
BG807	29/64	1	0.4531	94.0	175.0	33.50
BG808	15/32	1	0.4688	101.0	182.0	34.50
BG809	31/64	2	0.4844	43/8"	8 1/4"	39.50
BG810	1/2	2	0.5000	43/8"	8 1/4"	38.50
BG811	33/64	2	0.5156	45/8"	8 1/2"	42.50
BG812	17/32	2	0.5313	45/8"	8 1/2"	41.90
BG813	35/64	2	0.5469	47/8"	8 3/4"	46.50
BG814	9/16	2	0.5625	47/8"	8 3/4"	45.90
BG815	37/64	2	0.5781	47/8"	8 3/4"	49.50
BG816	19/32	2	0.5938	47/8"	8 3/4"	47.90
BG817	39/64	2	0.6094	47/8"	8 3/4"	52.50
BG818	5/8	2	0.6250	47/8"	8 3/4"	50.50
BG819	41/64	2	0.6406	5 1/8"	9"	57.90
BG820	21/32	2	0.6563	5 1/8"	9"	56.90
BG821	43/64	2	0.6719	5 3/8"	9 1/4"	62.50
BG822	11/16	2	0.6875	5 3/8"	9 1/4"	60.90
BG823	45/64	2	0.7031	5 5/8"	9 1/2"	66.90
BG824	23/32	2	0.7188	5 5/8"	9 1/2"	64.90
BG825	47/64	2	0.7344	5 7/8"	9 3/4"	71.50
BG826	3/4	2	0.7500	5 7/8"	9 3/4"	71.50
BG827	49/64	2	0.7656	6"	9 7/8"	81.50
BG828	25/32	2	0.7813	6"	9 7/8"	81.50
BG829	51/64	3	0.7969	6 1/8"	10 3/4"	88.90
BG830	13/16	3	0.8125	6 1/8"	10 3/4"	86.90
BG831	53/64	3	0.8281	6 1/8"	10 3/4"	92.50
BG832	27/32	3	0.8438	6 1/8"	10 3/4"	89.90
BG833	55/64	3	0.8594	6 1/8"	10 3/4"	95.90
BG834	7/8	3	0.8750	6 1/8"	10 3/4"	92.50
BG835	57/64	3	0.8906	6 1/8"	10 3/4"	97.90
BG836	29/32	3	0.9063	6 1/8"	10 3/4"	97.90
BG837	59/64	3	0.9219	6 1/8"	10 3/4"	105.00
BG838	15/16	3	0.9375	6 1/8"	10 3/4"	97.50
BG839	61/64	3	0.9531	6 3/8"	11"	109.00
BG840	31/32	3	0.9688	6 3/8"	11"	109.00
BG841	63/64	3	0.9844	6 3/8"	11"	109.00
BG842	1	3	1.0000	6 3/8"	11"	109.00
BG843	1 1/64	3	1.0156	6 1/2"	11 1/8"	125.00
BG844	1 1/32	3	1.0313	6 1/2"	11 1/8"	119.00
BG845	1 3/64	3	1.0469	6 5/8"	11 1/4"	129.00
BG846	1 1/16	3	1.0625	6 5/8"	11 1/4"	125.00
BG847	1 5/64	4	1.0781	6 7/8"	12 1/2"	149.00

Model No.	Fractional Size"	Morse Taper#	Decimal Size" Equiv	L2"	L1"	Price /Each
BG848	13/32	4	1.0938	6 7/8	12 1/2	145.00
BG849	1 7/64	4	1.1094	7 1/8	12 3/4	155.00
BG850	1 1/8	4	1.1250	7 1/8	12 3/4	149.00
BG851	1 9/64	4	1.1406	7 1/4	12 7/8	165.00
BG852	1 5/32	4	1.1563	7 1/4	12 7/8	155.00
BG853	1 11/64	4	1.1719	7 3/8	13	169.00
BG854	1 3/16	4	1.1875	7 3/8	13	165.00
BG855	1 13/64	4	1.2031	7 1/2	13 1/8	179.00
BG856	1 7/32	4	1.2188	7 1/2	13 1/8	175.00
BG857	1 15/64	4	1.2344	7 7/8	13 1/2	195.00
BG858	1 1/4	4	1.2500	7 7/8	13 1/2	185.00
BG859	1 17/64	4	1.2656	8 1/2	14 1/8	225.00
BG860	1 19/32	4	1.2813	8 1/2	14 1/8	225.00
BG861	1 19/64	4	1.2969	8 5/8	14 1/4	239.00
BG862	1 5/16	4	1.3125	8 5/8	14 1/4	225.00
BG863	1 21/64	4	1.3281	8 3/4	14 3/8	249.00
BG864	1 11/32	4	1.3438	8 3/4	14 3/8	239.00
BG865	1 23/64	4	1.3594	8 7/8	14 1/2	255.00
BG866	1 3/8	4	1.3750	8 7/8	14 1/2	245.00
BG867	1 25/64	4	1.3906	9	14 5/8	259.00
BG868	1 13/32	4	1.4063	9	14 5/8	259.00
BG869	1 27/64	4	1.4219	9 1/8	14 1/4	269.00
BG870	1 7/16	4	1.4375	9 1/8	14 1/4	265.00
BG871	1 29/64	4	1.4531	9 1/4	14 7/8	279.00
BG872	1 15/32	4	1.4688	9 1/4	14 7/8	275.00
BG873	1 31/64	4	1.4844	9 3/8	15	285.00
BG874	1 1/2	4	1.5000	9 3/8	15	275.00
BG875	1 33/64	5	1.5156	9 3/8	16 3/8	359.00
BG876	1 17/32	5	1.5313	9 3/8	16 3/8	325.00
BG877	1 35/64	5	1.5469	9 5/8	16 5/8	385.00
BG878	1 9/16	5	1.5625	9 5/8	16 5/8	339.00
BG879	1 19/32	5	1.5938	9 7/8	16 7/8	369.00
BG880	1 5/8	5	1.6250	10	17	379.00
BG881	1 21/32	5	1.6563	10 1/8	17 1/8	395.00
BG882	1 11/16	5	1.6875	10 1/8	17 1/8	405.00
BG883	1 23/32	5	1.7188	10 1/8	17 1/8	425.00
BG884	1 3/4	5	1.7500	10 1/8	17 1/8	435.00
BG885	1 25/32	5	1.7813	10 1/8	17 1/8	455.00
BG886	1 13/16	5	1.8125	10 1/8	17 1/8	465.00
BG887	1 7/8	5	1.8750	10 3/8	17 3/8	469.00
BG888	1 15/16	5	1.9375	10 3/8	17 3/8	509.00
BG889	1 31/32	5	1.9688	10 3/8	17 3/8	519.00
BG890	2	5	2.0000	10 3/8	17 3/8	525.00
BG891	2 1/16	5	2.0625	10 1/4	17 3/8	559.00
BG892	2 1/8	5	2.1250	10 1/4	17 3/8	619.00
BG893	2 3/16	5	2.1875	10 1/4	17 3/8	649.00
BG894	2 1/4	5	2.2500	10 1/4	17 3/8	669.00
BG895	2 5/16	5	2.3125	10 1/4	17 3/8	749.00
BG896	2 3/8	5	2.3750	10 1/4	17 3/8	745.00
BG897	2 7/16	5	2.4375	11 1/4	18 3/4	945.00
BG898	2 1/2	5	2.5000	11 1/4	18 3/4	979.00
BG899	2 9/16	5	2.5625	11 7/8	19 1/2	1065.00
BG900	2 5/8	5	2.6250	11 7/8	19 1/2	1185.00
BG901	2 11/16	5	2.6875	12 3/4	20 3/8	1225.00
BG902	2 3/4	5	2.7500	12 3/4	20 3/8	1259.00
BG903	2 13/16	5	2.8125	13 3/8	21 1/8	1435.00
BG904	2 7/8	5	2.8750	13 3/8	21 1/8	1509.00
BG905	2 15/16	5	2.9375	14	21 3/4	1595.00
BG906	3	5	3.0000	14	21 3/4	1599.00

Note: Metric sizes available

MORSE TAPER REDUCING SLEEVES

Applications:

Used to adapt Morse Taper Shank tools to larger or smaller holders

OIL TOUGHENED

Model No.	Inside Hole	Outside Taper	Price /Each
BH495	0 MTS	1 MTS	29.50
BH496	1 MTS	2 MTS	15.50
BH497	1 MTS	3 MTS	22.50
BH498	1 MTS	4 MTS	29.90
BH499	2 MTS	3 MTS	22.50
BH500	2 MTS	4 MTS	29.90
BH501	3 MTS	4 MTS	29.90
BH503	4 MTS	5 MTS	78.50



CLARKSON OSBORN

HARDENED & GROUND*

Model No.	Outside Taper	Inside Hole	Price /Each
BH504	1 MTS	2 MTS	31.90
BH505	1 MTS	3 MTS	43.90
BH506	2 MTS	3 MTS	43.90
BH507	3 MTS	4 MTS	78.90
BH508	4 MTS	5 MTS	109.00

*Internally & externally

MTS = Morse Taper Shank



JOBBER LENGTH" HIGH SPEED STEEL SETS



WJ188

BLACK & GOLD MULTI APPLICATION

- Industrial duty
- Right hand 135° split point eliminates walking
- General purpose used on steels, cast iron and most non-ferrous metals
- Machine and portable drilling applications
- Two-tone black oxide and bronze finish provides ideal chip flow and resistance to abrasion
- Steel case

FRACTIONAL SETS

Model No.	Description	Size*	Price/Each
QR040	13-piece set	1/16 to 1/4 by 64ths	39.50
BG060	15-piece set	1/16 to 1/2 by 32nds	115.00
BG063	21-piece set	1/16 to 3/8 by 64ths	105.00
WJ188	29-piece set	1/16 to 1/2 by 64ths	199.00

METRIC SETS

Model No.	Description	Size mm	Price/Each
BG057	11-piece set	1.5 to 6.5 by 0.5	50.90
BG061	19-piece set	1.0 to 10.0 by 0.5	99.50
BG064	25-piece set	1.0 to 13.0 by 0.5	145.00
BG058	50-piece set	1.0 to 5.9 by 0.1	92.90
BG059	41-piece set	6.0 to 10.0 by 0.1	249.00

WIRE GAUGE & LETTER SETS

Model No.	Description	Sizes	Price/Each
BG066	60-piece set	#1 to #60	165.00
BG062	20-piece set	#61 to #80	73.50
BG065	26-piece set	Letter A to Z	225.00

CLARKSON OSBORN



QF420

HYPER

- Maintenance duty
- Right hand, 118° point
- General purpose used on steels, cast iron and most non-ferrous metals
- Machine and portable drilling applications
- Black oxide finish
- Steel case

FRACTIONAL SETS

Model No.	Description	Size*	Price/Each
BM889	13-piece set	1/16 to 1/4 by 64ths	29.50
BM890	15-piece set	1/16 to 1/2 by 32nds	62.90
BM891	21-piece set	1/16 to 3/8 by 64ths	52.50
QF420	29-piece set	1/16 to 1/2 by 64ths	92.50

WIRE GAUGE & LETTER SETS

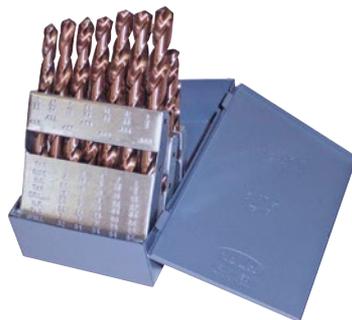
Model No.	Description	Sizes	Price/Each
BM897	60-piece set	#1 to #60	90.50
BM892	26-piece set	Letter A to Z	129.00

JOBBER LENGTH" – COBALT

- M42 cobalt provides wear and heat resistance
- Straight shank, 2 flute design
- Right hand cutting direction
- 135° split point, self-centring eliminates walking
- Bright finish

Applications

For general purpose drilling to heavy-duty operations in high tensile strength steel and alloys, stainless steels and other ferrous metals



CLARKSON OSBORN

FRACTIONAL SETS

Model No.	Description	Sizes	Price/Each
BG067	15-piece set	1/16" to 1/2" by 32nds	195.00
BG069	21-piece set	1/16" to 3/8" by 64ths	185.00
BG071	29-piece set	1/16" to 1/2" by 64ths	375.00

METRIC SETS

Model No.	Description	Sizes	Price/Each
BG068	19-piece set	1.0 mm to 10.0 mm by 0.5 mm	255.00
BG070	25-piece set	1.0 mm to 13.0 mm by 0.5 mm	559.00

DRILL DOCTOR®

Designed for durability and flexibility required to sharpen the largest range and most popular sizes of dull or broken bits—including split points and masonry bits.

- Sharpens 118° to 135° drill point angles
- For all standard twist drills
- Sharpens high speed steel, cobalt, TiN-coated and carbide tipped masonry drills
- Includes diamond sharpening wheel and moulded plastic case
- 110 V power supply



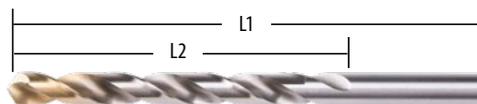
DAREX

Model No.	Description	Price/Each
TZ961	Sharpens 3/32" to 1/2"	211.00

JOBBER DRILLS 118°

A012 SERIES

- Low thrust design with self centering split point makes for easier penetration
- TiN coated tip increases surface hardness and improves tool life
- Material: High Speed Steel
- Point Angle: 118°
- Manufacturing Standards: ANSI
- Finish: TiN Tip and Bright Body
- Cutting Direction: Right Hand



A012 SERIES - FRACTIONAL SIZE

Model No.	Fractional Size"	Decimal Size"	L2"	L1"	Price /Each
TC0714*	1/64	0.0156	3/16	3/4	3.26
TC0726*	1/32	0.0313	1/2	1-3/8	2.27
TC0739*	3/64	0.0469	3/4	1-3/4	2.27
TC0743*	1/16	0.0625	7/8	1-7/8	1.97
TC0749*	5/64	0.0781	1	2	1.97
TC0756	3/32	0.0938	1-1/4	2-1/4	2.09
TC0763	7/64	0.1094	1-1/2	2-5/8	2.22
TC0769	1/8	0.125	1-5/8	2-3/4	2.22
TC0773	9/64	0.1406	1-3/4	2-7/8	2.44
TC0779	5/32	0.1563	2	3-1/8	2.47
TC0785	11/64	0.1719	2-1/8	3-1/4	2.59
TC0791	3/16	0.1875	2-5/16	3-1/2	2.96
TC0798	13/64	0.2031	2-7/16	3-5/8	3.31
TC0803	7/32	0.2188	2-1/2	3-3/4	3.66
TC0807	15/64	0.2344	2-5/8	3-7/8	3.96
TC0811	1/4	0.25	2-3/4	4	4.22
TC0815	17/64	0.2656	2-7/8	4-1/8	5.06
TC0820	9/32	0.2813	2-15/16	4-1/4	5.28
TC0823	19/64	0.2968	3-1/16	4-3/8	6.08
TC0825	5/16	0.3125	3-3/16	4-1/2	6.75
TC0828	21/64	0.3281	3-5/16	4-5/8	7.45
TC0831	11/32	0.3437	3-7/16	4-3/4	8.30
TC0834	23/64	0.3594	3-1/2	4-7/8	9.38

*No split point or TiN tip

A012 SERIES - WIRE GAUGE SIZE

Model No.	Wire Gauge Size	Decimal Size"	L2"	L1"	Price /Each
TC0712*	80	0.0135	1/8	3/4	4.19
TC0713*	79	0.0145	1/8	3/4	4.19
TC0715*	78	0.016	3/16	7/8	4.19
TC0716*	77	0.018	3/16	7/8	3.02
TC0717*	76	0.02	3/16	7/8	3.02
TC0718*	75	0.021	1/4	1	3.02
TC0719*	74	0.0225	1/4	1	3.02
TC0720*	73	0.024	5/16	1-1/8	3.02
TC0721*	72	0.025	5/16	1-1/8	3.02
TC0722*	71	0.026	3/8	1-1/4	3.02
TC0723*	70	0.028	3/8	1-1/4	2.54
TC0724*	69	0.0292	1/2	1-3/8	2.54
TC0725*	68	0.031	1/2	1-3/8	2.30
TC0727*	67	0.032	1/2	1-3/8	2.30
TC0728*	66	0.033	1/2	1-3/8	2.30
TC0729*	65	0.035	5/8	1-1/2	2.30
TC0730*	64	0.036	5/8	1-1/2	2.30
TC0731*	63	0.037	5/8	1-1/2	2.30
TC0732*	62	0.038	5/8	1-1/2	2.30
TC0733*	61	0.039	11/16	1-5/8	2.30
TC0734*	60	0.04	11/16	1-5/8	2.27
TC0735*	59	0.041	11/16	1-5/8	2.27
TC0736*	58	0.042	11/16	1-5/8	2.27
TC0737*	57	0.043	3/4	1-3/4	2.27
TC0738*	56	0.0465	3/4	1-3/4	2.27
TC0740*	55	0.052	7/8	1-7/8	2.27
TC0741*	54	0.055	7/8	1-7/8	2.27
TC0742*	53	0.0595	7/8	1-7/8	2.27
TC0744*	52	0.0635	7/8	1-7/8	2.05
TC0745*	51	0.0669	1	2	2.05
TC0746*	50	0.07	1	2	2.05
TC0747*	49	0.073	1	2	2.05
TC0748*	48	0.076	1	2	2.05
TC0750*	47	0.0785	1	2	2.05
TC0751	46	0.081	1-1/8	2-1/8	2.09
TC0752	45	0.082	1-1/8	2-1/8	2.09
TC0753	44	0.086	1-1/8	2-1/8	2.09
TC0754	43	0.089	1-1/4	2-1/4	2.09
TC0755	42	0.0935	1-1/4	2-1/4	2.09
TC0757	41	0.096	1-3/8	2-3/8	2.09

*No split point or TiN tip

Model No.	Fractional Size"	Decimal Size"	L2"	L1"	Price /Each
TC0836	3/8	0.375	3-5/8	5	9.65
TC0839	25/64	0.3906	3-3/4	5-1/8	11.00
TC0842	13/32	0.4063	3-7/8	5-1/4	11.30
TC0844	27/64	0.4219	3-15/16	5-3/8	12.50
TC0845	7/16	0.4375	4-1/16	5-1/2	13.00
TC0846	29/64	0.4531	4-3/16	5-5/8	14.50
TC0847	15/32	0.4687	4-5/16	5-3/4	15.50
TC0848	31/64	0.4844	4-3/8	5-7/8	16.20
TC0849	1/2	0.5	4-1/2	6	16.50
TC0850	33/64	0.5156	4-13/16	6-5/8	30.30
TC0851	17/32	0.5313	4-13/16	6-5/8	31.90
TC0852	35/64	0.5469	4-13/16	6-5/8	34.50
TC0853	9/16	0.5625	4-13/16	6-5/8	36.10
TC0854	37/64	0.5781	4-13/16	6-5/8	36.40
TC0855	19/32	0.5937	5-3/16	7-1/8	37.10
TC0856	39/64	0.6094	5-3/16	7-1/8	40.60
TC0857	5/8	0.625	5-3/16	7-1/8	39.80
TC0858	21/32	0.6563	5-3/16	7-1/8	42.20
TC0859	11/16	0.6875	5-5/8	7-5/8	48.20
TC0860	45/64	0.7031	5-5/8	7-5/8	68.40
TC0861	23/32	0.7188	5-5/8	7-5/8	72.50
TC0862	47/64	0.7344	6	8	77.10
TC0863	3/4	0.75	6	8	81.80

DRILL BITS

JOBBER DRILLS (CONT'D)

A012 SERIES - LETTER SIZE

Model No.	Letter Size	Decimal Size"	L2"	L1"	Price /Each
TC0806	A	0.234	2-5/8	3-7/8	4.94
TC0808	B	0.238	2-3/4	4	4.94
TC0809	C	0.242	2-3/4	4	4.94
TC0810	D	0.246	2-3/4	4	4.94
TC0812	E	0.25	2-3/4	4	4.22
TC0813	F	0.257	2-7/8	4-1/8	5.29
TC0814	G	0.261	2-7/8	4-1/8	5.93
TC0816	H	0.266	2-7/8	4-1/8	5.93
TC0817	I	0.272	2-7/8	4-1/8	5.93
TC0818	J	0.277	2-7/8	4-1/8	6.35
TC0819	K	0.281	2-15/16	4-1/4	6.98
TC0821	L	0.29	2-15/16	4-1/4	6.98
TC0822	M	0.295	3-1/16	4-3/8	7.43

JOBBER DRILLS 118°

- Material: High Speed Steel
- Point Angle: 118°
- Manufacturing Standards: ANSI
- Cutting Direction: Right Hand

R10 SERIES - FRACTIONAL SIZE

- Steam oxide finish reduces wear and chip welding in harder ferrous materials for increased wear resistance and lubricity

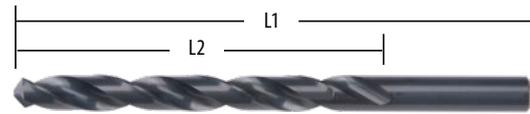
Model No.	Fractional Size"	Decimal Size"	L2"	L1"	Price /Each
TDB875	1/64	0.0156	3/16	3/4	2.59
TDB876	1/32	0.0313	1/2	1-3/8	1.59
TDB877	3/64	0.0469	3/4	1-3/4	1.59
TDB878	1/16	0.0625	7/8	1-7/8	1.45
TDB879	5/64	0.0781	1	2	1.47
TC0869	3/32	0.0938	1-1/4	2-1/4	1.47
TDB881	7/64	0.1094	1-1/2	2-5/8	1.54
TDB882	1/8	0.125	1-5/8	2-3/4	1.50
TDB883	9/64	0.1406	1-3/4	2-7/8	1.67
TDB884	5/32	0.1563	2	3-1/8	1.69
TDB885	11/64	0.1719	2-1/8	3-1/4	1.84
TDB886	3/16	0.1875	2-5/16	3-1/2	2.04
MLN282	13/64	0.2031	2-7/16	3-5/8	2.25
TDB888	7/32	0.2188	2-1/2	3-3/4	2.52
TDB889	15/64	0.2344	2-5/8	3-7/8	2.72
TDB890	1/4	0.25	2-3/4	4	2.84
TDB891	17/64	0.2656	2-7/8	4-1/8	3.47
TDB892	9/32	0.2813	2-15/16	4-1/4	3.57
TDB893	19/64	0.2969	3-1/16	4-3/8	4.14
TDB894	5/16	0.3125	3-3/16	4-1/2	4.58
TDB895	21/64	0.3281	3-5/16	4-5/8	5.08
TDB896	11/32	0.3437	3-7/16	4-3/4	5.68

R10P SERIES - FRACTIONAL SIZE

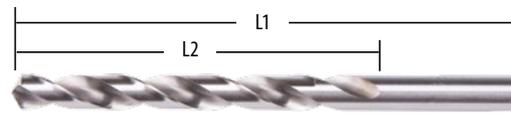
- Bright finish improves chip flow in soft or non-ferrous materials

Model No.	Fractional Size"	Decimal Size"	L2"	L1"	Price /Each
TC0908	1/64	0.0156	3/16	3/4	3.62
TC0909	1/32	0.0313	1/2	1-3/8	2.20
TC0910	3/64	0.0469	3/4	1-3/4	2.20
TC0911	1/16	0.0625	7/8	1-7/8	2.04
TC0912	5/64	0.0781	1	2	2.05
TC0913	3/32	0.0938	1-1/4	2-1/4	2.05
TC0914	7/64	0.1094	1-1/2	2-5/8	2.15
TC0915	1/8	0.125	1-5/8	2-3/4	2.09
TC0916	9/64	0.1406	1-3/4	2-7/8	2.32
TC0917	5/32	0.1563	2	3-1/8	2.37
TC0918	11/64	0.1719	2-1/8	3-1/4	2.57
TC0919	3/16	0.1875	2-5/16	3-1/2	2.86
TC0920	13/64	0.2031	2-7/16	3-5/8	3.16
TC0921	7/32	0.2188	2-1/2	3-3/4	3.52
TC0922	15/64	0.2344	2-5/8	3-7/8	3.81
TC0923	1/4	0.25	2-3/4	4	3.97
TC0924	17/64	0.2656	2-7/8	4-1/8	4.84
TC0925	9/32	0.2813	2-15/16	4-1/4	5.01
TC0926	19/64	0.2969	3-1/16	4-3/8	5.81
TC0927	5/16	0.3125	3-3/16	4-1/2	6.40
TC0928	21/64	0.3281	3-5/16	4-5/8	7.10
TC0929	11/32	0.3437	3-7/16	4-3/4	7.95

Model No.	Letter Size	Decimal Size"	L2"	L1"	Price /Each
TC0824	N	0.302	3-1/16	4-3/8	7.55
TC0826	O	0.316	3-3/16	4-1/2	7.55
TC0827	P	0.323	3-5/16	4-5/8	8.48
TC0829	Q	0.332	3-7/16	4-3/4	8.48
TC0830	R	0.339	3-7/16	4-3/4	9.07
TC0832	S	0.348	3-1/2	4-7/8	9.62
TC0833	T	0.358	3-1/2	4-7/8	11.00
TC0835	U	0.368	3-5/8	5	11.00
TC0837	V	0.377	3-5/8	5	11.30
TC0838	W	0.386	3-3/4	5-1/8	11.60
TC0840	X	0.397	3-3/4	5-1/8	14.10
TC0841	Y	0.404	3-7/8	5-1/4	16.00
TC0843	Z	0.413	3-7/8	5-1/4	16.90



Model No.	Fractional Size"	Decimal Size"	L1"	L2"	Price /Each
TDB897	23/64	0.3594	3-1/2	4-7/8	6.40
TDB898	3/8	0.375	3-5/8	5	6.45
TDB899	25/64	0.3906	3-3/4	5-1/8	7.48
TDB900	13/32	0.4063	3-7/8	5-1/4	7.65
TDB901	27/64	0.4219	3-15/16	5-3/8	8.53
TDB902	7/16	0.4375	4-1/16	5-1/2	8.85
TDB903	29/64	0.4531	4-3/16	5-5/8	9.87
TDB904	15/32	0.4687	4-5/16	5-3/4	10.50
TDB905	31/64	0.4844	4-3/8	5-7/8	11.00
UU377	1/2	0.5	4-1/2	6	11.00
TDB907	33/64	0.5156	4-13/16	6-5/8	20.00
TDB908	17/32	0.5313	4-13/16	6-5/8	20.60
TDB909	35/64	0.5469	4-13/16	6-5/8	22.70
TDB910	9/16	0.5625	4-13/16	6-5/8	23.40
TC0900	37/64	0.5781	4-13/16	6-5/8	24.50
TDB912	19/32	0.5937	5-3/16	7-1/8	24.50
TDB913	39/64	0.6094	5-3/16	7-1/8	26.30
TDB914	5/8	0.625	5-3/16	7-1/8	25.80
TDB915	41/64	0.6406	5-3/16	7-1/8	29.10
TDB916	21/32	0.6563	5-3/16	7-1/8	30.40
TDB917	43/64	0.6719	5-5/8	7-5/8	32.90
TC0907	11/16	0.6875	5-5/8	7-5/8	32.90



Model No.	Fractional Size"	Decimal Size"	L2"	L1"	Price /Each
TC0930	23/64	0.3594	3-1/2	4-7/8	8.95
TC0931	3/8	0.375	3-5/8	5	9.03
TC0932	25/64	0.3906	3-3/4	5-1/8	10.50
TC0933	13/32	0.4063	3-7/8	5-1/4	10.70
TC0934	27/64	0.4219	3-15/16	5-3/8	12.00
TC0935	7/16	0.4375	4-1/16	5-1/2	12.40
TC0936	29/64	0.4531	4-3/16	5-5/8	13.80
TC0937	15/32	0.4687	4-5/16	5-3/4	14.80
TC0938	31/64	0.4844	4-3/8	5-7/8	15.40
TC0939	1/2	0.5	4-1/2	6	15.40
TC0940	33/64	0.5156	4-13/16	6-5/8	28.00
TC0941	17/32	0.5313	4-13/16	6-5/8	28.90
TC0942	35/64	0.5469	4-13/16	6-5/8	31.80
TC0943	9/16	0.5625	4-13/16	6-5/8	32.70
TC0944	37/64	0.5781	4-13/16	6-5/8	33.40
TC0945	19/32	0.5937	5-3/16	7-1/8	34.30
TC0946	39/64	0.6094	5-3/16	7-1/8	36.80
TC0947	5/8	0.625	5-3/16	7-1/8	36.10
TC0948	41/64	0.6406	5-3/16	7-1/8	40.70
TC0949	21/32	0.6563	5-3/16	7-1/8	42.60
TC0950	43/64	0.6719	5-5/8	7-5/8	46.00
TC0951	11/16	0.6875	5-5/8	7-5/8	46.00

JOBBER DRILLS 118° (CONT.)

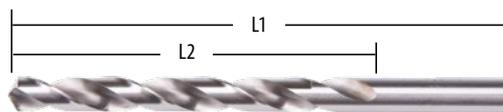
R18 SERIES - WIRE GAUGE SIZE

- Steam oxide finish reduces wear and chip welding in harder ferrous materials for increased wear resistance and lubricity

Model No.	Wire Gauge Size	Decimal Size"	L2"	L1"	Price /Each
TDD155	80	0.0135	1/8	3/4	2.62
TDD154	79	0.0145	1/8	3/4	2.62
TDD153	78	0.016	3/16	7/8	2.17
TDD152	77	0.018	3/16	7/8	2.17
TDD151	76	0.02	3/16	7/8	2.17
TDD150	75	0.021	1/4	1	2.17
TDD149	74	0.0225	1/4	1	2.17
TDD148	73	0.024	5/16	1-1/8	2.17
TDD147	72	0.025	5/16	1-1/8	2.17
TCP013	71	0.026	3/8	1-1/4	2.17
TDD145	70	0.028	3/8	1-1/4	1.75
TDD144	69	0.0292	1/2	1-3/8	1.75
TDD143	68	0.031	1/2	1-3/8	1.60
TDD142	67	0.032	1/2	1-3/8	1.60
TDD141	66	0.033	1/2	1-3/8	1.60
TDD140	65	0.035	5/8	1-1/2	1.60
TCP020	64	0.036	5/8	1-1/2	1.60
TDD138	63	0.037	5/8	1-1/2	1.60
TDD137	62	0.038	5/8	1-1/2	1.60
TDD136	61	0.039	11/16	1-5/8	1.60
TDD135	60	0.04	11/16	1-5/8	1.55
TDD134	59	0.041	11/16	1-5/8	1.55
TDD133	58	0.042	11/16	1-5/8	1.55
TDD132	57	0.043	3/4	1-3/4	1.55
TDD131	56	0.0465	3/4	1-3/4	1.55
TDD130	55	0.052	7/8	1-7/8	1.55
TDD129	54	0.055	7/8	1-7/8	1.55
TDD128	53	0.0595	7/8	1-7/8	1.55
TDD127	52	0.0635	7/8	1-7/8	1.47
TDD126	51	0.067	1	2	1.47
TDD125	50	0.07	1	2	1.47
TDD124	49	0.073	1	2	1.47
TDD123	48	0.076	1	2	1.47
TDD122	47	0.0785	1	2	1.47
TDD121	46	0.081	1-1/8	2-1/8	1.47
TDD120	45	0.082	1-1/8	2-1/8	1.47
TDD119	44	0.086	1-1/8	2-1/8	1.47
TDD118	43	0.089	1-1/4	2-1/4	1.47
TDD117	42	0.0935	1-1/4	2-1/4	1.47
TDD116	41	0.096	1-3/8	2-3/8	1.45



Model No.	Wire Gauge Size	Decimal Size"	L2"	L1"	Price /Each
TDD115	40	0.098	1-3/8	2-3/8	1.45
TDD114	39	0.0995	1-3/8	2-3/8	1.47
TDD113	38	0.1015	1-7/16	2-1/2	1.47
TDD112	37	0.104	1-7/16	2-1/2	1.47
TDD111	36	0.1065	1-7/16	2-1/2	1.45
TDD110	35	0.11	1-1/2	2-5/8	1.47
TDD109	34	0.111	1-1/2	2-5/8	1.47
TDD108	33	0.113	1-1/2	2-5/8	1.47
TDD107	32	0.116	1-5/8	2-3/4	1.47
TDD106	31	0.12	1-5/8	2-3/4	1.47
TDD105	30	0.1285	1-5/8	2-3/4	1.49
TDD104	29	0.136	1-3/4	2-7/8	1.49
TO075	28	0.1405	1-3/4	2-7/8	1.50
TDD102	27	0.144	1-7/8	3	1.62
TDD101	26	0.147	1-7/8	3	1.64
TDD100	25	0.1495	1-7/8	3	1.62
TDD099	24	0.152	2	3-1/8	1.70
TDD098	23	0.154	2	3-1/8	1.70
TDD097	22	0.157	2	3-1/8	1.70
TDD096	21	0.159	2-1/8	3-1/4	1.69
TDD095	20	0.161	2-1/8	3-1/4	1.84
TDD094	19	0.166	2-1/8	3-1/4	1.84
TDD093	18	0.1695	2-1/8	3-1/4	1.85
TDD092	17	0.173	2-3/16	3-3/8	2.22
TDD091	16	0.177	2-3/16	3-3/8	2.22
TDD090	15	0.18	2-3/16	3-3/8	2.22
TDD089	14	0.182	2-3/16	3-3/8	2.22
TDD088	13	0.185	2-5/16	3-1/2	2.22
TDD087	12	0.189	2-5/16	3-1/2	2.29
TDD086	11	0.191	2-5/16	3-1/2	2.25
TDD085	10	0.1935	2-7/16	3-5/8	2.44
TDD084	9	0.196	2-7/16	3-5/8	2.45
TDD083	8	0.199	2-7/16	3-5/8	2.45
TDD082	7	0.201	2-7/16	3-5/8	2.40
TDD081	6	0.204	2-1/2	3-3/4	2.79
TDD080	5	0.2055	2-1/2	3-3/4	2.79
TDD079	4	0.209	2-1/2	3-3/4	2.79
TDD078	3	0.213	2-1/2	3-3/4	2.76
TDD077	2	0.221	2-5/8	3-7/8	3.06
TDD076	1	0.228	2-5/8	3-7/8	3.04



R18P SERIES - WIRE GAUGE SIZE

- Bright finish improves chip flow in soft or non-ferrous materials

Model No.	Wire Gauge Size	Decimal Size"	L2"	L1"	Price /Each
TCP084	97	0.0059	1/16	3/4	19.00
TCP085	96	0.0063	1/16	3/4	19.00
TCP086	95	0.0067	1/16	3/4	17.20
TCP087	94	0.0071	1/16	3/4	17.20
TCP088	93	0.0075	1/16	3/4	12.00
TCP089	92	0.0079	1/16	3/4	12.00
TCP090	91	0.0083	5/64	3/4	12.00
TCP091	90	0.0087	5/64	3/4	12.00
TCP092	89	0.0091	5/64	3/4	12.00
TCP093	88	0.0095	5/64	3/4	12.00
TCP094	87	0.01	5/64	3/4	9.47
TCP095	86	0.0105	3/32	3/4	9.47
TCP096	85	0.011	3/32	3/4	8.53
TCP097	84	0.0115	3/32	3/4	8.53
TCP098	83	0.012	3/32	3/4	8.53
TCP099	82	0.0125	3/32	3/4	7.43
TCP100	81	0.013	3/32	3/4	7.43
TCP101	80	0.0135	1/8	3/4	3.67
TCP102	79	0.0145	1/8	3/4	3.67
TCP103	78	0.016	3/16	7/8	3.04
TCP104	77	0.018	3/16	7/8	3.04
TCP105	76	0.02	3/16	7/8	3.04
TCP106	75	0.021	1/4	1	3.04
TCP107	74	0.0225	1/4	1	3.04
TCP108	73	0.024	5/16	1-1/8	3.04
TCP109	72	0.025	5/16	1-1/8	3.04
TCP110	71	0.026	3/8	1-1/4	3.04
TCP111	70	0.028	3/8	1-1/4	2.45

Model No.	Wire Gauge Size	Decimal Size"	L2"	L1"	Price /Each
TCP112	69	0.0292	1/2	1-3/8	2.45
TCP113	68	0.031	1/2	1-3/8	2.24
TCP114	67	0.032	1/2	1-3/8	2.24
TCP115	66	0.033	1/2	1-3/8	2.24
TCP116	65	0.035	5/8	1-1/2	2.24
TCP117	64	0.036	5/8	1-1/2	2.24
TCP118	63	0.037	5/8	1-1/2	2.24
TCP119	62	0.038	5/8	1-1/2	2.24
TCP120	61	0.039	11/16	1-5/8	2.24
TCP121	60	0.04	11/16	1-5/8	2.10
TCP122	59	0.041	11/16	1-5/8	2.10
TCP123	58	0.042	11/16	1-5/8	2.10
TCP124	57	0.043	3/4	1-3/4	2.05
TCP125	56	0.0465	3/4	1-3/4	2.05
TCP126	55	0.052	7/8	1-7/8	2.05
TCP127	54	0.055	7/8	1-7/8	2.05
TCP128	53	0.0595	7/8	1-7/8	2.05
TCP129	52	0.0635	7/8	1-7/8	2.05
TCP130	51	0.067	1	2	2.05
TCP131	50	0.07	1	2	2.05
TCP132	49	0.073	1	2	2.05
TCP133	48	0.076	1	2	2.05
TCP134	47	0.0785	1	2	2.05
TCP135	46	0.081	1-1/8	2-1/8	2.05
TCP136	45	0.082	1-1/8	2-1/8	2.05
TCP137	44	0.086	1-1/8	2-1/8	2.04
TCP138	43	0.089	1-1/4	2-1/4	2.04
TCP139	42	0.0935	1-1/4	2-1/4	2.05

DRILL BITS



R18P SERIES - WIRE GAUGE SIZE (CONT.)

Model No.	Wire Gauge Size	Decimal Size"	L2"	L1"	Price /Each
TCP140	41	0.096	1-3/8	2-3/8	2.05
TCP141	40	0.098	1-3/8	2-3/8	2.04
TCP142	39	0.0995	1-3/8	2-3/8	2.05
TCP143	38	0.1015	1-7/16	2-1/2	2.05
TCP144	37	0.104	1-7/16	2-1/2	2.05
TCP145	36	0.1065	1-7/16	2-1/2	2.04
TCP146	35	0.11	1-1/2	2-5/8	2.05
TCP147	34	0.111	1-1/2	2-5/8	2.05
TCP148	33	0.113	1-1/2	2-5/8	2.05
TCP149	32	0.116	1-5/8	2-3/4	2.05
TCP150	31	0.12	1-5/8	2-3/4	2.05
TCP151	30	0.1285	1-5/8	2-3/4	2.07
TCP152	29	0.136	1-3/4	2-7/8	2.07
TCP153	28	0.1405	1-3/4	2-7/8	2.10
TCP154	27	0.144	1-7/8	3	2.27
TCP155	26	0.147	1-7/8	3	2.29
TCP156	25	0.1495	1-7/8	3	2.27
TCP157	24	0.152	2	3-1/8	2.39
TCP158	23	0.154	2	3-1/8	2.39
TCP159	22	0.157	2	3-1/8	2.39
TCP160	21	0.159	2-1/8	3-1/4	2.37

R15 SERIES - LETTER SIZE

- Steam oxide finish reduces wear and chip welding in harder ferrous materials for increased wear resistance and lubricity

Model No.	Letter Size	Decimal Size"	L2"	L1"	Price /Each
TC0952	A	0.234	2-5/8	3-7/8	3.44
TC0953	B	0.2374	2-3/4	4	3.44
TC0954	C	0.2421	2-3/4	4	3.44
TC0955	D	0.2461	2-3/4	4	3.44
TC0956	E	0.25	2-3/4	4	3.21
TC0957	F	0.2571	2-7/8	4-1/8	3.69
TC0958	G	0.261	2-7/8	4-1/8	4.14
TC0959	H	0.2661	2-7/8	4-1/8	4.14
TC0960	I	0.272	2-7/8	4-1/8	4.14
TC0961	J	0.2772	2-7/8	4-1/8	4.43
TC0962	K	0.2811	2-15/16	4-1/4	4.89
TC0963	L	0.2902	2-15/16	4-1/4	4.89
TC0964	M	0.2949	3-1/16	4-3/8	5.16
TC0965	N	0.302	3-1/16	4-3/8	5.16
TC0966	O	0.3161	3-3/16	4-1/2	5.23
TC0967	P	0.3228	3-5/16	4-5/8	5.93
TC0968	Q	0.3319	3-7/16	4-3/4	5.93
TC0969	R	0.339	3-7/16	4-3/4	6.31
TC0970	S	0.348	3-1/2	4-7/8	6.70
TC0971	T	0.358	3-1/2	4-7/8	7.61
TC0972	U	0.368	3-5/8	5	7.61
TC0973	V	0.3772	3-5/8	5	7.83
TC0974	W	0.3858	3-3/4	5-1/8	8.10
TC0975	X	0.3969	3-3/4	5-1/8	9.79
TC0976	Y	0.4039	3-7/8	5-1/4	11.00
TC0977	Z	0.413	3-7/8	5-1/4	11.70

JOBBER DRILLS 135°

- Low thrust design and self-centering split point makes for easier penetration
- Unique surface treatment for improved wear resistance in hard ferrous alloys
- Material: High Speed Steel • Point Angle: 135°
- Manufacturing Standards: ANSI
- Finish: Purple and Bronze • Cutting Direction: Right Hand

HX10 SERIES - FRACTIONAL SIZE

Model No.	Fractional Size"	Decimal Size"	L2"	L1"	Price /Each
TDE104	1/16	0.0625	7/8	1-7/8	2.14
TDE105	5/64	0.0781	1	2	2.14
TDE106	3/32	0.0938	1-1/4	2-1/4	2.14
TDE107	7/64	0.1094	1-1/2	2-5/8	2.25
TDE108	1/8	0.125	1-5/8	2-3/4	2.25
TDE109	9/64	0.1406	1-3/4	2-7/8	2.45
TDE110	5/32	0.1563	2	3-1/8	2.49
TDE111	11/64	0.1719	2-1/8	3.25	2.72
TDE112	3/16	0.1875	2-5/16	3-1/2	3.04
TDE113	13/64	0.2031	2-7/16	3-5/8	3.32
TDE114	7/32	0.2188	2-1/2	3-3/4	3.69
TDE115	15/64	0.2344	2-5/8	3-7/8	3.99
TDE116	1/4	0.25	2-3/4	4	4.24
TDE117	17/64	0.2656	2-7/8	4-1/8	5.11
TDE118	9/32	0.2813	2-15/16	4-1/4	5.26

Model No.	Wire Gauge Size	Decimal Size"	L2"	L1"	Price /Each
TCP161	20	0.161	2-1/8	3-1/4	2.57
TCP162	19	0.166	2-1/8	3-1/4	2.57
TCP163	18	0.1695	2-1/8	3-1/4	2.59
TCP164	17	0.173	2-3/16	3-3/8	3.11
TCP165	16	0.177	2-3/16	3-3/8	3.11
TCP166	15	0.18	2-3/16	3-3/8	3.11
TCP167	14	0.182	2-3/16	3-3/8	3.11
TCP168	13	0.185	2-5/16	3-1/2	3.11
TCP169	12	0.189	2-5/16	3-1/2	3.19
TCP170	11	0.191	2-5/16	3-1/2	3.16
TCP171	10	0.1935	2-7/16	3-5/8	3.39
TCP172	9	0.196	2-7/16	3-5/8	3.44
TCP173	8	0.199	2-7/16	3-5/8	3.44
TCP174	7	0.201	2-7/16	3-5/8	3.37
TCP175	6	0.204	2-1/2	3-3/4	3.89
TCP176	5	0.2055	2-1/2	3-3/4	3.89
TCP177	4	0.209	2-1/2	3-3/4	3.89
TCP178	3	0.213	2-1/2	3-3/4	3.86
TCP179	2	0.221	2-5/8	3-7/8	4.27
TCP180	1	0.228	2-5/8	3-7/8	4.24

R15P SERIES - LETTER SIZE

- Bright finish improves chip flow in soft or non-ferrous materials

Model No.	Letter Size	Decimal Size"	L2"	L1"	Price /Each
TC0978	A	0.234	2-5/8	3-7/8	4.83
TC0979	B	0.2374	2-3/4	4	4.83
TC0980	C	0.2421	2-3/4	4	4.83
TC0981	D	0.2461	2-3/4	4	4.83
TC0982	E	0.25	2-3/4	4	4.51
TC0983	F	0.2571	2-7/8	4-1/8	5.16
TC0984	G	0.261	2-7/8	4-1/8	5.79
TC0985	H	0.2661	2-7/8	4-1/8	5.79
TC0986	I	0.272	2-7/8	4-1/8	5.79
TC0987	J	0.2772	2-7/8	4-1/8	6.20
TC0988	K	0.2811	2-15/16	4-1/4	6.85
TC0989	L	0.2902	2-15/16	4-1/4	6.85
TC0990	M	0.2949	3-1/16	4-3/8	7.21
TC0991	N	0.302	3-1/16	4-3/8	7.21
TC0992	O	0.3161	3-3/16	4-1/2	7.31
TC0993	P	0.3228	3-5/16	4-5/8	8.30
TC0994	Q	0.3319	3-7/16	4-3/4	8.30
TC0995	R	0.339	3-7/16	4-3/4	8.83
TC0996	S	0.348	3-1/2	4-7/8	9.38
TC0997	T	0.358	3-1/2	4-7/8	10.70
TC0998	U	0.368	3-5/8	5	10.70
TC0999	V	0.3772	3-5/8	5	11.00
TC0000	W	0.3858	3-3/4	5-1/8	11.30
TC0001	X	0.3969	3-3/4	5-1/8	13.70
TC0002	Y	0.4039	3-7/8	5-1/4	15.40
TC0003	Z	0.413	3-7/8	5-1/4	16.40



JOBBER DRILLS 135° (CONT.)

HX18 SERIES - WIRE GAUGE SIZE

Model No.	Wire Gauge Size	Decimal Size"	L2"	L1"	Price /Each
TCP237	52	0.0635	7/8	1-7/8	2.15
TCP238	51	0.067	1	2	2.15
TCP239	50	0.07	1	2	2.15
TCP240	49	0.073	1	2	2.15
TCP241	48	0.076	1	2	2.15
TCP242	47	0.0785	1	2	2.15
TCP243	46	0.081	1-1/8	2-1/8	2.15
TCP244	45	0.082	1-1/8	2-1/8	2.15
TCP245	44	0.086	1-1/8	2-1/8	2.14
TCP246	43	0.089	1-1/4	2-1/4	2.14
TCP247	42	0.0935	1-1/4	2-1/4	2.15
TCP248	41	0.096	1-3/8	2-3/8	2.14
TCP249	40	0.098	1-3/8	2-3/8	2.15
TCP250	39	0.0995	1-3/8	2-3/8	2.15
TCP251	38	0.1015	1-7/16	2-1/2	2.15
TCP252	37	0.104	1-7/16	2-1/2	2.15
TCP253	36	0.1065	1-7/16	2-1/2	2.14
TCP254	35	0.11	1-1/2	2-5/8	2.15
TCP255	34	0.111	1-1/2	2-5/8	2.15
TCP256	33	0.113	1-1/2	2-5/8	2.15
TCP257	32	0.116	1-5/8	2-3/4	2.15
TCP258	31	0.12	1-5/8	2-3/4	2.15
TCP259	30	0.1285	1-5/8	2-3/4	2.19
TCP260	29	0.136	1-3/4	2-7/8	2.19
TCP261	28	0.1405	1-3/4	2-7/8	2.20
TCP262	27	0.144	1-7/8	3	2.37

HX15 SERIES - LETTER SIZE

Model No.	Letter Size	Decimal Size"	L2"	L1"	Price /Each
TCP211	A	0.234	2-5/8	3-7/8	5.13
TCP212	B	0.2374	2-3/4	4	5.13
TCP213	C	0.2421	2-3/4	4	5.13
TCP214	D	0.2461	2-3/4	4	5.13
TDE116	E	0.25	2-3/4	4	4.24
TCP216	F	0.2571	2-7/8	4-1/8	5.43
TCP217	G	0.261	2-7/8	4-1/8	6.14
TCP218	H	0.2661	2-7/8	4-1/8	6.14
TCP219	I	0.272	2-7/8	4-1/8	6.14
TCP220	J	0.2772	2-7/8	4-1/8	6.55
TCP221	K	0.2811	2-15/16	4-1/4	7.25
TCP222	L	0.2902	2-15/16	4-1/4	7.25
TCP223	M	0.2949	3-1/16	4-3/8	7.66

Model No.	Wire Gauge Size	Decimal Size"	L2"	L1"	Price /Each
TCP263	26	0.147	1-7/8	3	2.40
TCP264	25	0.1495	1-7/8	3	2.37
TCP265	24	0.152	2	3-1/8	2.45
TCP266	23	0.154	2	3-1/8	2.45
TCP267	22	0.157	2	3-1/8	2.50
TCP268	21	0.159	2-1/8	3-1/4	2.47
TCP269	20	0.161	2-1/8	3-1/4	2.69
TCP270	19	0.166	2-1/8	3-1/4	2.69
TCP271	18	0.1695	2-1/8	3-1/4	2.72
TCP272	17	0.173	2-3/16	3-3/8	3.29
TCP273	16	0.177	2-3/16	3-3/8	3.29
TCP274	15	0.18	2-3/16	3-3/8	3.29
TCP275	14	0.182	2-3/16	3-3/8	3.29
TCP276	13	0.185	2-5/16	3-1/2	3.29
TCP277	12	0.189	2-5/16	3-1/2	3.37
TCP278	11	0.191	2-5/16	3-1/2	3.34
TCP279	10	0.1935	2-7/16	3-5/8	3.61
TCP280	9	0.196	2-7/16	3-5/8	3.64
TCP281	8	0.199	2-7/16	3-5/8	3.64
TCP282	7	0.201	2-7/16	3-5/8	3.61
TCP283	6	0.204	2-1/2	3-3/4	4.12
TCP284	5	0.2055	2-1/2	3-3/4	4.12
TCP285	4	0.209	2-1/2	3-3/4	4.12
TCP286	3	0.213	2-1/2	3-3/4	4.07
TCP287	2	0.221	2-5/8	3-7/8	4.54
TCP288	1	0.228	2-5/8	3-7/8	4.51

JOBBER DRILL SETS

A097 SERIES

- TiN coated tip that increases surface hardness and improves tool life
- Low thrust design with self centering split point that makes for easier penetration
- Material: High Speed Steel
- Manufacturing Standards: ANSI
- Point Angle: 118°
- Cutting Direction: Right Hand
- Case Included

Note: Sizes 47 to 60 and 1/16" to 5/64" have no split point or TiN tip



TCP405

Model No.	No. of Pieces	Sizes	Price /Each
TCP405	29	1/16" to 1/2" by 1/64"	219.00
TCP406	15	1/16" to 1/2" by 1/32"	125.00
TCP407	13	1/16" to 1/4" by 1/64"	45.70
TCP408	60	1 to 60	168.00
TCP409	26	A to Z	238.00
TCP410	115	A to Z, 1 to 60, 1/16" to 1/2" by 1/64"	669.00

JOBBER DRILL SETS

C29HX10 SERIES

- Unique surface treatment for improved wear resistance in hard ferrous alloys
- Low thrust design and self-centering split point makes for easier penetration
- Material: High Speed Steel
- Manufacturing Standards: ANSI
- Point Angle: 135°
- Finish: Purple and Gold
- Cutting Direction: Right Hand
- Case Included



Model No.	No. of Pieces	Sizes	Price /Each
TCP404	29	1/16" to 1/2" by 1/64"	229.00



DRILL BITS



JOBBER DRILL SETS

- Material: High Speed Steel
- Manufacturing Standards: ANSI
- Point Angle: 118°
- Cutting Direction: Right Hand
- Case Included

STEAM OXIDE FINISH

- Steam oxide finish reduces wear and chip welding in harder ferrous materials for increased wear resistance and lubricity

BRIGHT FINISH

- Bright finish improves chip flow in soft or non-ferrous materials



TCP412

COBALT JOBBER DRILL SETS

- Bronze oxide finish for increased wear resistance and lubricity
- Suitable for ferrous materials
- Material: High Speed Cobalt
- Manufacturing Standards: ANSI
- Point Angle: 135°
- Cutting Direction: Right Hand
- Case Included



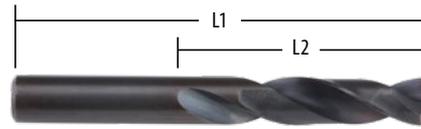
TCP918

Model No.	No of Pieces	Sizes	Manufacturer Series	Finish	Price /Each
TCP411	15	1/16" to 1/2" by 1/32"	C15R10	Steam Oxide	112.00
TCP413	29	1/16" to 1/2" by 1/64"	C29R10	Steam Oxide	207.00
TCP412	15	1/16" to 1/2" by 1/32"	C15R10P	Bright	111.00
TCP414	29	1/16" to 1/2" by 1/64"	C29R10P	Bright	207.00

Model No.	No. of Pieces	Size	Manufacturer Series	Price /Each
TCP915	13	1/16" to 1/4" by 1/64"	C13R10CO	77.50
TCP916	15	1/16" to 1/2" by 1/32"	C15R10CO	220.00
TCP917	21	1/16" to 3/8" by 1/64"	C21R10CO	203.00
TCP918	29	1/16" to 1/2" by 1/64"	C29R10CO	419.00
TCP919	26	A to Z	C26R15CO	419.00
TCP920	60	#1 to #60	C60R18CO	309.00

SCREW MACHINE DRILLS 135°

- Steam oxide finish for increased wear resistance and lubricity
- Low thrust design and self-centering split point makes for easier penetration
- Material: High Speed Steel
- Point Angle: 135°
- Manufacturing Standards: ANSI
- Cutting Direction: Right Hand



R40C SERIES - FRACTIONAL SIZE

Model No.	Fractional Size"	Decimal Size"	L2"	L1"	Price /Each
TCP289	1/16	0.0625	5/8	1-5/8	2.60
TCP290	5/64	0.0781	11/16	1-11/16	2.64
TCP291	3/32	0.0938	3/4	1-3/4	2.59
TCP292	7/64	0.1094	13/16	1-13/16	2.64
TCP293	1/8	0.125	7/8	1-7/8	2.52
TCP294	9/64	0.1406	15/16	1-15/16	2.69
TCP295	5/32	0.1563	1	2-1/16	2.91
TCP296	11/64	0.1719	1-1/16	2-1/8	3.07
TCP297	3/16	0.1875	1-1/8	2-3/16	3.31
TCP298	13/64	0.2031	1-3/16	2-1/4	3.51
TCP299	7/32	0.2188	1-1/4	2-3/8	4.21
TCP300	15/64	0.2344	1-5/16	2-7/16	4.27
TCP301	1/4	0.25	1-3/8	2-1/2	4.73
TCP302	17/64	0.2656	1-7/16	2-5/8	5.44
TCP303	9/32	0.2813	1-1/2	2-11/16	5.83

Model No.	Fractional Size"	Decimal Size"	L2"	L1"	Price /Each
TCP304	19/64	0.2969	1-9/16	2-3/4	6.46
TCP305	5/16	0.3125	1-5/8	2-13/16	6.88
TCP306	21/64	0.3281	1-11/16	2-15/16	7.61
TCP307	11/32	0.3437	1-11/16	3	8.58
TCP308	23/64	0.3594	1-3/4	3-1/16	9.89
TCP309	3/8	0.375	1-13/16	3-1/8	10.30
TCP310	25/64	0.3906	1-7/8	3-1/4	11.80
TCP311	13/32	0.4063	1-15/16	3-5/16	12.10
TCP312	27/64	0.4219	2	3-3/8	13.40
TCP313	7/16	0.4375	2-1/16	3-7/16	13.50
TCP314	29/64	0.4531	2-1/8	3-9/16	16.10
TCP315	15/32	0.4687	2-1/8	3-5/8	17.20
TCP316	31/64	0.4844	2-3/16	3-11/16	17.60
TCP317	1/2	0.5	2-1/4	3-3/4	17.30

R41C SERIES - WIRE GAUGE SIZE

Model No.	Wire Gauge Size	Decimal Size"	L2"	L1"	Price /Each
TCP318*	#60	0.04	1/2	1-3/8	2.54
TCP319*	#59	0.041	1/2	1-3/8	2.54
TCP320*	#58	0.042	1/2	1-3/8	2.54
TCP321*	#57	0.043	1/2	1-3/8	2.54
TCP322*	#56	0.0465	1/2	1-3/8	2.54
TCP323*	#55	0.052	5/8	1-5/8	2.54
TCP324*	#54	0.055	5/8	1-5/8	2.54
TCP325*	#53	0.0595	5/8	1-5/8	2.54
TCP326	#52	0.0635	11/16	1-11/16	2.54
TCP327	#51	0.067	11/16	1-11/16	2.54
TCP328	#50	0.07	11/16	1-11/16	2.54
TCP329	#49	0.073	11/16	1-11/16	2.54
TCP330	#48	0.076	11/16	1-11/16	2.54
TCP331	#47	0.0785	11/16	1-11/16	2.54
TCP332	#46	0.081	3/4	1-3/4	2.54

Model No.	Wire Gauge Size	Decimal Size"	L2"	L1"	Price /Each
TCP333	#45	0.082	3/4	1-3/4	2.54
TCP334	#44	0.086	3/4	1-3/4	2.54
TCP335	#43	0.089	3/4	1-3/4	2.54
TCP336	#42	0.0935	3/4	1-3/4	2.54
TCP337	#41	0.096	13/16	1-13/16	2.54
TCP338	#40	0.098	13/16	1-13/16	2.54
TCP339	#39	0.0995	13/16	1-13/16	2.54
TCP340	#38	0.1015	13/16	1-13/16	2.54
TCP341	#37	0.104	13/16	1-13/16	2.54
TCP342	#36	0.1065	13/16	1-13/16	2.54
TCP343	#35	0.11	7/8	1-7/8	2.54
TCP344	#34	0.111	7/8	1-7/8	2.54
TCP345	#33	0.113	7/8	1-7/8	2.54
TCP346	#32	0.116	7/8	1-7/8	2.54
TCP347	#31	0.12	7/8	1-7/8	2.54

*No split point

R41C SERIES - WIRE GAUGE SIZE (CONT.)

Model No.	Wire Gauge Size	Decimal Size"	L2"	L1"	Price /Each
TCP348	30	0.1285	15/16	1-15/16	2.54
TCP349	29	0.136	15/16	1-15/16	2.54
TCP350	28	0.1405	15/16	1-15/16	2.54
TCP351	27	0.144	1	2-1/16	2.81
TCP352	26	0.147	1	2-1/16	2.81
TCP353	25	0.1495	1	2-1/16	2.81
TCP354	24	0.152	1	2-1/16	2.86
TCP355	23	0.154	1	2-1/16	2.86
TCP356	22	0.157	1-1/16	2-1/8	2.86
TCP357	21	0.159	1-1/16	2-1/8	2.86
TCP358	20	0.161	1-1/16	2-1/8	2.97
TCP359	19	0.166	1-1/16	2-1/8	2.97
TCP360	18	0.1695	1-1/16	2-1/8	2.97
TCP361	17	0.173	1-1/8	2-3/16	3.54
TCP362	16	0.177	1-1/8	2-3/16	3.54

Model No.	Wire Gauge Size	Decimal Size"	L2"	L1"	Price /Each
TCP363	15	0.18	1-1/8	2-3/16	3.54
TCP364	14	0.182	1-1/8	2-3/16	3.54
TCP365	13	0.185	1-1/8	2-3/16	3.54
TCP366	12	0.189	1-3/16	2-1/4	3.54
TCP367	11	0.191	1-3/16	2-1/4	3.54
TCP368	10	0.1935	1-3/16	2-1/4	3.54
TCP369	9	0.196	1-3/16	2-1/4	3.54
TCP370	8	0.199	1-3/16	2-1/4	3.54
TCP371	7	0.201	1-3/16	2-1/4	3.54
TCP372	6	0.204	1-1/4	2-3/8	4.24
TCP373	5	0.2055	1-1/4	2-3/8	4.24
TCP374	4	0.209	1-1/4	2-3/8	4.24
TCP375	3	0.213	1-1/4	2-3/8	4.24
TCP376	2	0.221	1-5/16	2-7/16	4.54
TCP377	1	0.228	1-5/16	2-7/16	4.54

R42C SERIES - LETTER SIZE

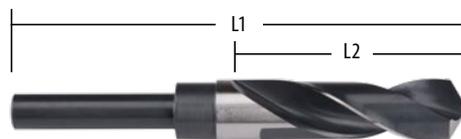
Model No.	Letter Size	Decimal Size"	L2"	L1"	Price /Each
TCP378	A	0.234	1-5/16	2-7/16	5.38
TCP379	B	0.2374	1-3/8	2-1/2	5.38
TCP380	C	0.2421	1-3/8	2-1/2	5.38
TCP381	D	0.2461	1-3/8	2-1/2	5.38
TCP382	E	0.25	1-3/8	2-1/2	5.71
TCP383	F	0.2571	1-7/16	2-5/8	5.93
TCP384	G	0.261	1-7/16	2-5/8	6.28
TCP385	H	0.2661	1-1/2	2-11/16	6.28
TCP386	I	0.272	1-1/2	2-11/16	6.28
TCP387	J	0.2772	1-1/2	2-11/16	6.75
TCP388	K	0.2811	1-1/2	2-11/16	7.25
TCP389	L	0.2992	1-9/16	2-3/4	7.25
TCP390	M	0.2949	1-9/16	2-3/4	7.92

Model No.	Letter Size	Decimal Size"	L2"	L1"	Price /Each
TCP391	N	0.302	1-5/8	2-13/16	7.92
TCP392	O	0.3161	1-11/16	2-15/16	7.98
TCP393	P	0.3228	1-11/16	2-15/16	8.95
TCP394	Q	0.3319	1-11/16	3	8.95
TCP395	R	0.339	1-11/16	3	9.08
TCP396	S	0.348	1-3/4	3-1/16	10.30
TCP397	T	0.358	1-3/4	3-1/16	12.00
TCP398	U	0.368	1-13/16	3-1/8	12.00
TCP399	V	0.3772	1-7/8	3-1/4	12.80
TCP400	W	0.3858	1-7/8	3-1/4	13.40
TCP401	X	0.3969	1-15/16	3-5/16	15.50
TCP402	Y	0.4039	1-15/16	3-5/16	18.50
TCP403	Z	0.413	2	3-3/8	18.50

SILVER & DEMING DRILLS 118°

R56 SERIES

- Steam oxide finish for increased wear resistance and lubricity
- Material: High Speed Steel
- Point Angle: 118°
- Manufacturing Standards: ANSI
- Shank Size: 1/2"
- Cutting Direction: Right Hand



Model No.	Fractional Size"	Decimal Size"	L2"	L1"	Price /Each
TCQ496	33/64	0.5156	3	6	32.20
TCQ497	17/32	0.5313	3	6	31.40
TCQ498	35/64	0.5469	3	6	34.30
TCQ499	9/16	0.5625	3	6	33.40
TCQ500	37/64	0.5781	3	6	36.80
TCQ501	19/32	0.5937	3	6	35.90
TCQ502	5/8	0.625	3	6	37.60
TCQ503	41/64	0.6406	3	6	41.30
TCQ504	21/32	0.6563	3	6	40.20
TCQ505	43/64	0.6719	3	6	42.80
TCQ506	11/16	0.6875	3	6	41.70
TCQ507	45/64	0.7031	3	6	43.40
TCQ508	23/32	0.7188	3	6	42.20
TCQ509	47/64	0.7344	3	6	47.30
TCQ510	3/4	0.75	3	6	46.00
TCQ511	49/64	0.7656	3	6	50.60
TCQ512	25/32	0.7813	3	6	49.10
TCQ513	51/64	0.7969	3	6	58.60
TCQ514	13/16	0.8125	3	6	51.60
TCQ515	53/64	0.8281	3	6	60.60
TCQ516	27/32	0.8438	3	6	53.10
TCQ517	55/64	0.8594	3	6	63.10
TCQ518	7/8	0.875	3	6	55.60
TCQ519	57/64	0.8906	3	6	66.60
TCQ520	29/32	0.9063	3	6	57.60
TCQ521	59/64	0.9219	3	6	71.10
TCQ522	15/16	0.9375	3	6	61.10
TCQ523	61/64	0.9531	3	6	74.60

Model No.	Fractional Size"	Decimal Size"	L2"	L1"	Price /Each
TCQ524	31/32	0.9688	3	6	65.60
TCQ525	63/64	0.9844	3	6	84.20
TCQ526	1	1	3	6	72.60
TCQ527	1-1/64	1.0156	3	6	101.00
TCQ528	1-1/32	1.0312	3	6	89.20
TCQ529	1-3/64	1.0469	3	6	91.70
TCQ530	1-1/16	1.0625	3	6	86.20
TCQ531	1-5/64	1.0781	3	6	94.20
TCQ532	1-3/32	1.0937	3	6	94.70
TCQ533	1-7/64	1.1094	3	6	102.00
TCQ534	1-1/8	1.125	3	6	96.70
TCQ535	1-9/64	1.1406	3	6	104.00
TCQ536	1-5/32	1.1563	3	6	101.00
TCQ537	1-11/64	1.1719	3	6	111.00
TCQ538	1-3/16	1.1875	3	6	107.00
TCQ539	1-13/64	1.2031	3	6	119.00
TCQ540	1-7/32	1.2187	3	6	119.00
TCQ541	1-15/64	1.2344	3	6	122.00
TCQ542	1-1/4	1.25	3	6	118.00
TCQ543	1-9/32	1.2813	3	6	138.00
TCQ544	1-5/16	1.3125	3	6	146.00
TCQ545	1-11/32	1.3437	3	6	159.00
TCQ546	1-3/8	1.375	3	6	168.00
TCQ547	1-13/32	1.4063	3	6	196.00
TCQ548	1-7/16	1.4375	3	6	185.00
TCQ549	1-15/32	1.4687	3	6	215.00
TCQ550	1-1/2	1.5	3	6	203.00

DRILL BITS

TAPER SHANK DRILL 118°

209 SERIES

- Steam oxide finish increases tool life and lubricity
- Material: High Speed Steel
- Point Angle: 118°
- Manufacturing Standards: ANSI
- Cutting Direction: Right Hand



Model No.	Fractional Size"	Decimal Size"	L2"	L1"	Morse Taper Shank No.	Price /Each
TDD862	1/8	0.125	1-7/8	5-1/8	#1	20.20
TDD863	9/64	0.1406	2-1/8	5-3/8	#1	21.10
TDD864	5/32	0.1562	2-1/8	5-3/8	#1	20.30
TDD865	11/64	0.1718	2-1/2	5-3/4	#1	21.10
TDD866	3/16	0.1875	2-1/2	5-3/4	#1	14.30
TCP420	13/64	0.2031	2-3/4	6	#1	16.00
TDD868	7/32	0.2187	2-3/4	6	#1	15.50
TDD869	15/64	0.2343	2-7/8	6-1/8	#1	18.40
TDD870	1/4	0.25	2-7/8	6-1/8	#1	15.90
TDD871	17/64	0.2656	3	6-1/4	#1	17.80
TDD872	9/32	0.2812	3	6-1/4	#1	17.00
TDD873	19/64	0.2968	3-1/8	6-3/8	#1	22.00
TDD874	5/16	0.3125	3-1/8	6-3/8	#1	17.00
TDD875	21/64	0.3281	3-1/4	6-1/2	#1	23.60
TDD876	11/32	0.3437	3-1/4	6-1/2	#1	24.70
TDD877	23/64	0.3593	3-1/2	6-3/4	#1	27.30
TDD878	3/8	0.375	3-1/2	6-3/4	#1	26.00
TDD879	25/64	0.3906	3-5/8	7	#1	28.40
TDD880	13/32	0.4062	3-5/8	7	#1	26.30
TDD881	27/64	0.4218	3-7/8	7-1/4	#1	30.30
TDD882	7/16	0.4375	3-7/8	7-1/4	#1	29.10
TDD883	29/64	0.4531	4-1/8	7-1/2	#1	33.30
TDD884	15/32	0.4687	4-1/8	7-1/2	#1	33.40
TDD885	31/64	0.4843	4-3/8	8-1/4	#2	37.60
TDD886	1/2	0.5	4-3/8	8-1/4	#2	33.30
TDD887	33/64	0.5156	4-5/8	8-1/2	#2	39.70
TDD888	17/32	0.5312	4-5/8	8-1/2	#2	37.10
TDD889	35/64	0.5468	4-7/8	8-3/4	#2	43.30
TDD890	9/16	0.5625	4-7/8	8-3/4	#2	40.50
TDD891	37/64	0.5781	4-7/8	8-3/4	#2	46.00
TDD892	19/32	0.5937	4-7/8	8-3/4	#2	43.60
TDD893	39/64	0.6093	4-7/8	8-3/4	#2	48.10
TDD894	5/8	0.625	4-7/8	8-3/4	#2	44.20
TDD895	41/64	0.6406	5-1/8	9	#2	53.10
TDD896	21/32	0.6562	5-1/8	9	#2	49.30
TDD897	43/64	0.6718	5-3/8	9-1/4	#2	56.60
TDD898	11/16	0.6875	5-3/8	9-1/4	#2	51.60
TDD899	45/64	0.7031	5-5/8	9-1/2	#2	58.60
TDD900	23/32	0.7187	5-5/8	9-1/2	#2	55.10
TDD901	47/64	0.7343	5-7/8	9-3/4	#2	62.60
TDD902	3/4	0.75	5-7/8	9-3/4	#2	59.60
TDD903	49/64	0.7656	6	9-7/8	#2	75.10
TDD904	25/32	0.7812	6	9-7/8	#2	72.60
TDD905	51/64	0.7968	6-1/8	10-3/4	#3	83.20
TDD906	13/16	0.8125	6-1/8	10-3/4	#3	74.10
TDD907	53/64	0.8281	6-1/8	10-3/4	#3	86.70
TDD908	27/32	0.8437	6-1/8	10-3/4	#3	80.70

Model No.	Fractional Size"	Decimal Size"	L2"	L1"	Morse Taper Shank No.	Price /Each
TDD909	55/64	0.8593	6-1/8	10-3/4	#3	89.70
TDD910	7/8	0.875	6-1/8	10-3/4	#3	82.70
TDD911	57/64	0.8906	6-1/8	10-3/4	#3	91.70
TDD912	29/32	0.9062	6-1/8	10-3/4	#3	88.20
TDD913	59/64	0.9218	6-1/8	10-3/4	#3	92.70
TDD914	15/16	0.9375	6-1/8	10-3/4	#3	83.20
TDD915	61/64	0.9531	6-3/8	11	#3	95.20
TDD916	31/32	0.9687	6-3/8	11	#3	91.20
TDD917	63/64	0.9843	6-3/8	11	#3	101.00
TDD918	1	1	6-3/8	11	#3	92.70
TDD919	1-1/64	1.0156	6-1/2	11-1/8	#3	114.00
TDD920	1-1/32	1.0312	6-1/2	11-1/8	#3	102.00
TDD921	1-3/64	1.0468	6-5/8	11-1/4	#3	121.00
TDD922	1-1/16	1.0625	6-5/8	11-1/4	#3	106.00
TDD923	1-5/64	1.0781	6-7/8	12-1/2	#4	139.00
TDD924	1-3/32	1.0937	6-7/8	12-1/2	#4	125.00
TDD925	1-7/64	1.1093	7-1/8	12-3/4	#4	145.00
TDD926	1-1/8	1.125	7-1/8	12-3/4	#4	130.00
TDD927	1-9/64	1.1406	7-1/4	12-7/8	#4	153.00
TDD928	1-5/32	1.1562	7-1/4	12-7/8	#4	136.00
TDD929	1-11/64	1.1718	7-3/8	13	#4	154.00
TDD930	1-3/16	1.1875	7-3/8	13	#4	142.00
TDD932	1-7/32	1.2187	7-1/2	13-1/8	#4	152.00
TDD933	1-15/64	1.2343	7-7/8	13-1/2	#4	181.00
TDD934	1-1/4	1.25	7-7/8	13-1/2	#4	160.00
TDD935	1-17/64	1.2656	8-1/2	14-1/8	#4	208.00
TDD936	1-9/32	1.2812	8-1/2	14-1/8	#4	199.00
TDD937	1-19/64	1.2968	8-5/8	14-1/4	#4	222.00
TDD938	1-5/16	1.3125	8-5/8	14-1/4	#4	201.00
TDD939	1-21/64	1.3281	8-3/4	14-3/8	#4	229.00
TDD940	1-11/32	1.3437	8-3/4	14-3/8	#4	214.00
TDD942	1-3/8	0.375	8-7/8	14-1/2	#4	215.00
TDD944	1-13/32	1.4062	9	14-5/8	#4	232.00
TDD945	1-27/64	1.4218	9-1/8	14-3/4	#4	249.00
TDD946	1-7/16	1.4375	9-1/8	14-3/4	#4	232.00
TDD948	1-15/32	1.4687	9-1/4	14-7/8	#4	250.00
TDD949	1-31/64	1.4843	9-3/8	15	#4	270.00
TDD950	1-1/2	1.5	9-3/8	15	#4	247.00
TDD951	1-17/32	1.5312	9-3/8	16-3/8	#5	289.00
TDD952	1-9/16	1.5625	9-5/8	16-5/8	#5	299.00
TDD954	1-5/8	1.625	10	17	#5	319.00
TDD956	1-11/16	1.6875	10-1/8	17-1/8	#5	349.00
TDD958	1-3/4	1.75	10-1/8	17-1/8	#5	379.00
TDD960	1-13/16	1.8125	10-1/8	17-1/8	#5	399.00
TDD962	1-7/8	1.875	10-3/8	17-3/8	#5	419.00
TDD964	1-15/16	1.9375	10-3/8	17-3/8	#5	449.00
TDD966	2	2	10-3/8	17-3/8	#5	469.00



ZENITH
SAFETY PRODUCTS
FOR INDUSTRY

TAP & DRILL SETS

18 PC BLUE WIZARD

- Premium high speed steel
- Metal case

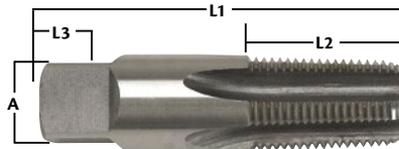


CLARKSON OSBORN

NC (National Coarse) Model No. BG080 contains		NF (National Fine) Model No. BG078 contains		Metric Model No. BG079 contains	
Tap	Drill	Tap	Drill	Tap mm	Drill mm
#6-32	#36	#6-40	#33	2.5 x .45	2.05
#8-32	#29	#8-36	#29	3.0 x .5	2.5
#10-32	#21	#10-32	#21	3.5 x .6	2.9
#12-24	#16	#12-28	#15	4.0 x .7	3.3
1/4-20	#7	1/4-28	#3	5.0 x .8	4.2
5/16-18	F	5/16-24	#1	6.0 x 1	5
3/8-16	5/16	3/8"-24	Q	8.0 x 1.25	6.7
7/16-14	U	7/16	25/64	10.0 x 1.5	8.5
1/2-13	27/64	1/2-20	29/64	12 x 1.75	10
Price/Each \$195.00		Price/Each \$195.00		Price/Each \$219.00	

PIPE TAPS

- High speed steel, ground threads
- Square drive shank
- Right hand cutting direction



CLARKSON OSBORN

WARWICK NPT (NATIONAL PIPE THREAD) TAPS

Applications:

For tapping tapered pipe threads. This is the most common of all pipe tap styles. The tapered thread form creates a pressure-tight joint when used with a sealant.

Model No	NPT Size	L2"	L1"	L3"	A"	Flutes	Price /Each
BD944	1/16-27	11/16	2 1/8	3/8	0.234	3	27.50
QD610	1/8-27	3/4	2 1/8	3/8	0.328	3	27.50
QD611	1/4-18	1 1/16	2 7/16	7/16	0.421	5	33.90
QD612	3/8-18	1 1/16	2 9/16	1/2	0.531	5	42.90
BD946	1/2-14	1 3/8	3 1/8	5/8	0.515	5	64.50
BD947	3/4-14	1 3/8	3 1/4	11/16	0.679	5	95.50
BD948	1-11.5	1 3/4	3 3/4	13/16	0.843	5	145.00
BD949	1 1/4-11.5	1 3/4	4	15/16	0.984	7	225.00
BD950	1 1/2-11.5	1 3/4	4 1/4	1	1.125	7	269.00
BD951	2-11.5	1 3/4	4 1/2	1 1/8	1.406	7	339.00

WARWICK NPTF (DRYSEAL NATIONAL PIPE THREAD) TAPS

HSS taper pipe taps are designed for tapping ferrous and non-ferrous fittings used to connect pipes carrying fluids or gases and other places where very tight fits are needed. NPTF taper thread pipe taps do not require sealants. Dryseal is attained by metal to metal contact.

Model No	NPT Size	L2"	L1"	L3"	A"	Flutes	Price /Each
BD961	1/16-27	11/16	2 1/8	3/8	0.234	3	67.50
BD962	1/8-27	3/4	2 1/8	3/8	0.328	3	66.90
BD963	1/4-18	1 1/16	2 7/16	7/16	0.421	5	71.50
BD964	3/8-18	1 1/16	2 9/16	1/2	0.531	5	105.00
BD965	1/2-14	1 3/8	3 1/8	5/8	0.515	5	125.00
BD966	3/4-14	1 3/8	3 1/4	11/16	0.679	5	155.00
BD967	1-11.5	1 3/4	3 3/4	13/16	0.843	5	269.00
BD968	1 1/4-11.5	1 3/4	4	15/16	0.984	7	425.00

WARWICK NPTI (INTERRUPTED NATIONAL PIPE THREAD) TAPS

Application:

HSS interrupted thread pipe taps are designed for tapping soft or tough stringy metals that tend to load threads with chips. Interrupted thread pipe taps start with a few full threads and then have every other thread removed along the thread helix to provide more chip space, better lubrication, and to reduce drag.

Model No	NPT Size	L2"	L1"	L3"	A"	Flutes	Price /Each
BD952	1/8-27	3/4	2 1/8	3/8	0.328	3	61.50
BD953	1/4-18	1 1/16	2 7/16	7/16	0.421	5	67.90
BD954	3/8-18	1 1/16	2 9/16	1/2	0.531	5	85.90
BD955	1/2-14	1 3/8	3 1/8	5/8	0.515	5	139.00
BD956	3/4-14	1 3/8	3 1/4	11/16	0.679	5	149.00
BD957	1-11.5	1 3/4	3 3/4	13/16	0.843	5	299.00
BD958	1 1/4-11.5	1 3/4	4	15/16	0.984	7	399.00
BD959	1 1/2-11.5	1 3/4	4 1/4	1	1.125	7	495.00
BD960	2-11.5	1 3/4	4 1/2	1 1/8	1.406	7	709.00

WARWICK NPTS (STRAIGHT NATIONAL PIPE THREAD) TAPS

Application:

HSS straight thread pipe taps (NPTS) are designed for tapping holes or couplings for low pressure work that will adjust at assembly to the taper of external threads. A sealant must be used to secure a pressure-tight joint.

Model No	NPT Size	L2"	L1"	L3"	A"	Flutes	Price /Each
BD969	1/8-27	3/4	2 1/8	3/8	0.328	4	43.90
BD970	1/4-18	1 1/16	2 7/16	7/16	0.421	4	60.90
BD971	3/8-18	1 1/16	2 9/16	1/2	0.531	4	92.90
BD972	1/2-14	1 3/8	3 1/8	5/8	0.515	4	129.00
BD973	3/4-14	1 3/8	3 1/4	11/16	0.679	4	179.00
BD974	1-11.5	1 3/4	3 3/4	13/16	0.843	6	335.00

TAPS & DIES

HAND TAPS

- High speed steel ground thread
- Square drive shank
- Right hand cutting direction, straight flute
- Available in taper, plug, bottoming and sets
- Bright finish

Applications:

Taps cut a thread on the inside surface of a hole, creating a female surface which functions like a nut. Well suited for a variety of ferrous & non-ferrous materials.

Taper

Used in through-holes and for starting threads.

Used in through-holes and in blind holes with space at the bottom for chip accumulation.

Used in blind holes where threads must come as close to the hole's bottom as possible

Plug

Bottoming

MACHINE SCREW SIZES - NC NATIONAL COARSE
NF NATIONAL FINE

Fractional Size	Taper Model No.	Plug Model No.	Bottoming Model No.	Price /Each	L2"	L1"	L3"	A"	Flutes	Set of 3 taps		
										Model No.	Price /Each	
0-80	NF	BL964	BL965	BL966	24.50	3/8	1 5/8	3/16	0.110	3	BL963	72.90
1-64	NC	BL968	BL969	BL970	23.50	7/16	1 11/16	3/16	0.110	2	BL967	70.50
1-72	NF	BM005	BM006	BM007	23.50	7/16	1 11/16	3/16	0.110	3	BM004	70.50
2-56	NC	BL972	BL973	BL974	19.90	1/2	1 3/4	3/16	0.110	3	BL971	59.90
2-64	NF	BM009	BM010	BM011	19.90	1/2	1 3/4	3/16	0.110	3	BM008	59.90
3-48	NC	BL976	BL977	BL978	14.90	9/16	1 13/16	3/16	0.110	3	BL975	44.50
3-56	NF	BM013	BM014	BM015	14.90	9/16	1 13/16	3/16	0.110	3	BM012	44.50
4-40	NC	BL980	BL981	BL982	12.20	5/8	1 7/8	3/16	0.110	3	BL979	36.50
4-48	NF	BM017	BM018	BM019	12.20	5/8	1 7/8	3/16	0.110	3	BM016	36.50
5-40	NC	BL984	BL985	BL986	12.20	11/16	1 15/16	3/16	0.110	3	BL983	36.50
5-44	NF	BM021	BM022	BM023	12.20	11/16	1 15/16	3/16	0.110	3	BM020	36.50
6-32	NC	BL988	BL989	BL990	9.25	11/16	2	3/16	0.110	3	BL987	27.50
6-40	NF	BM025	BM026	BM027	9.25	11/16	2	3/16	0.110	3	BM024	27.50
8-32	NC	BL992	BL993	BL994	9.25	3/4	2 1/8	1/4	0.131	4	BL991	27.50
8-36	NF	BM029	BM030	BM031	9.25	3/4	2 1/8	1/4	0.131	4	BM028	27.50
10-24	NC	BL996	BL997	BL998	9.99	7/8	2 3/8	1/4	0.152	4	BL995	29.90
10-32	NF	BM033	BM034	BM035	9.99	7/8	2 3/8	1/4	0.152	4	BM032	29.90
12-24	NC	BM001	BM002	BM003	10.50	15/16	2 3/8	9/32	0.165	4	BL999	30.90
12-28	NF	BM037	BM038	BM039	10.50	15/16	2 3/8	9/32	0.165	4	BM036	30.90

FRACTIONAL SIZES - NC NATIONAL COARSE
NF NATIONAL FINE

Fractional Size	Taper Model No.	Plug Model No.	Bottoming Model No.	Price /Each	L2"	L1"	L3"	A"	Flutes	Set of all 3 taps		
										Model No.	Price /Each	
1/4-20	NC	BL843	BL844	BL845	9.85	1	2 1/2	5/16	0.191	4	BL842	29.50
1/4-28	NF	BL905	BL906	BL907	9.85	1	2 1/2	5/16	0.191	4	BL904	29.50
5/1-18	NC	BL847	BL848	BL849	12.20	1 1/8	2 23/32	3/8	0.238	4	QE252	36.50
5/16-24	NF	BL909	BL910	BL911	12.20	1 1/8	2 23/32	3/8	0.238	4	BL908	36.50
3/8-16	NC	BL851	BL852	BL853	13.90	1 1/4	2 15/16	7/16	0.286	4	BL850	41.50
3/8-24	NF	BL912	BL913	BL914	13.90	1 1/4	2 15/16	7/16	0.286	4	VE890	41.50
7/16-14	NC	BL855	BL856	BL857	23.90	1 7/16	3 5/32	13/32	0.242	4	BL854	71.50
7/16-20	NF	BL916	BL917	BL918	23.90	1 7/16	3 5/32	13/32	0.242	4	BL915	71.50
1/2-13	NC	BL859	BL860	BL861	24.50	1 21/32	3 3/8	7/16	0.275	4	BL858	73.90
1/2-20	NF	BL920	BL921	BL922	24.50	1 21/32	3 3/8	7/16	0.275	4	BL919	73.90
9/16-12	NC	BL863	BL864	BL865	41.50	1 21/32	3 19/32	1/2	0.322	4	BL862	125.00
9/16-18	NF	BL924	BL925	BL926	41.50	1 21/32	3 19/32	1/2	0.322	4	BL923	125.00
5/8-11	NC	QE253	BL867	BL868	49.90	1 13/16	3 13/16	9/16	0.360	4	BL866	149.00
5/8-18	NF	BL928	BL929	BL930	49.90	1 13/16	3 13/16	9/16	0.360	4	BL927	149.00
3/4-10	NC	VE860	BL870	BL871	69.50	2	4 1/4	11/16	0.442	4	BL869	209.00
3/4-16	NF	BL932	BL933	BL934	69.50	2	4 1/4	11/16	0.442	4	BL931	209.00
7/8-9	NC	BL873	BL874	BL875	95.90	2 7/32	4 11/16	3/4	0.523	4	BL872	289.00
7/8-14	NF	BL936	BL937	BL938	95.90	2 7/32	4 11/16	3/4	0.523	4	BL935	289.00
1-8	NC	BL877	BL878	BL879	129.00	2 1/2	5 1/8	13/16	0.600	4	BL876	385.00
1-12	NF	BL940	BL941	BL942	129.00	2 1/2	5 1/8	13/16	0.600	4	BL939	385.00
1-14	NS	BL960	BL961	BL962	129.00	2 1/2	5 1/8	13/16	0.600	4	BL959	385.00
1 1/8-7	NC	QE254	BL882	BL883	169.00	2 9/16	5 7/16	7/8	0.672	4	BL880	499.00
1 1/8-12	NF	BL944	BL945	BL946	169.00	2 9/16	5 7/16	7/8	0.672	4	BL943	499.00
1 1/4-7	NC	BL885	BL886	BL887	225.00	2 9/16	5 3/4	1	0.766	4	BL884	665.00
1 1/4-12	NF	BL948	BL949	BL950	225.00	2 9/16	5 3/4	1	0.766	4	BL947	665.00
1 3/8-6	NC	BL889	BL890	BL891	279.00	3	6 1/16	1 1/16	0.831	4	BL888	835.00
1 3/8-12	NF	BL952	BL953	BL954	279.00	3	6 1/16	1 1/16	0.831	4	BL951	835.00
1 1/2-6	NC	BL893	BL894	BL895	325.00	3	6 3/8	1 1/8	0.925	4	BL892	965.00
1 1/2-12	NE	BL956	BL957	BL958	325.00	3	6 3/8	1 1/8	0.925	4	BL955	965.00
1 3/4-5	NC	BL897	BL898	BL899	475.00	3 3/16	7	1 1/4	1.072	6	BL896	1419.00
2-4.5	NC	BL901	BL902	BL903	525.00	3 9/16	7 5/8	1 3/8	1.233	6	BL900	1579.00

CLARKSON OSBORN



HAND TAPS (CONT'D)

METRIC COARSE SIZES

Size	Taper Model No.	Plug Model No.	Bottoming Model No.	Price /Each	L2 mm	L1 mm	L3 mm	A mm	Flutes	Set of 3 taps	
										Model No.	Price /Each
M2 x 0.4	BM185	BM186	BM187	21.50	8.0	41.0	4.0	2.00	3	BM184	64.90
M2.2 x 0.45	BM182	BM183	TBM075	22.50	9.5	44.5	5.0	2.24	3	BM181	67.50
M2.5 x 0.45	BM189	BM190	BM191	15.50	9.5	44.5	5.0	2.24	3	BM188	46.90
M3 x 0.5	BM193	BM194	BM195	12.90	15.0	48.0	5.0	2.50	3	BM192	38.50
M3.5 x 0.6	BM197	BM198	BM199	9.99	17.0	50.0	5.0	2.80	3	BM196	29.90
M4 x 0.7	BM201	BM202	BM203	9.99	17.0	53.0	6.0	3.15	3	BM200	29.90
M4.5 x 0.75	BM205	BM206	BM207	13.90	17.0	53.0	6.0	3.55	3	BM204	41.90
M5 x 0.8	BM209	BM210	BM211	10.90	16.0	58.0	7.0	4.00	3	BM208	33.50
M6 x 1	BM213	BM214	BM215	11.50	19.0	66.0	8.0	5.00	3	BM212	34.50
M7 x 1	BM217	BM218	BM219	12.50	19.0	66.0	8.0	5.60	4	BM216	36.90
M8 x 1.25	BM221	BM222	BM223	12.50	22.0	72.0	9.0	6.30	4	BM220	36.90
M9 x 1.25	BM225	BM226	BM227	15.50	22.0	72.0	10.0	7.10	4	BM224	45.90
M10 x 1.5	BM229	BM230	BM231	22.90	24.0	80.0	11.0	8.00	4	BM228	69.50
M11 x 1.5	BM233	BM234	BM235	22.90	25.0	85.0	9.0	6.30	4	BM232	69.50
M12 x 1.75	BM237	BM238	BM239	26.50	19.0	89.0	10.0	7.10	4	BM236	78.50
M14 x 2	BM241	BM242	BM243	39.90	30.0	95.0	12.0	9.00	4	BM240	119.00
M16 x 2	BM245	BM246	BM247	49.50	32.0	102.0	13.0	10.00	4	BM244	149.00
M18 x 2.5	BM249	BM250	BM251	67.90	37.0	112.0	14.0	11.20	4	BM248	205.00
M20 x 2.5	BM253	BM254	BM255	92.90	37.0	112.0	14.0	11.20	4	BM252	279.00
M22 x 2.5	BM257	BM258	BM259	109.00	38.0	118.0	16.0	12.50	4	BM256	325.00
M24 x 3	BM261	BM262	BM263	125.00	45.0	130.0	18.0	14.00	4	BM260	375.00
M27 x 3	BM265	BM266	BM267	169.00	45.0	135.0	20.0	16.00	4	BM264	505.00
M30 x 3.5	BM269	BM270	BM271	179.00	48.0	138.0	20.0	16.00	4	BM268	545.00
M33 x 3.5	BM273	BM274	BM275	245.00	51.0	151.0	22.0	18.00	4	BM272	729.00
M36 x 4	BM277	BM278	BM279	269.00	57.0	162.0	24.0	20.00	4	BM276	815.00
M39 x 4	BM280	BM281	BM282	329.00	60.0	170.0	26.0	22.40	4	TBM083	985.00
M42 x 4.5	BM284	BM285	BM286	379.00	60.0	170.0	26.0	22.40	6	BM283	1145.00
M45 x 4.5	TBM067	BM287	BM288	515.00	67.0	187.0	28.0	25.00	6	TBM084	1539.00
M48 x 5	TBM068	BM289	BM290	569.00	67.0	187.0	28.0	25.00	6	TBM085	1715.00
M52 x 5	TBM069	BM291	BM292	719.00	70.0	200.0	31.0	28.00	6	TBM086	2155.00
M56 x 5.5	TBM070	BM293	BM294	975.00	70.0	200.0	31.0	28.00	6	TBM087	2919.00

METRIC FINE SIZES

Size	Taper Model No.	Plug Model No.	Bottoming Model No.	Price /Each	L2 mm	L1 mm	L3 mm	A mm	Flutes	Set of 3 taps	
										Model No.	Price/Each
MF3 x 0.35	BM296	BM297	BM298	26.50	15.0	48.0	5.0	2.50	3	BM295	78.90
MF3.5 x 0.35	BM299	BM300	BM301	27.50	17.0	50.0	5.0	2.80	3	TBM088	82.50
MF4 x 0.5	BM303	BM304	BM305	26.50	17.0	53.0	6.0	3.15	3	BM302	78.90
MF4.5 x 0.5	BM307	BM308	BM309	29.50	17.0	53.0	6.0	3.55	3	BM306	87.90
MF5 x 0.5	BM311	BM312	BM313	26.50	16.0	58.0	7.0	4.00	3	BM310	78.90
MF6 x 0.5	BM315	BM316	BM317	64.50	19.0	66.0	8.0	5.00	3	BM314	195.00
MF6 x 0.75	BM319	BM320	BM321	26.50	19.0	66.0	8.0	5.00	3	BM318	78.90
MF7 x 0.75	BM323	BM324	BM325	29.50	19.0	66.0	8.0	5.60	4	BM322	87.90
MF8 x 0.5	BM328	BM329	BM330	69.90	19.0	69.0	9.0	6.30	4	BM327	209.00
MF8 x 0.75	BM332	BM333	BM334	32.50	22.0	72.0	9.0	6.30	4	BM331	96.90
MF8 x 1	BM335	BM336	BM337	27.50	22.0	72.0	9.0	6.30	4	BM326	82.50
MF9 x 1	BM338	BM339	BM340	64.50	22.0	72.0	10.0	7.10	4	BM341	195.00
MF10 x 0.75	BM345	BM346	BM347	64.50	24.0	80.0	11.0	8.00	4	BM344	195.00
MF10 x 1	BM348	BM349	BM350	39.90	24.0	80.0	11.0	8.00	4	BM342	119.00
MF10 x 1.25	BM351	BM352	BM353	38.50	24.0	80.0	11.0	8.00	4	BM343	115.00
MF11 x 0.75	BM355	BM356	BM357	79.50	22.0	82.0	9.0	6.30	4	BM354	239.00
MF11 x 1	BM359	BM360	BM361	79.50	22.0	82.0	9.0	6.30	4	BM358	239.00
MF12 x 1	BM363	BM364	BM365	76.90	29.0	89.0	10.0	7.10	4	BM362	229.00
MF12 x 1.25	BM367	BM368	BM369	50.90	29.0	89.0	10.0	7.10	4	BM366	155.00
MF12 x 1.5	BM371	BM372	BM373	50.90	29.0	89.0	10.0	7.10	4	BM370	155.00
MF14 x 1	BM375	BM376	BM377	85.50	30.0	95.0	12.0	9.00	4	BM374	259.00
MF14 x 1.25	BM379	BM380	BM381	57.50	30.0	95.0	12.0	9.00	4	BM378	175.00
MF14 x 1.5	BM383	BM384	BM385	55.90	30.0	95.0	12.0	9.00	4	BM382	169.00
MF16 x 1	BM387	BM388	BM389	92.90	32.0	102.0	13.0	10.00	4	BM386	279.00
MF16 x 1.5	BM391	BM392	BM393	62.50	32.0	102.0	13.0	10.00	4	BM390	189.00
MF18.0 x 1	BM395	BM396	BM397	119.00	37.0	112.0	14.0	11.20	4	BM394	359.00
MF18 x 1.5	BM399	BM400	BM401	86.90	37.0	112.0	14.0	11.20	4	BM398	259.00
MF18 x 2	BM403	BM404	BM405	119.00	37.0	112.0	14.0	11.20	4	BM402	359.00
MF20 x 1	BM407	BM408	BM409	139.00	37.0	112.0	14.0	11.20	4	BM406	409.00
MF20 x 1.5	BM411	BM412	BM413	105.00	37.0	112.0	14.0	11.20	4	BM410	319.00
MF20 x 2	BM415	BM416	BM417	139.00	37.0	112.0	14.0	11.20	4	BM414	409.00
MF22 x 1.5	BM419	BM420	BM421	119.00	38.0	118.0	16.0	12.50	4	BM418	359.00
MF22 x 2	BM423	BM424	BM425	135.00	38.0	118.0	16.0	12.50	4	BM422	395.00
MF24 x 1.5	BM427	BM428	BM429	175.00	45.0	130.0	18.0	14.00	4	BM426	519.00
MF24 x 2	BM431	BM432	BM433	149.00	45.0	130.0	18.0	14.00	4	BM430	449.00
MF25 x 1.5	BM435	BM436	BM437	145.00	35.0	120.0	18.0	14.00	4	BM434	429.00
MF27 x 2	BM439	BM440	BM441	219.00	37.0	127.0	20.0	16.00	4	BM438	659.00
MF30 x 1.5	BM443	BM444	BM445	285.00	37.0	127.0	20.0	16.00	4	BM442	855.00
MF30 x 2	BM447	BM448	BM449	245.00	37.0	127.0	20.0	16.00	4	BM446	729.00
MF32 x 1.5	TBM076	BM451	TBM079	285.00	37.0	137.0	22.0	18.00	4	BM450	855.00
MF40 x 1.5	TBM077	TBM078	TBM080	449.00	39.0	149.0	26.0	22.40	4	TBM089	1349.00

TAPS & DIES

HAND TAPS

- Versatile tap that can be used for both hand or machine tapping in a wide variety of materials
- Bright finish improves chip flow in soft or non-ferrous materials
- Material: High Speed Steel
- Manufacturing Standards: ANSI
- Cutting Direction: Right Hand
- **1500-1500S series:** Fractional sizes
- **1528-1528S series:** Machine screw sizes



Note: Sizes 0-80 through 3/8"-24 have a male centre on the thread end
 Sizes 7/16"-14 through 1-1/2"-12 have a female centre/flat end

UNION BUTTERFIELD®

Thread Size	Thread Form	No. of Flutes	L2"	L1"	Limits	Taper Model No.	Plug Model No.	Bottoming Model No.	Price /Each	Sets	Price /Each
0-80	Unified Fine	2	5/16	1-5/8	H1	TCQ219	TCQ277	TCQ361	19.60	TCQ441	58.40
0-80	Unified Fine	2	5/16	1-5/8	H2	-	TCQ278	TCQ362	19.60	-	-
1-64	Unified Coarse	2	3/8	1-11/16	H1	TCQ220	TCQ279	TCQ363	18.20	TCQ442	54.80
1-72	Unified Fine	2	3/8	1-11/16	H1	TCQ221	TCQ280	TCQ364	18.20	TCQ443	54.80
2-56	Unified Coarse	2	7/16	1-3/4	H2	-	TCQ281	TCQ365	17.10	-	-
2-56	Unified Coarse	3	7/16	1-3/4	H1	TCQ222	TCQ282	TCQ366	17.10	-	-
2-56	Unified Coarse	3	7/16	1-3/4	H2	TCQ223	TCQ283	TCQ367	16.00	TCQ444	48.00
2-64	Unified Fine	3	7/16	1-3/4	H2	-	-	-	-	TCQ445	51.20
3-48	Unified Coarse	2	1/2	1-13/16	H2	-	TCQ284	-	13.60	-	-
3-48	Unified Coarse	3	1/2	1-13/16	H2	TCQ224	TCQ285	TCQ368	12.00	TCQ446	36.10
3-56	Unified Fine	3	1/2	1-13/16	H2	TCQ225	TCQ286	TCQ369	13.60	TCQ447	40.60
4-40	Unified Coarse	2	9/16	1-7/8	H2	-	TCQ287	TCQ370	10.70	-	-
4-40	Unified Coarse	3	9/16	1-7/8	H1	TCQ226	TCQ288	TCQ371	10.70	-	-
4-40	Unified Coarse	3	9/16	1-7/8	H2	TCQ227	TCQ289	TCQ372	10.00	TCQ448	30.00
4-48	Unified Fine	3	9/16	1-7/8	H2	TCQ228	TCQ290	TCQ373	10.70	TCQ449	32.10
4-36	Unified Special	3	9/16	1-7/8	H2	-	-	-	-	TCQ450	32.10
5-40	Unified Coarse	3	5/8	1-15/16	H2	TCQ229	TCQ291	TCQ374	10.00	TCQ451	30.00
5-44	Unified Fine	3	5/8	1-15/16	H2	TCQ230	TCQ292	TCQ375	10.70	TCQ452	32.10
6-32	Unified Coarse	2	11/16	2	H2	-	TCQ293	TCQ376	9.32	-	-
6-32	Unified Coarse	2	11/16	2	H3	-	TCQ294	TCQ377	8.07	-	-
6-32	Unified Coarse	3	11/16	2	H1	TCQ231	TCQ295	TCQ378	9.32	-	-
6-32	Unified Coarse	3	11/16	2	H2	TCQ232	TCQ296	TCQ379	8.07	TCQ453	24.10
6-32	Unified Coarse	3	11/16	2	H3	TCQ233	TCQ297	TCQ380	7.60	TCQ454	22.90
6-40	Unified Fine	3	11/16	2	H2	TCQ234	TCQ298	TCQ381	8.07	TCQ455	24.10
8-32	Unified Coarse	2	3/4	2-1/8	H2	-	TCQ299	TCQ382	9.32	-	-
8-32	Unified Coarse	2	3/4	2-1/8	H3	-	TCQ300	TCQ383	8.07	-	-
8-32	Unified Coarse	3	3/4	2-1/8	H2	-	TCQ301	TCQ384	9.32	-	-
8-32	Unified Coarse	3	3/4	2-1/8	H3	-	TCQ302	TCQ385	8.07	-	-
8-32	Unified Coarse	4	3/4	2-1/8	H1	-	TCQ303	-	9.32	-	-
8-32	Unified Coarse	4	3/4	2-1/8	H2	TCQ235	TCQ304	TCQ386	8.07	TCQ456	24.10
8-32	Unified Coarse	4	3/4	2-1/8	H3	TCQ236	TCQ305	TCQ387	7.80	TCQ457	23.40
8-36	Unified Fine	4	3/4	2-1/8	H2	TCQ237	TCQ306	TCQ388	8.07	TCQ458	24.10
10-24	Unified Coarse	2	7/8	2-3/8	H2	-	TCQ307	TCQ389	9.32	-	-
10-24	Unified Coarse	2	7/8	2-3/8	H3	-	TCQ308	TCQ390	8.27	-	-
10-24	Unified Coarse	3	7/8	2-3/8	H2	-	TCQ309	-	9.32	-	-
10-24	Unified Coarse	3	7/8	2-3/8	H3	-	TCQ310	TCQ391	8.27	-	-
10-24	Unified Coarse	4	7/8	2-3/8	H1	-	TCQ311	-	8.27	-	-
10-24	Unified Coarse	4	7/8	2-3/8	H2	TCQ238	TCQ312	TCQ392	8.27	TCQ459	24.80
10-24	Unified Coarse	4	7/8	2-3/8	H3	TCQ239	TCQ313	TCQ393	8.27	TCQ460	24.80
10-32	Unified Fine	2	7/8	2-3/8	H2	-	TCQ314	TCQ394	9.32	-	-
10-32	Unified Fine	2	7/8	2-3/8	H3	-	TCQ315	TCQ395	8.27	-	-
10-32	Unified Fine	3	7/8	2-3/8	H2	-	TCQ316	TCQ396	9.32	-	-
10-32	Unified Fine	3	7/8	2-3/8	H3	-	TCQ317	TCQ397	8.27	-	-
10-32	Unified Fine	4	7/8	2-3/8	H2	TCQ240	TCQ318	TCQ398	8.27	TCQ461	24.80
10-32	Unified Fine	4	7/8	2-3/8	H3	TCQ241	TCQ319	TCQ399	8.27	TCQ462	24.80
12-24	Unified Coarse	4	15/16	2-3/8	H3	TCQ242	TCQ320	TCQ400	8.53	TCQ463	25.40
12-28	Unified Fine	4	15/16	2-3/8	H3	TCQ243	TCQ321	TCQ401	9.32	TCQ464	28.10
1/4"-20	Unified Coarse	4	1	2-1/2	H1	TCQ244	TCQ322	TCQ402	10.80	-	-
1/4"-20	Unified Coarse	4	1	2-1/2	H2	TCQ245	TCQ323	TCQ403	10.30	-	-
1/4"-20	Unified Coarse	4	1	2-1/2	H3	TCQ246	TCQ324	TCQ404	8.73	TCQ465	26.10
1/4"-20	Unified Coarse	4	1	2-1/2	H5	-	TCQ325	TCQ405	10.30	-	-
1/4"-28	Unified Fine	4	1	2-1/2	H2	-	TCQ326	TCQ406	10.80	-	-
1/4"-28	Unified Fine	4	1	2-1/2	H3	TCQ247	TCQ327	TCQ407	8.73	TCQ466	26.10
1/4"-28	Unified Fine	4	1	2-1/2	H5	-	TCQ328	TCQ408	10.80	-	-
5/16"-18	Unified Coarse	4	1-1/8	2-23/32	H2	TCQ248	TCQ329	TCQ409	11.90	-	-
5/16"-18	Unified Coarse	4	1-1/8	2-23/32	H3	TCQ249	TCQ330	TCQ410	10.60	TCQ467	31.50
5/16"-24	Unified Fine	4	1-1/8	2-23/32	H3	TCQ250	TCQ331	TCQ411	10.60	TCQ468	31.50
3/8"-16	Unified Coarse	4	1-1/4	2-15/16	H2	TCQ251	TCQ332	TCQ412	13.50	-	-
3/8"-16	Unified Coarse	4	1-1/4	2-15/16	H3	TCQ252	TCQ333	TCQ413	11.90	TCQ469	35.80
3/8"-16	Unified Coarse	4	1-1/4	2-15/16	H5	-	TCQ334	TCQ414	13.50	-	-
3/8"-24	Unified Fine	4	1-1/4	2-15/16	H3	TCQ253	TCQ335	TCQ415	11.90	TCQ470	35.80
7/16"-14	Unified Coarse	4	1-7/16	3-5/32	H3	TCQ254	TCQ336	TCQ416	20.60	TCQ471	62.00
7/16"-20	Unified Fine	4	1-7/16	3-5/32	H3	TCQ255	TCQ337	TCQ417	20.60	TCQ472	62.00
1/2"-13	Unified Coarse	4	1-21/32	3-3/8	H2	-	TCQ338	TCQ418	26.60	-	-
1/2"-13	Unified Coarse	4	1-21/32	3-3/8	H3	TCQ256	TCQ339	TCQ419	21.50	TCQ473	64.30
1/2"-13	Unified Coarse	4	1-21/32	3-3/8	H5	-	TCQ340	TCQ420	26.60	-	-
1/2"-20	Unified Fine	4	1-21/32	3-3/8	H3	TCQ257	TCQ341	TCQ421	24.60	TCQ474	73.60
9/16"-12	Unified Coarse	4	1-21/32	3-19/32	H3	TCQ258	TCQ342	TCQ422	36.20	TCQ475	108.00

HAND TAPS (CONT.)

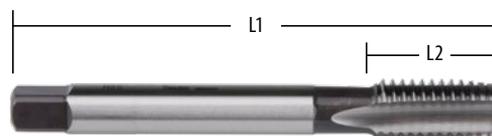
Thread Size	Thread Form	No. of Flutes	L2"	L1"	Limits	Taper Model No.	Plug Model No.	Bottoming Model No.	Price /Each	Sets	Price /Each
9/16"-18	Unified Fine	4	1-21/32	3-19/32	H3	TCQ259	TCQ343	TCQ423	36.20	TCQ476	108.00
5/8"-11	Unified Coarse	4	1-13/16	3-13/16	H3	TCQ260	TCQ344	TCQ424	43.70	TCQ477	131.00
5/8"-18	Unified Fine	4	1-13/16	3-13/16	H3	TCQ261	TCQ345	TCQ425	43.70	TCQ478	131.00
11/16"-11	Unified Special	4	1-13/16	4-1/32	H3	-	-	-	-	TCQ479	164.00
11/16"-16	Unified Special	4	1-13/16	4-1/32	H3	-	-	-	-	TCQ480	164.00
3/4"-10	Unified Coarse	4	2	4-1/4	H3	TCQ262	TCQ346	TCQ426	62.00	TCQ481	185.00
3/4"-16	Unified Fine	4	2	4-1/4	H3	TCQ263	TCQ347	TCQ427	62.00	TCQ482	185.00
7/8"-9	Unified Coarse	4	2-7/32	4-11/16	H4	TCQ264	TCQ348	TCQ428	84.70	TCQ483	255.00
7/8"-14	Unified Fine	4	2-7/32	4-11/16	H4	TCQ265	TCQ349	TCQ429	84.70	TCQ484	255.00
1"-8	Unified Coarse	4	2-1/2	5-1/8	H4	TCQ266	TCQ350	TCQ430	114.00	TCQ485	339.00
1"-12	Unified Fine	4	2-1/2	5-1/8	H4	TCQ267	TCQ351	TCQ431	115.00	TCQ486	339.00
1"-14	Unified Special	4	2-1/2	5-1/8	H4	TCQ268	TCQ352	TCQ432	114.00	TCQ487	339.00
1-1/8"-7	Unified Coarse	4	2-9/16	5-7/16	H4	TCQ269	TCQ353	TCQ433	182.00	TCQ488	539.00
1-1/8"-12	Unified Fine	4	2-9/16	5-7/16	H4	TCQ270	TCQ354	TCQ434	196.00	TCQ489	579.00
1-1/4"-7	Unified Coarse	4	2-9/16	5-3/4	H4	TCQ271	TCQ355	TCQ435	239.00	TCQ490	709.00
1-1/4"-12	Unified Fine	6	2-9/16	5-3/4	H4	TCQ272	TCQ356	TCQ436	244.00	TCQ491	719.00
1-3/8"-6	Unified Coarse	4	3	6-1/16	H4	TCQ273	TCQ357	TCQ437	299.00	TCQ492	899.00
1-3/8"-12	Unified Fine	6	3	6-1/16	H4	TCQ274	TCQ358	TCQ438	299.00	TCQ493	909.00
1-1/2"-6	Unified Coarse	4	3	6-3/8	H4	TCQ275	TCQ359	TCQ439	339.00	TCQ494	1039.00
1-1/2"-12	Unified Fine	6	3	6-3/8	H4	TCQ276	TCQ360	TCQ440	349.00	TCQ495	1059.00

HAND TAPS

ES00 SERIES

- Versatile tap that can be used for both hand or machine tapping in a wide variety of materials
- Bright finish improves chip flow in soft or non-ferrous materials
- Material: High Speed Steel
- Manufacturing Standards: ISO 529
- Tolerance: 6H
- Cutting Direction: Right Hand

Note: ISO shank and square dimensions require metric holders



Thread Size	Thread Form	No. of Flutes	L2 mm	L1 mm	Taper Model No.	Plug Model No.	Bottoming Model No.	Price /Each	Sets	Price /Each
M1 x 0.25	Metric Coarse	2	4.5	38	TCQ069	TCQ111	TCQ153	85.90	-	-
M1.2 x 0.25	Metric Coarse	2	4.5	38	TCQ070	TCQ112	TCQ154	73.50	-	-
M1.4 x 0.3	Metric Coarse	2	6	40	TCQ071	TCQ113	TCQ155	57.80	-	-
M1.6 x 0.35	Metric Coarse	2	8	41	TCQ072	TCQ114	TCQ156	33.10	TCQ197	98.90
M1.7 x 0.35	Metric Coarse	2	8	41	TCQ073	TCQ115	TCQ157	39.40	TCQ198	118.00
M1.8 x 0.35	Metric Coarse	2	8	41	TCQ074	TCQ116	TCQ158	39.00	-	-
M2 x 0.4	Metric Coarse	3	8	41	TCQ078	TCQ120	TCQ162	25.30	TCQ202	76.00
M2 x 0.45	Metric Coarse	3	8	41	TCQ079	TCQ121	TCQ163	66.70	-	-
M2.2 x 0.45	Metric Coarse	3	9.5	44.5	TCQ080	TCQ122	TCQ164	32.70	-	-
M2.3 x 0.45	Metric Coarse	3	9.5	44.5	TCQ081	TCQ123	TCQ165	30.50	-	-
M2.5 x 0.45	Metric Coarse	3	9.5	44.5	TCQ082	TCQ124	TCQ166	24.60	TCQ203	72.90
M2.6 x 0.45	Metric Coarse	3	9.5	44.5	TCQ083	TCQ125	TCQ167	32.20	-	-
M3 x 0.5	Metric Coarse	3	12.5	48	TCQ084	TCQ126	TCQ168	11.90	TCQ204	35.50
M3 x 0.6	Metric Coarse	3	12.5	48	TCQ085	TCQ127	TCQ169	22.60	-	-
M3.5 x 0.6	Metric Coarse	3	14	50	TCQ086	TCQ128	TCQ170	10.80	TCQ205	32.20
M4 x 0.7	Metric Coarse	3	14	53	TCQ087	TCQ129	TCQ171	10.80	TCQ206	32.20
M4 x 0.75	Metric Coarse	3	14	53	TCQ088	TCQ130	TCQ172	22.10	-	-
M4.5 x 0.75	Metric Coarse	3	9.5	53	TCQ089	TCQ131	TCQ173	10.80	TCQ207	32.20
M5 x 0.8	Metric Coarse	3	11	58	TCQ090	TCQ132	TCQ174	10.80	TCQ208	32.20
M5 x 0.9	Metric Coarse	3	11	58	TCQ091	TCQ133	TCQ175	23.60	-	-
M5.5 x 0.9	Metric Coarse	3	12	62	TCQ092	TCQ134	TCQ176	11.60	-	-
M6 x 1	Metric Coarse	3	13	66	TCQ093	TCQ135	TCQ177	11.40	TCQ209	34.20
M7 x 1	Metric Coarse	3	13	66	TCQ094	TCQ136	TCQ178	12.40	TCQ210	37.10
M8 x 1.25	Metric Coarse	3	16	72	TCQ095	TCQ137	TCQ179	12.40	TCQ211	37.10
M9 x 1.25	Metric Coarse	3	16	72	TCQ096	TCQ138	TCQ180	16.10	TCQ212	48.30
M10 x 1.5	Metric Coarse	3	18	80	TCQ075	TCQ117	TCQ159	23.30	TCQ199	69.80
M11 x 1.5	Metric Coarse	3	19	85	TCQ076	TCQ118	TCQ160	23.30	TCQ200	69.80
M12 x 1.75	Metric Coarse	3	22	89	TCQ077	TCQ119	TCQ161	27.40	TCQ201	82.20
M14 x 2	Metric Coarse	4	24	95	TCQ097	TCQ139	TCQ181	40.80	TCQ213	123.00
M16 x 2	Metric Coarse	4	24	102	TCQ098	TCQ140	TCQ182	50.00	TCQ214	150.00
M18 x 2.5	Metric Coarse	4	29	112	TCQ099	TCQ141	TCQ183	66.70	TCQ215	202.00
M20 x 2.5	Metric Coarse	4	29	112	TCQ100	TCQ142	TCQ184	91.40	TCQ216	275.00
M22 x 2.5	Metric Coarse	4	29	118	TCQ101	TCQ143	TCQ185	100.10	TCQ217	299.00
M24 x 3	Metric Coarse	4	35	130	TCQ102	TCQ144	TCQ186	122.00	TCQ218	359.00
M27 x 3	Metric Coarse	4	35	135	TCQ103	TCQ145	TCQ187	216.00	-	-
M30 x 3.5	Metric Coarse	4	41	138	TCQ104	TCQ146	TCQ188	284.00	-	-
M33 x 3.5	Metric Coarse	4	41	151	TCQ105	TCQ147	TCQ189	369.00	-	-
M36 x 4	Metric Coarse	4	47	162	TCQ106	TCQ148	TCQ190	409.00	-	-
M39 x 4	Metric Coarse	4	47	170	TCQ107	TCQ149	TCQ191	449.00	-	-
M42 x 4.5	Metric Coarse	6	53	170	TCQ108	TCQ150	TCQ192	579.00	-	-
M45 x 4.5	Metric Coarse	6	54	187	TCQ109	TCQ151	TCQ193	789.00	-	-
M48 x 5	Metric Coarse	6	60	187	TCQ110	TCQ152	TCQ194	839.00	-	-
M52 x 5	Metric Coarse	6	60	200	-	-	TCQ195	959.00	-	-
M56 x 5.5	Metric Coarse	6	60	200	-	-	TCQ196	1059.00	-	-

TAPS & DIES

WIZARD SPIRAL POINT MACHINE TAPS - NC & NF



CLARKSON  OSBORN



Size	Thread Form	L2"	L1"	L3"	A"	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
0-80	NF	3/8	1 5/8	3/16	0.110	2	BF370	CT72100	35.50	-	-	-	TBM048	CT79100	47.90
1-64	NC	7/16	1 11/16	3/16	0.110	2	BF367	CT72001	35.50	-	-	-	TBM049	CT79001	47.90
1-72	NF	7/16	1 11/16	3/16	0.110	2	BF371	CT72101	35.50	-	-	-	TBM050	CT79101	47.90
2-56	NC	1/2	1 3/4	3/16	0.110	2	BF368	CT72002	20.90	-	-	-	BF544	CT79002	32.50
2-64	NF	1/2	1 3/4	3/16	0.110	2	BF372	CT72102	20.90	-	-	-	TBM051	CT79102	32.50
3-48	NC	9/16	1 13/16	3/16	0.110	2	BF369	CT72003	20.90	-	-	-	TBM052	CT79003	32.50
3-56	NF	9/16	1 13/16	3/16	0.110	2	BF373	CT72103	20.90	-	-	-	TBM053	CT79103	32.50
4-40	NC	5/8	1 7/8	3/16	0.110	2	QD614	CT72004	18.90	BF390	CT73004	22.90	TBM054	CT79004	30.50
4-48	NF	5/8	1 7/8	3/16	0.110	2	BF374	CT72104	18.90	BF400	CT73104	22.90	BF550	CT79104	30.50
5-40	NC	11/16	1 15/16	3/16	0.110	2	QD615	CT72005	18.90	BF391	CT73005	22.90	BF545	CT79005	30.50
5-44	NF	11/16	1 15/16	3/16	0.110	2	BF375	CT72105	18.90	BF401	CT73105	22.90	BF551	CT79105	30.50
6-32	NC	11/16	2	3/16	0.110	2	QD616	CT72006	12.50	BF392	CT73006	14.90	BF546	CT79006	23.50
6-40	NF	11/16	2	3/16	0.110	2	BF376	CT72106	12.50	BF402	CT73106	14.90	TBM055	CT79106	23.50
8-32	NC	3/4	2 1/8	1/4	0.131	2	QD617	CT72008	12.50	BF393	CT73008	14.90	BF547	CT79008	23.50
8-36	NF	3/4	2 1/8	1/4	0.131	2	BF377	CT72108	12.50	BF403	CT73108	14.90	TBM056	CT79108	23.50
10-24	NC	11/16	2 3/8	1/4	0.152	2	QD618	CT72010	12.50	BF394	CT73010	14.90	BF548	CT79010	23.50
10-32	NF	11/16	2 3/8	1/4	0.152	2	-	-	-	BF404	CT73110	14.90	BF552	CT79110	23.50
12-24	NC	11/16	2 3/8	9/32	0.165	2	QD619	CT72012	16.50	BF395	CT73012	19.90	BF549	CT79012	27.90
12-28	NF	11/16	2 3/8	9/32	0.165	2	QD621	CT72120	16.50	BF405	CT73120	19.90	TBM057	CT79120	27.90
1/4-20	NC	13/16	2 1/2	5/16	0.191	2	QD622	CT72404	13.50	BF406	CT73404	15.90	BF553	CT79404	24.50
1/4-28	NF	13/16	2 1/2	5/16	0.191	2	QD631	CT72504	13.50	BF416	CT73504	15.90	BF561	CT79504	24.50
5/16-18	NC	7/8	2 23/32	3/8	0.238	3	QD623	CT72405	14.50	BF407	CT73405	17.50	BF554	CT79405	31.90
5/16-24	NF	7/8	2 23/32	3/8	0.238	3	QD632	CT72505	14.50	BF417	CT73505	17.50	BF562	CT79505	31.90
3/8-16	NC	1	2 15/16	7/16	0.286	3	QD624	CT72406	19.50	BF408	CT73406	23.50	BF555	CT79406	37.50
3/8-24	NF	1	2 15/16	7/16	0.286	3	QD633	CT72506	19.50	BF418	CT73506	23.50	BF563	CT79506	37.50
7/16-14	NC	1 1/16	3 5/32	13/32	0.242	3	QD625	CT72407	26.50	BF409	CT73407	31.50	BF556	CT79407	48.50
7/16-20	NF	1 1/16	3 5/32	13/32	0.242	3	QD634	CT72507	26.50	BF419	CT73507	31.50	BF564	CT79507	48.50
1/2-13	NC	1 3/16	3 3/8	7/16	0.275	3	QD626	CT72408	28.90	BF410	CT73408	34.50	BF557	CT79408	50.90
1/2-20	NF	1 3/16	3 3/8	7/16	0.275	3	QD635	CT72508	28.90	BF420	CT73508	34.50	BF565	CT79508	50.90
9/16-12	NC	1 3/16	3 19/32	1/2	0.322	3	-	-	-	BF411	CT73409	60.50	BF558	CT79409	73.90
9/16-18	NF	1 3/16	3 19/32	1/2	0.322	3	QR181	CT72509	50.50	BF421	CT73509	60.50	BF566	CT79509	73.90
5/8-11	NC	1 3/8	3 13/16	9/16	0.360	3	QD627	CT72410	50.50	BF412	CT73410	60.50	BF559	CT79410	88.90
5/8-18	NF	1 3/8	3 13/16	9/16	0.360	3	QD636	CT72510	50.50	BF422	CT73510	60.50	TBM058	CT79510	88.90
3/4-10	NC	1 7/16	4 1/4	11/16	0.442	3	QD628	CT72412	72.90	BF413	CT73412	87.50	TBM059	CT79412	125.00
3/4-16	NF	1 7/16	4 1/4	11/16	0.442	3	QD637	CT72512	72.90	BF423	CT73512	87.50	BF567	CT79512	125.00
7/8-9	NC	1 5/8	4 11/16	3/4	0.523	3	QD629	CT72414	96.50	BF414	CT73414	115.00	TBM060	CT79414	155.00
7/8-14	NF	1 5/8	4 11/16	3/4	0.523	3	QR186	CT72514	96.50	BF424	CT73514	115.00	TBM061	CT79514	155.00
1-8	NC	1 3/4	5 1/8	13/16	0.600	4	QD630	CT72416	125.00	BF415	CT73416	149.00	BF560	CT79416	179.00
1-12	NF	1 3/4	5 1/8	13/16	0.600	4	QR161	CT72516	125.00	BF425	CT73516	149.00	TBM062	CT79516	179.00

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	Gold Wizard Model No.	Mfg. No.	Price /Each
M2.0 x 0.40	8.0	41.0	4.0	2.00	3	BF350	CT71020	27.50	TBM035	CT78020	39.50
M2.5 x 0.45	9.5	44.5	5.0	2.24	3	BF351	CT71025	22.90	TBM036	CT78025	34.50
M3.0 x 0.50	15.0	48.0	5.0	2.50	3	QR162	CT71030	17.90	BF535	CT78030	29.50
M3.5 x 0.60	17.0	50.0	5.0	2.80	3	QR163	CT71035	17.90	TBM037	CT78035	29.50
M4.0 x 0.70	17.0	53.0	6.0	3.15	3	QR164	CT71040	14.50	BF536	CT78040	25.90
M4.5 x 0.75	17.0	53.0	6.0	3.55	3	BF352	CT71045	19.50	TBM038	CT78045	31.50
M5.0 x 0.80	16.0	58.0	7.0	4.00	3	QR165	CT71050	16.50	BF537	CT78050	27.90
M6.0 x 1.00	19.0	66.0	8.0	5.00	3	QR166	CT71060	16.90	BF538	CT78060	28.50
M7.0 x 1.00	19.0	66.0	8.0	5.60	3	BF353	CT71070	21.90	TBM039	CT78070	40.50
M8.0 x 1.25	22.0	72.0	9.0	6.30	3	QR167	CT71080	18.50	BF539	CT78080	36.90
M10.0 x 1.50	24.0	80.0	11.0	8.00	3	QR168	CT71100	25.50	BF540	CT78100	48.50
M12.0 x 1.75	29.0	89.0	10.0	7.10	3	QR101	CT71120	40.50	BF541	CT78120	64.50
M14.0 x 2.00	30.0	95.0	12.0	9.00	3	QR172	CT71140	51.90	BF542	CT78140	77.50
M16.0 x 2.00	32.0	102.0	13.0	10.00	3	QR112	CT71160	64.90	BF543	CT78160	109.00
M18.0 x 2.50	37.0	112.0	14.0	11.20	3	BF354	CT71180	87.50	TBM040	CT78180	129.00
M20.0 x 2.50	37.0	112.0	14.0	11.20	3	QR160	CT71200	115.00	TBM041	CT78200	169.00
M22.0 x 2.50	38.0	118.0	16.0	12.50	3	BF355	CT71220	135.00	TBM042	CT78220	195.00
M24.0 x 3.00	45.0	130.0	18.0	14.00	3	QR183	CT71240	149.00	TBM043	CT78240	215.00

SPIRAL POINT TAPS

- Material: High Speed Cobalt
- Manufacturing Standards: ANSI
- Cutting Direction: Right Hand
- Chamfer Type: Plug
- Tolerance: 3B

EO25 & EO35 SERIES - BRIGHT FLUTE & BRONZE BODY FINISH

- Premium substrate for through hole tapping in tough or abrasive materials
- Bronze oxide body and shank reduces rust and corrosion
- Bright finish flutes improve chip flow in soft or non-ferrous materials

Note: Reinforced shanks: Sizes 6-32 to 3/8"-24
Reduced shanks: Sizes 7/16"-14 to 1"-14



Model No.	Thread Size	Thread Form	No. of Flutes	L2"	L1"	Limits	Price /Each
TCP825	6-32	Unified Coarse	2	0.2610	2	H2	12.60
TCP868	6-40	Unified Fine	2	0.261	2	H2	14.30
TCP826	8-32	Unified Coarse	2	0.2484	2-1/8	H2	12.60
TCP869	8-36	Unified Fine	2	0.2484	2-1/8	H2	14.30
TCP827	10-24	Unified Coarse	2	0.4303	2-3/8	H3	12.60
TCP870	10-32	Unified Fine	3	0.4303	2-3/8	H2	12.60
TCP828	12-24	Unified Coarse	3	0.4173	2-3/8	H3	14.30
TCP829	1/4"-20	Unified Coarse	2	0.5075	2-1/2	H3	12.60
TCP830	1/4"-20	Unified Coarse	3	0.5075	2-1/2	H3	12.60
TCP871	1/4"-28	Unified Fine	2	0.5075	2-1/2	H3	12.60
TCP872	1/4"-28	Unified Fine	3	0.5075	2-1/2	H3	12.60
TCP831	5/16"-18	Unified Coarse	2	0.5939	2-23/32	H3	13.70
TCP832	5/16"-18	Unified Coarse	3	0.5939	2-23/32	H3	13.70
TCP873	5/16"-24	Unified Fine	2	0.5939	2-23/32	H3	13.70
TCP874	5/16"-24	Unified Fine	3	0.5939	2-23/32	H3	13.70
TCP833	3/8"-16	Unified Coarse	2	0.602	2-15/16	H3	16.30
TCP834	3/8"-16	Unified Coarse	3	0.602	2-15/16	H3	16.30
TCP875	3/8"-24	Unified Fine	3	0.602	2-15/16	H3	16.30

Model No.	Thread Size	Thread Form	No. of Flutes	L2"	L1"	Limits	Price /Each
TCP876	3/8"-24	Unified Fine	2	0.602	2-15/16	H3	16.30
TCP835	7/16"-14	Unified Coarse	3	0.9055	3-5/32	H3	27.40
TCP877	7/16"-20	Unified Fine	3	0.9055	3-5/32	H3	27.40
TCP836	1/2"-13	Unified Coarse	3	0.9055	3-3/8	H3	28.00
TCP837	1/2"-13	Unified Coarse	3	0.9055	3-3/8	H3	28.00
TCP878	1/2"-20	Unified Fine	3	0.9055	3-3/8	H3	32.20
TCP879	1/2"-20	Unified Fine	3	0.9055	3-3/8	H3	32.20
TCP838	9/16"-12	Unified Coarse	3	0.9843	3-19/32	H3	55.10
TCP880	9/16"-18	Unified Fine	3	0.9843	3-19/32	H3	55.10
TCP839	5/8"-11	Unified Coarse	3	0.9843	3-13/16	H3	62.20
TCP881	5/8"-18	Unified Fine	3	0.9843	3-13/16	H3	65.90
TCP840	3/4"-10	Unified Coarse	3	1.1614	4-1/4	H4	88.90
TCP882	3/4"-16	Unified Fine	3	1.1614	4-1/4	H3	92.70
TCP841	7/8"-9	Unified Coarse	2	1.1614	4-11/16	H4	122.00
TCP883	7/8"-14	Unified Fine	3	1.1614	4-11/16	H4	122.00
TCP842	1"-8	Unified Coarse	2	1.3976	5-1/8	H4	150.00
TCP884	1"-14	Unified Fine	2	1.3976	5-1/8	H4	155.00

EO26 & EO36 SERIES - STEAM OXIDE FINISH

- Premium substrate with steam oxide surface treatment reduces wear and prevents chip welding in abrasive or harder ferrous materials

Note: Reinforced Shanks: Sizes 2-56 to 3/8"-24
Reduced Shanks: Sizes 7/16"-14 to 1"-14



Model No.	Thread Size	Thread Form	No. of Flutes	L2"	L1"	Limits	Price /Each
TCP843	2-56	Unified Coarse	2	0.314	1-3/4	H2	24.70
TCP844	4-40	Unified Coarse	2	0.6091	1-7/8	H2	15.40
TCP845	5-40	Unified Coarse	2	0.7404	1-15/16	H2	15.40
TCP846	6-32	Unified Coarse	2	0.261	2	H2	12.60
TCP847	8-32	Unified Coarse	2	0.2484	2-1/8	H2	12.60
TCP848	10-24	Unified Coarse	2	0.4303	2-3/8	H3	12.60
TCP885	10-32	Unified Fine	2	0.4303	2-3/8	H2	12.60
TCP849	12-24	Unified Coarse	3	0.4173	2-3/8	H3	14.30
TCP886	12-28	Unified Fine	2	0.4173	2-3/8	H3	13.60
TCP850	1/4"-20	Unified Coarse	3	0.5075	2-1/2	H3	12.60
TCP851*	1/4"-20	Unified Coarse	3	0.5075	2-1/2	H11	12.60
TCP852	1/4"-20	Unified Coarse	3	0.5075	2-1/2	H3	12.60
TCP887	1/4"-28	Unified Fine	2	0.5075	2-1/2	H3	12.60
TCP888	1/4"-28	Unified Fine	3	0.5075	2-1/2	H3	12.60
TCP853	5/16"-18	Unified Coarse	3	0.5939	2-23/32	H3	13.70
TCP854*	5/16"-18	Unified Coarse	2	0.5939	2-23/32	H11	13.70
TCP855	5/16"-18	Unified Coarse	3	0.5939	2-23/32	H3	13.70
TCP889	5/16"-24	Unified Fine	2	0.5939	2-23/32	H3	13.20
TCP890	5/16"-24	Unified Fine	3	0.5939	2-23/32	H3	13.20
TCP856	3/8"-16	Unified Coarse	3	0.602	2-15/16	H3	16.30
TCP857*	3/8"-16	Unified Coarse	3	0.602	2-15/16	H11	16.30

* Tolerance: Oversize +0.005", not 3B

Model No.	Thread Size	Thread Form	No. of Flutes	L2"	L1"	Limits	Price /Each
TCP858	3/8"-16	Unified Coarse	3	0.602	2-15/16	H3	16.30
TCP891	3/8"-24	Unified Fine	2	0.602	2-15/16	H3	16.30
TCP859	7/16"-14	Unified Coarse	3	0.9055	3-5/32	H3	27.40
TCP892	7/16"-20	Unified Fine	3	0.9055	3-5/32	H3	27.40
TCP860	1/2"-13	Unified Coarse	3	0.9055	3-3/8	H3	28.00
TCP861*	1/2"-13	Unified Coarse	3	0.9055	3-3/8	H11	28.00
TCP862	1/2"-13	Unified Coarse	3	0.9055	3-3/8	H3	28.00
TCP893	1/2"-20	Unified Fine	3	0.9055	3-3/8	H3	32.20
TCP894	1/2"-20	Unified Fine	2	0.9055	3-3/8	H3	32.20
TCP863	9/16"-12	Unified Coarse	3	0.9843	3-19/32	H3	55.10
TCP895	9/16"-18	Unified Fine	3	0.9843	3-19/32	H3	55.10
TCP864*	5/8"-11	Unified Coarse	3	0.9843	3-13/16	H11	62.20
TCP865	5/8"-11	Unified Coarse	3	0.9843	3-13/16	H3	62.20
TCP896	5/8"-18	Unified Fine	3	0.9843	3-13/16	H3	65.90
TCP866	3/4"-10	Unified Coarse	2	1.1614	4-1/4	H4	88.90
TCP897	3/4"-16	Unified Fine	3	1.1614	4-1/4	H3	92.70
TCP867	7/8"-9	Unified Coarse	2	1.1614	4-11/16	H4	122.00
TCP898	7/8"-14	Unified Fine	3	1.1614	4-11/16	H4	122.00
TCP899	1"-12	Unified Fine	3	1.3976	5-1/8	H4	150.00
TCP900	1"-14	Unified Fine	3	1.3976	5-1/8	H4	155.00

TAPS & DIES

SPIRAL FLUTE TAPS 45°

- Material: High Speed Cobalt
- Manufacturing Standards: ANSI
- Chamfer Type: Semi-Bottoming
- Tolerance: 3B
- Cutting Direction: Right Hand

EO27 & EO37 SERIES - BRIGHT FLUTES & BRONZE OXIDE BODY FINISH

- Premium substrate for blind hole tapping in tough or abrasive materials
- Bronze oxide body and shank reduces rust and corrosion
- Bright finish flutes improve chip flow in soft and non-ferrous materials

Model No.	Thread Size	Thread Form	No. of Flutes	L2"	L1"	Limits	Price /Each
TCQ017	6-32	Unified Coarse	3	0.261	2	H2	23.80
TCQ018	8-32	Unified Coarse	3	0.2484	2-1/8	H2	23.80
TCQ019	10-24	Unified Coarse	3	0.265	2-3/8	H3	23.80
TCQ047	10-32	Unified Fine	3	0.265	2-3/8	H2	23.80
TCQ020	12-24	Unified Coarse	3	0.252	2-3/8	H3	25.80
TCQ021	1/4"-20	Unified Coarse	3	0.3937	2-1/2	H3	27.10
TCQ048	1/4"-28	Unified Fine	3	0.3937	2-1/2	H3	27.10
TCQ022	5/16"-18	Unified Coarse	3	0.4567	2-23/32	H3	33.30
TCQ049	5/16"-24	Unified Fine	3	0.4567	2-23/32	H3	33.30
TCQ023	3/8"-16	Unified Coarse	3	0.5315	2-15/16	H3	38.50
TCQ050	3/8"-24	Unified Fine	3	0.5315	2-15/16	H3	38.50
TCQ024	7/16"-14	Unified Coarse	3	0.6299	3-5/32	H3	57.30
TCQ051	7/16"-20	Unified Fine	3	0.6299	3-5/32	H3	57.30

EO28 & EO38 SERIES - STEAM OXIDE FINISH

- Premium substrate with steam oxide surface treatment reduces wear and prevents chip welding in abrasive or harder ferrous materials

Note: Reinforced shanks: Sizes 4-40 to 3/8"-24
Reduced shanks: Sizes 7/16"-14 to 1"-14

Model No.	Thread Size	Thread Form	No. of Flutes	L2"	L1"	Limits	Price /Each
TCQ031	4-40	Unified Coarse	3	0.6091	1-7/8	H2	25.40
TCQ032	5-40	Unified Coarse	3	0.7404	1-15/16	H2	25.40
TCQ033	6-32	Unified Coarse	3	0.261	2	H2	23.80
TCQ034	8-32	Unified Coarse	3	0.2484	2-1/8	H2	23.80
TCQ035	10-24	Unified Coarse	3	0.265	2-3/8	H3	23.80
TCQ058	10-32	Unified Fine	3	0.265	2-3/8	H2	23.80
TCQ036	12-24	Unified Coarse	3	0.252	2-3/8	H3	25.80
TCQ037	1/4"-20	Unified Coarse	3	0.3937	2-1/2	H3	27.10
TCQ059	1/4"-28	Unified Fine	3	0.3937	2-1/2	H3	27.10
TCQ038	5/16"-18	Unified Coarse	3	0.4567	2-23/32	H3	33.30
TCQ060	5/16"-24	Unified Fine	3	0.4567	2-23/32	H3	33.30
TCQ039	3/8"-16	Unified Coarse	3	0.5315	2-15/16	H3	38.50
TCQ061	3/8"-24	Unified Fine	3	0.5315	2-15/16	H3	38.50
TCQ040	7/16"-14	Unified Coarse	3	0.6299	3-5/32	H3	57.30

SPIRAL FLUTE TAP 45°

- Material: High Speed Cobalt
- Manufacturing Standards: ISO 529
- Helix Angle: 45°
- Cutting Direction: Right Hand
- Chamfer Type: Semi-Bottoming
- Tolerance: 6H

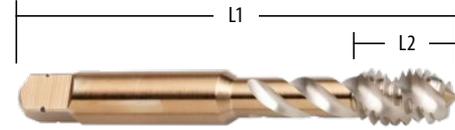
Note: ISO shank and square dimensions require metric holders

EO02 SERIES - BRIGHT FLUTE & BRONZE OXIDE BODY FINISH

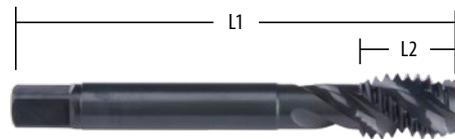
- Premium substrate for blind hole tapping in tough or abrasive materials
- Bronze oxide body and shank reduces rust and corrosion
- Bright finish flutes improve chip flow in soft and non-ferrous materials

Note: Reinforced shanks: Sizes M2 x 0.4 to M10 x 1.5
Reduced shanks: Sizes M12 x 1.75 to M24 x 3

Model No.	Thread Size	Thread Form	No. of Flutes	L2 mm	L1 mm	Limits	Price /Each
TCP968	M2 x 0.4	Metric Coarse	2	8	41	D3	46.60
TCP969	M2.5 x 0.45	Metric Coarse	2	9.5	44.5	D3	31.50
TCP970	M3 x 0.5	Metric Coarse	3	6	48	D3	20.80
TCP971	M4 x 0.7	Metric Coarse	3	7	53	D4	18.50
TCP972	M5 x 0.8	Metric Coarse	3	8	58	D4	20.50
TCP973	M6 x 1	Metric Coarse	3	10	66	D5	20.80
TCP974	M8 x 1.25	Metric Coarse	3	12	72	D5	23.10
TCP975	M10 x 1.5	Metric Coarse	3	15	80	D6	28.50



Model No.	Thread Size	Thread Form	No. of Flutes	L2"	L1"	Limits	Price /Each
TCQ025	1/2"-13	Unified Coarse	3	0.689	3-3/8	H3	68.40
TCQ052	1/2"-20	Unified Fine	3	0.689	3-3/8	H3	68.40
TCQ026	9/16"-12	Unified Coarse	3	0.7087	3-19/32	H3	114.00
TCQ053	9/16"-18	Unified Fine	3	0.7087	3-19/32	H3	114.00
TCQ027	5/8"-11	Unified Coarse	3	0.7087	3-13/16	H3	114.00
TCQ054	5/8"-18	Unified Fine	3	0.7087	3-13/16	H3	114.00
TCQ028	3/4"-10	Unified Coarse	3	0.8858	4-1/4	H4	156.00
TCQ055	3/4"-16	Unified Fine	3	0.8858	4-1/4	H3	156.00
TCQ029	7/8"-9	Unified Coarse	3	0.9843	4-11/16	H4	196.00
TCQ056	7/8"-14	Unified Fine	3	0.9843	4-11/16	H4	196.00
TCQ030	1"-8	Unified Coarse	3	1.1811	5-1/8	H4	259.00
TCQ057	1"-14	Unified Fine	3	1.1811	5-1/8	H4	259.00



Model No.	Thread Size	Thread Form	No. of Flutes	L2"	L1"	Limits	Price /Each
TCQ062	7/16"-20	Unified Fine	3	0.6299	3-5/32	H3	57.30
TCQ041	1/2"-13	Unified Coarse	3	0.689	3-3/8	H3	68.40
TCQ063	1/2"-20	Unified Fine	3	0.689	3-3/8	H3	68.40
TCQ042	9/16"-12	Unified Coarse	3	0.7087	3-19/32	H3	114.00
TCQ064	9/16"-18	Unified Fine	3	0.7087	3-19/32	H3	114.00
TCQ043	5/8"-11	Unified Coarse	3	0.7087	3-13/16	H3	114.00
TCQ065	5/8"-18	Unified Fine	3	0.7087	3-13/16	H3	114.00
TCQ044	3/4"-10	Unified Coarse	3	0.8858	4-1/4	H4	156.00
TCQ066	3/4"-16	Unified Fine	3	0.8858	4-1/4	H3	156.00
TCQ045	7/8"-9	Unified Coarse	3	0.9843	4-11/16	H4	196.00
TCQ067	7/8"-14	Unified Fine	3	0.9843	4-11/16	H4	196.00
TCQ046	1"-8	Unified Coarse	3	1.1811	5-1/8	H4	259.00
TCQ068	1"-14	Unified Fine	3	1.1811	5-1/8	H4	259.00



Model No.	Thread Size	Thread Form	No. of Flutes	L2 mm	L1 mm	Limits	Price /Each
TCP976	M12 x 1.75	Metric Coarse	3	16	89	D6	41.00
TCP977	M14 x 2	Metric Coarse	3	18	95	D7	63.60
TCP978	M16 x 2	Metric Coarse	4	18	102	D7	62.90
TCP979	M18 x 2.5	Metric Coarse	4	29	112	D7	101.00
TCP980	M20 x 2.5	Metric Coarse	4	29	112	D7	111.00
TCP981	M22 x 2.5	Metric Coarse	4	29	118	D8	131.00
TCP982	M24 x 3	Metric Coarse	4	35	130	D8	150.00



SPIRAL FLUTE TAP 45° (CONT.)

E003 & EO13 SERIES - STEAM OXIDE FINISH

- Premium substrate with steam oxide surface treatment reduces wear and prevents chip welding in abrasive or harder ferrous materials

Note: Reinforced shanks: sizes M2 x 0.4 to M10 x 1.25
Reduced shanks: sizes M12 x 1 to M24 x 3



Model No.	Thread Size	Thread Form	No. of Flutes	L2 mm	L1 mm	Limits	Price /Each
TCP983	M2x0.4	Metric Coarse	2	8	41	D3	46.60
TCP984	M2.5x0.45	Metric Coarse	2	9.5	44.5	D3	31.50
TCP985	M3x0.5	Metric Coarse	3	6	48	D3	20.80
TCP998	M4x0.5	Metric Fine	3	7	53	D4	43.30
TCP986	M4x0.7	Metric Coarse	3	7	53	D4	18.50
TCP999	M5x0.5	Metric Fine	3	8	58	D4	38.20
TCP987	M5x0.8	Metric Coarse	3	8	58	D4	20.50
TCQ000	M6x0.5	Metric Fine	3	10	66	D5	47.80
TCQ001	M6x0.75	Metric Fine	3	10	66	D5	47.80
TCP988	M6x1	Metric Coarse	3	10	66	D5	20.80
TCQ002	M8x0.75	Metric Fine	3	12	72	D5	55.40
TCQ003	M8x1	Metric Fine	3	12	72	D5	55.40
TCP989	M8x1.25	Metric Coarse	3	12	72	D5	23.10
TCQ004	M10x1	Metric Fine	3	15	80	D6	64.90
TCQ005	M10x1.25	Metric Fine	3	15	80	D6	64.90
TCP990	M10x1.5	Metric Coarse	3	15	80	D6	28.50

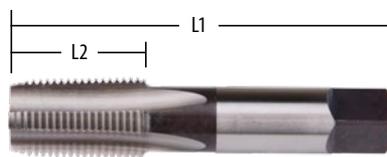
Model No.	Thread Size	Thread Form	No. of Flutes	L2 mm	L1 mm	Limits	Price /Each
TCQ006	M12x1	Metric Fine	3	16	89	D6	89.10
TCQ007	M12x1.25	Metric Fine	3	16	89	D6	89.10
TCQ008	M12x1.5	Metric Fine	3	16	89	D6	89.10
TCP991	M12x1.75	Metric Coarse	3	16	89	D6	41.00
TCQ009	M14x1.5	Metric Fine	3	18	95	D7	116.00
TCP992	M14x2	Metric Coarse	3	18	95	D7	63.60
TCQ010	M16x1	Metric Fine	4	18	102	D7	134.00
TCQ011	M16x1.5	Metric Fine	4	18	102	D7	134.00
TCP993	M16x2	Metric Coarse	4	18	102	D7	62.90
TCQ012	M18x1.5	Metric Fine	4	29	112	D7	193.00
TCP994	M18x2.5	Metric Coarse	4	29	112	D7	101.00
TCQ013	M20x1.5	Metric Fine	4	29	112	D7	211.00
TCP995	M20x2.5	Metric Coarse	4	29	112	D7	111.00
TCQ014	M22x1.5	Metric Fine	4	29	112	D8	249.00
TCP996	M22x2.5	Metric Coarse	4	29	118	D8	131.00
TCP997	M24x3	Metric Coarse	4	35	130	D8	150.00

MEDIUM HOOK PIPE TAPS

E710 SERIES

- Generally used for pipe fittings and couplings in most ferrous and non-ferrous materials
- Medium hook for multi-material tapping
- Straight flute
- Material: High Speed Steel
- Thread Form: National Taper Pipe
- Manufacturing Standards: ANSI B94.9
- Finish: Bright
- Cutting Direction: Right Hand

Note: NPT threads require the use of a sealant such as teflon tape or pipe compound to ensure a tight joint



Model No.	Pipe Size	No. of Flutes	L2 mm	L1 mm	Price /Each
TCP958	1/16"-27	4	17	65	32.30
TCP959	1/8"-27	4	19	70	32.30
TCP960	1/4"-18	4	27	75	34.90
TCP961	3/8"-18	4	27	80	46.10
TCP962	1/2"-14	4	35	100	72.50
TCP963	3/4"-14	5	35	105	103.00
TCP964	1"-11.5	5	43	115	156.00
TCP965	1-1/4"-11.5	5	43	125	221.00
TCP966	1-1/2"-11.5	7	43	135	299.00
TCP967	2"-11.5	7	43	145	399.00

STRAIGHT HANDLE TAP WRENCHES

3850 SERIES

- Ideal for hand tapping
- Hardened steel jaws are opened and closed by simply twisting one hand which is knurled for side gripping



UNION BUTTERFIELD®

Model No.	Imperial Hand Tap Capacity"	Metric Hand Tap Capacity"	Hand Reamer Capacity"	Size	Price /Each
TCP921	1/16 - 5/16	M1 - M8	1/8 - 5/16	#8	274.00
TCP922	3/16 - 1/2	M4 - M12	3/16 - 3/8	#9	295.00
TCP923	1/4 - 3/4	M3 - M18	1/4 - 9/16	#10	319.00
TCP924	3/8 - 1	M10 - M25	3/8 - 3/4	#11	589.00
TCP925	3/8 - 1-1/8	M10 - M27	3/8 - 7/8	#12	619.00
TCP926	7/8 - 1-7/8	M22 - M42	5/8 - 1-1/2	#14	799.00

SCREW EXTRACTORS

- Left hand rotation screw extractors
- Material: Chromium Steel



UNION BUTTERFIELD®

1800 SERIES

Model No.	Extractor Size	For Screw/Bolt Sizes"	For Pipe Sizes"	Overall Length"	Small End Diameter"	Shank Size"	Price /Each
TCP901	#1	3/16 - 1/4	-	2	0.054	5/32	7.25
TCP902	#2	1/4 - 5/16	-	2-3/8	0.086	3/16	7.40
TCP903	#3	5/16 - 7/16	-	2-3/4	1/8	1/4	9.10
TCP904	#4	7/16 - 9/16	-	3	11/64	5/16	9.50
TCP905	#5	9/16 - 3/4	1/8 - 1/4	3-3/8	1/4	7/16	12.20
TCP906	#6	3/4 - 1	3/8	3-3/4	3/8	5/8	26.10
TCP907	#7	1 - 1-3/8	1/2	4-1/8	31/64	3/4	43.40
TCP908	#8	1-3/8 - 1-3/4	3/4	4-3/8	47/64	1	58.70
TCP909	#9	1-3/4 - 2-1/8	1	4-5/8	31/32	1-1/4	101.00
TCP910	#10	2-1/8 - 2-1/2	1-1/4	5	1-7/32	1-17/32	149.00
TCP911	#11	2-1/2 - 3	1-1/2	5-5/8	1-15/32	1-27/32	215.00
TCP912	#12	3 - 3-1/2	2	6-1/4	1-27/32	2-9/32	349.00

1815 & 1816 SERIES

Model No.	Extractor Size	For Screw/Bolt Sizes"	For Pipe Sizes"	Price /Each
TCP913	#1 to #5	3/16 - 3/4	1/8 - 1/4	54.80
TCP914	#1 to #6	3/16 - 1	1/8 - 3/8	81.90

TAPS & DIES

EXTENSION HAND TAPS

- High speed steel, ground threads
- Square drive shank
- Right hand cutting direction
- Plug style only

Application:

Designed for deep hole tapping where the work requires an undercut shank to follow through hole

MACHINE SCRW SIZES - NATIONAL COARSE NC & NATIONAL FINE NF

Model No.	NF & NC Size	L2"	L1"	A"	Flutes	Price /Each
BM040	6-32 NC	11/16	6	0.141	3	65.50
BM041	8-32 NC	3/4	6	0.168	4	65.50
BM042	10-24 NC	7/8	6	0.194	4	63.50
BM051	10-32 NF	7/8	6	0.194	4	63.50

FRACTIONAL - NATIONAL FINE NF

Model No.	National Fine Size	L2"	L1"	A"	Flutes	Price /Each
BM052	1/4-28 NF	1	6	0.255	4	55.50
TBL997	5/16-24 NF	1 1/8	6	0.318	4	61.90
BM053	3/8-24 NF	1 1/4	6	0.381	4	66.90
TBM002	7/16-20 NF	1 7/16	6	0.323	4	139.00
BM054	1/2-20 NF	1 21/32	6	0.367	4	85.50
TBM004	9/16-18 NF	1 21/32	6	0.429	4	195.00
TBM005	5/8-18 NF	1 13/16	6	0.480	4	209.00

BAR TYPE TAP & REAMER WRENCHES

- Best suited for smaller diameter hand taps & reamers
- Holds round or square drive shanks



CLARKSON OSBORN

Model No.	Sizes	Price/Each
BM610	1/16"/M2 to 1/4"/M6	47.90
BM611	1/8"/M3 to 1/2"/M12	73.90

ADJUSTABLE TAP WRENCHES

- Rugged construction
- Well balanced
- Holds round or square drive shanks



CLARKSON OSBORN

Model No.	Sizes	Price/Each
BM612	1/8"/M3 to 1/2"/M12	79.90
BM613	7/32"/M6 to 3/4"/M20	90.90
BM614	7/16"/M12 to 1"/M24	119.00
BM615	3/4"/M18 to 1 1/2"/M42	265.00
BM616	1"/M24 to 2 1/2"/M50	425.00

CLARKSON OSBORN



FRACTIONAL - NATIONAL COARSE NC

Model No.	National Coarse Size	L2"	L1"	A"	Flutes	Price /Each
BM043	1/4-20 NC	1	6	0.255	4	55.50
BM062	1/4-20 NC	1	6	0.185	4	88.50
BM055	1/4-20 NC	1	8	0.255	4	67.90
BM044	5/16-18 NC	1 1/8	6	0.318	4	58.90
BM063	5/16-18 NC	1 1/8	6	0.420	4	90.90
BM056	5/16-18 NC	1 1/8	8	0.318	4	67.90
BM045	3/8-16 NC	1 1/4	6	0.381	4	63.90
BM057	3/8-16 NC	1 1/4	8	0.381	4	83.50
TBL998	3/8-16 NC	1 1/4	6	0.275	4	99.50
TBL999	3/8-16 NC	1 1/4	10	0.381	4	185.00
BM046	7/16-14 NC	1 7/16	6	0.323	4	139.00
BM047	1/2-13 NC	1 21/32	6	0.367	4	85.50
BM048	9/16-12 NC	1 21/32	6	0.429	4	195.00
BM049	5/8-11 NC	1 13/16	6	0.480	4	209.00
BM058	5/8-11 NC	1 13/16	8	0.480	4	249.00
BM050	3/4-10 NC	2	6	0.590	4	245.00
BM059	3/4-10 NC	2	8	0.590	4	279.00
TBM006	3/4-10 NC	2	10	0.590	4	325.00
BM060	7/8-9 NC	2 7/32	8	0.697	4	285.00
BM061	1-8 NC	2 1/2	8	0.800	4	349.00
TBM007	1-8 NC	2 1/2	10	0.800	4	419.00

T-TYPE TAP WRENCHES

- Knurled cap and chuck sleeve
- Heat-treated jaws
- T-handle
- Available in 4" and 8" body lengths



CLARKSON OSBORN

4" BODY LENGTH

Model No.	Sizes	Price/Each
QR060	1/16"/M1 to 1/4"/M6	68.50
QR051	1/4"/M6 to 1/2"/M12	68.50

8" BODY LENGTH

Model No.	Sizes	Price/Each
BM617	1/16"/M1 to 1/4"/M6	76.50
BM618	1/4"/M6 to 1/2"/M12	84.90

DIE STOCKS

- For round split dies
- Knurled handle



CLARKSON OSBORN

Model No.	Die Ø"	Overall Length"	Price /Each
BM619	13/16	6 1/2	24.50
BM620	1	9	42.90
BM623	1 15/16	11	52.50
BM621	1 1/2	13 3/4	52.50
BM622	2	21 5/8	72.50
BM625	2 1/4	24	159.00
BM624	3	31	249.00

PIPE DIES

- Industrial duty
- High speed steel
- Right hand cut



NATIONAL PIPE THREAD - NPT

Model No.	NPT Size	Ø"	Thickness"	Price /Each
BM149	1/8-27	1	3/8	40.50
TBL912	1/8-27	1 5/16	7/16	209.00
BM150	1/8-27	1 1/2	1/2	64.90
TBL913	1/4-18	1 5/16	7/16	209.00
QE257	1/4-18	1 1/2	1/2	64.90
BM153	1/4-18	2	5/8	309.00
BM152	3/8-18	1 1/2	1/2	64.90
BM154	3/8-18	2	5/8	309.00
BM155	1/2-14	2	5/8	115.00
BM156	3/4-14	2	5/8	115.00
BM157	1-11.5	3	7/8	165.00
BM158	1 1/4-11.5	3	7/8	705.00
BM159	1 1/2-11.5	4	1	2195.00
BM160	2-11.5	4	1	2195.00

BRITISH STANDARD PIPE THREAD - BSPT

Model No.	BSPT Size	Ø"	Thickness"	Price /Each
TBL914	1/2-14	2	5/8	429.00
TBL915	3/4-14	2	5/8	429.00
TBL916	1-11	2 1/4	11/16	739.00
TBL917	1-11	3	7/8	979.00
TBL918	1 1/4-11	3	7/8	979.00
TBL919	1 1/2-11	4	1	3059.00
TBL920	2-11	4	1	3059.00

BRITISH STANDARD PIPE FINE - BSPF

Model No.	BSPF Size	Ø"	Thickness"	Price /Each
BM163	1/8-28	1	3/8	68.50
TBL921	1/8-28	1 5/16	7/16	105.00
BM165	1/8-28	1 1/2	1/2	159.00
BM164	1/4-19	1 5/16	7/16	105.00
BM166	1/4-19	1 1/2	1/2	125.00
TBL922	1/4-19	2	5/8	229.00
BM167	3/8-19	1 1/2	1/2	125.00
TBL923	3/8-19	2	5/8	229.00
BM168	1/2-14	2	5/8	185.00
BM169	5/8-14	2	5/8	229.00
BM170	3/4-14	2	5/8	229.00
TBL924	1-11	2 1/4	11/16	325.00
BM171	1-11	3	7/8	399.00
BM172	1 1/4-11	3	7/8	399.00

HEXAGONAL DIE NUTS

- Maintenance duty
- Carbon steel
- Right hand cut

Application:

For cutting external screw threads, either by hand, using a die stock or by machine, using a floating die holder



NATIONAL FINE - NF

Model No.	NF Size	A"	Thickness"	Price /Each
BM640	1/4-28	0.710	1/4	19.90
BM641	5/16-24	0.820	5/16	21.90
BM642	3/8-24	0.920	3/8	23.50
BM643	7/16-20	1.010	7/16	26.50
BM644	1/2-20	1.100	1/2	28.50
BM645	9/16-18	1.300	5/8	30.90
BM646	5/8-18	1.300	5/8	35.50
BM647	3/4-16	1.480	11/16	49.90
BM648	7/8-14	1.670	13/16	51.50
BM649	1-12	2.050	15/16	55.90
BM650	1 1/8-12	2.220	1 1/16	65.90
BM651	1 1/4-12	2.220	1 1/16	76.50
BM652	1 3/8-12	2.580	1 1/8	86.50
BM653	1 1/2-12	2.760	1 1/4	96.90

NATIONAL COARSE - NC

Model No.	NC Size	A"	Thickness"	Price /Each
BM626	1/4-20	0.710	1/4	19.90
BM627	5/16-18	0.820	5/16	21.90
BM628	3/8-16	0.920	3/8	23.50
BM629	7/16-14	1.010	7/16	26.50
BM630	1/2-13	1.100	1/2	28.50
BM631	9/16-12	1.300	5/8	30.90
BM632	5/8-11	1.300	5/8	35.50
BM633	3/4-10	1.480	11/16	49.90
BM634	7/8-9	1.670	13/16	51.50
BM635	1-8	2.050	15/16	55.90
BM636	1 1/8-7	2.220	1 1/16	65.90
BM637	1 1/4-7	2.220	1 1/16	76.50
BM638	1 3/8-6	2.580	1 1/8	86.50
BM639	1 1/2-6	2.760	1 1/4	96.90

TAPS & DIES

HEXAGONAL DIE NUTS

- Industrial duty
- High speed steel
- Right hand cut

Applications:

For cutting external screw threads, either by hand, using a die stock or by machine, using a floating die holder



CLARKSON  **OSBORN**

NATIONAL FINE - NF

Model No.	HSS-NF Size	A"	Thickness"	Price /Each
BM671	1/4-28	0.710	1/4	45.50
BM672	5/16-24	0.820	5/16	52.90
BM673	3/8-24	0.920	3/8	61.50
BM674	7/16-20	1.010	7/16	77.90
BM675	1/2-20	1.100	1/2	77.90
BM676	9/16-18	1.300	5/8	95.90
BM677	5/8-18	1.300	5/8	95.90
BM678	3/4-16	1.480	11/16	115.00
BM679	7/8-14	1.670	13/16	135.00
BM680	1-12	2.050	15/16	195.00
BM681	1 1/8-12	2.220	1 1/16	249.00
BM682	1 1/4-12	2.220	1 1/16	349.00
BM683	1 3/8-12	2.580	1 1/8	399.00
BM684	1 1/2-12	2.760	1 1/4	445.00

NATIONAL COARSE - NC

Model No.	HSS-NC Size	A"	Thickness"	Price /Each
BM655	1/4-20	0.710	1/4	45.50
BM656	5/16-18	0.820	5/16	52.90
BM657	3/8-16	0.920	3/8	61.50
BM658	7/16-14	1.010	7/16	77.90
BM659	1/2-13	1.100	1/2	77.90
BM660	9/16-12	1.300	5/8	95.90
BM661	5/8-11	1.300	5/8	95.90
BM662	3/4-10	1.480	11/16	119.00
BM663	7/8-9	1.670	13/16	135.00
BM664	1-8	2.050	15/16	195.00
BM665	1 1/8-7	2.220	1 1/16	249.00
BM666	1 1/4-7	2.220	1 1/16	349.00
BM667	1 3/8-6	2.580	1 1/8	399.00
BM668	1 1/2-6	2.760	1 1/4	445.00
BM669	1 3/4-5	3.150	1 3/8	639.00
BM670	2-4.5	3.550	1 3/4	789.00

METRIC

Model No.	Metric Size	A"	Thickness"	Price /Each
TBL925	M3 x 0.5	0.710	1/4	45.90
BM685	M4 x 0.7	0.710	1/4	45.90
TBL926	M5 x 0.8	0.710	1/4	45.50
BM686	M6 x 1	0.710	1/4	42.90
TBL927	M7 x 1	0.820	5/16	48.90
BM687	M8 x 1.25	0.820	5/16	48.90
BM688	M9 x 1.25	0.920	3/8	56.90
BM689	M10 x 1.5	0.920	3/8	56.90
BM690	M11 x 1.5	1.010	7/16	80.50
BM691	M12 x 1.75	1.100	1/2	80.50

METRIC

Model No.	Metric Size	A"	Thickness"	Price /Each
BM692	M14 x 2	1.300	5/8	94.90
BM693	M16 x 2	1.300	5/8	94.90
BM694	M18 x 2.5	1.480	11/16	109.00
BM695	M20 x 2.5	1.480	11/16	109.00
BM696	M22 x 2.5	1.670	13/16	139.00
BM697	M24 x 3	2.050	15/16	219.00
BM698	M27 x 3	2.220	1 1/16	345.00
BM699	M30 x 3.5	2.220	1 1/16	345.00
TBL928	M33 x 3.5	2.580	1 1/8	465.00
TBL929	M36 x 4	2.760	1 1/4	465.00

METRIC FINE

Model No.	Metric Fine Size	A"	Thickness"	Price /Each
TBL930	MF3 x 0.35	0.710	1/4	485.00
TBL931	MF4 x 0.50	0.710	1/4	279.00
TBL932	MF5 x 0.50	0.710	1/4	72.90
TBL933	MF6 x 0.75	0.710	1/4	65.50
TBL934	MF7 x 0.75	0.820	3/8	235.00
TBL935	MF8 x 1	0.820	3/8	72.90
BM700	MF10 x 1	0.920	3/8	105.00
BM701	MF12 x 1.25	1.100	1/2	119.00
BM702	MF14 x 1.5	1.300	1/2	129.00
TBL936	MF16 x 1.5	1.300	1/2	129.00
TBL937	MF18 x 1.5	1.480	1/2	159.00
BM703	M20 x 1.5	1.480	5/8	159.00
BM704	MF22 x 1.5	1.670	5/8	175.00
TBL938	MF24 x 2	2.050	5/8	269.00
TBL939	MF25 x 1.5	2.050	5/8	269.00

BRITISH STANDARD WHITWORTH - BSW

Model No.	BSW Size	A"	Thickness"	Price /Each
TBL940	1/8-40	0.710	1/4	149.00
TBL941	3/16-24	0.710	1/4	119.00
TBL942	1/4-20	0.710	1/4	76.50
TBL943	5/16-18	0.820	5/16	90.90
TBL944	3/8-16	0.920	3/8	105.00
TBL945	7/16-14	1.010	7/16	145.00
TBL946	1/2-12	1.100	1/2	129.00
TBL947	9/16-12	1.300	5/8	159.00
TBL948	5/8-11	1.300	5/8	159.00
TBL949	3/4-10	1.480	11/16	199.00
TBL950	7/8-9	1.670	13/16	225.00
TBL951	1-8	2.050	15/16	329.00
TBL952	1 1/8-7	2.220	1 1/16	445.00
TBL953	1 1/4-7	2.220	1 1/16	545.00
TBL954	1 1/2-6	2.760	1 1/4	715.00
TBL955	1 3/4-5	3.150	1 3/8	879.00
TBL956	2-4.5	3.550	1 3/4	1085.00

BRITISH STANDARD FINE - BSW

Model No.	BSF Size	A"	Thickness"	Price /Each
TBL957	1/4-26	0.710	1/4	76.50
BM705	5/16-22	0.820	5/16	90.90
BM706	3/8-20	0.920	3/8	105.00
TBL958	7/16-18	1.010	7/16	145.00
TBL959	1/2-16	1.100	1/2	129.00
TBL960	9/16-16	1.300	5/8	159.00
TBL961	5/8-14	1.300	5/8	159.00
TBL962	11/16-14	1.480	11/16	249.00
TBL963	3/4-12	1.480	11/16	199.00
TBL964	7/8-11	1.670	13/16	225.00
TBL965	1-10	2.050	15/16	329.00
TBL966	1 1/8-9	2.220	1 1/16	445.00
TBL967	1 1/4-9	2.220	1 1/16	545.00
BM707	1 1/2-8	2.760	1 1/4	715.00
TBL968	1 3/4-7	3.150	1 3/8	869.00
TBL969	2-7	3.550	1 3/4	1085.00

SPLIT CIRCULAR DIES

- Industrial duty
- High speed steel
- Right hand cut

Applications:

For cutting external screw threads, either by hand, using a die stock or by machine, using a floating die holder



MACHINE SCREW SIZES

Model No.	Machine Screw Size	Ø"	Thickness"	Price /Each
BM084	#0-80 NF	13/16	1/4	49.50
BM075	#1-64 NC	13/16	1/4	49.50
BM085	#1-72 NF	13/16	1/4	49.50
BM076	#2-56 NC	13/16	1/4	49.50
BM086	#2-64 NF	13/16	1/4	49.50
BM077	#3-48-NC	13/16	1/4	49.50
BM087	#3-56 NF	13/16	1/4	49.50
BM078	#4-40 NC	13/16	1/4	49.50
BM088	#4-48 NF	13/16	1/4	49.50
BM079	#5-40 NC	13/16	1/4	49.50
BM089	#5-44 NF	13/16	1/4	49.50
BM080	#6-32 NC	13/16	1/4	49.50
BM090	#6-40 NF	13/16	1/4	49.50
BM081	#8-32 NC	13/16	1/4	49.50
BM091	#8-36 NF	13/16	1/4	49.50
BM082	#10-24 NC	13/16	1/4	49.50
BM092	#10-32 NF	13/16	1/4	49.50
BM083	#12-24 NC	13/16	1/4	49.50
BM093	#12-28 NF	13/16	1/4	49.50

FRACTIONAL - NATIONAL COARSE (NC)

Model No.	National Coarse Size - NC	Ø"	Thickness"	Price /Each
BM094	1/4-20	13/16	1/4	49.50
BM096	1/4-20	1	3/8	61.50
BM102	1/4-20	1 5/16	7/16	99.90
BM097	5/16-18	1	3/8	61.50
BM103	5/16-18	1 5/16	7/16	99.90
BM098	3/8-16	1	3/8	61.50
BM104	3/8-16	1 5/16	7/16	99.90
BM114	3/8-16	1 1/2	1/2	99.90
BM105	7/16-14	1 5/16	7/16	99.90
BM115	7/16-14	1 1/2	1/2	99.90
BM106	1/2-13	1 5/16	7/16	99.90
BM116	1/2-13	1 1/2	1/2	99.90
BM126	1/2-13	2	5/8	175.00
BM107	9/16-12	1 5/16	7/16	99.90
BM117	9/16-12	1 1/2	1/2	99.90
BM127	9/16-12	2	5/8	175.00
BM118	5/8-11	1 1/2	1/2	99.90
BM128	5/8-11	2	5/8	175.00
BM119	3/4-10	1 1/2	1/2	99.90
BM129	3/4-10	2	5/8	175.00
TBL975	7/8-9	2	5/8	175.00
BM131	1-8	2	5/8	175.00
BM139	1-8	3	7/8	309.00
BM140	1 1/8-7	3	7/8	309.00
BM141	1 1/4-7	3	7/8	309.00
BM142	1 3/8-6	3	7/8	309.00
BM143	1 1/2-6	3	7/8	309.00

FRACTIONAL - NATIONAL FINE (NF)

Model No.	National Fine Size - NF	Ø"	Thickness"	Price /Each
BM095	1/4-28	13/16	1/4	49.50
BM099	1/4-28	1	3/8	61.50
BM108	1/4-28	1 5/16	7/16	99.90
BM100	5/16-24	1	3/8	61.50
BM109	5/16-24	1 5/16	7/16	99.90
BM101	3/8-24	1	3/8	61.50
BM110	3/8-24	1 5/16	7/16	99.90
BM120	3/8-24	1 1/2	1/2	99.90
BM111	7/16-20	1 5/16	7/16	99.90
BM121	7/16-20	1 1/2	1/2	99.90
BM112	1/2-20	1 5/16	7/16	99.90
BM122	1/2-20	1 1/2	1/2	99.90
BM132	1/2-20	2	5/8	175.00
BM113	9/16-18	1 5/16	7/16	99.90
BM123	9/16-18	1 1/2	1/2	99.90
BM133	9/16-18	2	5/8	175.00
BM124	5/8-18	1 1/2	1/2	99.90
BM134	5/8-18	2	5/8	175.00
BM125	3/4-16	1 1/2	1/2	99.90
BM135	3/4-16	2	5/8	175.00
BM136	7/8-14	2	5/8	175.00
BM137	1-12	2	5/8	175.00
BM144	1-12	3	7/8	309.00
BM145	1 1/8-12	3	7/8	309.00
BM146	1 1/4-12	3	7/8	309.00
BM147	1 3/8-12	3	7/8	309.00
BM148	1 1/2-12	3	7/8	309.00

METRIC SIZES

Model No.	Metric Size	Ø"	Thickness"	Price /Each
TBL976	M1.4x0.30	13/16	1/4	43.90
BM522	M1.6x0.35	13/16	1/4	43.90
BM523	M1.8x0.35	13/16	1/4	43.90
BM524	M2x0.40	13/16	1/4	43.90
BM525	M2.2x0.45	13/16	1/4	43.90
BM526	M2.5x0.45	13/16	1/4	43.90
BM527	M3x0.5	13/16	1/4	43.90
BM528	M3.5x0.6	13/16	1/4	43.90
BM529	M4x0.7	13/16	1/4	43.90
BM537	M4x0.7	1	3/8	54.50
TBL977	M4.5x0.75	13/16	1/4	43.90
BM531	M5x0.8	13/16	1/4	43.90
BM538	M5x0.8	1	3/8	54.50
TBL978	M6x1	13/16	1/4	43.90
BM539	M6x1	1	3/8	54.50
BM547	M6x1	1 5/16	7/16	87.90
BM533	M7x1	13/16	1/4	43.90
BM540	M7x1	1	3/8	54.50
BM548	M7x1	1 5/16	7/16	87.90
BM534	M8x1.25	1	3/8	54.50
BM541	M8x1.25	1 5/16	7/16	87.90
BM535	M9x1.25	1	3/8	54.50
BM542	M9x1.25	1 5/16	7/16	87.90
BM536	M10x1.5	1	3/8	54.50

Model No.	Metric Size	Ø"	Thickness"	Price /Each
BM543	M10x1.5	1 5/16	7/16	87.90
BM549	M10x1.5	1 1/2	1/2	87.90
BM544	M11x1.5	1 5/16	7/16	87.90
BM550	M11x1.5	1 1/2	1/2	87.90
BM545	M12x1.75	1 5/16	7/16	87.90
BM551	M12x1.75	1 1/2	1/2	87.90
BM556	M12x1.75	2	5/8	139.00
BM546	M14x2	1 5/16	7/16	87.90
BM552	M14x2	1 1/2	1/2	87.90
BM557	M14x2	2	5/8	139.00
BM553	M16x2	1 1/2	1/2	87.90
BM558	M16x2	2	5/8	139.00
BM554	M18x2.5	1 1/2	1/2	87.90
BM559	M18x2.5	2	5/8	139.00
BM555	M20x2.5	1 1/2	1/2	87.90
BM560	M20x2.5	2	5/8	139.00
BM561	M22x2.5	2	5/8	139.00
BM562	M24x3	2	5/8	139.00
BM563	M27x3	3	7/8	279.00
BM564	M30x3.5	3	7/8	279.00
TBL979	M33x3.5	3	7/8	279.00
BM565	M36x4	3	7/8	279.00
BM566	M39x4	3	7/8	279.00

METRIC FINE SIZES

Model No.	Metric Fine Size	Ø"	Thickness"	Price /Each
BM567	MF3x0.35	13/16	1/4	83.50
BM568	MF4x0.5	13/16	1/4	83.50
BM569	MF5x0.5	13/16	1/4	83.50
BM570	MF6x0.75	13/16	1/4	83.50
BM580	MF8x1	1	3/8	94.90
TBL980	MF10x1	1	3/8	94.90
TBL981	MF10x1.25	1	3/8	94.90
BM572	MF12x1.25	1 5/16	7/16	145.00
BM573	MF14x1.5	1 5/16	7/16	145.00

Model No.	Metric Fine Size	Ø"	Thickness"	Price /Each
BM574	MF16x1.5	1 1/2	1/2	179.00
BM575	MF18x1.5	1 1/2	1/2	179.00
BM576	MF20x1.5	2	5/8	265.00
BM577	MF22x1.5	2	5/8	265.00
BM578	MF24x2	2	5/8	265.00
BM579	MF25x1.5	2	5/8	265.00
TBL982	MF27x2	3	7/8	555.00
TBL983	MF30x2	3	7/8	555.00
TBL984	MF32x1.5	3	7/8	555.00



Can't find what you're looking for?

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REAMERS

HAND REAMERS

- High speed steel
- Right hand cutting direction
- Spiral flute
- Straight shank
- Ground starting taper on cutting end for easy entry

Applications:

Hand reamers are designed for extreme accuracy and are used by hand for final sizing of drilled holes. The square shank end fits in a tap wrench.

CLARKSON OSBORN



FRACTIONAL SIZES

Model No.	Fractional Size"	Decimal Equiv."	L2 mm	L1 mm	Price /Each
BK453	1/16	0.0625	21.0	44.0	66.90
BK454	3/32	0.0938	29.0	58.0	49.90
BK455	1/8	0.1250	33.0	66.0	37.50
BK456	9/64	0.1406	35.0	71.0	44.50
BK457	5/32	0.1562	38.0	76.0	40.90
BK458	11/64	0.1719	41.0	81.0	44.90
BK459	3/16	0.1875	44.0	87.0	41.50
BK460	13/64	0.2031	44.0	87.0	47.90
BK461	7/32	0.2188	48.0	93.0	43.90
TBM143	15/64	0.2344	48.0	93.0	48.50
BK462	1/4	0.2500	50.0	100.0	42.50
BK463	17/64	0.2656	54.0	107.0	51.50
BK464	9/32	0.2812	54.0	107.0	48.90
BK465	19/64	0.2969	58.0	115.0	55.50
BK466	5/16	0.3125	58.0	115.0	48.90
BK467	21/64	0.3281	58.0	115.0	57.90
BK468	11/32	0.3438	62.0	124.0	60.90

Model No.	Fractional Size"	Decimal Equiv."	L2 mm	L1 mm	Price /Each
BK469	23/64	0.3594	62.0	124.0	70.50
BK470	3/8	0.3750	66.0	133.0	56.90
BK471	25/64	0.3906	66.0	133.0	70.90
BK472	13/32	0.4062	66.0	133.0	67.90
BK473	27/64	0.4219	71.0	142.0	76.50
BK474	7/16	0.4375	71.0	142.0	67.50
BK475	29/64	0.4531	71.0	142.0	84.50
BK476	15/32	0.4688	76.0	152.0	72.90
BK477	31/64	0.4844	76.0	152.0	92.90
BK478	1/2	0.5000	76.0	152.0	64.90
BK479	17/32	0.5312	81.0	163.0	87.50
BK480	9/16	0.5625	81.0	163.0	82.50
BK481	19/32	0.5938	87.0	175.0	109.00
BK482	5/8	0.6250	87.0	175.0	83.50
BK483	21/32	0.6562	87.0	175.0	125.00
BK484	11/16	0.6875	93.0	188.0	109.00
BK485	23/32	0.7188	93.0	188.0	145.00
BK486	3/4	0.7500	100.0	201.0	115.00

Model No.	Fractional Size"	Decimal Equiv."	L2 mm	L1 mm	Price /Each
BK487	25/32	0.7813	100.0	201.0	209.00
BK488	13/16	0.8125	100.0	201.0	135.00
BK489	27/32	0.8438	107.0	215.0	219.00
BK490	7/8	0.8750	107.0	215.0	145.00
BK491	29/32	0.9062	107.0	215.0	219.00
BK492	15/16	0.9375	115.0	231.0	199.00
BK493	31/32	0.9688	115.0	231.0	265.00
BK494	1	1.0000	115.0	231.0	209.00
BK495	1 1/16	1.0625	124.0	247.0	239.00
BK496	1 1/8	1.1250	124.0	247.0	235.00
BK497	1 1/4	1.2500	133.0	265.0	285.00
BK498	1 3/8	1.3750	142.0	284.0	349.00
BK499	1 1/2	1.5000	152.0	305.0	419.00
BK500	1 5/8	1.6250	152.0	305.0	475.00
BK501	1 3/4	1.7500	163.0	326.0	615.00
TBM144	1 7/8	1.8750	174.0	347.0	729.00
BK502	2	2.0000	174.0	347.0	759.00

METRIC SIZES

Model No.	Metric Size	Decimal Equiv."	L2 mm	L1 mm	Price /Each
BK503	2.00	0.0787	25.0	50.0	55.50
BK504	2.50	0.0984	29.0	58.0	49.90
BK505	3.00	0.1181	31.0	62.0	42.90
BK506	3.50	0.1378	35.0	71.0	37.50
BK507	4.00	0.1575	38.0	76.0	37.90
BK508	4.50	0.1772	41.0	81.0	41.90
BK509	5.00	0.1969	44.0	87.0	40.50
BK510	5.50	0.2165	48.0	93.0	46.90
BK511	6.00	0.2362	48.0	93.0	42.50
BK512	6.50	0.2559	50.0	100.0	46.90
BK513	7.00	0.2756	54.0	107.0	43.90
BK514	7.50	0.2953	58.0	115.0	48.90
BK515	8.00	0.3150	58.0	115.0	48.90
BK516	8.50	0.3346	58.0	115.0	52.90
BK517	9.00	0.3543	62.0	124.0	56.90
BK518	9.50	0.3740	62.0	124.0	62.50

Model No.	Metric Size	Decimal Equiv."	L2 mm	L1 mm	Price /Each
BK519	10.00	0.3937	66.0	133.0	56.90
BK520	10.50	0.4134	66.0	133.0	65.90
BK521	11.00	0.4331	71.0	142.0	65.90
BK522	11.50	0.4528	71.0	142.0	70.50
BK523	12.00	0.4724	76.0	152.0	63.90
BK524	12.50	0.4921	76.0	152.0	72.50
BK525	13.00	0.5118	76.0	152.0	66.50
BK526	13.50	0.5315	81.0	163.0	85.90
BK527	14.00	0.5512	81.0	163.0	82.50
BK528	15.00	0.5906	81.0	163.0	89.90
BK529	16.00	0.6299	87.0	175.0	88.50
BK530	17.00	0.6693	87.0	175.0	99.90
BK531	18.00	0.7087	93.0	188.0	99.90
BK532	19.00	0.7480	93.0	188.0	115.00
BK533	20.00	0.7874	100.0	201.0	119.00
BK534	21.00	0.8268	100.0	201.0	139.00

Model No.	Metric Size	Decimal Equiv."	L2 mm	L1 mm	Price /Each
BK535	22.00	0.8661	107.0	215.0	149.00
BK536	23.00	0.9055	107.0	215.0	159.00
BK537	24.00	0.9449	115.0	231.0	189.00
BK538	25.00	0.9843	115.0	231.0	209.00
BK539	26.00	1.0236	115.0	231.0	219.00
BK540	27.00	1.0630	124.0	247.0	235.00
BK541	28.00	1.1024	124.0	247.0	229.00
BK542	30.00	1.1811	124.0	247.0	275.00
BK543	32.00	1.2598	133.0	265.0	295.00
BK544	33.00	1.2992	133.0	265.0	345.00
BK545	34.00	1.3386	142.0	284.0	345.00
BK546	35.00	1.3780	142.0	284.0	385.00
BK547	36.00	1.4173	142.0	284.0	375.00
BK548	38.00	1.4961	152.0	305.0	425.00
BK549	40.00	1.5748	152.0	305.0	485.00

STRAIGHT SHANK ALIGNING REAMERS

- Right hand cut
- High speed steel
- Straight shank
- Spiral flute

Applications:

Aligning Reamers are designed for aligning holes in structural steel fabrication for bridgework, ship construction, automotive maintenance, and railroad car manufacturing. Their shorter length makes for easier work in tight areas. Can be used in any 1/2" 3 jaw power tool.



FRACTIONAL SIZES

Model No.	Fractional Size"	Decimal Equiv."	L2 mm	L1 mm	Price /Each
TC0036	1/4	0.2500	2.5	4.375	83.90
TC0037	5/16	0.3125	2.75	4.625	83.90
TC0038	3/8	0.3750	2.75	4.625	83.90
TC0039	7/16	0.4375	3.5	5.375	86.90
TC0040	1/2	0.5000	4.0	5.875	86.90
TC0041	9/16	0.5625	4.0	5.875	96.90
TC0042	39/64	0.6094	4.5	6.375	109.00
TC0043	5/8	0.6250	4.5	6.375	99.90

Model No.	Fractional Size"	Decimal Equiv."	L2 mm	L1 mm	Price /Each
TC0044	11/16	0.6875	4.5	6.375	115.00
TC0045	3/4	0.7500	5.0	6.875	135.00
TC0046	13/16	0.8125	5.0	6.875	135.00
TC0047	7/8	0.8750	5.0	6.875	145.00
TC0048	15/16	0.9375	5.0	6.875	155.00
TC0049	1	1.0	5.0	6.875	179.00
TC0050	11/16	1.0625	5.0	6.875	209.00

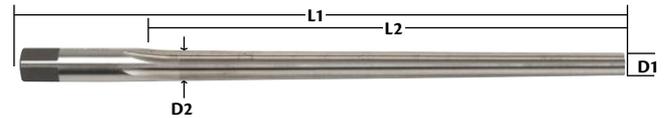
Model No.	Fractional Size"	D1"	L2"	L1"	Hex Diameter"	Price /Each
TC0051	11/16	0.6875	4 1/2	6 1/2	1 1/16	135.00
TC0052	13/16	0.8125	5	7	1 1/4	165.00
TC0053	15/16	0.9375	5	7	1 7/16	179.00
TC0054	1 1/16	1.0625	5	7	1 5/8	245.00

TAPER PIN REAMERS

- Right hand cut
- High speed steel
- Straight shank
- Straight flute

Application:

Taper Pin Reamers are manufactured with a taper of 1/4" per foot. They are used to ream holes into which standard taper pins will fit. The point of each reamer will enter hole reamed by next smaller size. Hole to be reamed should be a few thousandths smaller than the small diameter of the finished reamed hole.



Model No.	Fractional Size"	D1"	D2"	L2"	L1"	Price /Each
TBM090	5/64	0.0592	0.0800	1	2	69.50
TBM091	3/32	0.0690	0.0950	1 1/4	2 1/4	56.90
TBM092	7/64	0.0798	0.1110	1 1/2	2 1/2	60.90
BK404	1/8	0.0905	0.1270	1 3/4	2 3/4	47.50
TBM093	9/64	0.1039	0.1430	1 7/8	2 7/8	59.90
BK405	5/32	0.1163	0.1580	2	3	54.50
BK406	11/64	0.1271	0.1740	2 1/4	3 1/2	58.90
BK407	3/16	0.1377	0.1950	2 3/4	4	57.50
BK408	7/32	0.1627	0.2200	2 3/4	4	61.50
BK409	1/4	0.1827	0.2530	3 3/8	4 5/8	59.50

Model No.	Fractional Size"	D1"	D2"	L2"	L1"	Price /Each
BK410	9/32	0.2061	0.2920	4 1/8	5 5/8	69.90
BK411	5/16	0.2301	0.3160	4 1/8	5 5/8	72.90
BK412	11/32	0.2533	0.3470	4 1/2	6	72.90
BK413	3/8	0.2768	0.3810	5	6 1/2	80.90
TBM094	13/32	0.2922	0.4120	5 3/4	7 1/2	95.50
BK414	7/16	0.3232	0.4430	5 3/4	7 1/2	98.90
BK415	1/2	0.3706	0.5060	6 1/2	8 1/4	139.00
BK416	9/16	0.4304	0.5710	6 3/4	8 1/2	209.00
BK417	5/8	0.4768	0.6330	7 1/2	9 1/4	239.00
BK418	3/4	0.5777	0.7600	8 3/4	10 3/4	279.00

METRIC SIZES

Model No.	Metric Size mm	D1 mm	D2 mm	L2 mm	L1 mm	Price /Each
BK440	2.0	1.90	2.86	48.0	68.0	46.90
BK441	2.5	2.40	3.36	48.0	68.0	48.50
BK442	3.0	2.90	4.06	58.0	80.0	49.50
BK443	4.0	3.90	5.26	68.0	93.0	55.50
BK444	5.0	4.90	6.36	73.0	100.0	59.50
BK445	6.0	5.90	8.00	105.0	135.0	69.50
BK446	8.0	7.90	10.80	145.0	180.0	87.90

Model No.	Metric Size mm	D1 mm	D2 mm	L2 mm	L1 mm	Price /Each
BK447	10.0	9.90	13.40	175.0	215.0	115.00
BK448	12.0	11.80	16.00	194.0	240.0	129.00
BK449	13.0	12.86	16.74	194.0	240.0	159.00
BK450	14.0	13.86	17.76	194.0	240.0	215.00
BK451	16.0	15.80	20.40	230.0	280.0	265.00
BK452	20.0	19.80	24.80	230.0	310.0	359.00

NUMBER SIZES

Model No.	Number Size	D1"	D2"	L2"	L1"	Price /Each
TBM095	7/0	0.0497	0.0666	13/16	1 13/16	37.90
BK423	6/0	0.0611	0.0806	15/16	1 15/16	37.90
BK422	5/0	0.0719	0.0966	1 3/16	2 3/16	34.90
BK421	4/0	0.0869	0.1142	1 5/16	2 5/16	34.90
BK420	3/0	0.1029	0.1302	1 5/16	2 5/16	34.90
BK419	2/0	0.1137	0.1462	1 9/16	2 9/16	31.50
BK424	0/0	0.1287	0.1638	1 11/16	2 15/16	29.90
BK425	1	0.1447	0.1798	1 11/16	2 15/16	28.90
BK426	2	0.1605	0.2008	1 15/16	3 3/16	28.90
BK427	3	0.1813	0.2294	2 5/16	3 11/16	28.90
BK428	4	0.2071	0.2604	2 9/16	4 1/16	32.50
BK429	5	0.2409	0.2994	2 13/16	4 5/16	34.90
BK430	6	0.2773	0.3540	3 11/16	5 7/16	41.90
BK431	7	0.3297	0.4220	4 7/16	6 5/16	53.90
BK432	8	0.3971	0.5050	5 3/16	7 3/16	68.90
BK433	9	0.4805	0.6066	6 1/16	8 5/16	84.50
BK434	10	0.5799	0.7216	6 13/16	9 5/16	115.00
BK435	11	0.7060	0.8780	8 1/4	11 1/4	229.00
BK436	12	0.8420	1.0500	10	13 5/8	325.00
BK437	13	1.0090	1.2590	12	16	485.00
BK438	14	1.2500	1.5420	14	18 1/4	609.00



ZENITH
SAFETY PRODUCTS
FOR INDUSTRY

REAMERS

CHUCKING REAMERS - HIGH SPEED STEEL

- Right hand cut
- High speed steel
- Straight shank
- Straight flute

Application:

Straight Flute Chucking Reamers are designed for general purpose reaming. Ground with 45° chamfer.

CLARKSON OSBORN



FRACTIONAL SIZES

Model No.	Fractional Size"	Decimal Equiv."	L2"	L1"	Price /Each
BK156	3/64	0.0469	1/2	2 1/2	36.90
BK157	1/16	0.0625	1/2	2 1/2	33.50
BK158	5/64	0.0781	3/4	3	29.90
BK159	3/32	0.0938	3/4	3	27.50
BK160	7/64	0.1094	7/8	3 1/2	30.90
BK161	1/8	0.1250	7/8	3 1/2	14.90
BK162	9/64	0.1406	1	4	22.90
BK163	5/32	0.1562	1	4	20.90
BK164	11/64	0.1719	1 1/8	4 1/2	22.90
BK165	3/16	0.1875	1 1/8	4 1/2	20.90
BK166	13/64	0.2031	1 1/4	5	27.90
BK167	7/32	0.2188	1 1/4	5	26.90
BK168	15/64	0.2344	1 1/2	6	27.90
BK169	1/4	0.2500	1 1/2	6	24.50
BK170	17/64	0.2656	1 1/2	6	30.90
BK171	9/32	0.2812	1 1/2	6	30.90
BK172	19/64	0.2969	1 1/2	6	32.50
BK173	5/16	0.3125	1 1/2	6	28.90
BK174	21/64	0.3281	1 1/2	6	35.50
BK175	11/32	0.3438	1 1/2	6	35.50
BK176	23/64	0.3594	1 3/4	7	35.50
BK177	3/8	0.3750	1 3/4	7	30.90
BK178	25/64	0.3906	1 3/4	7	36.50
BK179	13/32	0.4062	1 3/4	7	37.90
BK180	27/64	0.4219	1 3/4	7	39.90
BK181	7/16	0.4375	1 3/4	7	36.50
BK182	29/64	0.4531	1 3/4	7	44.50

Model No.	Fractional Size"	Decimal Equiv."	L2"	L1"	Price /Each
BK183	15/32	0.4688	1 3/4	7	43.50
BK184	31/64	0.4844	2	8	44.50
BK185	1/2	0.5000	2	8	39.90
BK186	17/32	0.5313	2	8	47.90
BK187	9/16	0.5625	2	8	46.50
BK188	19/32	0.5938	2	8	54.50
BK189	5/8	0.6250	2 1/4	9	54.50
BK190	21/32	0.6563	2 1/4	9	54.50
BK191	11/16	0.6875	2 1/4	9	61.90
BK192	23/32	0.7188	2 1/4	9	71.90
BK193	3/4	0.7500	2 1/2	9 1/2	68.90
BK194	25/32	0.7813	2 1/2	9 1/2	80.50
BK195	13/16	0.8125	2 1/2	9 1/2	80.50
BK196	27/32	0.8438	2 1/2	9 1/2	90.90
BK197	7/8	0.8750	2 5/8	10	88.90
BK198	29/32	0.9063	2 5/8	10	99.90
BK199	15/16	0.9375	2 5/8	10	99.90
BK200	31/32	0.9688	2 5/8	10	115.00
BK201	1	1.0000	2 3/4	10 1/2	109.00
BK202	1 1/16	1.0625	2 3/4	10 1/2	129.00
BK203	1 1/8	1.1250	2 7/8	11	135.00
BK204	1 3/16	1.1875	2 7/8	11	155.00
BK205	1 1/4	1.2500	3	11 1/2	169.00
BK206	1 5/16	1.3125	3	11 1/2	185.00
BK207	1 3/8	1.3750	3 1/4	12	205.00
BK208	1 7/16	1.4375	3 1/4	12	219.00
BK209	1 1/2	1.5000	3 1/2	12 1/2	239.00

WIRE GAUGE SIZES

Model No.	Wire No.	Decimal Equiv."	L2"	L1"	Price /Each
BK269	60	0.0400	1/2	2 1/2	30.50
BK268	59	0.0410	1/2	2 1/2	30.50
BK267	58	0.0420	1/2	2 1/2	30.50
BK266	57	0.0430	1/2	2 1/2	30.50
BK265	56	0.0465	1/2	2 1/2	30.50
BK264	55	0.0520	1/2	2 1/2	30.50
BK263	54	0.0550	1/2	2 1/2	30.50
BK262	53	0.0595	1/2	2 1/2	30.50
BK261	52	0.0635	1/2	2 1/2	28.50
BK260	51	0.0670	3/4	3	24.50
BK259	50	0.0700	3/4	3	24.50
BK258	49	0.0730	3/4	3	24.50
BK257	48	0.0760	3/4	3	24.50
BK256	47	0.0785	3/4	3	24.50
BK255	46	0.0810	3/4	3	24.50
BK254	45	0.0820	3/4	3	24.50
BK253	44	0.0860	3/4	3	24.50
BK252	43	0.0890	3/4	3	24.50
BK251	42	0.0935	3/4	3	24.50
BK250	41	0.0960	7/8	3 1/2	24.50
BK249	40	0.0980	7/8	3 1/2	23.50
BK248	39	0.0995	7/8	3 1/2	23.50
BK247	38	0.1015	7/8	3 1/2	23.50
BK246	37	0.1040	7/8	3 1/2	23.50
BK245	36	0.1065	7/8	3 1/2	23.50
BK244	35	0.1100	7/8	3 1/2	23.50
BK243	34	0.1110	7/8	3 1/2	23.50
BK242	33	0.1130	7/8	3 1/2	22.50
BK241	32	0.1160	7/8	3 1/2	22.50
BK240	31	0.1200	7/8	3 1/2	22.50

Model No.	Wire No.	Decimal Equiv."	L2"	L1"	Price /Each
BK239	30	0.1285	7/8	3 1/2	21.90
BK238	29	0.1360	1	4	21.90
BK237	28	0.1405	1	4	21.90
BK236	27	0.1440	1	4	21.90
BK235	26	0.1470	1	4	21.90
BK234	25	0.1495	1	4	21.90
BK233	24	0.1520	1	4	21.90
BK232	23	0.1540	1	4	21.90
BK231	22	0.1570	1	4	21.90
BK230	21	0.1590	1 1/8	4 1/2	21.90
BK229	20	0.1610	1 1/8	4 1/2	21.90
BK228	19	0.1660	1 1/8	4 1/2	21.90
BK227	18	0.1695	1 1/8	4 1/2	21.90
BK226	17	0.1730	1 1/8	4 1/2	23.50
BK225	16	0.1770	1 1/8	4 1/2	23.50
BK224	15	0.1800	1 1/8	4 1/2	25.50
BK223	14	0.1820	1 1/8	4 1/2	25.50
BK222	13	0.1850	1 1/8	4 1/2	25.50
BK221	12	0.1890	1 1/8	4 1/2	25.50
BK220	11	0.1910	1 1/4	5	26.90
BK219	10	0.1935	1 1/4	5	27.50
BK218	9	0.1960	1 1/4	5	27.50
BK217	8	0.1990	1 1/4	5	27.50
BK216	7	0.2010	1 1/4	5	27.50
BK215	6	0.2040	1 1/4	5	27.50
BK214	5	0.2055	1 1/4	5	27.50
BK213	4	0.2090	1 1/4	5	27.50
BK212	3	0.2130	1 1/4	5	27.50
BK211	2	0.2210	1 1/4	5	27.50
BK210	1	0.2280	1 1/4	5	27.50

CHUCKING REAMERS - HIGH SPEED STEEL (CONT'D)

- Right hand cut
- High speed steel
- Morse Taper shank
- Spiral flute

Application:

Machine reamers are designed for use on a machine equipped with a Morse taper spindle.

CLARKSON OSBORN



FRACTIONAL SIZES

Model No.	Fractional Size"	Morse Taper Shank Size	Decimal Equiv."	L2 mm	L1 mm	Price /Each
BK550	1/8	MT1	0.1250	33.0	106.0	50.50
TBM147	9/64	MT1	0.1406	35.0	108.0	63.90
TBM148	5/32	MT1	0.1562	38.0	112.0	60.90
TBM150	11/64	MT1	0.1719	41.0	115.0	70.50
BK551	3/16	MT1	0.1875	44.0	118.0	56.90
TBM152	13/64	MT1	0.2031	44.0	118.0	63.90
BK552	7/32	MT1	0.2188	48.0	125.0	62.50
TBM154	15/64	MT1	0.2344	48.0	125.0	70.90
BK553	1/4	MT1	0.2500	50.0	130.0	56.90
TBM156	17/64	MT1	0.2656	54.0	134.0	71.90
TBM157	9/32	MT1	0.2813	54.0	134.0	64.90
TBM159	19/64	MT1	0.2969	58.0	138.0	70.50
BK554	5/16	MT1	0.3125	58.0	138.0	59.50
TBM160	21/64	MT1	0.3281	58.0	138.0	72.90
BK555	11/32	MT1	0.3438	62.0	141.0	63.90
TBM161	23/64	MT1	0.3594	62.0	141.0	73.50
BK556	3/8	MT1	0.3750	67.0	146.0	59.50
BK557	25/64	MT1	0.3906	67.0	146.0	73.90
BK558	13/32	MT1	0.4063	67.0	146.0	69.50
BK559	27/64	MT1	0.4219	71.0	151.0	76.90
BK560	7/16	MT1	0.4375	71.0	151.0	63.50
TBM163	29/64	MT1	0.4531	71.0	151.0	77.50
TBM164	15/32	MT1	0.4688	76.0	156.0	70.50
TBM165	31/64	MT1	0.4844	76.0	156.0	79.90
BK561	1/2	MT1	0.5000	76.0	156.0	63.90
BK562	17/32	MT1	0.5313	81.0	160.0	75.50

Model No.	Fractional Size"	Morse Taper Shank Size	Decimal Equiv."	L2 mm	L1 mm	Price /Each
BK563	9/16	MT2	0.5625	81.0	181.0	78.90
TBM166	19/32	MT2	0.5938	87.0	187.0	93.50
BK564	5/8	MT2	0.6250	87.0	187.0	83.50
TBM167	21/32	MT2	0.6563	87.0	187.0	109.00
BK565	11/16	MT2	0.6875	94.0	194.0	99.90
BK566	23/32	MT2	0.7188	94.0	194.0	119.00
BK567	3/4	MT2	0.7500	100.0	200.0	115.00
TBM168	25/32	MT2	0.7813	100.0	200.0	129.00
BK568	13/16	MT2	0.8125	100.0	200.0	119.00
TBM169	27/32	MT2	0.8438	106.0	206.0	149.00
BK569	7/8	MT2	0.8750	106.0	206.0	135.00
BK570	15/16	MT3	0.9375	114.0	241.0	199.00
TBM170	31/32	MT3	0.9688	114.0	241.0	235.00
BK571	1	MT3	1.0000	114.0	241.0	215.00
BK572	1 1/16	MT3	1.0625	124.0	251.0	255.00
BK573	1 1/8	MT3	1.1250	124.0	251.0	249.00
BK574	1 1/4	MT3	1.2500	133.0	260.0	319.00
BK575	1 3/8	MT4	1.3750	142.0	303.0	379.00
BK576	1 1/2	MT4	1.5000	152.0	312.0	475.00
BK577	1 5/8	MT4	1.6250	152.0	312.0	575.00
BK578	1 3/4	MT4	1.7500	163.0	323.0	675.00
BK579	1 7/8	MT4	1.8750	175.0	334.0	855.00
BK580	2	MT4	2.0000	175.0	334.0	849.00

METRIC SIZES

Model No.	Metric Size mm	Morse Taper Shank Size	Decimal Equiv."	L2 mm	L1 mm	Price /Each
TBM145	3.00	MT1	0.1181	31.0	104.0	50.90
TBM146	3.50	MT1	0.1378	35.0	108.0	63.90
TBM149	4.00	MT1	0.1575	38.0	112.0	51.50
TBM151	4.50	MT1	0.1772	41.0	115.0	59.90
BK581	5.00	MT1	0.1969	44.0	118.0	53.90
TBM153	5.50	MT1	0.2165	48.0	125.0	61.50
BK582	6.00	MT1	0.2362	48.0	125.0	55.50
TBM155	6.50	MT1	0.2559	50.0	130.0	63.50
BK583	7.00	MT1	0.2756	54.0	134.0	57.90
TBM158	7.50	MT1	0.2953	54.0	134.0	64.90
BK584	8.00	MT1	0.3150	58.0	138.0	57.90
BK585	8.50	MT1	0.3346	58.0	138.0	63.90
BK586	9.00	MT1	0.3543	62.0	141.0	58.50
TBM162	9.50	MT1	0.3740	62.0	141.0	72.90
BK587	10.00	MT1	0.3937	67.0	146.0	59.50
BK588	10.50	MT1	0.4134	67.0	146.0	69.50
BK589	11.00	MT1	0.4331	71.0	151.0	61.50
BK590	11.50	MT1	0.4528	71.0	151.0	70.50
BK591	12.00	MT1	0.4724	76.0	156.0	63.50
BK592	12.50	MT1	0.4921	76.0	156.0	70.90
BK593	13.00	MT1	0.5118	76.0	156.0	63.90
BK594	14.00	MT1	0.5512	81.0	160.0	71.50
BK595	15.00	MT2	0.5906	81.0	181.0	78.90
BK596	16.00	MT2	0.6299	87.0	187.0	87.50
BK597	17.00	MT2	0.6693	87.0	187.0	95.90

Model No.	Metric Size mm	Morse Taper Shank Size	Decimal Equiv."	L2 mm	L1 mm	Price /Each
BK598	18.00	MT2	0.7087	94.0	194.0	99.90
BK599	19.00	MT2	0.7480	94.0	194.0	115.00
BK600	20.00	MT2	0.7874	100.0	200.0	125.00
BK601	21.00	MT2	0.8268	100.0	200.0	135.00
BK602	22.00	MT2	0.8661	106.0	206.0	139.00
BK603	23.00	MT2	0.9055	106.0	206.0	145.00
BK604	24.00	MT3	0.9449	114.0	241.0	209.00
BK605	25.00	MT3	0.9843	114.0	241.0	215.00
BK606	26.00	MT3	1.0236	114.0	241.0	219.00
BK607	27.00	MT3	1.0630	124.0	251.0	245.00
BK608	28.00	MT3	1.1024	124.0	251.0	255.00
BK609	30.00	MT3	1.1811	124.0	251.0	269.00
BK610	32.00	MT4	1.2598	133.0	294.0	365.00
TBM171	33.00	MT4	1.2992	133.0	294.0	415.00
BK611	34.00	MT4	1.3386	142.0	303.0	425.00
TBM172	35.00	MT4	1.3780	142.0	303.0	449.00
BK612	36.00	MT4	1.4173	142.0	303.0	485.00
BK613	38.00	MT4	1.4961	152.0	312.0	525.00
BK614	40.00	MT4	1.5748	152.0	312.0	575.00
BK615	42.00	MT4	1.6535	152.0	312.0	649.00
BK616	44.00	MT4	1.7323	163.0	323.0	805.00
BK617	45.00	MT4	1.7717	163.0	323.0	765.00
TBM173	46.00	MT4	1.8110	163.0	323.0	859.00
BK618	48.00	MT4	1.8898	175.0	334.0	909.00
TBM174	50.00	MT4	1.9685	175.0	334.0	885.00

REAMERS

CHUCKING REAMERS (CONT'D)

LETTER GAUGE SIZES

Model No.	Letter Size	Decimal Equiv."	L2"	L1"	Price /Each
BK270	A	0.2340	1 1/2	6	29.50
BK271	B	0.2380	1 1/2	6	29.50
BK272	C	0.2420	1 1/2	6	29.50
BK273	D	0.2460	1 1/2	6	29.50
BK169	E	0.2500	1 1/2	6	24.50
BK274	F	0.2570	1 1/2	6	29.50
BK275	G	0.2610	1 1/2	6	31.50
BK276	H	0.2660	1 1/2	6	33.50
BK277	I	0.2720	1 1/2	6	33.50
BK278	J	0.2770	1 1/2	6	33.50
BK279	K	0.2810	1 1/2	6	33.50
BK280	L	0.2900	1 1/2	6	33.50
BK281	M	0.2950	1 1/2	6	33.50

Model No.	Letter Size	Decimal Equiv."	L2"	L1"	Price /Each
BK282	N	0.3020	1 1/2	6	33.50
BK283	O	0.3160	1 1/2	6	34.50
BK284	P	0.3230	1 1/2	6	35.50
BK285	Q	0.3320	1 1/2	6	35.50
BK286	R	0.3390	1 1/2	6	35.50
BK287	S	0.3480	1 3/4	7	35.50
BK288	T	0.3580	1 3/4	7	35.50
BK289	U	0.3680	1 3/4	7	35.50
BK290	V	0.3770	1 3/4	7	39.50
BK291	W	0.3860	1 3/4	7	39.50
BK292	X	0.3970	1 3/4	7	39.50
BK293	Y	0.4040	1 3/4	7	40.50
BK294	Z	0.4130	1 3/4	7	40.50

CHUCKING REAMERS - COBALT

- Right hand cut
- M42 Cobalt for hard steels & alloys
- Straight shank
- Spiral flute

Applications:

Spiral flute chucking reamers are designed for reaming materials where additional shear is necessary and to improve chip removal in blind holes. Ground with 45° chamfer.

CLARKSON  OSBORN



FRACTIONAL SIZES

Model No.	Fractional Size"	Decimal Equiv."	L2 mm	L1 mm	Price /Each
BK371	3/32	0.0938	14.0	57.0	63.50
BK372	1/8	0.1250	16.0	65.0	51.90
BK373	5/32	0.1563	19.0	75.0	51.50
BK374	11/64	0.1719	21.0	80.0	54.90
BK375	3/16	0.1875	23.0	86.0	51.90
BK376	7/32	0.2188	26.0	93.0	56.50
BK377	1/4	0.2500	28.0	101.0	59.50
BK378	9/32	0.2813	31.0	109.0	62.50
BK379	5/16	0.3125	33.0	117.0	66.50

Model No.	Fractional Size"	Decimal Equiv."	L2 mm	L1 mm	Price /Each
BK380	11/32	0.3438	36.0	125.0	64.90
BK381	3/8	0.3750	38.0	133.0	75.50
BK382	13/32	0.4063	38.0	133.0	77.50
BK383	7/16	0.4375	41.0	142.0	87.50
BK384	15/32	0.4688	44.0	151.0	81.90
BK385	1/2	0.5000	44.0	151.0	81.90
BK386	9/16	0.5625	50.0	162.0	105.00
BK387	5/8	0.6250	52.0	170.0	109.00

METRIC SIZES

Model No.	Metric Size mm	Decimal Equiv."	L2 mm	L1 mm	Price /Each
BK388	3.00	0.1181	15.0	61.0	51.90
BK389	3.50	0.1378	18.0	70.0	44.50
BK390	4.00	0.1575	19.0	75.0	44.90
BK391	4.50	0.1772	21.0	80.0	50.90
BK392	5.00	0.1969	23.0	86.0	47.50
BK393	6.00	0.2362	26.0	93.0	55.90
BK394	7.00	0.2756	31.0	109.0	56.90
BK395	8.00	0.3150	33.0	117.0	62.90

Model No.	Metric Size mm	Decimal Equiv."	L2 mm	L1 mm	Price /Each
BK396	9.00	0.3543	36.0	125.0	65.90
BK397	10.00	0.3937	38.0	133.0	68.50
BK398	11.00	0.4331	41.0	142.0	79.90
BK399	12.00	0.4724	44.0	151.0	79.50
BK400	13.00	0.5118	44.0	151.0	83.90
BK401	14.00	0.5512	47.0	160.0	99.90
BK402	15.00	0.5906	50.0	162.0	109.00
BK403	16.00	0.6299	52.0	170.0	105.00

Ask us about volume prices!
In many cases you will benefit from quantity prices.



WELDON SHANK END MILLS - STANDARD LENGTH - 2 FLUTE

CLARKSON  OSBORN



D1 Frac"	Shank Dec"	Dia. "	L2"	L1"	Flutes	HSS Model No.	HSS Price/Each	Cobalt Model No.	Cobalt Price/Each
1/8	0.1250	3/8	3/8	2 5/16	2	-	-	BI161	19.90
5/32	0.1563	3/8	7/16	2 5/16	2	BI292	11.50	BI162	23.50
3/16	0.1875	3/8	7/16	2 5/16	2	QD764	11.50	BI163	19.90
7/32	0.2188	3/8	1/2	2 5/16	2	BI293	11.50	BI164	23.50
1/4	0.2500	3/8	1/2	2 5/16	2	QD765	11.50	BI165	19.90
9/32	0.2813	3/8	9/16	2 5/16	2	QD766	11.50	-	-
5/16	0.3125	3/8	9/16	2 5/16	2	-	-	BI166	19.90
11/32	0.3438	3/8	9/16	2 5/16	2	QD768	11.50	-	-
3/8	0.3750	3/8	9/16	2 5/16	2	QD769	11.50	BI167	19.90
13/32	0.4063	3/8	13/16	2 1/2	2	BI294	17.50	-	-
7/16	0.4375	3/8	13/16	2 1/2	2	QR042	17.50	BI168	29.50
15/32	0.4688	3/8	13/16	2 1/2	2	BI295	17.50	-	-
1/2	0.5000	3/8	13/16	2 1/2	2	-	-	BI169	31.90
1/2	0.5000	1/2	1	3	2	QD771	13.90	BI170	29.50
17/32	0.5313	1/2	1 1/8	3 1/8	2	BI296	20.90	-	-
9/16	0.5625	1/2	1 1/8	3 1/8	2	QR043	20.90	BI171	40.50
19/32	0.5938	5/8	1 1/8	3 1/8	2	BI297	25.90	-	-
5/8	0.6250	1/2	1 1/8	3 1/8	2	-	-	BI172	35.50
5/8	0.6250	5/8	1 5/16	3 7/16	2	QR044	25.90	BI173	33.90
11/16	0.6875	5/8	1 5/16	3 7/16	2	QR045	30.50	BI174	39.90

D1 Frac"	Shank Dec"	Dia. "	L2"	L1"	Flutes	HSS Model No.	HSS Price/Each	Cobalt Model No.	Cobalt Price/Each
3/4	0.7500	5/8	1 5/16	3 7/16	2	-	-	BI175	41.90
3/4	0.7500	3/4	1 5/16	3 7/16	2	QR046	33.50	BI176	39.90
25/32	0.7813	5/8	1 1/2	3 5/8	2	BI299	36.50	-	-
13/16	0.8125	5/8	1 1/2	3 5/8	2	BI300	36.50	-	-
27/32	0.8438	3/4	1 1/2	3 3/4	2	BI302	38.90	-	-
7/8	0.8750	3/4	1 1/2	3 3/4	2	BI303	38.90	BI177	50.90
7/8	0.8750	7/8	1 1/2	3 3/4	2	BI306	38.90	BI179	52.90
29/32	0.9063	7/8	1 1/2	3 3/4	2	BI307	49.90	-	-
15/16	0.9375	7/8	1 1/2	3 3/4	2	BI308	49.90	-	-
31/32	0.9688	3/4	1 1/2	3 3/4	2	BI304	49.90	-	-
1	1.0000	3/4	1 1/2	3 3/4	2	BI305	49.90	BI178	63.50
1	1.0000	1	1 5/8	4 1/8	2	-	-	BI180	60.90
1 1/8	1.1250	1	1 5/8	4 1/8	2	BI310	72.90	-	-
1 1/4	1.2500	1	1 5/8	4 1/8	2	-	-	BI181	109.00
1 1/4	1.2500	1 1/4	1 5/8	4 1/8	2	BI311	79.50	BI183	105.00
1 3/8	1.3750	1 1/4	1 5/8	4 1/8	2	BI312	98.50	-	-
1 1/2	1.5000	1	1 5/8	4 1/8	2	-	-	BI182	169.00
1 1/2	1.5000	1 1/4	1 5/8	4 1/8	2	BI313	119.00	BI184	135.00
1 3/4	1.7500	1 1/4	1 5/8	4 1/8	2	BI314	149.00	-	-
2	2.0000	1 1/4	1 5/8	4 1/8	2	BI315	179.00	-	-

WELDON SHANK SLOT DRILLS - STANDARD LENGTH - 2 FLUTE

CLARKSON  OSBORN



Cobalt Model No.	D1 mm	Dec"	Shank Dia. mm	L2 mm	L1 mm	Flutes	Cobalt Price/Each
BJ582	1.5	0.0591	6.0	3.0	48.0	2	40.90
BJ583	2.0	0.0787	6.0	4.0	48.0	2	31.50
BJ584	2.5	0.0984	6.0	5.0	59.0	2	37.90
BJ585	3.0	0.1181	6.0	5.0	49.0	2	31.50
BJ586	3.5	0.1378	6.0	6.0	50.0	2	37.90
BJ587	4.0	0.1575	6.0	7.0	51.0	2	31.50
BJ588	4.5	0.1772	6.0	7.0	51.0	2	37.90
BJ589	5.0	0.1969	6.0	8.0	52.0	2	33.90
BJ590	5.5	0.2165	6.0	8.0	52.0	2	37.90
BJ591	6.0	0.2362	6.0	8.0	52.0	2	33.90
BJ592	6.5	0.2559	10.0	10.0	60.0	2	51.50
BJ593	7.0	0.2756	10.0	10.0	60.0	2	36.50
BJ594	7.5	0.2953	10.0	10.0	60.0	2	51.50
BJ595	8.0	0.3150	10.0	11.0	61.0	2	36.50
BJ596	8.5	0.3346	10.0	11.0	61.0	2	52.50
BJ597	9.0	0.3543	10.0	11.0	61.0	2	42.50
BJ598	9.5	0.3740	10.0	11.0	61.0	2	52.50
BJ599	10.0	0.3937	10.0	13.0	63.0	2	36.50
BJ600	10.5	0.4134	12.0	13.0	70.0	2	60.90
BJ601	11.0	0.4331	12.0	13.0	70.0	2	49.90

Cobalt Model No.	D1 mm	Dec"	Shank Dia. mm	L2 mm	L1 mm	Flutes	Cobalt Price/Each
BJ602	12.0	0.4724	12.0	16.0	73.0	2	45.50
BJ603	13.0	0.5118	12.0	16.0	73.0	2	84.50
BJ604	14.0	0.5512	12.0	16.0	73.0	2	52.50
BJ605	15.0	0.5906	12.0	16.0	73.0	2	84.50
BJ606	16.0	0.6299	16.0	19.0	79.0	2	62.90
BJ607	18.0	0.7087	16.0	19.0	79.0	2	70.90
BJ608	20.0	0.7874	20.0	22.0	88.0	2	84.50
BJ609	22.0	0.8661	20.0	22.0	88.0	2	105.00
BJ610	24.0	0.9449	25.0	26.0	102.0	2	129.00
BJ611	25.0	0.9843	25.0	26.0	102.0	2	135.00
BJ612	26.0	1.0236	25.0	26.0	102.0	2	145.00
BJ613	28.0	1.1024	25.0	26.0	102.0	2	145.00
BJ614	30.0	1.1811	25.0	26.0	102.0	2	149.00
BJ615	32.0	1.2598	32.0	32.0	112.0	2	275.00
BJ616	36.0	1.4173	32.0	32.0	112.0	2	245.00
BJ617	38.0	1.4961	32.0	38.0	120.0	2	309.00
BJ618	40.0	1.5748	32.0	38.0	120.0	2	309.00
BJ619	45.0	1.7717	32.0	38.0	120.0	2	465.00
BJ620	50.0	1.9685	32.0	45.0	137.0	2	619.00

END MILLS

WELDON SHANK SLOT DRILLS



CLARKSON  OSBORN



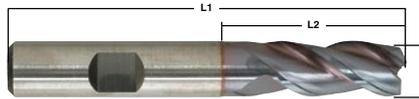
2 FLUTE - COBALT - KEYWAY TOLERANCE

Model No.	D1 +.000/-.0015"	DEC"	Shank Dia. "	L2"	L1"	Flutes	Price /Each
B136	1/8	0.1250	3/8	3/8	2.5/16	2	14.90
B137	5/32	0.1563	3/8	7/16	2.5/16	2	14.90
B138	3/16	0.1875	3/8	7/16	2.5/16	2	14.90
B139	7/32	0.2188	3/8	1/2	2.5/16	2	14.90
B140	1/4	0.2500	3/8	1/2	2.5/16	2	14.90
B141	9/32	0.2813	3/8	9/16	2.5/16	2	14.90
B142	5/16	0.3125	3/8	9/16	2.5/16	2	14.90
B143	11/32	0.3438	3/8	9/16	2.5/16	2	14.90
B144	3/8	0.3750	3/8	9/16	2.5/16	2	14.90
B145	13/32	0.4063	3/8	13/16	2 1/2	2	22.50
B146	7/16	0.4375	3/8	13/16	2 1/2	2	22.50
B147	15/32	0.4688	3/8	13/16	2 1/2	2	22.50
B148	1/2	0.5000	1/2	1	3	2	22.50

Model No.	D1 +.000/-.0015"	DEC"	Shank Dia. "	L2"	L1"	Flutes	Price /Each
B149	9/16	0.5625	1/2	1 1/8	3 1/8	2	60.50
B150	5/8	0.6250	5/8	1 5/16	3 7/16	2	39.90
B151	11/16	0.6875	5/8	1 5/16	3 7/16	2	46.50
B152	3/4	0.7500	3/4	1 5/16	3 7/16	2	51.90
B153	13/16	0.8125	5/8	1 1/2	3 5/8	2	56.90
B154	7/8	0.8750	3/4	1 1/2	3 3/4	2	59.90
B155	1	1.0000	1	1 5/8	4 1/8	2	59.90
B156	1 1/8	1.1250	1	1 5/8	4 1/8	2	125.00
B157	1 1/4	1.2500	1 1/4	1 5/8	4 1/8	2	135.00
B158	1 1/2	1.5000	1 1/4	1 5/8	4 1/8	2	205.00
B159	1 3/4	1.7500	1 1/4	1 5/8	4 1/8	2	259.00
B160	2	2.0000	1 1/4	1 5/8	4 1/8	2	305.00

WELDON SHANK 3 FLUTE SUPERMILLS

CLARKSON  OSBORN



Cobalt Model No.	D1 mm	DEC "	Shank Dia. mm	L2 mm	L1 mm	Flutes	Cobalt Price/Each
BJ664	3.0	0.1181	6.0	8.0	52.0	3	34.90
TBL877	3.5	0.1378	6.0	10.0	54.0	3	36.50
BJ665	4.0	0.1575	6.0	11.0	55.0	3	34.90
TBL878	4.5	0.1772	6.0	11.0	55.0	3	36.50
BJ666	5.0	0.1969	6.0	13.0	57.0	3	34.90
TBL879	5.5	0.2165	6.0	13.0	57.0	3	36.50
BJ667	6.0	0.2362	6.0	13.0	57.0	3	34.90
BJ668	8.0	0.3150	10.0	19.0	69.0	3	40.50
BJ669	10.0	0.3937	10.0	22.0	72.0	3	53.50
BJ670	12.0	0.4724	12.0	26.0	83.0	3	53.90
BJ671	14.0	0.5512	12.0	26.0	83.0	3	67.90
BJ672	16.0	0.6299	16.0	32.0	92.0	3	83.90
BJ673	18.0	0.7087	16.0	32.0	92.0	3	109.00
TBL880	20.0	0.7874	20.0	38.0	104.0	3	115.00
BJ674	22.0	0.8661	20.0	38.0	104.0	3	155.00
TBL881	24.0	0.9449	25.0	45.0	121.0	3	185.00
BJ675	25.0	0.9843	25.0	45.0	121.0	3	185.00
TBL882	26.0	1.0236	25.0	45.0	121.0	3	225.00
BJ676	28.0	1.1024	25.0	45.0	121.0	3	235.00
BJ677	30.0	1.1811	25.0	45.0	121.0	3	269.00
BJ678	32.0	1.2598	32.0	53.0	133.0	3	305.00
TBL883	40.0	1.5748	32.0	63.0	143.0	3	539.00
TBL884	50.0	1.9685	32.0	75.0	155.0	3	749.00

LONG SERIES

Cobalt Model No.	D1 mm	DEC "	Shank Dia. mm	L2 mm	L1 mm	Flutes	Cobalt Price/Each
TBL885	3.0	0.1181	6.0	12.0	56.0	3	43.50
BJ680	4.0	0.1575	6.0	19.0	63.0	3	43.50
TBL886	5.0	0.1969	6.0	24.0	68.0	3	43.50
TBL887	6.0	0.2362	6.0	24.0	68.0	3	43.50
TBL888	8.0	0.3150	10.0	38.0	88.0	3	65.50
BJ683	10.0	0.3937	10.0	45.0	95.0	3	64.50
TBL889	12.0	0.4724	12.0	53.0	110.0	3	72.50
TBL890	14.0	0.5512	12.0	53.0	110.0	3	99.90
TBL891	16.0	0.6299	16.0	63.0	123.0	3	119.00
TBL892	18.0	0.7087	16.0	63.0	123.0	3	149.00
TBL893	20.0	0.7874	20.0	75.0	135.0	3	155.00
TBL894	22.0	0.8661	20.0	75.0	147.0	3	255.00
TBL895	24.0	0.9449	25.0	90.0	166.0	3	275.00
TBL896	25.0	0.9843	25.0	90.0	166.0	3	285.00
TBL897	28.0	1.1024	25.0	90.0	166.0	3	339.00
TBL898	30.0	1.1811	25.0	90.0	166.0	3	369.00

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



ENDMILLS

SOLID CARBIDE – SQUARE END

- Solid micro-grain carbide
- Available in 2, 3 and 4-flute models
- Right-hand cutting direction
- Centre cut - designed to plunge cut or drill to depth and then mill sideways into work
- Bright finish

Applications:

For machining tough work hardening metals, stainless steel, titanium, monel, inconel, and super alloys.

CLARKSON OSBORN



Fractional Size"	Decimal Equiv"	Shank Ø	Overall L1"	Flute L2"	2-Flute Model No.	Price /Each	3-Flute Model No.	Price /Each	4-Flute Model No.	Price /Each
1/32	0.0313	1/8	5/64	1 1/2	BK909	18.50	-	-	BK966	18.50
3/64	0.0469	1/8	7/64	1 1/2	BK910	18.50	-	-	BK967	18.50
1/16	0.0625	1/8	3/16	1 1/2	BK911	14.90	BK947	14.90	BK968	14.90
5/64	0.0781	1/8	3/16	1 1/2	BK912	14.90	TBM176	14.90	BK969	14.90
3/32	0.0938	1/8	9/32	1 1/2	BK913	14.90	BK948	14.90	BK970	14.90
7/64	0.1094	1/8	3/8	1 1/2	BK914	14.90	TBM177	14.90	BK971	14.90
1/8	0.1250	1/8	1/2	1 1/2	BK915	14.90	BK949	14.90	BK972	14.90
9/64	0.1406	3/16	1/2	2	BK916	20.50	TBM178	20.50	BK973	20.50
5/32	0.1563	3/16	1/2	2	BK917	20.50	BK950	20.50	BK974	20.50
11/64	0.1719	3/16	5/8	2	BK918	20.90	BK951	20.90	BK975	20.90
3/16	0.1875	3/16	5/8	2	BK919	20.90	BK952	20.90	BK976	20.90
13/64	0.2031	1/4	5/8	2 1/2	BK920	25.90	TBM179	25.90	BK977	25.90
7/32	0.2188	1/4	5/8	2 1/2	BK921	25.90	BK953	25.90	BK978	25.90
15/64	0.2344	1/4	3/4	2 1/2	BK922	26.90	BK954	26.90	BK979	26.90
1/4	0.2500	1/4	3/4	2 1/2	BK923	26.90	BK955	26.90	BK980	26.90
17/64	0.2656	5/16	3/4	2 1/2	BK924	29.50	TBM180	29.50	BK981	29.50
9/32	0.2813	5/16	3/4	2 1/2	BK925	29.50	TBM181	29.50	BK982	29.50
19/64	0.2969	5/16	13/16	2 1/2	BK926	30.50	TBM182	30.50	BK983	30.50
5/16	0.3125	5/16	13/16	2 1/2	BK927	30.50	BK956	30.50	BK984	30.50
21/64	0.3281	3/8	1	2 1/2	BK928	38.50	-	-	BK985	38.50
11/32	0.3438	3/8	1	2 1/2	BK929	38.50	TBM184	38.50	BK986	38.50
23/64	0.3594	3/8	1	2 1/2	BK930	38.50	TBM185	38.50	BK987	38.50
3/8	0.3750	3/8	1	2 1/2	BK931	38.50	BK957	38.50	BK988	38.50
25/64	0.3906	7/16	1	2 3/4	TBM175	56.90	TBM186	56.90	TBM193	56.90
13/32	0.4063	7/16	1	2 3/4	BK932	56.90	BK958	56.90	BK989	56.90
27/64	0.4219	7/16	1	2 3/4	BK933	56.90	TBM187	56.90	TBM194	56.90
7/16	0.4375	7/16	1	2 3/4	BK934	56.90	BK959	56.90	BK990	56.90
29/64	0.4531	1/2	1	3	BK935	65.90	TBM188	65.90	TBM195	65.90
15/32	0.4688	1/2	1	3	BK936	65.90	TBM189	65.90	BK991	65.90
31/64	0.4844	1/2	1	3	BK937	65.90	TBM190	65.90	TBM196	65.90
1/2	0.5000	1/2	1	3	BK938	65.90	BK960	65.90	BK992	65.90
9/16	0.5625	9/16	1 1/8	3 1/2	BK939	115.00	TBM191	115.00	BK993	115.00
5/8	0.6250	5/8	1 1/4	4	BK940	125.00	BK961	125.00	BK994	125.00
11/16	0.6875	3/4	1 3/8	4	BK941	185.00	TBM192	185.00	BK995	185.00
3/4	0.7500	3/4	1 1/2	4	BK942	185.00	BK962	185.00	BK996	185.00
7/8	0.8750	7/8	1 1/2	4	BK943	319.00	BK963	319.00	BK997	319.00
1	1.0000	1	1 1/2	4	BK944	329.00	BK964	329.00	BK998	329.00

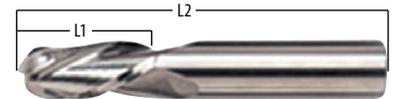
SOLID CARBIDE – BALL END

- Solid micro-grain carbide
- Available in 2, 3 and 4-flute models
- Right-hand cutting direction
- Centre cut - designed to plunge cut or drill to depth and then mill sideways into work
- Bright finish

Applications:

for machining tough work hardening metals, stainless steel, titanium, monel, inconel, and super alloys

CLARKSON OSBORN



Fractional Size"	Decimal Equiv"	Shank Ø	Overall L1"	Flute L2"	2-Flute Model No.	Price /Each	3-Flute Model No.	Price /Each	4-Flute Model No.	Price /Each
1/32	0.0313	1/8	5/64	1 1/2	BL001	21.90	-	-	BL044	21.90
3/64	0.0469	1/8	7/64	1 1/2	BL002	21.90	-	-	BL045	21.90
1/16	0.0625	1/8	3/16	1 1/2	BL003	17.90	BL033	17.90	BL046	17.90
5/64	0.0781	1/8	3/16	1 1/2	BL004	17.90	TBM203	17.90	BL047	17.90
3/32	0.0938	1/8	9/32	1 1/2	BL005	17.90	BL034	17.90	BL048	17.90
7/64	0.1094	1/8	3/8	1 1/2	BL006	17.90	TBM204	17.90	BL049	17.90
1/8	0.1250	1/8	1/2	1 1/2	BL007	17.90	BL035	17.90	BL050	17.90
9/64	0.1406	3/16	1/2	2	BL008	22.50	TBM205	22.50	BL051	22.50
5/32	0.1563	3/16	1/2	2	BL009	24.50	BL036	24.50	BL052	24.50
11/64	0.1719	3/16	5/8	2	BL010	25.50	TBM206	25.50	TBM223	25.50
3/16	0.1875	3/16	5/8	2	BL011	25.50	BL037	25.50	BL053	25.50
13/64	0.2031	1/4	5/8	2 1/2	BL012	30.90	TBM207	30.90	BL054	30.90
7/32	0.2188	1/4	5/8	2 1/2	BL013	30.90	TBM208	30.90	BL055	30.90
15/64	0.2344	1/4	3/4	2 1/2	BL014	32.50	TBM209	32.50	TBM224	32.50
1/4	0.2500	1/4	3/4	2 1/2	BL015	32.50	BL038	32.50	BL056	32.50
17/64	0.2656	5/16	3/4	2 1/2	BL016	34.50	TBM210	34.50	BL057	34.50
9/32	0.2813	5/16	3/4	2 1/2	BL017	34.50	TBM211	34.50	BL058	34.50
19/64	0.2969	5/16	13/16	2 1/2	BL018	36.50	TBM212	36.50	TBM225	36.50
5/16	0.3125	5/16	13/16	2 1/2	BL019	36.50	BL039	36.50	BL059	36.50
21/64	0.3281	3/8	1	2 1/2	BL020	45.90	TBM213	45.90	TBM226	45.90
11/32	0.3438	3/8	1	2 1/2	BL021	46.50	TBM214	46.50	BL060	46.50
23/64	0.3594	3/8	1	2 1/2	TBM197	46.50	TBM215	46.50	TBM227	46.50
3/8	0.3750	3/8	1	2 1/2	BL022	51.50	BL040	46.50	BL061	46.50
25/64	0.3906	7/16	1	2 3/4	TBM198	67.90	TBM216	67.90	TBM228	67.90
13/32	0.4063	7/16	1	2 3/4	BL023	67.90	TBM217	67.90	BL062	67.90
27/64	0.4219	7/16	1	2 3/4	TBM199	67.90	TBM218	67.90	TBM229	67.90
7/16	0.4375	7/16	1	2 3/4	BL024	67.90	BL041	67.90	BL063	67.90
29/64	0.4531	1/2	1	3	TBM200	78.90	TBM219	78.90	TBM230	78.90
15/32	0.4688	1/2	1	3	BL025	78.90	TBM220	78.90	TBM231	78.90
31/64	0.4844	1/2	1	3	BL026	78.90	TBM221	78.90	TBM232	78.90
1/2	0.5000	1/2	1	3	BL027	78.90	BL042	78.90	BL064	78.90
9/16	0.5625	9/16	1 1/8	3 1/2	BL028	135.00	TBM222	135.00	BL065	135.00
5/8	0.6250	5/8	1 1/4	3 1/2	BL029	149.00	-	-	BL066	149.00
11/16	0.6875	3/4	1 3/8	4	TBM201	225.00	-	-	TBM233	225.00
3/4	0.7500	3/4	1 1/2	4	BL030	225.00	-	-	BL067	225.00
7/8	0.8750	7/8	1 1/2	4	TBM202	385.00	-	-	BL068	385.00
1	1.0000	1	1 1/2	4	BL031	395.00	-	-	BL069	395.00

END MILLS

ENDMILLS

SOLID CARBIDE – SQUARE END

- Solid micro-grain carbide
- Available in 2 and 4-flute models
- Right-hand cutting direction
- Centre cut - designed to plunge cut or drill to depth and then mill sideways into work
- Bright finish

LONG LENGTH SERIES

Cutting Ø"	Shank Ø"	L1"	L"	2-Flute Model No.	Price /Each	4-Flute Model No.	Price /Each
1/8	0.1250	3/4	2 1/4	TBM252	23.90	BL078	23.90
3/16	0.1875	3/4	2 1/4	BL070	27.50	BL079	27.50
1/4	0.2500	1 1/8	3	BL071	33.90	BL080	33.90
5/16	0.3125	1 1/8	3	BL072	52.90	BL081	52.90
3/8	0.3750	1 1/8	3	BL073	52.90	BL082	52.90
7/16	0.4375	2	4 1/2	BL074	84.50	BL083	84.50
1/2	0.5000	2	4 1/2	BL075	95.50	BL084	95.50
5/8	0.6250	2 1/4	5	BL076	179.00	BL085	179.00
3/4	0.7500	2 1/4	5	BL077	235.00	BL086	235.00
1	1.0000	2 1/4	5	TBM253	465.00	BL087	465.00

SOLID CARBIDE – BALL END

- Solid micro-grain carbide
- Available in 2 and 4-flute models
- Right-hand cutting direction
- Centre cut - designed to plunge cut or drill to depth and then mill sideways into work
- Bright finish

LONG LENGTH SERIES

Cutting Ø"	Shank Ø"	L1"	L"	2-Flute Model No.	Price /Each	4-Flute Model No.	Price /Each
1/8	0.1250	3/4	2 1/4	TBM265	28.50	TBM268	28.50
3/16	0.1875	3/4	2 1/2	BL088	32.90	TBM269	32.90
1/4	0.2500	1 1/8	3	BL089	40.50	BL095	40.50
5/16	0.3125	1 1/8	3	BL090	50.50	BL096	50.50
3/8	0.3750	1 1/8	3	BL091	63.90	BL097	63.90
7/16	0.4375	2	4 1/2	TBM266	99.90	BL098	99.90
1/2	0.5000	2	4 1/2	BL092	115.00	BL099	115.00
5/8	0.6250	2 1/4	5	BL093	215.00	TBM270	215.00
3/4	0.7500	2 1/4	5	BL094	279.00	TBM271	279.00
1	1.0000	2 1/4	5	TBM267	559.00	BL100	559.00

SCREW EXTRACTORS

- Left-hand cut
- High speed steel
- Punch point
- Spiral flute

Applications:

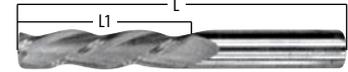
Remove broken screws, bolts, studs, pipe and lubrication fittings without damage to the threaded hole. Designed with a left-hand helical flute to firmly grip and remove any right hand threaded screw or bolt from 3/16" to 1 3/4" in size.

Model No.	Size No.	Drill Size to Use"	For Screw /Bolt Sizes"	Price /Each
BM708	1	5/64	3/16 to 1/4	8.15
BM709	2	7/64	1/4 to 5/16	8.95
BM710	3	5/32	5/16 to 7/16	10.50
BM711	4	1/4	7/16 to 9/16	10.90
BM712	5	17/64	9/16 to 3/4	14.90
BM713	6	13/32	3/4 to 1	20.50
BM714	7	17/32	1-1 3/8	31.90
BM715	8	13/16	1 3/8 to 1 3/4	48.90

SETS

Model No.	Includes	Price /Each
BM716	5-piece set, includes extractor #1 to #5	54.50
BM717	6-piece set, includes extractor #1 to #6	73.50
BM718	8-piece set, includes extractor #1 to #8	165.00

CLARKSON OSBORN



EXTRA LONG LENGTH

Cutting Ø"	Shank Ø"	L1"	L"	2-Flute Model No.	Price /Each	4-Flute Model No.	Price /Each
1/8	0.1250	1	3	TBM248	27.90	TBM250	27.90
3/16	0.1875	1 1/8	3	BL101	32.90	BL109	32.90
1/4	0.2500	1 1/2	4	BL102	40.50	BL110	40.50
5/16	0.3125	1 5/8	4	BL103	50.50	BL111	50.50
3/8	0.3750	1 3/4	4	BL104	68.90	BL112	68.90
7/16	0.4375	3	6	TBM249	119.00	TBM251	119.00
1/2	0.5000	3	6	BL105	159.00	BL113	159.00
5/8	0.6250	3	6	BL106	259.00	BL114	259.00
3/4	0.7500	3	6	BL107	329.00	BL115	329.00
1	1.0000	3	6	BL108	519.00	BL116	519.00

CLARKSON OSBORN



EXTRA LONG LENGTH

Cutting Ø"	Shank Ø"	L1"	L"	2-Flute Model No.	Price /Each	4-Flute Model No.	Price /Each
1/8	0.1250	1	3	TBM254	36.50	TBM260	36.50
3/16	0.1875	1 1/8	3	BL117	39.90	BL121	39.90
1/4	0.2500	1 1/2	4	BL118	48.90	BL122	48.90
5/16	0.3125	1 5/8	4	TBM255	59.50	BL123	59.50
3/8	0.3750	1 3/4	4	TBM256	82.50	BL124	82.50
7/16	0.4375	3	6	TBM257	145.00	TBM261	145.00
1/2	0.5000	3	6	BL119	189.00	BL125	189.00
5/8	0.6250	3	6	TBM258	315.00	TBM262	315.00
3/4	0.7500	3	6	BL120	395.00	TBM263	395.00
1	1.0000	3	6	TBM259	625.00	TBM264	625.00

CLARKSON OSBORN



BM718

COMBINED DRILLS & COUNTERSINKS 60°

76HA SERIES

- Bright finish improves chip flow in soft or non-ferrous materials
- 60° countersink
- Material: High Speed Steel
- Manufacturing Standards: ANSI
- Cutting Direction: Right Hand



Model No.	No. Size	Size"	Decimal Size"	Body Diameter"	Overall Length"	Price /Each
TCQ551	#000	0.02	0.02	1/8	1-1/4	25.40
TCQ552	#00	0.025	0.025	1/8	1-1/8	9.55
TCQ553	#0	1/32	0.0312	1/8	1-1/8	9.55
TDJ306	#1	3/64	0.0468	1/8	1-1/4	7.78
TDJ307	#2	5/64	0.0781	3/16	1-7/8	7.92
TDJ308	#3	7/64	0.1093	1/4	2	8.35
TCQ557	#4	1/8	0.125	5/16	2-1/8	8.48
TCQ558	#5	3/16	0.1875	7/16	2-3/4	13.80
TCQ559	#6	7/32	0.2187	1/2	3	21.80
TCQ560	#7	1/4	0.25	5/8	3-1/4	29.70
TCQ561	#8	5/16	0.3125	3/4	3-1/2	41.40

COMBINED DRILLS & COUNTERSINKS 82°

A217 SERIES

- Bright finish improves chip flow in soft or non-ferrous materials
- 82° countersink
- Material: High Speed Steel
- Manufacturing Standards: ANSI
- Cutting Direction: Right Hand



Model No.	No. Size	Size"	Decimal Size"	Body Diameter"	Overall Length"	Price /Each
TCQ617	#1	3/64	0.0469	1/8	1-1/4	8.15
TCQ618	#2	5/64	0.0781	3/16	1-7/8	8.32
TCQ619	#3	7/64	0.1094	1/4	2	8.78
TCQ620	#4	1/8	0.125	5/16	2-1/8	8.97
TCQ621	#5	3/16	0.1875	7/16	2-3/4	14.40
TCQ622	#6	7/32	0.2188	1/2	3	23.30
TCQ623	#7	1/4	0.25	5/8	3-1/4	31.70
TCQ624	#8	5/16	0.3125	3/4	3-1/2	44.20

COMBINED DRILL & COUNTERSINK 60°

A225 SERIES

- Bright finish improves chip flow in soft or non-ferrous materials
- 60° countersink
- Material: High Speed Steel
- Manufacturing Standards: BS 328
- Cutting Direction: Right Hand



Model No.	No. Size	Size"	Decimal Size"	Body Diameter"	Overall Length"	Price /Each
TCQ626	BS1	3/64	0.0469	1/8	1-1/2	6.03
TCQ627	BS2	1/16	0.0625	3/16	1-3/4	6.63
TCQ628	BS3	3/32	0.0938	1/4	2	8.23
TCQ629	BS4	1/8	0.125	5/16	2-1/4	10.70
TCQ630	BS5	3/16	0.1875	7/16	2-1/2	15.40
TCQ631	BSSA	7/32	0.2188	1/2	2-3/4	27.60
TCQ632	BS6	1/4	0.25	5/8	3	46.90
TCQ633	BS7	5/16	0.3125	3/4	3-1/2	67.60

COMBINED DRILL & COUNTERSINK SETS

A217SET SERIES

- Bright finish improves chip flow in soft or non-ferrous materials
- 82° countersink
- 5-Piece set
- Material: High Speed Steel
- Manufacturing Standards: ANSI
- Cutting Direction: Right Hand



Model No.	Wire Gauge	Size"	Price /Each
TCQ625	#1 to #5	3/64 to 3/16	69.70

Industrial Multi-Purpose Cleaning Products



COUNTERSINKS

3-FLUTE STRAIGHT SHANK COUNTERSINKS

G154 SERIES

- Bright finish improves chip flow in soft ferrous or non-ferrous materials
- Material: High Speed Steel
- Countersink Angle: 82°
- Number Of Flutes: 3
- Manufacturing Standards: DIN 335C
- Cutting Direction: Right Hand



DORMER

Model No.	Head Dia. mm	L2 mm	L1 mm	Shank Dia. mm	Min. Head Dia. mm	Price /Each
TCP951	6.3	5.5	45	5	1.5	22.50
TCP952	8.3	6.5	50	6	2	22.50
NIY991	10.4	7.6	50	6	2.5	25.20
TCP954	12.4	8.5	56	8	2.8	37.00
TCP955	16.5	10.5	60	10	3.2	50.00
TCP956	20.5	13	63	10	3.5	66.60
TCP957	25	15.5	67	10	3.8	121.00

3-FLUTE STRAIGHT SHANK COUNTERSINKS

4608 SERIES

- Widely used to countersink screw and rivet heads and to countersink holes for lathe centers
- The odd number of flutes eliminates chatter in most applications while providing better accuracy than a single-flute countersink
- Material: High Speed Steel
- Manufacturing Standards: ANSI
- Finish: Bright
- Cutting Direction: Right Hand
- No. of Flutes: 3



UNION BUTTERFIELD®

Model No.	Head Dia. "	Countersink Angle	L2"	L1"	Price /Each
TCP927	1/4	60°	3/4	1-1/2	17.70
TCP932	1/4	82°	3/4	1-1/2	17.70
TCP937	1/4	90°	3/4	1-1/2	17.70
TCP942	1/4	100°	3/4	1-1/2	17.70
TCP928	3/8	60°	7/8	1-3/4	20.90
TCP933	3/8	82°	7/8	1-3/4	20.90
TCP938	3/8	90°	7/8	1-3/4	20.90
TCP943	3/8	100°	7/8	1-3/4	20.90
TCP929	1/2	60°	1	2	27.00
TCP934	1/2	82°	1	2	27.00
TCP939	1/2	90°	1	2	27.00
TCP944	1/2	100°	1	2	27.00
TCP930	5/8	60°	1	2-1/4	38.90
TCP935	5/8	82°	1	2-1/4	39.00
TCP940	5/8	90°	1	2-1/4	39.00
TCP945	5/8	100°	1	2-1/4	38.90
TCP931	3/4	60°	1-1/4	2-5/8	51.50
TCP936	3/4	82°	1-1/4	2-5/8	51.50
TCP941	3/4	90°	1-1/4	2-5/8	51.50
TCP946	3/4	100°	1-1/4	2-5/8	51.50
TCP947	1	60°	1	3	97.60
TCP948	1	82°	1	3	97.60
TCP949	1	90°	1	3	97.60
TCP950	1	100°	1	3	97.60

KLETON



WE BUILD QUALITY AND DEPENDABILITY INTO ALL OF OUR PRODUCTS!



Look throughout the catalogue for the KLETON Custom Symbol indicating which products can be custom built to meet your specifications.

Call us with your specs today!



MASONRY DRILL BITS

SPLINE SHANKS

RELTON



Size"	Overall Length"	Drill Depth"	Model No.	Price /Each
3/8	10	4	TGX736	47.46
3/8	14	8	TGX737	49.10
3/8	18	12	TGX738	54.33
7/16	14	8	TGX739	49.10
1/2	14	8	TGX740	49.10
1/2	18	12	TGX741	54.33
1/2	22	16	TGX742	69.29
1/2	28	22	TGX743	83.33
9/16	14	8	TGX745	53.51
9/16	18	12	TGX746	61.40
9/16	22	16	TGX747	73.70
9/16	28	22	TGX748	89.48
5/8	14	8	TGX696	53.51
5/8	18	12	TGX697	62.32
5/8	22	16	TGX698	78.93
3/4	14	8	TGX703	59.76
3/4	18	12	TGX704	70.21
3/4	22	16	TGX705	81.59
7/8	14	8	TGX712	62.32
7/8	18	12	TGX713	74.52
7/8	22	16	TGX714	86.82
1	14	8	TGX717	67.65
1	18	12	TGX718	81.59
1	22	16	TGX719	101.00
1 1/8	14	8	TGX722	85.18
1 1/8	22	16	TGX723	105.00
1 1/4	14	8	TGX726	99.12
1 1/4	22	16	TGX727	121.00
1 3/8	22	16	TGX730	141.00
1 1/2	14	8	TGX732	117.00
1 1/2	22	16	TGX733	164.00

Additional sizes available

SDS-MAX

RELTON



Size"	Overall Length"	Drill Depth"	Model No.	Price /Each
3/8	10	4	TGY166	54.33
3/8	14	8	TGY167	55.35
3/8	18	12	TGY168	62.32
7/16	14	8	TGY169	55.35
1/2	14	8	TGY170	55.62
1/2	18	12	TGY171	62.73
1/2	22	16	TGY172	77.18
1/2	28	22	TGY173	85.18
9/16	14	8	TGY175	62.32
9/16	18	12	TGY176	70.21
9/16	22	16	TGY177	83.33
9/16	28	22	TGY178	104.00
5/8	14	8	TGY126	53.49
5/8	18	12	TGY127	71.03
5/8	22	16	TGY128	88.66
3/4	14	8	TGY133	65.98
3/4	18	12	TGY134	79.75
3/4	22	16	TGY135	92.05
7/8	14	8	TGY142	70.21
7/8	18	12	TGY143	85.18
7/8	22	16	TGY144	99.94
1	14	8	TGY147	76.36
1	18	12	TGY148	93.07
1	22	16	TGY149	113.00
1 1/8	14	8	TGY152	94.71
1 1/8	22	16	TGY153	119.00
1 1/4	14	8	TGY156	110.00
1 1/4	22	16	TGY157	136.00
1 3/8	22	16	TGY160	158.00
1 1/2	14	8	TGY162	131.00
1 1/2	22	16	TGY163	185.00

Additional sizes available

SPLINE SHANKS PYRAMID POINT



RELTON

Model No.	Size"	OAL"	Drill Depth"	Price /Each
TGY184	5/8	14	8	62.32
TGY185	5/8	18	12	71.96
TGY186	5/8	22	16	89.48
TGY187	5/8	42	36	174.00
TGY188	3/4	14	8	67.65
TGY189	3/4	18	12	81.59
TGY190	3/4	22	16	93.89
TGY191	3/4	42	36	185.00
TGY192	7/8	14	8	71.03

Model No.	Size"	OAL"	Drill Depth"	Price /Each
TGY193	7/8	18	12	86.82
TGY194	7/8	22	16	104.00
TGY195	7/8	42	36	209.00
TGY196	1	14	8	77.18
TGY197	1	18	12	93.89
TGY198	1	22	16	116.00
TGY199	1	42	36	247.00
TGY200	1 1/8	14	8	97.38
TGY201	1 1/8	22	16	120.00

Model No.	Size"	OAL"	Drill Depth"	Price /Each
TGY202	1 1/8	42	36	306.00
TGY203	1 1/4	14	8	114.00
TGY204	1 1/4	22	16	140.00
TGY205	1 1/4	42	36	316.00
TGY206	1 3/8	22	16	163.00
TGY207	1 3/8	42	36	385.00
TGY208	1 1/2	14	8	133.00
TGY209	1 1/2	22	16	190.00
TGY210	1 1/2	42	36	416.00

SDS-MAX PYRAMID POINT



RELTON

Model No.	Size"	OAL"	Drill Depth"	Price /Each
TGY220	5/8	14	8	64.99
TGY221	5/8	18	12	73.70
TGY222	5/8	22	16	93.07
TGY223	5/8	42	36	179.00
TGY224	3/4	14	8	71.03
TGY225	3/4	18	12	83.33
TGY226	3/4	22	16	95.63
TGY227	3/4	42	36	190.00
TGY228	7/8	14	8	73.70

Model No.	Size"	OAL"	Drill Depth"	Price /Each
TGY229	7/8	18	12	88.66
TGY230	7/8	22	16	106.00
TGY231	7/8	42	36	216.00
TGY232	1	14	8	82.51
TGY233	1	18	12	96.45
TGY234	1	22	16	119.00
TGY235	1	42	36	252.00
TGY236	1 1/8	14	8	101.00
TGY237	1 1/8	22	16	125.00

Model No.	Size"	OAL"	Drill Depth"	Price /Each
TGY238	1 1/8	42	36	315.00
TGY239	1 1/4	14	8	117.00
TGY240	1 1/4	22	16	142.00
TGY241	1 1/4	42	36	321.00
TGY242	1 3/8	22	16	166.00
TGY243	1 3/8	42	36	391.00
TGY244	1 1/2	14	8	139.00
TGY245	1 1/2	22	16	194.00
TGY246	1 1/2	42	36	418.00

STRAIGHT SHANKS



RELTON

Size"	Shank"	Overall Length"	Drill Depth"	Model No.	Price /Each
1/8	1/8	3	1 3/4	TGY342	3.48
3/16	3/16	4	2 1/2	TGY343	2.93
1/4	1/4	4	2 1/2	TGY345	3.39
1/4	1/4	6	4	TGY346	4.30
1/4	1/4	12	10	TGY344	11.07
5/16	1/4	4	2 1/2	TGY348	4.34
5/16	1/4	6	4	TGY349	4.82
5/16	1/4	12	10	TGY347	11.07
3/8*	1/4	4	2 1/2	TGY351	4.48
3/8*	1/4	6	4	TGY352	5.94
3/8*	3/8	12	10	TGY350	13.80
7/16*	1/4	6	2 1/2	TGY353	6.93
7/16*	1/4	6	4	TGY354	7.73

Size"	Shank"	Overall Length"	Drill Depth"	Model No.	Price /Each
1/2*	1/4	4	2 1/2	TGY356	6.58
1/2*	3/8	6	4	TGY357	7.82
1/2*	3/8	12	10	TGY355	14.62
9/16*	3/8	6	4	TGY359	10.18
5/8*	1/2	6	4	TGY334	10.66
5/8*	1/2	12	10	TGY333	18.45
11/16*	1/2	6	4	TGY335	14.76
3/4*	1/2	6	4	TGY337	14.97
3/4*	1/2	12	10	TGY336	25.01
7/8*	1/2	6	4	TGY339	16.71
7/8*	1/2	12	10	TGY338	27.68
1*	1/2	6	4	TGY341	24.19
1*	1/2	12	10	TGY340	38.23

*Three flats on shank to eliminate slippage

MASONRY DRILL BITS

GROO-V TIP MULTI-PURPOSE SPECIALTY CARBIDE TIPPED DRILL BITS

- Specialized Ram Tip® bits w/serrated carbide tip, allows drilling up to 50% faster than standard masonry bits

Application: Percussion or rotary, hard metals, plastic, masonry, tile, wood, marble, granite

RELTON



Size"	Shank"	Overall Length"	Drill Depth"	Model No.	Price /Each
3/16	3/16	3	1 7/8	TGX973	9.65
3/16	3/16	4	2 3/8	TGX974	12.25
1/4	1/4	4	2 1/4	TGX976	10.56
1/4	1/4	6	3 3/4	TGX977	11.38
5/16	1/4	6	4	TGX980	14.15
3/8	3/8	6	4	TGX982	14.72
1/2	3/8	6	4	TGX984	18.27
5/8	1/2	6	4	TGX968	26.34
3/4	1/2	6	4	TGX970	32.49
1	1/2	6	4	TGX972	55.35

5-PC. GROO-V TIP SETS

- Includes: 3/16", 1/4", 5/16", 3/8", 1/2"

Model No. TGX986
Price/Each \$64.55



RELTON

5-PC. SDS+ DRILL SETS

- Includes: 3/16" x 6", 1/4" x 6", 5/16" x 6", 3/8" x 6", 1/2" x 6"

Model No. THZ772
Price/Each \$49.94

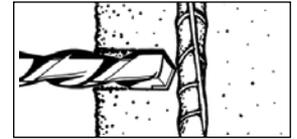


RELTON

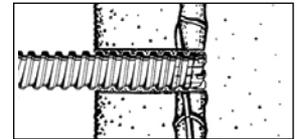
CARBIDE TIPPED ROTARY REBAR CUTTERS

- No need to relocate the hole to avoid the rebar
- Teeth can be sharpened or replaced as necessary
- Shank has three flats to eliminate slippage in 3-jaw chuck
- Design to drill dry, no water or coolant required
- Carbide teeth design for rotary use only
- To be used with rotary function only, percussion will break the carbide teeth
- Available in 1/2" straight shank or SDS shank

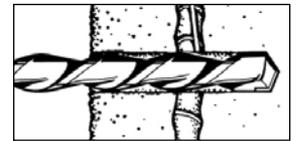
RELTON



1. Stop hammer bit when rebar is encountered



2. Using same size rebar cutter as masonry bit, rotary only through rebar



3. Return to hammer drilling to desired depth



Non-removable

Removable

SDS+ SHANKS

RELTON



Size"	Overall Length"	Drill Depth"	Model No.	Price /Each
5/32	6	4	TGX766	12.89
5/32	8	6	TGX770	14.01
3/16	4	2	TGX778	7.02
3/16	6	4	TGX779	7.74
3/16	8	6	TGX780	9.55
3/16	10	8	TGX776	19.37
3/16	14	12	TGX777	28.09
7/32	6	4	TGX775	10.56
7/32	10	8	TGX773	22.04
7/32	16	14	TGX774	29.93
1/4	4	2	TGX785	7.02
1/4	6	4	TGX786	7.74
1/4	8	6	TGX787	9.65
1/4	10	8	TGX782	16.71
1/4	14	12	TGX783	22.04
1/4	20	18	TGX784	25.52
9/32	8	6	TGX781	17.63
5/16	6	4	TGX790	11.38
5/16	10	8	TGX788	18.27
5/16	14	12	TGX789	22.04
3/8	6	4	TGX795	9.55
3/8	10	8	TGX791	18.07
3/8	14	12	TGX792	22.63
3/8	18	16	TGX793	33.31
3/8	25	22	TGX794	50.02
7/16	6	4	TGX797	18.45
7/16	12	10	TGX796	22.86
1/2	6	4	TGX802	12.18
1/2	10	8	TGX798	25.27
1/2	14	12	TGX799	30.45
1/2	18	16	TGX800	39.57
1/2	25	22	TGX801	51.76
9/16	6	4	TGX806	21.82
9/16	12	10	TGX803	31.26
9/16	18	16	TGX804	44.79

Size"	Style	Overall Length"	Model No.	Price /Each
STRAIGHT SHANK				
3/8	Non-Removable	8	TGY282	51.76
1/2	Non-Removable	12	TGY283	53.51
1/2	Non-Removable	18	TGY284	80.77
9/16	Non-Removable	12	TGY285	62.32
5/8	Non-Removable	12	TGY257	64.99
5/8	Non-Removable	18	TGY258	86.82
11/16	Non-Removable	12	TGY259	73.70
3/4	Non-Removable	12	TGY260	74.52
3/4	Non-Removable	18	TGY262	95.63
3/4	Non-Removable	24	TGY261	110.00
13/16	Non-Removable	12	TGY263	80.77
7/8	Removable	12	TGY264	104.00
1	Removable	12	TGY266	109.00
1 1/8	Removable	12	TGY268	128.00
1 1/4	Removable	12	TGY270	134.00
1 3/8	Removable	12	TGY272	136.00
1 1/2	Removable	12	TGY274	149.00
1 3/4	Removable	12	TGY276	188.00
2	Removable	12	TGY278	210.00
2 1/2	Removable	12	TGY280	229.00
SDS+ SHANK				
3/8	Non-Removable	8	TB0279	53.51
1/2	Non-Removable	12	TB0280	56.17
1/2	Non-Removable	18	TB0281	83.33
9/16	Non-Removable	12	TB0282	64.06
5/8	Non-Removable	12	TB0283	66.63
5/8	Non-Removable	18	TB0284	88.66
11/16	Non-Removable	12	TB0285	75.44
3/4	Non-Removable	12	TB0286	76.36
3/4	Non-Removable	18	TB0287	97.38
3/4	Non-Removable	24	TB0288	112.00
13/16	Non-Removable	12	TB0289	83.33
7/8	Removable	12	TB0290	107.00
1	Removable	12	TB0291	111.00
1 1/8	Removable	12	TB0292	131.00
1 1/4	Removable	12	TB0293	136.00
1 3/8	Removable	12	TB0294	138.00
1 1/2	Removable	12	TB0295	152.00
2	Removable	12	TB0297	215.00
2 1/2	Removable	12	TB0298	232.00

QUIK-LOK™ FLAT BORING SETS

- 1/4" Quick-change hex shank provides quick and easy accessory changes
- Double wing spurs for easy hole formation and reduced vibration, preventing "break out"
- Patented cutting edge for easier and faster wood boring and fast chip removal which dissipates heat from the bit
- Includes: 6" universal Quik-Lok™ bit extension, 3/8", 1/2", 5/8", 3/4", 7/8", and 1 1/8" spade bits

Model No. TBO612
Price/Each \$30.90



Milwaukee

4-PIECE AUGER SETS

- Double wing spurs for clean hole cutting
- Non-stick coated flutes for faster chip ejection
- Impact rated shank
- Canvas roll-up pouch for easy storage and job site organization
- Includes: 1/2" auger bit, 3/4" auger bit, 7/8" auger bit, 1" auger bit

Model No. TBO615
Price/Each \$62.64

Milwaukee



6" SPEEDBOR FLAT BITS

- Blue-Groove point and cutting edge for faster chip removal, 4x faster than standard spade bits
- Double cutting spurs scribe the outside of the hole reducing breakout
- 10% larger shank for added durability
- Grooved hex shank prevents slipping in drill chuck or bit extension
- Fits all standard quick change chucks

IRWIN



Diameter"	Shank Length"	Shank Size"	Model No.	Price /Each
1/4	6	1/4	TU937	4.69
5/16	6	1/4	TU938	4.69
3/8	6	1/4	TU939	4.79
7/16	6	1/4	TU940	4.79
1/2	6	1/4	TU941	4.79
9/16	6	1/4	TU942	4.99
5/8	6	1/4	TU943	5.19
11/16	6	1/4	TU944	5.19
3/4	6	1/4	TQ628	5.19
13/16	6	1/4	TQ629	5.49
7/8	6	1/4	TQ630	5.49
15/16	6	1/4	TQ631	5.79
1	6	1/4	TQ632	5.79
1 1/8	6	1/4	TQ633	8.29
1 1/4	6	1/4	TQ634	8.29
1 3/8	6	1/4	TQ635	8.29
1 1/2	6	1/4	TQ636	8.29

POWER DRILL LONG SHIP AUGER BITS

- Hollow centre flutes clear chips quickly out of holes
- Single cutter and side lip effortlessly bores holes in wood, cuts through nails without damaging the bit
- Full-length heat treatment guards against bending in heavy-duty applications and strengthens the twist where the greatest strain occurs
- Medium-fast screw point ideal for general wood boring applications
- Bit can be resharpened

IRWIN



Diameter"	Shank Size"	Twist Length"	Overall Length"	Model No.	Price /Each
3/8	5/16 hex	12	17	TH663	38.00
7/16	5/16 hex	12	17	TH664	38.60
1/2	5/16 hex	12	17	TH665	39.10
9/16	7/16 hex	12	17	TH666	41.10
5/8	7/16 hex	12	17	TH667	41.80
11/16	7/16 hex	12	17	TH668	45.40
3/4	7/16 hex	12	17	TH669	46.80
13/16	7/16 hex	12	17	TH670	49.10
7/8	7/16 hex	12	17	TH671	52.20
15/16	7/16 hex	12	17	TQ661	53.60
1	7/16 hex	12	17	TH673	55.90
1 1/8	7/16 hex	12	17	TH674	68.50
1 1/4	7/16 hex	12	17	TH675	78.90
1 3/8	7/16 hex	12	17	TH676	90.80
1 1/2	7/16 hex	12	17	TH677	95.90

SWITCHBLADE™ SELF-FEED BITS

- This innovative replaceable blade system provides maximum productivity by eliminating downtime and the cost to resharpen
- Designed for drilling holes in all types of wood for pipe, vents, gas lines, and bulk wire routing
- Aggressive feed screw design allows the bit to pull through the wood faster, resulting in faster drilling
- Replacement blades made with hardened steel increases bit life
- Size and model number engraved on each bit

1 3/8" Switchblade™ Self-Feed Bits come with:

- 1 3/8" Switchblade™ self-feed bit
- 2 replaceable blades
- 2 feed screws
- 2 set screws
- One (1) hex wrench



Milwaukee

REPLACEMENT PACKS

Dim"	Model No.	Price /Each	3 Blades		10 Blades	
			Model No.	Price /Each	Model No.	Price /Each
1 3/8	TB0301	49.90	TB0306	27.40	TB0311	70.90
1 1/2	TB0302	72.00	TB0307	28.20	TB0312	72.40
2	TB0303	84.90	TB0308	28.90	TB0313	75.50
2 1/8	TB0304	84.90	TB0309	30.40	TB0314	77.70
2 9/16	TB0305	93.40	TB0310	32.00	TB0315	80.00

POWER DRILL I-100 AUGER BITS

- Solid centre design provides extra rigidity while boring
- The flutes are ground behind the lands to funnel chips to the inside of the bit and away from the outside diameter, producing a faster, cleaner cut
- Single-spur cutting edge scribes the circumference of the hole for a smoother finish
- Full-length heat treated bit guards against bending in heavy-duty applications and streng thens the twist where the greatest strain occurs
- Coarse screw point provides fast boring in hard and soft woods



IRWIN

Diameter"	Shank Size"	Twist Length"	Overall Length"	Model No.	Price /Each
1/4	7/32 hex	4 1/2	7 1/2	TH785	17.00
5/16	7/32 hex	4 1/2	7 1/2	TH786	17.00
3/8	7/32 hex	4 1/2	7 1/2	TH787	17.20
7/16	7/32 hex	4 1/2	7 1/2	TH788	17.20
1/2	7/32 hex	4 1/2	7 1/2	TH789	17.30
9/16	5/16 hex	4 1/2	7 1/2	TH790	17.30
5/8	5/16 hex	4 1/2	7 1/2	TH791	17.40
11/16	5/16 hex	4 1/2	7 1/2	TH792	18.00
3/4	5/16 hex	4 1/2	7 1/2	TH793	18.70
13/16	5/16 hex	4 1/2	7 1/2	TH794	20.60
7/8	5/16 hex	4 1/2	7 1/2	TH795	21.40
15/16	5/16 hex	4 1/2	7 1/2	TH796	22.40
1	5/16 hex	4 1/2	7 1/2	TH797	23.10

WOODWORKING BITS



WOODPECKER FORSTNER BITS

- Designed to bore clean, flat, precise holes in a variety of woods
- Made of high carbon steel
- Up to 1" diameter are made with 1/4" hex shank
- Over 1" diameter made with 5/16" or 7/16" hex shank to prevent slippage

Model No.	Diameter"	Shank"	Length"	Price /Each
WK611	1/4	1/4	3 1/2	5.24
WK612	5/16	1/4	3 1/2	5.24
WK613	3/8	1/4	3 1/2	5.24
WK614	7/16	1/4	3 1/2	5.24
WK615	1/2	1/4	3 1/2	5.51
WK616	9/16	1/4	3 1/2	5.51
WK617	5/8	1/4	3 1/2	5.51
WK618	11/16	1/4	3 1/2	6.00
WK619	3/4	1/4	3 1/2	6.00
WK620	13/16	1/4	3 1/2	6.00
WK621	7/8	1/4	3 1/2	6.00
WK622	15/16	1/4	3 1/2	7.06
WK623	1	1/4	3 1/2	7.06
WK624	1 1/16	5/16	3 1/2	7.47
WK625	1 1/8	5/16	3 1/2	7.47
WK626	1 3/16	5/16	3 1/2	7.51
WK627	1 1/4	5/16	3 1/2	7.51
WK628	1 5/16	5/16	3 1/2	7.51
WK629	1 3/8	5/16	3 1/2	7.88
WK630	1 7/16	5/16	3 1/2	7.88
WK631	1 1/2	5/16	3 1/2	8.92
WK632	1 9/16	5/16	3 1/2	10.10
WK633	1 5/8	5/16	3 1/2	10.40
WK634	1 11/16	5/16	3 1/2	10.50
WK635	1 3/4	5/16	3 1/2	10.40
WK636	1 13/16	5/16	3 1/2	11.10
WK637	1 7/8	5/16	3 1/2	11.50
WK638	1 15/16	5/16	3 1/2	11.50
WK639	2	5/16	3 1/2	12.80
WK640	2 1/16	5/16	3 1/2	13.00
WK641	2 1/8	5/16	3 1/2	13.40



Model No.	Diameter"	Shank"	Length"	Price /Each
WK642	2 3/16	7/16	6 1/4	22.50
WK643	2 1/4	7/16	6 1/4	23.10
WK644	2 5/16	7/16	6 1/4	23.50
WK645	2 3/8	7/16	6 1/4	23.80
WK646	2 7/16	7/16	6 1/4	21.80
WK647	2 1/2	7/16	6 1/4	24.50
WK648	2 9/16	7/16	6 1/4	25.10
WK649	2 5/8	7/16	6 1/4	25.80
WK650	2 11/16	7/16	6 1/4	23.90
WK651	2 3/4	7/16	6 1/4	27.40
WK652	2 13/16	7/16	6 1/4	27.40
WK653	2 7/8	7/16	6 1/4	27.50
WK654	2 15/16	7/16	6 1/4	28.10
WK655	3	7/16	6 1/4	28.90
WK656	3 1/8	7/16	6 1/4	32.60
WK657	3 1/4	7/16	6 1/4	32.60
WK658	3 3/8	7/16	6 1/4	44.40
WK659	3 1/2	7/16	6 1/4	46.20
WK660	3 5/8	7/16	6 1/4	51.90
WK661	3 3/4	7/16	6 1/4	46.50
WK662	3 7/8	7/16	6 1/4	54.30
WK663	4	7/16	6 1/4	55.00

KITS IN A WOODEN BOX

7-Pieces including: 1/4", 3/8", 1/2", 1/2", 5/8", 3/4, 7/8", 1"

Model No. WK664
Price/Each \$31.60

16-Pieces including: 1/4", 3/8", 1/2", 5/8", 3/4, 7/8", 1", 1 1/8", 1 1/4", 1 3/8", 1 1/2", 1 5/8", 1 3/4", 1 7/8", 2", 2 1/8"

Model No. WK665
Price/Each \$121.00

29-Pieces including: 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 3/4, 13/16", 7/8", 15/16", 1", 1 1/8", 1 1/4", 1 3/8", 1 1/2", 1 5/8", 1 3/4", 1 7/8", 2", 2 1/8", 2 1/4", 2 3/8", 2 1/2", 2 5/8", 2 3/4", 2 7/8", 3"

Model No. WK666
Price/Each \$246.00

BORMAX FORSTNER BITS

- Innovative new design outlasting any bit on the market
- European quality bits, made in Germany, CNC machined
- Premium tool steel construction, heat treated for durability and accuracy
- Razor sharp edge for excellent finish
- Incorporates saw tooth style and wave-form side clearance for tear free accurate holes
- Modified cutting head for reduced friction, cooler boring and reduced burning



Model No.	Diameter"	Shank"	Length"	Price /Each
TB0650	1/2	5/16	3 1/2	27.10
WK596	5/8	5/16	3 1/2	27.50
TB0651	11/16	5/16	3 1/2	20.30
WK597	3/4	5/16	3 1/2	27.20
TB0652	13/16	5/16	3 1/2	30.30
WK598	7/8	5/16	3 1/2	21.60
TB0653	15/16	5/16	3 1/2	24.10
WK599	1	5/16	3 1/2	26.80
TB0654	1 1/16	5/16	3 1/2	31.40
WK600	1 1/8	5/16	3 1/2	32.90
TB0655	1 3/16	5/16	3 1/2	28.00
WK601	1 1/4	3/8	3 1/2	35.00
TB0656	1 5/16	3/8	3 1/2	38.20
WK602	1 3/8	3/8	3 1/2	38.20
WK603	1 1/2	3/8	3 1/2	41.30
WK604	1 5/8	3/8	3 1/2	47.00
WK605	1 3/4	3/8	3 1/2	56.00
WK606	1 7/8	3/8	3 1/2	56.00
WK607	2	3/8	3 1/2	61.40
WK608	2 1/8	3/8	3 1/2	71.30
TB0657	2 1/4	3/8	3 1/2	102.00
TB0658	2 3/8	1/2	6 1/4	165.00
TB0659	2 1/2	1/2	6 1/4	191.00
TB0660	2 5/8	1/2	6 1/4	226.00
TB0661	3	1/2	6 1/4	233.00

KITS IN A WOODEN BOX

5-Pieces including: 5/8", 3/4, 7/8", 1", 1 1/8", 1 3/8"

Model No. WK609
Price/Each \$182.00

7-Pieces including: 1/4" and 3/8" (Super Forstner bits), 1/2", 5/8", 3/4, 7/8", 1"

Model No. TB0662
Price/Each \$152.00

16-Pieces including: 1/4" and 3/8" (Super Forstner bits), 1/2", 5/8", 3/4, 7/8", 1", 1 1/8", 1 1/4", 1 3/8", 1 1/2", 1 5/8", 1 5/8", 1 3/4", 1 7/8", 2", 2 1/8"

Model No. WK610
Price/Each \$504.00

SUPER FORSTNER BITS

- European quality bits, made in Germany
- Premium steel construction
- Newly design cutter heads drill faster, cut cleaner and last longer
- **Application:** Flat



Model No.	Diameter"	Shank"	Length"	Price /Each
WK667	1/4	5/16	3 1/2	17.10
WK668	3/8	5/16	3 1/2	17.00
WK669	1/2	5/16	3 1/2	17.70
WK670	9/16	5/16	3 1/2	18.10
WK671	5/8	5/16	3 1/2	18.20
WK672	11/16	5/16	3 1/2	19.50
WK673	3/4	5/16	3 1/2	19.50
WK674	13/16	5/16	3 1/2	18.00
WK675	7/8	5/16	3 1/2	18.00
WK676	15/16	5/16	3 1/2	18.00
WK677	1	5/16	3 1/2	23.50
WK678	1 1/16	5/16	3 1/2	23.50
WK679	1 1/8	5/16	3 1/2	24.00
WK680	1 3/16	5/16	3 1/2	26.70
WK681	1 1/4	3/8	3 1/2	25.30
WK682	1 5/16	3/8	3 1/2	32.70
WK683	1 3/8	3/8	3 1/2	33.30
WK684	1 1/2	3/8	3 1/2	36.90
WK685	1 5/8	3/8	3 5/8	42.20
WK686	1 3/4	3/8	3 5/8	47.30
WK687	1 7/8	3/8	3 5/8	47.60
WK688	2	3/8	3 5/8	55.00
WK689	2 1/8	3/8	3 5/8	62.80
WK690	2 1/4	3/8	3 5/8	88.00

KITS IN A WOODEN BOX

7-Pieces including: 1/4", 3/8", 1/2", 5/8", 3/4, 7/8", 1"

Model No. WK721
Price/Each \$132.00

9-Pieces including: 1 1/8", 1 1/4", 1 3/8", 1 1/2", 1 5/8", 1 3/4", 1 7/8", 2", 2 1/8"

Model No. WK722
Price/Each \$342.00

16-Pieces including: 1/4", 3/8", 1/2", 5/8", 3/4, 7/8", 1", 1 1/8", 1 1/4", 1 3/8", 1 1/2", 1 5/8", 1 3/4", 1 7/8", 2", 2 1/8"

Model No. WK723
Price/Each \$463.00

HOLE DOZER™ HOLE SAW

ICE HARDENED™ HOLE SAWS

Utilize a proprietary cryogenic hardening process that improves upon traditional heat treat processes. Unlike surface coatings that wear away, cryogenics harden to the core by minimizing soft metal (austenite) and creating more hard metal (martensite).

Feature and benefits:

- Ice Hardened™ for up to 50% longer life than the competition
- Optimized tooth form for up to 2x faster cutting
- Functional slots for faster plug removal
- Matrix II bi-metal teeth for greater durability



Saw diameter Inches	mm	Model No.	Price /Each
5/8	16	TB0108	9.66
11/16	17	TB0109	9.75
3/4	19	TB0110	9.55
13/16	21	TB0111	9.75
7/8	22	TB0112	9.55
15/16	24	TB0113	9.66
1	25	TB0114	9.63
1 1/16	27	TB0115	9.73
1 1/8	29	TB0116	9.63
1 3/16	30	TB0117	9.73
1 1/4	32	TB0118	9.63
1 5/16	33	TB0119	9.73
1 3/8	35	TB0120	10.10
1 7/16	37	TB0121	10.20
1 1/2	38	TB0122	10.10
1 9/16	40	TB0123	10.20
1 5/8	41	TB0124	10.10
1 11/16	43	TB0125	10.30
1 3/4	44	TB0126	12.70
1 13/16	46	TB0127	12.80
1 7/8	48	TB0128	12.80
2	51	TB0129	12.70
2 1/16	52	TB0130	15.60
2 1/8	54	TB0131	15.40
2 1/4	57	TB0132	15.40

Saw diameter Inches	mm	Model No.	Price /Each
2 5/16	59	TB0133	15.60
2 3/8	60	TB0134	15.40
2 1/2	64	TB0135	16.90
2 9/16	65	TB0136	17.10
2 5/8	67	TB0137	17.00
2 3/4	70	TB0138	17.00
2 7/8	73	TB0139	17.50
3	76	TB0140	17.90
3 1/8	79	TB0141	18.10
3 1/4	83	TB0142	17.90
3 3/8	86	TB0143	18.30
3 1/2	89	TB0144	19.20
3 5/8	92	TB0145	21.40
3 3/4	95	TB0146	24.40
3 7/8	98	TB0147	25.10
4	102	TB0148	26.40
4 1/8	105	TB0149	28.50
4 1/4	108	TB0150	37.70
4 3/8	111	TB0151	44.90
4 1/2	114	TB0152	51.90
4 3/4	121	TB0153	58.70
5	127	TB0154	65.00
5 1/2	140	TB0155	78.10
6	152	TB0156	66.

Note: See page 1443 for arbors

Canada's Best Value in Industrial Tools



aurora tools

MATRIX[®]
INDUSTRIAL PRODUCTS

**Maintain the ideal
temperature
in your workplace.**



HOLE SAWS

HOLE DOZER™ HOLE SAW KITS

Ice Hardened™ products utilize a proprietary cryogenic hardening process (harden to the core by minimizing soft metal and creating more hard metal) that improves upon traditional heat treat processes.

Features and benefits:

- Ice Hardened™ for up to 50% longer life
- Optimized tooth form for up to 2x faster cutting
- Functional slots for faster plug removal

HOLE DOZER™ GENERAL PURPOSE HOLE SAW KIT

Includes:

- Eleven (11) hole saws: 3/4", 7/8", 1", 1 1/8", 1 3/8", 1 1/2", 1 3/4", 2", 2 1/8", 2 1/4", 2 1/2"
- (1) 3/8" Hex shank arbor
- (2) 3-1/2" Pilot bits,
- (1) 1/8" Hex key,
- (1) 7/16" No-wobble arbor

Model No. TBO157
Price/Each \$185.00



HOLE DOZER™ ALL PURPOSE PROFESSIONAL HOLE SAW KIT

Includes:

- Twenty-two (22) hole saws: 3/4", 7/8", 1", 1 1/8", 1 1/4", 1 3/8", 1 1/2", 1 3/4", 2", 2 1/8", 2 1/4", 2 1/2", 2 5/8", 3", 3 1/4", 3 3/8", 3 5/8", 3 3/4", 4 1/8", 4 1/4", 4 1/2", 4 3/4"
- (1) 3/8" Hex shank arbor
- (1) 7/16" Hex shank arbor
- (1) 7/16" No-wobble arbor
- (3) 3-1/2" Pilot bits
- (1) 1/8" Hex key

Model No. TBO165
Price/Each \$439.00



10-PC ELECTRICIANS ICE HARDENED™ HOLE SAW KIT

Includes:

- Six (6) hole saws: 7/8", 1 1/8", 1 3/8", 1 3/4", 2", 2 1/2"
- (1) 3/8" Hex shank arbor
- (2) 3-1/2" Pilot bits
- (1) 1/8" Hex key
- (1) 7/16" No-wobble arbor

Model No. TBO160
Price/Each \$125.00



HOLE DOZER™ MASTER ELECTRICIAN'S HOLE SAW KIT

Includes:

- Thirteen (13) hole saws: 3/4", 7/8", 1 1/8", 1 3/8", 1 3/4", 2", 2 1/4", 2 1/2", 2 5/8", 3", 3 5/8", 4 1/8", 4 3/4"
- (1) 3/8" Small thread arbor
- (1) 7/16" Large thread arbor
- (1) 1/4" x 3-1/2" HSS Pilot bit

Model No. TBO159
Price/Each \$276.00



HOLE DOZER™ PLUMBER'S HOLE SAW KIT

Includes:

- Six (6) hole saws: 3/4", 7/8", 1 1/8", 1 1/2", 1 3/4", 2 1/4"
- (1) 1/8" Hex key
- (1) 3/8" Small thread arbor
- (1) 7/16" Large thread arbor
- (2) 1/4" x 3-1/2" HSS Pilot bits

Model No. TBO163
Price/Each \$107.00



HOLE DOZER™ MASTER PLUMBER'S HOLE SAW KIT

Includes:

- Eleven (11) hole saws: 3/4", 7/8", 1 1/8", 1 3/8", 1 1/2", 1 3/4", 2 1/4", 2 5/8", 3", 4 1/4", 4 1/2"
- (1) 1/8" Hex key
- (1) 3/8" Small thread arbor
- (1) 7/16" Large thread arbor
- (3) 1/4" x 3-1/2" HSS Pilot bits

Model No. TBO164
Price/Each \$277.00



BIG HAWG® KITS

- Carbide teeth allow the hole saw to cut through the toughest materials, including nails, cement board, shingles, plaster and stucco
- Offers extreme life utilizing advanced carbide technology
- Ideal for nail-embedded wood and abrasive material applications

7-PC BIG HAWG™ HOLE SAW SET

- Hole Saw Size Range: 2-1/8" - 3-5/8"

Model No. TCR334
Price/Each \$164.00



10-PC BIG HAWG™ HOLE SAW SET

- Hole Saw Size Range: 2-1/8" - 4-1/4"

Model No. TCR313
Price/Each \$287.00



ELECTRICIAN'S HOLE SAW KITS

- Produced with Starrett Fastcut bi-metal hole saws, triple-chipped tungsten carbide-tipped saw and Smoothcut cordless hole saws
- Can cut similar size holes through multiple materials



Starrett®

Model No.	Mfg. No.	Description	Saw Types	# of Pieces	Included	Price /Each
TC0005	69924	CT Electricians Kit	CT Carbide-Tipped	10	Six carbide tipped hole saws: 7/8", 1 1/8", 1 3/8", 1 3/4", 2", 2 1/2"; two arbors: XA1, XA2; one arbor adapter: A12; one ejector spring: A7 and case	228.00
TC0007	69927	DH Electricians Kit	DH Bi-Metal	10	Six bi-metal hole saws: 7/8", 1 1/8", 1 3/8", 1 3/4", 2", 2 1/2"; two arbors: A1, A2; one arbor adapter: A12; one ejector spring: A7 and case	123.00
TCR303	KDC11041-N	DCH Electricians Kit	-	14	DCH Series 22mm (7/8"), 29mm (1.1/8"), 35mm (1.3/8"), 44mm (1.3/4"), 51mm (2"), 64mm (2.1/2"), 76mm (3"), 92mm (3.5/8"), 105mm (4.1/8"), 114mm (4.1/2"), 121mm (4.3/4")	258.00
TC0009	69926	DH/CT/CSC Electricians Kit	CT Carbide-Tipped, CSC Smoothcut DH Bi-Metal and	31	14 bi-metal hole saws: 3/4", 7/8", 1 1/8", 1 1/4", 1 3/8", 1 3/4", 2", 2 1/2", 2 11/16", 3", 3 5/8", 4 1/8", 4 1/2", 4 3/4"; eight carbide hole saws: 3/4", 7/8", 1 1/8", 1 3/8", 1 3/4", 2", 2 1/4", 2 1/2"; three Smoothcut hole saws: 3/4", 1 1/8", 1 3/8"; two arbors: A1, A2; two carbide tipped pilot bits: XA014C; one arbor adapter: A12; one ejector spring: A7 and case	545.00

HOLE SAW ARBORS & PILOT DRILLS

Features and benefits:

- Set screw in the body allows for easy replacement of the pilot drill
- Quick-Hitch™ arbor (**TBC568, TBC737, TBC700, TBC738**) enables instant change out of the hole saw without additional tools and without removing the arbor from the chuck

Starrett®



Model No.	For Hole Saw Diameter"	Shank"	Thread"	Will Fit Chuck Size"	Comes with 1/4" HSS Pilot Drill	Comes with 1/4" Carbide Tipped Pilot Drill	Price /Each
TBC567	9/16 to 1 3/16	11/32 hex	1/2 - 20	3/8	TBC701	-	12.10
TBC736	9/16 to 1 3/16	11/32 hex	1/2 - 20	3/8	-	TBC702	30.40
TBC569	9/16 to 1 3/16	1/4 round	1/2 - 20	1/4	TBC571	-	12.10
TBC568	1 1/4 to 8 9/32	7/16 hex	5/8 - 18	1/2	TBC701	-	18.30
TBC737	1 1/4 to 8 9/32	7/16 hex	5/8 - 18	1/2	-	TBC702	41.80
TBC700	1 1/4 to 8 9/32	11/32 hex	5/8 - 18	3/8	TBC701	-	18.30
TBC738	1 1/4 to 8 9/32	11/32 hex	5/8 - 18	3/8	-	TBC702	41.80

HOLE SAW ARBORS & PILOT DRILLS

Features and benefits:

- Quick Change VH072:** Backing plate equipped with push pins which lock into holes on the backing plate of the hole saw for positive efficient transmission of torque

Milwaukee®



Model No.	For Hole Saw Diameter"	Shank"	Thread"	Will Fit Chuck Size"	Standard Pilot Included (General Purpose Wood and Metal)	Can Also be Used with 1/4" Carbide Pilot	Price /Each
VH067	9/16 to 1 3/16	1/4 round	1/2 - 20	1/4 and larger	TW229	TW233	8.79
VH070	9/16 to 1 3/16	7/16 hex	1/2 - 20	1/2 and larger	TW229	TW233	12.30
VH071	9/16 to 1 3/16	3/8 hex	1/2 - 20	3/8 and larger	TW232	-	11.20
VH072	1 1/4 and +	7/16 hex	5/8 - 18	1/2 and larger	TW229	TW233	24.30

ELECTRICIAN'S HOLE SAW KIT

- Features dual pitch hole saws and select accessories
- High-speed, heat-resistant carbide steel teeth welded to a durable alloy backing and cap
- Ideal for a variety of materials including wood, metal and steel
- A1E extended length arbor, A2E extended length quick hitch arbor and A12 arbor adapter accessories also included
- No. of Pieces: 14
- Includes: DCH Series 22mm (7/8"), 29mm (1.1/8"), 35mm (1.3/8"), 44mm (1.3/4"), 51mm (2"), 64mm (2.1/2"), 76mm (3"), 92mm (3.5/8"), 105mm (4.1/8"), 114mm (4.1/2"), 121mm (4.3/4")
- Includes: 11 hole saws and 3 accessories

Model No. TCR303
Mfg. No. KDC11041-N
Price/Each \$258.00

Starrett®



HOLE SAWS



HOLE SAWS KITS

Designed to serve the specific needs of various trades and applications. Each kit is designed with a sturdy carrying case, hole saws and accessory pre-selected to cover a full range of applications

Starrett®

GENERAL PURPOSE HOLE SAW KITS

- Produced with Fastcut bi-metal
- Strong, safe and shatter resistant
- CT General Purpose: Ideal for materials too hard or too abrasive to be cut with conventional HSS saws
- MPH General Purpose: Engineered with a unique tooth set for an ultra-aggressive cutting action
- D High Performance: For drilling non-metallics; produce clean, accurate cut and offer extended life



TCO010

Starrett®

Model No.	Mfg. No.	Description	Saw Types	# of Pieces	Included	Price /Each
TCO010	69971	CT General Purpose Kit	CT Carbide-Tipped	14	Nine carbide-tipped hole saws: 3/4", 7/8", 1 1/8", 1 3/8", 1 1/2", 1 3/4", 2", 2 1/4", 2 1/2"; two arbors: XA1, XA2; one carbide-tipped pilot bit: XA014C; one 12" extension: A5 and case	297.00
TCO011	69974	D General Purpose Kit	D Diamond Grit	13	Nine hole saws: 3/4", 7/8", 1 1/8", 1 3/8", 1 1/2", 1 3/4", 2", 2 1/4", 2 1/2"; two arbors: XA1, XA2; one carbide-tipped pilot bit: XA014C; one 12" extension: A5 and case	462.00
TCO014	69972	MPH General Purpose Kit	CT Carbide-Tipped	6	Three TCT hole saws: 2 1/8", 2 9/16", 3 5/8"; one arbor with carbide-tipped pilot bit: A2-E; one arbor: A2-E; two carbide-tipped pilot bits: XA014C and case	136.00

PLUMBER'S DEEP CUT HOLE SAW KIT

- Manufactured with hardened, heat-resistant and positive rake, high speed carbide steel teeth welded to a durable alloy backing and cap
- Exceptionally strong, safe, and shatter resistant
- Effectively and economically cuts a wide variety of materials including wood, metal, and steel



TCS706

Starrett®

Model No.	Mfg. No.	# of Pieces	Included	Price /Each
TCS706	01234	10	3/4" Hole saw, 7/8" Hole saw, 1-1/8" Hole saw, 1-1/2" Hole saw, 1-3/4" Hole saw, 2-1/4" Hole saw, A1E Extended length arbor, A2E Extended length quick hitch arbor, A12 Arbor adapter, A014CE Extra length high speed steel pilot drill	125.00

LOCKSMITH'S HOLE SAW KITS

- Strong, safe and shatter resistant
- SH Locksmith hole saws: Produced with Starrett standard pitch bi-metal hole saws; provide cleaner finished holes
- DH Locksmith hole saws: Produced with Starrett Fastcut bi-metal hole saws



TCO025

Starrett®

Model No.	Mfg. No.	Description	Saw Types	# of Pieces	Included	Price /Each
TCO025	69969	SH Locksmith's Kit	SH Bi-Metal	4	Two bi-metal hole saws: 1", 2 1/8"; one arbor: A1; one arbor adaptor: A12 and case	43.10
TCO027	69967	DH Locksmith's Kit	DH Bi-Metal	14	Eight bi-metal hole saws: 3/4", 7/8", 1", 1 3/8", 1 1/2", 1 5/8", 1 3/4", 2 1/8"; two arbors: A1, A2; three pilot bits: A014CE; one arbor adaptor: A12 and case	155.00

INDUSTRIAL & DEEP CUT HOLE SAW KIT

- Manufactured with hardened heat resistant and positive rake high speed steel teeth welded to a durable alloy backing and cap
- Exceptionally strong, safe, and shatter resistant
- Effectively and economically cuts a wide variety of materials including wood, metal, and steel



UAE241

Starrett®

Model No.	Mfg. No.	# of Pieces	Included	Price /Each
UAE241	01220	12	DCH Series 19mm (3/4"), 22mm (7/8"), 25mm (1"), 32mm (1.1/4"), 35mm (1.3/8"), 38mm (1.1/2"), 44mm (1.3/4"), 51mm (2"), 57mm (2.1/4"), 64mm (2.1/2"), 76mm (3"). A1E Extended Length Arbor, A2E Extended Length Quick Hitch Arbor, A5 Arbor Extension	219.00
UAK134	KDC06034-N	13	DCH Series 22mm (7/8") Deep cut hole saw, 25mm (1") Deep cut hole saw, 32mm (1-1/4") Deep cut hole saw, 38mm (1-1/2") Deep cut hole saw, 44mm (1-3/4") Deep cut hole saw, 54mm (2-1/8") Deep cut hole saw, A1E Extended length arbor, A10E Extended length quick hitch arbor, A12 Arbor adapter, Carrying case	111.50

KING CUT® FIRE, RESCUE & DEMOLITION RECIPROCATING BLADES

- Made from bi-metal construction that joins HSS cutting edge to a durable steel back
- Vacuum hardened HSS tooth edge delivers rapid cutting action
- Come in durable resealable plastic packs

Dimensions L" x W"x Thick"		TPI	5 Blades Packs Model No.	Price /Each	20 Blades Packs Model No.	Price /Each	50 Blades Packs Model No.	Price /Each
STRAIGHT SHAPE								
6 x 3/4 x 0.035	18		EAM049	15.80	EAM050	57.80	EAM051	143.00
6 x 3/4 x 0.035	10-14		EAM052	15.80	EAM053	57.80	EAM054	143.00
8 x 3/4 x 0.035	18		EAM061	21.50	EAM062	77.20	EAM063	183.00
8 x 3/4 x 0.050	10-14		EAM064	21.50	EAM065	77.20	EAM066	183.00
9 x 3/4 x 0.050	10-14		EAM073	22.50	EAM074	87.40	EAM075	208.00
12 x 3/4 x 0.050	10-14		EAM082	27.30	EAM083	103.00	EAM084	244.00
TAPERED SHAPE								
12 x 1 x 0.063	10-14		EAM085	39.20	EAM086	152.00	EAM087	362.00
12 x 1 x 0.063	6-10		EAM088	39.20	EAM089	152.00	EAM090	362.00
6 x 1 x 0.063	10-14		EAM055	19.60	EAM056	76.30	EAM057	181.00
6 x 1 x 0.063	6-10		EAM058	19.60	EAM059	76.30	EAM060	181.00
8 x 1 x 0.063	10-14		EAM067	28.60	EAM068	109.00	EAM069	260.00
8 x 1 x 0.063	6-10		EAM070	28.60	EAM071	109.00	EAM072	260.00
9 x 3/4 x 0.050	10-14		EAM076	29.40	EAM077	114.00	EAM078	272.00
9 x 1 x 0.063	6-10		EAM079	29.40	EAM080	114.00	EAM081	272.00

Starrett®



EAM049

FASTCUT GENERAL PURPOSE RECIPROCATING BLADES

- Durable bi-metal HSS construction

Dimensions L" x W"x Thick"		TPI	5 Blades Packs Model No.	Price /Each	20 Blades Packs Model No.	Price /Each	50 Blades Packs Model No.	Price /Each
STRAIGHT SHAPE								
4 x 3/4 x 0.035	14		TBA855	13.80	TBB103	51.40	EAM091	126.00
	18		TBA856	13.80	TBB104	51.40	EAM092	126.00
	24		TBA857	13.80	TBB105	51.40	EAM093	126.00
6 x 3/4 x 0.035	6		TBA859	15.80	TBB109	57.80	EAM094	143.00
	10		TBA860	15.80	TBB110	57.80	EAM095	143.00
	14		TBA861	15.80	TBB111	57.80	EAM096	143.00
	18		TBA862	15.80	TBB112	57.80	EAM097	143.00
	24		TBA863	15.80	TBB113	57.80	EAM098	143.00
8 x 3/4 x 0.035	18		TBA917	21.50	TBB126	77.20	EAM099	183.00
TAPERED SHAPE								
6 x 3/4 x 0.050	3		TBA864	19.80	-	-	EAM100	167.00
	6		TBA865	19.80	TBB118	72.10	EAM101	167.00
	10		TBA883	19.80	TBB122	72.10	EAM102	167.00
9 x 3/4 x 0.050	6		TBA952	23.60	TBB128	86.30	EAM103	205.00
	10		TBB005	23.60	TBB129	86.30	EAM104	205.00
12 x 3/4 x 0.050	3		TBA871	33.50	TBB136	121.00	EAM105	288.00
	6		TBA872	33.50	TBB137	121.00	EAM106	288.00
	6-10		TBA885	33.50	TBB139	121.00	EAM107	288.00
	10-14		TBA886	33.50	TBB140	121.00	EAM108	288.00

Starrett®



TBA855



TBA864

SAWZALL® RECIPROCATING SAW KITS

- Powerful 12 Amp motor: Delivers 0-3000 SPM for high performance cutting in a variety of materials
- 3/4" stroke length
- Counter weighted mechanism: Provides reduced vibration for smoother operation
- Quik-Lok™ blade clamp: Provides fast, tool-free blade changes
- Includes: Sawzall® recip saw, carrying case

Model No. TLV200
Mfg. No. 6509-31
Price/Each \$204.00

Milwaukee



SPECIFICATIONS

Stroke Length: 3/4"
Amperage: 12.0
Strokes per Minute: 0-3000
Tool Weight: 7.1 lbs.

RECIPROCATING SAW

- Powered by a 12 Amp motor with electronic speed control to maintain constant speed under load
- Variable speed trigger to match the speed of the saw to the application
- Durable body design that keeps dust and debris away from the motor, with rubber and felt seals to keep dust and water out for a longer tool life
- "Tool-less" blade change for fast blade installation and removal
- Engineered for demolition, metal cutting, wood cutting, drywall and plaster, plastics, and more
- Tool hook secures the tool when not in use
- Well balanced design (only 7.3 lbs. and 17-5/8" long) for reduced operator fatigue and all-day use
- Large 2-finger trigger for added convenience
- Soft grip and handle for increased comfort
- Double insulated
- Includes: Reciprocating saw, 6" 6 TPI Wood-cutting saw blade, 6" 18 TPI Metal-cutting saw blade

Makita

Model No. UAJ532
Mfg. No. JR3051T
Price/Each \$135.00

SPECIFICATIONS

Max. Cutting Capacity: 5-1/8" Pipe & 10" Wood
Stroke Length: 1 3/16"
Amperage: 12.0
Strokes per Minute: 0-3000
Tool Weight: 7.3 lbs.



SAW BLADES

HIGH PERFORMANCE SUPER SAWZALL® BLADES

Matrix II high speed steel teeth with 8% cobalt. Tough bi-metal design for the fastest cutting, longest blade life available. 1/2" universal tang.

ICE HARDENED™ SAWZALL® BLADE FOR METAL

- Cryogenically treated to minimize soft metal (austenite) and create more hard metal (martensite) for up to 50% longer life than standard blades
- Combination of relief angles forms a radius on the back of the tooth that reduces stress build-up and extends blade life
- Precision forming process creates sharper teeth for fast cutting
- Matrix II bi-metal teeth for greater durability

ICE HARDENED™ THE TORCH® SAWZALL® BLADE FOR METAL

- All the features of Ice Hardened™ Sawzall® blade for metal, plus:
- Precision forming process creates sharper teeth for fast cutting
- A thicker, more rigid blade body resists fracturing and bending for maximum durability
- The 1" tall blade body reduces blade twisting for straighter, more accurate cuts

Dimensions L" x W" x Thick"			TPI	Recommended for Cutting	Pack of 5 Model No.	Price /Each
WOOD CUTTING BLADES						
6 x 3/4 x 0.050	6	Very fast cutting nail embedded wood and general roughing in	TW181	17.64		
9 x 3/4 x 0.050	6		TW182	23.10		
12 x 3/4 x 0.050	6		TW183	26.18		
WOOD, NAIL EMBEDDED WOOD & DEMOLITION						
6 x 1.0 x 0.062	5	Plunge cutting	TW185	19.78		
9 x 1.0 x 0.062	5	Demolition work	TW186	26.25		
12 x 1.0 x 0.062	5	Long demolition blade	TW187	30.19		
PLASTER CUTTING BLADE						
5 x 3/4 x 0.050	6	Cuts forward and backward stroke	TW188	13.00		
METAL CUTTING BLADES						
6 x 3/4 x 0.035	14	Metal 3/16" thru 1/4"	TW189	14.78		
6 x 3/4 x 0.035	18	Metal 1/8" thru 3/16"	TW190	14.78		
9 x 3/4 x 0.035	18	Metal 1/8" thru 3/16"	TW191	18.10		
6 x 3/4 x 0.035	24	Metal thinner than 1/8"	TW192	14.78		
4 x 3/4 x 0.035	14	Metal 3/16" thru 1/4"	TE533	10.78		
9 x 3/4 x 0.035	14	Metal 3/16" thru 1/4"	TE534	18.10		
12 x 3/4 x 0.035	18	Metal 1/8" thru 3/16"	TE535	22.64		
ALL PURPOSE BLADES						
6 x 3/4 x 0.050	8 1/2	All Woods, Nail Embedded	TW193	14.78		
8 x 3/4 x 0.050	8 1/2	Composition Material, Plastic	TW194	18.96		
12 x 3/4 x 0.050	8 1/2	Non-Ferrous Metals, Cast Iron	TW195	28.85		
ICE HARDENED™ THE TORCH® SAWZALL® BLADE FOR METAL						
6 x 1 x 0.042	10		TB0316	25.14		
6 x 1 x 0.042	14		TB0320	25.14		
6 x 1 x 0.042	18		TB0324	25.14		
9 x 1 x 0.042	14		TB0336	33.47		
9 x 1 x 0.042	18		TB0340	33.47		
ICE HARDENED™ SAWZALL® BLADE FOR METAL						
6 x 3/4 x 0.042	14		TB0318	18.96		
6 x 3/4 x 0.042	18		TB0322	18.96		
6 x 3/4 x 0.042	24		TB0326	18.96		
6 x 3/4 x 0.042	8-12		TB0328	18.96		
8 x 3/4 x 0.042	8-12		TB0330	24.25		
9 x 3/4 x 0.042	14		TB0334	23.18		
9 x 3/4 x 0.042	18		TB0338	23.18		

Dimensions L" x W" x Thick"			Type Grit	Recommended for Cutting	Pack of 3 Model No.	Price /Each
TUNGSTEN CARBIDE BLADES						
6 x 3/4 x 0.030	Coarse	Fibreglass, ceramic tile, stone brick,	TW197	19.98		
9 x 3/4 x 0.039	Coarse	Plaster and marble	TE536	25.65		

DIAMOND GRIT THE TORCH™ SAWZALL® BLADES

Features and benefits:

- D6A steel body, durable 1" tall profile for straighter and cleaner cuts
- Featuring industrial diamond grit embedded in high strength nickel
- Blades last up to 30x longer and cut 2x faster than traditional carbide grit blades

Dimensions L" x W" x Thick"			Type Grit	Recommended for Cutting	Model No.	Price /Each
6 x 1 x 0.042	Diamond coarse	Cast iron, hard tile (grade 5), ceramic tile, plaster,	TB0299	15.47		
9 x 1 x 0.042	Diamond coarse	masonry, brick, fibreglass and other abrasive materials	TB0300	18.83		



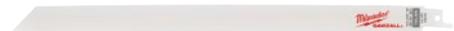
Wood Cutting Blade



Wood, Nail Embedded Wood and Demolition



Plaster Cutting Blade



Metal Cutting Blade



All Purpose Blade



Ice Hardened™ The Torch® Sawzall® Blade for metal



Ice Hardened™ Sawzall® Blade for metal



Tungsten Carbide Blade





JIG SAW BLADES

UNIFIED SHANK® JIG SAW BLADES

- Fits both universal shank and Bosch shank jig saw
- Made out of the exclusive bi-metal Unique® process technology that makes them resist breakage, cut faster and last longer than other blades

Dimensions L" x W" x Thick"	TPI	Tooth	Set	Pack of 5 Model No.	Price /Each	Pack of 20 Model No.	Price /Each
FOR WOOD CUTTING							
3 x 5/16 x 0.050	6	Ground	Tapered	EAM111	17.80	EAM115	69.90
3 x 5/16 x 0.050	6	Ground	Alternate	TGZ503	11.50	EAM116	45.00
3 x 5/16 x 0.050	8	Regular	Alternate	EAM112	10.10	EAM117	39.60
3 x 5/16 x 0.050	10	Ground	Tapered	TGZ501	12.10	EAM118	47.30
3 x 5/16 x 0.050	10	Ground	Tapered, downstroke cut	EAM113	12.10	EAM119	47.30
4 x 3/8 x 0.050	6	Skip	Alternate	EAM114	14.40	EAM120	56.50
FOR METAL CUTTING							
2 x 5/16 x 0.040	24	Wavy	Regular	EAM121	9.40	EAM125	36.70
2 x 5/16 x 0.040	32	Wavy	Regular	EAM122	11.30	EAM126	44.10
3 x 3/16 x 0.040	24	Wavy	Scroll	EAM123	10.90	EAM127	42.60
4 x 3/8 x 0.040	24	Wavy	Regular	EAM124	13.60	EAM128	53.40
MULTI-PURPOSE							
2 x 5/16 x 0.040	Coarse grit	Grit	Carbide	TJZ012	17.80	EAM133	69.70
2 x 5/16 x 0.040	14	Wavy	Regular	-	-	EAM134	36.70
2 x 5/16 x 0.040	18	Wavy	Regular	EAM130	9.40	EAM135	36.70
2 x 5/16 x 0.040	14	Wavy	Scroll	EAM131	10.90	EAM136	42.60
2 x 3/16 x 0.040	10-14	Wavy	Varipitch	TGZ502	13.80	EAM137	54.10
4 x 3/8 x 0.040	18	Wavy	Regular	EAM132	10.40	EAM138	40.90



EAM111



EAM121



TJZ012

UNIVERSAL-SHANK JIG-SAW BLADES

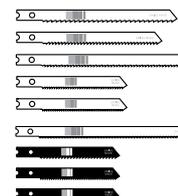
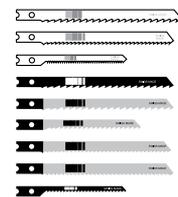
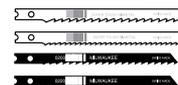
Bi-Metal - Super-tough bonded alloy steel for long life and faster cuts.

High-Carbon Steel - Tough durable carbon alloy blade for multi-purpose uses.

High-Speed Steel - General-purpose blade.

Sold in packs of 5

Length"	Width"	Teeth"	Tooth Type	Blade Material	Recommended Use	Model No.	Price /Each
GENERAL PURPOSE							
4	9/32	6	Milled and set	Bi-metal	Fast cutting, nail-embedded wood	TT427	14.90
4	9/32	10	Milled and set	Bi-metal	Fast cutting, nail-embedded wood	TT428	14.80
4	9/32	6	Milled and set	High-carbon steel	Very fast rough-cutting wood	TT430	8.86
4	9/32	8	Milled and set	High-carbon steel	Fast straight-cutting wood	TT431	8.86
WOOD CUTTING							
4	9/32	6	Taper ground	Bi-metal	Very fast clean cutting	TT435	19.30
4	9/32	10	Taper ground	Bi-metal	Fast clean cutting	TT436	19.10
2 3/4	3/16	20	Taper ground	Bi-metal	Scroll cutting in wood and laminates	TT437	19.30
4	9/32	6	Ground and set	High-carbon steel	Very fast rough cutting	TT438	17.50
4	9/32	6	Taper ground	High-carbon steel	Very fast clean cutting	TT439	12.70
3 1/8	7/32	8	Taper ground	High-carbon steel	Clean cutting	TT441	10.30
4	9/32	10	Taper ground	High-carbon steel	Straight clean cutting	TT442	12.70
4	9/32	10	Taper ground	High-carbon steel	Reverse, no top splinters	TT443	15.30
2 3/4	5/32	12	Milled, wavy set	High-carbon steel	Clean scroll cutting	TT444	8.28
METAL CUTTING							
4	9/32	8	Milled and set	Bi-metal	Aluminum, non-ferrous metals	TT455	16.40
3 5/8	9/32	14	Milled, wavy set	Bi-metal	Thick over 1/4" thick	TT456	13.70
5	9/32	14	Milled, raker set	Bi-metal	Thick metal, tubing, etc.	TT457	20.90
2 3/4	9/32	18	Milled, wavy set	Bi-metal	Metal over 1/8" thick	TT458	13.10
2 3/4	9/32	24	Milled, wavy set	Bi-metal	Metal under 1/8" thick	TT459	13.10
3 5/8	9/32	24	Milled, wavy set	Bi-metal	Thin metal under 1/8" thick	TT460	19.70
2 3/4	9/32	14	Milled, raker set	High-speed steel	Metal over 1/4" thick	TT461	9.73
2 3/4	9/32	18	Milled, wavy set	High-speed steel	Metal over 1/8" thick	TT462	9.83
2 3/4	9/32	24	Milled, wavy set	High-speed steel	Metal under 1/8" thick	TT463	9.83



UNIFIED SHANK® JIG SAW ASSORTMENT PACK

16 blades in the full product line plus an extra 6-tooth wood cutting saw. Blades come in a durable, tri-fold wallet.

Model No. EAM041 Mfg. No. 11974
Price/Each \$43.30



SAW BLADES

INTENSSTM PRO

Ideal for intensive production cutting operations across a wide range of metals. Featuring a tooth design with a positive rake angle and variable pitch for optimal cutting efficiency in sustained, high-production sawing applications

Features and benefits:

- Easy penetration, excellent chip clearance and reduced noise levels
- High-quality surface finish for faster and straighter cuts
- Made with triple-tempered, **high-speed M-42 cobalt steel** teeth combined with a fatigue-resistant alloy steel backing strip

Application:

- High production cutting
- Steel (up to 45 HRC)
- Stainless steel
- Nickel-based
- Non-ferrous alloys

Starrett®



STANDARD

Model No.	Mfg. No.	Length	Pitch Size"	TPI	Price /Each
TCS152	99206-07-09	7' 9"	3/4 x 0.035	6-10/P	57.70
TCS155	99206-10	10'	3/4 x 0.035	6-10/P	70.00
TCS156	99222-10	10'	3/4 x 0.035	8-12/P	64.30
TCS157	99234-10	10'	3/4 x 0.035	10-14/P	64.30
TCS158	99206-10-05	10' 5"	3/4 x 0.035	6-10/P	73.10
TCS159	99222-10-05	10' 5"	3/4 x 0.035	8-12/P	67.10
TCS160	99234-10-05	10' 5"	3/4 x 0.035	10-14/P	67.10
TCS161	99206-10-10-1/2	10' 10 1/2"	3/4 x 0.035	6-10/P	76.20
TCS162	99222-10-10-1/2	10' 10 1/2"	3/4 x 0.035	8-12/P	69.90
TCS163	99234-10-10-1/2	10' 10 1/2"	3/4 x 0.035	10-14/P	69.90
TCS164	99206-11	11'	3/4 x 0.035	6-10/P	76.20
TCS165	99222-11	11'	3/4 x 0.035	8-12/P	69.90
TCS166	99234-11	11'	3/4 x 0.035	10-14/P	69.90
TCS167	99206-11-06	11' 6"	3/4 x 0.035	6-10/P	79.30
TCS168	99222-11-06	11' 6"	3/4 x 0.035	8-12/P	72.70
TCS169	99234-11-06	11' 6"	3/4 x 0.035	10-14/P	72.70

Model No.	Mfg. No.	Length	Pitch Size"	TPI	Price /Each
TCS170	99318-08	8'	1 x 0.035	6-10/P	65.00
TCS171	99329-08	8'	1 x 0.035	8-12/P	61.40
TCS172	99334-08	8'	1 x 0.035	10-14/P	61.40
TCS173	99318-10-10-1/2	10' 10 1/2"	1 x 0.035	6-10/P	86.10
TCS174	99329-10-10-1/2	10' 10 1/2"	1 x 0.035	8-12/P	81.20
TCS175	99334-10-10-1/2	10' 10 1/2"	1 x 0.035	10-14/P	81.20
TCS176	99318-11	11'	1 x 0.035	6-10/P	86.10
TCS177	99329-11	11'	1 x 0.035	8-12/P	81.20
TCS178	99334-11	11'	1 x 0.035	10-14/P	81.20
TCS179	99318-11-06	11' 6"	1 x 0.035	6-10/P	89.60
TCS180	99329-11-06	11' 6"	1 x 0.035	8-12/P	84.50
TCS181	99334-11-06	11' 6"	1 x 0.035	10-14/P	84.50
TCS182	99318-12	12'	1 x 0.035	6-10/P	93.10
TCS183	99329-12	12'	1 x 0.035	8-12/P	87.80
TCS184	99334-12	12'	1 x 0.035	10-14/P	87.80

INTENSSTM PRO-DIE

Featuring the longevity and chip clearing advantages of **bi-metal Unique®** saw technology and is ideal for contour and general purpose cutting on horizontal and vertical machines.

Features and benefits:

- Resists heat, abrasion and shock, allowing faster cutting rates
- Can be used on horizontal and vertical machines
- Triple tempered M-42 cobalt high speed steel teeth combined with a fatigue resistant alloy steel backing strip

Application:

- Contour cutting
- General purpose
- Die and mold steels
- Stainless steels
- Nickel based alloys
- Non ferrous alloys

Starrett®



STANDARD

Model No.	Mfg. No.	Length	Size"	Pitch TPI	Price /Each
TCS001	99151-05	5'	1/2 x 0.025	6	34.30
TCS002	99165-05	5'	1/2 x 0.025	8-12	34.30
TCS003	99186-05	5'	1/2 x 0.025	10-14	34.30
TCS004	99188-05	5'	1/2 x 0.025	14-18	34.30
TCS005	99151-05-04-1/2	5' 4 1/2"	1/2 x 0.025	6	36.90
TCS006	99165-05-04-1/2	5' 4 1/2"	1/2 x 0.025	8-12	36.90
TCS007	99186-05-04-1/2	5' 4 1/2"	1/2 x 0.025	10-14	36.90
TCS008	99188-05-04-1/2	5' 4 1/2"	1/2 x 0.025	14-18	36.90
TCS009	99151-07-06	7' 6"	1/2 x 0.025	6	47.20
TCS010	99165-07-06	7' 6"	1/2 x 0.025	8-12	47.20
TCS011	99186-07-06	7' 6"	1/2 x 0.025	10-14	47.20
TCS012	99188-07-06	7' 6"	1/2 x 0.025	14-18	47.20

Model No.	Mfg. No.	Length	Size"	Pitch TPI	Price /Each
TCS033	99151-10	10'	1/2 x 0.025	6	60.10
TCS034	99102-10	10'	1/2 x 0.025	6-10	60.10
TCS035	99165-10	10'	1/2 x 0.025	8-12	60.10
TCS036	99186-10	10'	1/2 x 0.025	10-14	60.10
TCS037	99188-10	10'	1/2 x 0.025	14-18	60.10
TCS039	99181-10	10'	1/2 x 0.035	14	63.50
TCS040	99154-10	10'	1/2 x 0.035	6-10	63.50
TCS041	99167-10	10'	1/2 x 0.035	8-12	63.50
TCS042	99178-10	10'	1/2 x 0.035	10-14	63.50

Model No.	Mfg. No.	Length	Size"	Pitch TPI	Price /Each
TCS013	99151-07-09	7' 9"	1/2 x 0.025	6	49.80
TCS014	99102-07-09	7' 9"	1/2 x 0.025	6-10	49.80
TCS015	99165-07-09	7' 9"	1/2 x 0.025	8-12	49.80
TCS016	99186-07-09	7' 9"	1/2 x 0.025	10-14	49.80
TCS017	99188-07-09	7' 9"	1/2 x 0.025	14-18	49.80
TCS019	99181-07-09	7' 9"	1/2 x 0.035	14	52.50
TCS020	99154-07-09	7' 9"	1/2 x 0.035	6-10	52.50
TCS021	99167-07-09	7' 9"	1/2 x 0.035	8-12	52.50
TCS022	99178-07-09	7' 9"	1/2 x 0.035	10-14	52.50
TCS023	99151-07-09-1/2	7' 9 1/2"	1/2 x 0.025	6	49.80
TCS024	99102-07-09-1/2	7' 9 1/2"	1/2 x 0.025	6-10	49.80
TCS025	99165-07-09-1/2	7' 9 1/2"	1/2 x 0.025	8-12	49.80
TCS026	99186-07-09-1/2	7' 9 1/2"	1/2 x 0.025	10-14	49.80
TCS027	99188-07-09-1/2	7' 9 1/2"	1/2 x 0.025	14-18	49.80
TCS029	99181-07-09-1/2	7' 9 1/2"	1/2 x 0.035	14	52.50
TCS030	99154-07-09-1/2	7' 9 1/2"	1/2 x 0.035	6-10	52.50
TCS031	99167-07-09-1/2	7' 9 1/2"	1/2 x 0.035	8-12	52.50
TCS032	99178-07-09-1/2	7' 9 1/2"	1/2 x 0.035	10-14	52.50

Ask us about volume prices!
In many cases you will benefit from quantity prices.

VERSATIX™ MP

Setting a new standard in cutting structural steels, sections, tubes and small solids. New tooth design ensures that the blades can easily handle the stock loading conditions associated with intermittent cutting.

Features and benefits:

- New tooth design significantly increases tooth strength and reduces stripping
- Ideal for use on manual "pull down" band saw machines where uncontrolled feed rates can overload the teeth of a standard blade
- Triple-tempered, **high-speed M-42 cobalt steel** teeth are combined with a fatigue-resistant alloy steel backing strip

Application:

- Structural steel section
- Tubes and small solids



STANDARD

Model No.	Mfg. No.	Length	Size"	Pitch TPI	Price /Each
TCS524	99212-07-09	7' 9"	3/4 x 0.035	4-6/P	53.20
TCS525	99211-07-09	7' 9"	3/4 x 0.035	5-8/P	53.20
TCS526	99210-07-09	7' 9"	3/4 x 0.035	6-10/P	53.20
TCS527	99212-10	10'	3/4 x 0.035	4-6/P	64.30
TCS528	99211-10	10'	3/4 x 0.035	5-8/P	64.30
TCS529	99210-10	10'	3/4 x 0.035	6-10/P	64.30
TCS530	99212-10-05	10' 5"	3/4 x 0.035	4-6/P	67.10
TCS531	99211-10-05	10' 5"	3/4 x 0.035	5-8/P	67.10
TCS532	99210-10-05	10' 5"	3/4 x 0.035	6-10/P	67.10
TCS533	99212-11	11'	3/4 x 0.035	4-6/P	69.90
TCS534	99211-11	11'	3/4 x 0.035	5-8/P	69.90
TCS535	99210-11	11'	3/4 x 0.035	6-10/P	69.90
TCS536	99212-11-06	11' 6"	3/4 x 0.035	4-6/P	72.70
TCS537	99211-11-06	11' 6"	3/4 x 0.035	5-8/P	72.70
TCS538	99210-11-06	11' 6"	3/4 x 0.035	6-10/P	72.70
TCS539	99343-08	8'	1 x 0.035	3-4/P	61.40
TCS540	99342-08	8'	1 x 0.035	4-6/P	61.40
TCS541	99341-08	8'	1 x 0.035	5-8/P	61.40
TCS542	99340-08	8'	1 x 0.035	6-10/P	61.40
TCS543	99343-11	11'	1 x 0.035	3-4/P	81.20
TCS544	99342-11	11'	1 x 0.035	4-6/P	81.20
TCS545	99341-11	11'	1 x 0.035	5-8/P	81.20
TCS546	99340-11	11'	1 x 0.035	6-10/P	81.20

Model No.	Mfg. No.	Length	Size"	Pitch TPI	Price /Each
TCS547	99343-11-06	11' 6"	1 x 0.035	3-4/P	84.50
TCS548	99342-11-06	11' 6"	1 x 0.035	4-6/P	84.50
TCS549	99341-11-06	11' 6"	1 x 0.035	5-8/P	84.50
TCS550	99340-11-06	11' 6"	1 x 0.035	6-10/P	84.50
TCS551	99343-12	12'	1 x 0.035	3-4/P	87.80
TCS552	99342-12	12'	1 x 0.035	4-6/P	87.80
TCS553	99341-12	12'	1 x 0.035	5-8/P	87.80
TCS554	99340-12	12'	1 x 0.035	6-10/P	87.80
TCS583	99494-11-06	11' 6"	1 1/4 x 0.042	2-3/P	95.50
TCS584	99495-11-06	11' 6"	1 1/4 x 0.042	3-4/P	95.50
TCS585	99496-11-06	11' 6"	1 1/4 x 0.042	4-6/P	95.50
TCS586	99497-11-06	11' 6"	1 1/4 x 0.042	5-8/P	95.50
TCS587	99498-11-06	11' 6"	1 1/4 x 0.042	6-10/P	95.50
TCS588	99494-12	12'	1 1/4 x 0.042	2-3/P	99.20
TCS589	99495-12	12'	1 1/4 x 0.042	3-4/P	99.20
TCS590	99496-12	12'	1 1/4 x 0.042	4-6/P	99.20
TCS591	99497-12	12'	1 1/4 x 0.042	5-8/P	99.20
TCS592	99498-12	12'	1 1/4 x 0.042	6-10/P	99.20

Versatix™ custom cut saw blades available on next page

KLETON



CANADA'S LEADING MATERIAL HANDLING SUPPLIER

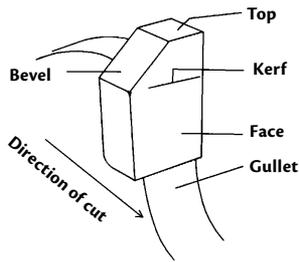




WHAT YOU SHOULD KNOW ABOUT CIRCULAR SAW BLADES

Tooth design is the determining factor in deciding which blade is best for which industrial application. Here's a quick overview of how subtle changes in bevel, gullet and kerf affect cutting performance.

freud



BEVEL

Teeth can have a single bevel, two bevels or no bevel at all. Types of bevels can alternate from tooth to tooth on a given blade. The bevel is what gives the blade its specific cutting pattern.

GULLET

This is the space between teeth that clears the work piece of chips after the cut. The deeper the gullet, the more efficiently chips are cleared.

KERF

This is the face of the tooth, where the actual cutting takes place. The pattern of alternating kerfs, known as the grind, decides what applications a blade is best for.

GRIND

There are many types of grinds, but the five basic ones are:

Flat top grind (FTG) - best for ripping.



Alternate top bevel (ATB) - for crosscutting, cut-off and trimming.



Triple chip grind (TCG) - perfect for hard, abrasive materials like non-ferrous metals, hardwoods and plastics.



Multi-purpose carbide tipped (MCT) or ripping and crosscutting, mitre.



Tri-grind (TRI) - combination grind.



INDUSTRIAL BLADES

TCS

Feature Freud's newest and most resilient PermaShield® coating. This blade now combines Freud's highest quality blade with its highest quality coating. The TCS coating helps reduce blade distorting heat and makes cutting a breeze.

freud

GENERAL PURPOSE

- Crosscut and cutoff of hard and soft woods

Model No.	Mfg. No.	Blade Dia. "	Arbor "	No. of Teeth	Kerf "	Degrees	Hook Grind	Price /Each
TT815	LU84R008	8	5/8	40	0.126	10	MCT	87.10
TT817	LU84R010	10	5/8	50	0.126	10	MCT	88.90
TT818	LU84R012	12	1	60	0.126	10	MCT	148.00

SLIDING COMPOUND MITER BLADES

- Easy fast cutting

Model No.	Mfg. No.	Blade Dia. "	Arbor "	No. of Teeth	Kerf "	Degrees	Hook Grind	Price /Each
TT833	LU91R008	8	5/8	48	0.090	-5	ATB	91.90
TT834	LU91R010	10	5/8	60	0.090	-5	TCG	113.00

RIPPING

- Rips hard and soft woods

Model No.	Mfg. No.	Blade Dia. "	Arbor "	No. of Teeth	Kerf "	Degrees	Hook Grind	Price /Each
TT809	LM72R008	8	5/8	24	0.126	20	FTG	70.40
TT810	LM72R010	10	5/8	24	0.126	20	FTG	77.80
TT811	LM72R012	12	1	30	0.169	20	FTG	101.00

CROSSCUT & FINISHING

- Ultra smooth crosscut and mitres

Model No.	Mfg. No.	Blade Dia. "	Arbor "	No. of Teeth	Kerf "	Degrees	Hook Grind	Price /Each
TT821	LU85R008	8	5/8	64	0.116	10	ATB	111.00
TT823	LU85R010	10	5/8	80	0.116	10	ATB	122.00
TT824	LU85R012	12	1	96	0.116	10	ATB	208.00

LAMINATE & CHIPBOARD

- Cuts dense abrasive man-made materials

Model No.	Mfg. No.	Blade Dia. "	Arbor "	No. of Teeth	Kerf "	Degrees	Hook Grind	Price /Each
TT836	LU98R008	8	5/8	64	0.126	-10	TCG	119.00
TT838	LU98R010	10	5/8	80	0.126	-10	TCG	131.00
TT839	LU98R012	12	1	96	0.126	-10	TCG	171.00

PREMIER FUSION GENERAL PURPOSE SAW BLADES

- Rips woods, crosscuts wood, plywood, laminate



Model No.	Mfg. No.	Blade Dia. "	Arbor "	No. of Teeth	Kerf "	Hook Grind	Price /Each
TB0352	P408	8	5/8	34 Hi	0.126	ATB	107.00
TB0353	P410	10	5/8	40 Hi	0.126	ATB	122.00
TB0354	P412	12	1	48 Hi	0.126	ATB	148.00

HEAVY-DUTY GLUE LINE RIPPING BLADES

- Rips wood, crosscuts wood, chip board, plywood, laminate



Model No.	Mfg. No.	Blade Dia. "	Arbor "	No. of Teeth	Kerf "	Hook Grind	Price /Each
TB0357	LM74R010	10	5/8	30	0.118	TCG	89.30
TB0358	LM74R012	12	1	40	0.118	TCG	115.00
TB0359	LM74R014	14	1	44	0.138	TCG	136.00

MITRE CROSSCUT

- Crosscut and mitre of hard and soft woods



Model No.	Mfg. No.	Blade Dia. "	Arbor "	No. of Teeth	Kerf "	Degrees	Hook Grind	Price /Each
TT686	LU73M014	14	1	84	0.138	10	ATB	184.00

GENERAL PURPOSE SAW BLADES

- For crosscutting thick hardwoods and softwoods (3/4" to 3 1/2") and thinner stock material (1/4" to 1")
- Anti-vibration design, Silver Ice™ coating



Model No.	Mfg. No.	Blade Dia. "	Arbor "	No. of Teeth	Kerf "	Degrees	Hook Grind	Price /Each
TT639	LU72M014	14	1	54	0.138	13	ATB	148.00

DOUBLE SIDED LAMINATE/MELAMINE

- Rips wood, crosscuts wood, chip board, plywood, melamine, laminate



Model No.	Mfg. No.	Blade Dia. "	Arbor "	No. of Teeth	Kerf "	Hook Grind	Price /Each
TB0360	LM97R008	8	5/8	64	0.126	TCG	104.00
TB0361	LM97R010	10	5/8	80	0.126	TCG	130.00
TB0362	LM97R012	12	1	96	0.126	TCG	148.00
TB0363	LM97R014	14	1	108	0.138	TCG	165.00

CONTRACTOR SAW BLADES

DIABLO® SAW BLADES



- Thin kerf, ideal for portable and low powered saws
- Perma-Shield® coating, keeps the blades resistant to gumming and corrosion
- Laser-cut stabilizer vents reduces vibration and heat built up

Combination

- For ripping and crosscutting



Model No.	Mfg. No.	Blade Dia."	Arbor"	No. of Teeth	Hook Grind	Price /Each
TDX905	D1050X	10	5/8	50	ATB	61.90

Finishing

- For ripping, crosscutting, decking, fencing and plywood



Model No.	Mfg. No.	Blade Dia."	Arbor"	No. of Teeth	Hook Grind	Price /Each
TDX992	D0740A	7 1/4	5/8	40	ATB	24.20
TEX006	D0840X	8 1/4	5/8	40	ATB	30.50

Fine Finishing

- For crosscutting oak, pine, melamine, plywood and molding, very smooth finish



Model No.	Mfg. No.	Blade Dia."	Arbor"	No. of Teeth	Hook Grind	Price /Each
TEX005	D0860S	8 1/2	5/8	60	ATB	68.60
TDX909	D1060S	10	5/8	60	ATB	72.20
TDX931	D1280X	12	1	80	ATB	79.40

General Purpose

- For cutting oak, pine, plywood, pressure treated lumber and beams



Model No.	Mfg. No.	Blade Dia."	Arbor"	No. of Teeth	Hook Grind	Price /Each
TDX901	D1040X	10	5/8	40	ATB	53.90
TDX926	D1244X	12	1	44	ATB	57.70

METAL CUTTING SAW BLADE

- For cutting ferrous metals up to 25 HRC, aluminum, wood and composite material



Model No.	Mfg. No.	Blade Dia."	Arbor"	No. of Teeth	Kerf	Price /Each
TB0728	8-40 MET	8	5/8	40	0.086	86.90
TB0729	10-48 MET	10	5/8	48	0.094	86.90
TRW236	12-60 MET	12	1	60	0.094	130.00
TRW240	12-80 MET	12	1	80	0.094	153.00
TB0730	14-90 MET	14	1	90	0.1	189.00

SAWS FOR NON-FERROUS METAL

- Material must be clamped firmly to the table on both sides during cutting operation and the use of coolant is very important



Model No.	Mfg. No.	Blade Dia."	Arbor"	No. of Teeth	Kerf"	Degrees	Hook Grind	Price /Each
TRW242	6 1/4-48 N/F	6 1/4	5/8	48	0.113	-6	TCG	89.20
TRW244	7 1/4-58 N/F	7 1/4	5/8	58	0.113	-6	TCG	95.70
TRW114	8-48 N/F	8	5/8	48	0.113	-6	TCG	101.00
TRW245	8-64 N/F	8	5/8	64	0.113	-6	TCG	121.00
TRW117	10-80 N/F	10	5/8	80	0.126	-6	TCG	151.00
TRW153	10-100 N/F	10	5/8	100	0.126	-6	TCG	182.00
TRW119	12-96 N/F	12	1	96	0.126	-6	TCG	186.00
TRW120	14-84 N/F	14	1	84	0.126	-6	TCG	202.00
TRW121	14-108 N/F	14	1	108	0.126	-6	TCG	220.00
TRW163	15-100 N/F	15	1	100	0.126	-6	TCG	243.00

GROOVING SAW

BLADES FOR ALUMINUM

- Used for milling, clean up and grooving of aluminum welds and cutting out welding tracks
- Used with hand held grinder



Model No.	Mfg. No.	Blade Dia. mm	Arbor"	No. of Teeth	Kerf"	Price /Each
TRW263	4-24 N/F	100	5/8	24	0.154	64.80
TRW264	4-30 N/F	100	5/8	30	0.154	69.60
TRW265	4 1/2-24 N/F	115	5/8	24	0.154	69.60
TRW266	4 1/2-30 N/F	115	5/8	30	0.154	76.60

CROSSCUT & PLYWOOD

- Smooth crosscut and plywood



Model No.	Mfg. No.	Blade Dia."	Arbor"	No. of Teeth	Hook Grind	Price /Each
TV663	TK303	7 1/4	5/8	40	FTG	30.50

MATRIX
INDUSTRIAL PRODUCTS

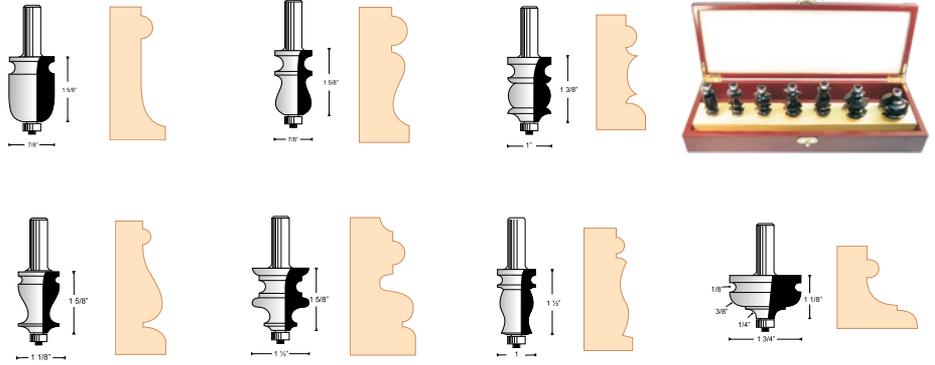
**Maintain the ideal temperature
in your workplace.**



2-FLUTE, MOLDING SETS

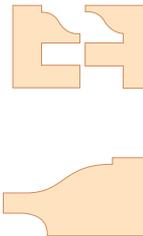
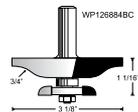
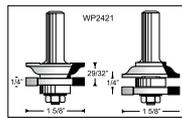
- Full size carbide tipped for better chip ejection
- 2.2 mm thick carbide for 10-15 sharpening
- CNC machined hardened body for vibration free operation
- Anti-lick-back body design for safe and easy feed
- Comes in a solid wood box
- 1/2" shank, 7 pieces

Model No. TBO347
Price/Each \$261.00



2-FLUTE, OGEE STYLE CABINET DOOR SETS W/BACK CUTTER

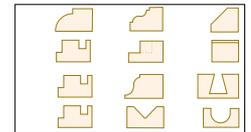
- Used for making stile and rail cuts with raised panels
- Design for raised panels on cabinet doors, frame and panel furniture and architectural panelling
- 1/2" shank



Model No.	Description	Price /Each
TBO346	3-PC. cabinet door set w/back cutter, includes 1 5/8" stile and rail, 3 1/8" raised panel bit	157.00

3-FLUTE CARBIDE-TIPPED ROUTER BIT SETS

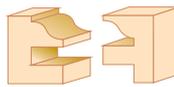
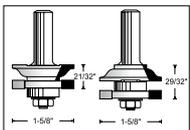
- 3 cutting edges for smoother, cleaner surface
- High quality carbide for longer edge life
- Thick carbide tips prolongs service life
- Chip limitation design for safe operation
- Hardened steel body for stable performance



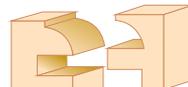
Model No.	Description	Price /Each
TB0342	12 pieces, 3 Flutes, 1/4" Shank, Triangle Wood Box	65.90
TB0343	12 pieces, 3 Flutes, 1/2" Shank, Triangle Wood Box	67.10
TB0344	24 pieces, 3 Flutes, 1/4" Shank, Wood Box	134.00
TB0345	24 pieces, 3 Flutes, 1/2" Shank, Wood Box	135.00

2-FLUTE, RAIL & STILE SETS

- Full size carbide tipped for better chip ejection
- 2.2 mm thick carbide for 10-15 sharpening
- CNC machined hardened body for vibration free operation
- Comes in a solid wood box
- 1/2" shank, 1 5/8" dia., 2 29/64" length



TBO349



TBO350



TBO351



Model No.	Description	Price /Each
TB0349	2-PC. rail and stile set	81.40
TB0350	2-PC. rail and stile set	79.30
TB0351	2-PC. rail and stile set	79.30

4-FLUTE, TONGUE & GROOVE SETS

- Used to form self-aligning glue joints and to produce panelling
- This router bit set will make the process fast, accurate and repeatable
- 4 cutting edges for smoother, cleaner surface
- High quality carbide for longer edge life
- 1/2" shank



Model No.	Description	Price /Each
TB0348	Tongue and groove set, 1 39/64" dia. x 3/4" cut	80.80

WOODPECKER CARBIDE BITS

- These quality bits are produced from special steel and carbide
- Two flutes for high performance
- Anti-kickback design for maximum safety
- Good carbide tooth thickness for longer life
- Available with 1/2" and 1/4" shanks



DOUBLE FLUTE STRAIGHT BITS

Model No.	Mfg No.	Diameter"	Shank Dia."	Working Length"	O.A. Length"	Price /Each
TB0663	W70	3/16	1/4	1/2	1 7/8	12.00
TB0664	W71	1/4	1/4	3/4	2	7.06
TB0665	WP107L86	1/4	1/2	3/4	2 1/2	7.06
TB0666	W72	5/16	1/4	3/4	2	7.06
TB0667	WP107L88	5/16	1/2	1	2 3/4	7.06
TB0668	W72A	3/8	1/4	3/4	2	7.06
TB0669	WP107S810	3/8	1/2	1 1/4	2 3/8	7.13
TB0670	W73	1/2	1/4	3/4	2	7.39
TB0671	WP107812	1/2	1/2	1	2 5/8	9.34
TB0672	WP107S812	1/2	1/2	1 1/2	3	13.10
TB0673	W74	9/16	1/4	3/4	2	7.06
TB0674	W75	5/8	1/4	3/4	2	9.68
TB0675	WP107816	5/8	1/2	1	2 5/8	9.80
TB0676	WP107L816	5/8	1/2	1 1/4	2 7/8	12.00
TB0677	W79	3/4	1/4	3/4	2	11.70
TB0678	WP107819	3/4	1/2	1	2 5/8	14.40
TB0679	WP107S819	3/4	1/2	1 1/2	3	21.60
TB0680	WP107L825	1	1/2	1 1/4	3	20.00

ROUND NOSE BITS



Model No.	Mfg No.	Diameter"	Shank Dia."	Working Length"	Radius"	O.A. Length"	Price /Each
TB0686	W06A	1/4	1/4	1/4	1/8	1 1/2	6.16
TB0687	WP10685	3/8	1/2	3/8	3/16	2	6.48
TB0688	W06A	1/2	1/4	3/8	1/4	1 1/2	7.35
TB0689	WP10686	1/2	1/2	3/8	1/4	2	6.99
TB0690	WP106810	3/4	1/2	1/2	3/8	2 1/8	11.30
TB0691	WP106812	1	1/2	5/8	1/2	2 1/4	17.40

ROUND OVER BITS



Model No.	Mfg No.	Diameter"	Shank Dia."	Working Length"	Radius"	O.A. Length"	Price /Each
TB0708	W90	3/4	1/4	13/32	1/8	2 1/8	11.50
TB0709	W91	1	1/4	17/32	1/4	2 3/16	13.60
TB0710	W91A	1 1/8	1/4	5/8	5/16	2 1/4	14.60
TB0711	W92	1 1/4	1/4	21/32	3/8	2 5/16	22.40
TB0712	W93	1 1/2	1/4	3/4	1/2	2 7/16	22.40
TB0713	WP10983	3/4	1/2	13/32	1/8	2 5/16	11.50
TB0714	WP10986	1	1/2	17/32	1/4	2 9/16	13.20
TB0715	WP10988	1 1/8	1/2	5/8	5/16	2 11/16	14.00
TB0716	WP109810	1 1/4	1/2	21/32	3/8	3 11/16	18.20
TB0717	WP109812	1 1/2	1/2	3/4	1/2	2 13/16	22.40
TB0718	WP109816	1 3/4	1/2	7/8	5/8	2 15/16	26.60
TB0719	WP109819	2	1/2	1	3/4	3 1/16	35.40
TB0720	WP109825	2 1/2	1/2	1 1/4	1	3 5/16	53.10

BRAD POINT, WOOD DRILLS

Designed for hard and soft woods.



Model No.	Dia"	Length of Shank"	Overall Length"	Price /Each
WK540	1/8	1/8	2 5/8	2.23
WK541	5/32	5/32	2 15/16	2.35
WK542	3/16	3/16	3 3/8	2.35
WK543	7/32	7/32	3 3/8	2.35
WK544	1/4	1/4	4	2.54
WK545	9/32	9/32	4	2.70
WK546	5/16	5/16	4 1/2	4.21
WK547	11/32	5/16	4 1/2	3.34
WK548	3/8	5/16	5 1/4	5.44
WK549	7/16	5/16	5 5/8	6.72
WK550	1/2	5/16	6 1/8	10.50

Model No.	Dia"	Length of Shank"	Overall Length"	Price /Each
WK551	9/16	3/8	6 5/8	7.64
WK552	5/8	3/8	7 1/8	9.96
WK553	3/4	3/8	7 3/4	24.60
WK554	7/8	1/2	8 1/4	28.10
WK555	1	1/2	8 5/8	48.90
WK556	1 1/4	1/4	10	8.82
WK557	5/16	5/16	10	11.00
WK558	3/8	3/8	10	15.10
WK559	1/2	3/8	10	18.50
WK560	9/16	3/8	10	23.30
WK561	5/8	1/2	10	27.50



COVE BITS



Model No.	Mfg No.	Diameter"	Shank Dia."	Working Length"	Radius"	O.A. Length"	Price /Each
TB0704	W112	7/8	1/4	1/2	1/4	2 1/8	13.20
TB0705	W112A	1 1/8	1/4	3/8	1/4	2 1/16	16.80
TB0706	WP112810	1 1/8	1/2	1/2	1/2	2 1/2	13.20
TB0707	WP112812	1 3/8	1/2	5/8	1/2	2 11/16	21.50

ROMAN OGEE BITS



Model No.	Mfg No.	Diameter"	Shank Dia."	Working Length"	Radius"	O.A. Length"	Price /Each
TB0725	W113	1	1/4	15/32	5/32	2 5/32	13.20
TB0726	WP11384	1	1/2	1/2	5/32	2 1/2	17.70
TB0727	WP11386	1 3/8	1/2	11/16	1/4	2 3/4	24.60

V GROOVING BITS



Model No.	Mfg No.	Diameter"	Shank Dia."	Working Length"	Degree	O.A. Length"	Price /Each
TB0692	W05A	3/8	1/4	3/8	60	1 1/2	7.42
TB0693	W05	1/2	1/4	1/2	90	1 3/4	7.80
TB0694	WP105816	5/8	1/2	1/2	90	2 1/8	8.58
TB0695	WP105819	3/4	1/2	5/8	90	2 1/4	13.30
TB0696	WP105812	1/2	1/2	1/2	90	2 1/8	7.88
TB0697	WP105825	1	1/2	3/4	90	2 3/8	16.70

TOP BEARING FLUSH TRIM BITS



Model No.	Mfg No.	Diameter"	Shank Dia."	Working Length"	O.A. Length"	Price /Each
TB0681	W01	1/2	1/4	1/2	2 1/8	9.27
TB0682	W01A	3/8	1/4	1/2	2 1/8	7.92
TB0683	WP101821	1/2	1/2	1	3	10.50
TB0684	WP101823	1/2	1/2	1 1/2	3 5/8	14.10
TB0685	WP101824	1/2	1/2	2	3 5/8	21.80

RABBETING BITS



Model No.	Mfg No.	Diameter"	Shank Dia."	Working Length"	O.A. Length"	Price /Each
TB0698	W114	1 1/8	1/4	1/2	2 1/8	14.70
TB0699	WP114832	1 1/4	1/2	1/2	2 3/8	15.60

DOVETAIL BITS



Model No.	Mfg No.	Diameter"	Shank Dia."	Working Length"	Degree	O.A. Length"	Price /Each
TB0700	W04	1/2	1/4	1/2	14	1 7/8	7.39
TB0701	WP104812	1/2	1/2	1/2	14	2 1/8	7.56
TB0702	WP1048197	3/4	1/2	7/8	7	2 1/2	12.60
TB0703	WP104825	1	1/2	1	14	2 1/2	14.50



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.

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.	52.30

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.	20.50
AD183	C06301	1 gal.	68.80
AD185	C06355	55 gal.	2099.00

A-151 SOLVENT 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.	28.10
AB448	C04305	5 gal.	669.00
AB579	C04355	55 gal.	5529.00

EVR® CLEAN AIR SOLVENT DEGREASER

- 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.	18.20
AD063	C05255	55 gal.	2509.00

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.	14.80
AB446	C01005	5 gal.	559.00

PRESOLVE® ORANGE 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.	25.10
AD729	C01422	20 oz. Trigger	31.70
AB604	C01428	1 gal.	139.00
AB603	C01405	5 gal.	629.00
AA868	C01455	55 gal.	5609.00

F-104° SOLVENT DEGREASER

- 104°F (40°C) flash point
- Rapid evaporation
- Non-conductive
- No rinsing
- 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.	20.10
AB591	C04955	55 gal.	2929.00

ZEROTRI® HEAVY-DUTY DEGREASER

- Instant degreasing action
- Ideal for degreasing metals
- No rinsing and no residue
- Safe to use on most surfaces
- Excellent alternative to Methyl Ethyl Ketone (MEK)
- Accepted for use in Canadian food processing facilities



Model No.	Mfg. No.	Size	Price /Each
AA787	C03520	15 oz.	30.60
AB607	C03528	1 gal.	199.00
AB605	C03505	5 gal.	829.00
AB606	C03555	55 gal.	5559.00

HEAVY DUTY DEGREASER

- Base Type: Chlorinated
- No flashpoint
- Fast evaporation rate
- A versatile cleaner/degreaser that is extremely effective in most heavy duty applications
- Aggressively dissolves grease, oil and sludge for more efficient operation of mechanical equipment
- NSF Registered K1
- Accepted for use in Canadian food processing facilities



Model No.	Mfg. No.	Size	Price /Each
YA184	73095	539 g	14.50

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
- Inverta spray valve can be sprayed at almost any angle
- NSF registered category code C1



Model No.	Mfg. No.	Size	Price /Each
AD186	C06420	15 oz.	21.80

HYDROFORCE® INDUSTRIAL STRENGTH DEGREASER

- An aqueous cleaner that removes heavy deposits of grease, oil and dirt
- Biodegradable, concentrated, non-abrasive and non-flammable
- Use caution on soft metals and painted surfaces
- NSF Registered C1



Model No.	Mfg. No.	Size	Price /Each
AF112	74415	946 ml	19.50

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.	14.80

INSTANT SUPER DEGREASER 2.0

- Non-flammable fast drying solvent degreaser
- Heavy-duty formula that removes oil, grease, dirt, and tar with less cleaner
- Non-brominated formula that improves worker safety and simplifies employer compliance
- No residue/no rinsing formula
- Non-conductive formula that can be used on or near energized equipment, eliminating equipment downtime



Model No.	Mfg. No.	Size	Price /Each
AF141	C07220	20 oz.	45.80

GREZ-OFF DEGREASER

- Professional strength, biodegradable formula hits hard and fast with powerful water-soluble solvents
- Quickly breaks down heavy grease, oil, tar, lubricants and grime
- Safe on metal, plastic, vinyl, rubber, and fibreglass



Model No.	Mfg. No.	Size	Price /Each
NJQ185	C12532	946 ml	11.20
JK738	C12501	4 L	31.60
JK739	C12520	20 L	140.00
JK740	C12545	208 L	1176.00

BFX ALL-PURPOSE CLEANER

- Water-based
- Butyl-free and dye-free formula
- Removes grease and oil
- Rinses clean
- Ideal for parts washers and pressure washers
- Safe on most surfaces except magnesium
- NSF registered category code C1



Model No.	Mfg. No.	Size	Price /Each
AB581	C05528	28 oz.	15.90
AB583	C05555	55 gal.	1369.00

T-FORCE™ DEGREASER

- High-performance industrial strength degreaser
- Non-conductive, non-corrosive, and non-staining
- No flash point
- No fire point
- NSF Registered K1



Model No.	Mfg. No.	Size	Price /Each
AF205	73115	510 g	28.90

HYDROFORCE® ZERO VOC GENERAL PURPOSE CLEANERS

- Plastic safe: Yes
- Slow evaporation rate
- Provides maximum regulatory compliance without performance compromises
- Removes dirt, dust, and grime
- Accepted for use in Canadian food processing facilities
- NSF Registered A1



Model No.	Mfg. No.	Size	Price /Each
AE970	74446	946 ml	18.90

PRECISION CLEAN MULTI-PURPOSE CLEANER/DEGREASER

- Water-based
- 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
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READY TO USE FORMULA

AB444	C02720	18 oz.	18.20
AA789	C02728	28 oz. trigger	20.50

CONCENTRATED FORMULA

AA788	C02701	1 gal.	62.70
AB600	C02705	5 gal.	309.00
AB601	C02755	55 gal.	1999.00

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	11.80
AC306	53-C 503	500 ml, trigger	20.90
AA462	53-C 506	5 L	99.40
AA463	53-C 507	20 L	385.00
AC307	53-C 508	200 L	2059.00

CHEMICALS



CD757L 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 moulds, aluminum and concrete
- NSF Certified



Model No.	Mfg. No.	Size	Price /Each
AB532	SC0757LQ0	14 oz. trigger	26.10

STAINLESS STEEL CLEANER AND POLISH

- Industrial strength
- Use for commercial, automotive and marine
- Durable lasting shine
- Biodegradable
- Eliminates dirt, dust, fingerprints, and watermarks
- CFIA accepted



Model No.	Mfg. No.	Size	Price /Each
AF243	74424	510 g	12.50

HYDROFORCE® CITRUS DEGREASER

- Heavy-duty degreaser
- Designed for extremely difficult cleaning jobs found in the industrial environments
- NSF Registered C1



Model No.	Mfg. No.	Size	Price /Each
AF241	74440	425 g	11.50

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-G023	500 ml trigger	10.50
AA466	53-G017	20 L	125.00
NI137	53-G018	200 L	1514.00

CITRUS DEGREASER

- Specially-formulated and designed for extremely difficult cleaning jobs found in the industrial environment
- Dissolves grease, oil, ink, grime, tar and glue
- Safe on most plastics
- Wipes off easily and leaves no residue
- Pleasant scent
- Applications include air tools, mechanical brakes, clutches, chains, wire ropes, motors, dies, molds, parts, bearings, generators and compressors



Model No.	Mfg. No.	Size	Price /Each
AG572	1750379	3.8 L	119.00
AG573	1750392	19 L	665.00
AG574	1750393	208 L	6399.00

CB 100™ NATURAL WATER-BASED SOLVENT

- All-natural, water-based cleaner and degreaser
- Offers superior cleaning results with the removal of stubborn ink, rubber marks, tar, wax, carbon, soot, pastes and many other common industrial contaminants
- Bio-degradable, VOC free, non-flammable
- Safe on steel, stainless steel, aluminum and non-ferrous metals
- Applications: Immersion bath, pressure washing, all manual cleaning operations



Model No.	Mfg. No.	Size	Price /Each
AD515	53G167	20 L	170.00

CD885 STAINLESS STEEL CLEANER

- Water-based emulsion
- Effectively cleans most water and oil-based stain on stainless steel and other metal surfaces
- Resists finger-prints, water marks and rusting
- USDA compliant, NSF Certified



Model No.	Mfg. No.	Size	Price /Each
AA202	SC0885000	17 oz.	9.62

CD880 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



Model No.	Mfg. No.	Size	Price /Each
AA200	SC0880000	19 oz.	7.82

CD888 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



Model No.	Mfg. No.	Size	Price /Each
AA201	A00888	18 oz.	7.82

SUPER CITRUS™ DEGREASERS

- Base type: d-Limonene and petroleum distillate
- Flashpoint: 43°C
- Fast evaporation rate
- Removes grease, oil and lubricants with no water wash-off
- Evaporates quickly and leaves no residue
- Pleasant citrus scent
- NSF Registered C1



Model No.	Mfg. No.	Size	Price /Each
AE967	73170	425 g	18.50

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	26.40

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	11.30

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.	24.76
QN488	18.5 oz.	34.36

SP705 NON-CHLORINATED BRAKE & PARTS CLEANER

- Non-chlorinated and fast evaporating
- Leaves no residue
- Instantly flushes away brake fluids, grease and dirt to ensure accurate adjustments and smooth brake operations
- Also recommended as a cleaner for metal parts
- Improves brake performance, helps stop brake disc squeal



Model No.	Mfg. No.	Size	Price /Each
AA649	SC0705000	14 oz.	8.38

SP404 ECO-GRADE™ VANDAL MARK & GRAFFITI REMOVER

- Soy based, contains natural, biodegradable ingredients made to replace terpene or petrochemical based products
- 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	SC0404000	12 oz.	17.90

TRIFREE BRAKE CLEANER

- Heavy-duty performance
- Improves brake performance
- Helps stop disc brake squeal
- Fast evaporation
- Powerful jet spray
- No rinsing and no residue



Model No.	Mfg. No.	Size	Price /Each
AA818	C03620	15 oz.	24.70

CD887 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	SC0887000	18 oz.	8.45

CHLOR-FREE™ DEGREASER

- Non-chlorinated degreasing solvent that removes oil, grease and other types of contaminants
- Ideal for use in applications requiring quick turnaround and where a low flashpoint solvent can be used
- NSF Registered K2



Model No.	Mfg. No.	Size	Price /Each
AF105	73185	425 g	12.50

NOFLASH® 2.0 ELECTRO CONTACT CLEANERS

- Non-flammable fast drying electronic cleaner
- Industrial-strength formula for maximum cleaning power
- Non-brominated formula that improves worker safety and simplifies employer compliance
- No residue/no rinsing formula
- Non-conductive formula
- Inverta spray valve allows users to spray in an upright or inverted position for more convenient application



Model No.	Mfg. No.	Size	Price /Each
AF142	C07416	12 oz.	42.70

CHEMICALS



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.	28.40
AB546	C03101	1 gal.	139.00
AB544	C03105	5 gal.	559.00
AB545	C03155	55 gal.	5099.00

CFC FREE NU 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.	29.30

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
- Accepted for use in Canadian food processing facilities



Model No.	Mfg. No.	Size	Price /Each
AD010	C04416	12 oz.	41.20

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.	23.90

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



Model No.	Mfg. No.	Size	Price /Each
AA860	C04015	12 oz.	50.40

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.	18.20
AB549	C04555	55 gal.	2759.00

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	12 oz.	27.80

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.	90.30

PSC PLASTIC SAFE CLEANER

- Formulated for contact cleaning
- Fast evaporation
- No flash point
- No rinsing and no residue
- Displaces moisture
- Very low odor
- No CFC's



Model No.	Mfg. No.	Size	Price /Each
AB700	C04620	18 oz.	91.10

LECTRA CLEAN® HEAVY-DUTY ELECTRICAL PARTS DEGREASER

- A chlorinated based degreaser that quickly removes grease, oil and dirt from motor parts and other similar equipment
- NSF Registered K2



Model No.	Mfg. No.	Size	Price /Each
AF103	72018	539 g	12.50

QD™ CONTACT CLEANER

- Plastic safe: Yes
- Flashpoint: Less than -18°C
- Very fast evaporation rate
- Suitable for cleaning sensitive electronics and electrical equipment
- Use where lower flashpoint cleaners are acceptable
- Accepted for use in Canadian food processing facilities
- NSF Registered K2



Model No.	Mfg. No.	Size	Price /Each
MLN874	72130	312 g	21.50

FREEZE SPRAY

- Plastic Safe: Yes
- No flashpoint
- Very fast evaporation rate
- Aerosol coolant system that instantly freezes surfaces to -60°F, dissipating heat and cooling equipment
- Assists in locating thermal intermittent components, failures and shorts
- Safe to use on sensitive components and all surfaces finishes



Model No.	Mfg. No.	Size	Price /Each
AE971	74086	284 g	23.90

EL848L FLASH FREE ELECTRICAL 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	SC08848LQ0	14 fl oz. trigger	27.30

EL749 ELECTRICAL 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	SC0749LQ0	14 fl oz. trigger	18.90

EL848 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	SC0848000	13 oz.	15.10

EL2302 ELECTRONIC CONTACT CLEANER

- 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
- NSF Registered K2



Model No.	Mfg. No.	Size	Price /Each
AA214	SC2302000	11 oz.	18.70

EL749 ELECTRICAL 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 moulds



Model No.	Mfg. No.	Size	Price /Each
NA613	SC0749000	15 oz.	15.60

SP610 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	SC0610000	11.5 oz.	19.20

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

7629™ ELECTRICAL CONTACT CLEANERS

- Ideal for removing grease, oil and contaminants from electrical parts to prevent contact failures
- Dries residue-free in seconds
- This contact cleaner is non-conductive, non-corrosive and non-flammable



Model No.	Mfg. No.	Size	Price /Each
AF070	1174633	12 oz.	39.40

CHEMICALS

LPS 1® GREASELESS 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.	19.40
AB628	C00122	20 oz. trigger	25.80
AB627	C01128	1 gal.	78.70
AB625	C00105	5 gal.	349.00
AB626	C00155	55 gal.	2869.00

LU1324 HIGH PERFORMANCE SILICONE LUBRICANT

- 6.6% silicone formula
- Stops squeaks and sticking, eliminates friction, displaces water, inhibits rust 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	SC1324000	10 oz.	9.62

LU206 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	SC0206000	10 oz.	8.19

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.	19.00
AB624	C01505	5 gal.	489.00

FOOD PLANT SILICONE LUBRICANT

- Flashpoint: Less than -18°C
- Fast evaporation rate
- Multi-purpose silicone spray for food processing and handling applications
- Forms a colorless, odorless, non-staining film
- Eliminates binding and sticking in most metal to non-metal applications
- Accepted for use in Canadian food processing facilities
- NSF Registered H1



Model No.	Mfg. No.	Size	Price /Each
YC014	73040	284 g	16.20

SUPERIOR LUBRICANT

- Penetrates inaccessible areas to displace contaminants
- Lubricates with 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
- 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.	15.10
AA428	CTF20006	12 oz.	24.50
AA429	CTF29200	18 oz.	40.80

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.	19.00
AB632	C00222	20 oz. trigger	28.40
AB631	C02128	1 gal.	80.40
AB629	C00205	5 gal.	359.00
AB630	C00255	55 gal.	3409.00

DRY GRAPHITE LUBRICANT

- Dry black film
- Flashpoint: Less than -18°C
- Fast evaporation rate
- Resists dirt, dust and oil build-up
- Wide effective temperature range up to 454°C constant



Model No.	Mfg. No.	Size	Price /Each
MLT431	75101	320 g	13.20

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



Model No.	Mfg. No.	Size	Price /Each
AG904		13.25 oz.	14.26

LU204 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	SC0204000	10 oz.	12.90

DRY FILM SILICONE LUBRICANT

- Colourless, thin film
- Excellent for releasing moulded parts in high temperatures or pressures
- Low odour
- Non-staining
- Non-flammable
- Non-corrosive



Model No.	Mfg. No.	Size	Price /Each
AA902	C01616	11 oz.	19.40

LU708 HIGH PERFORMANCE DRY LUBRICANT

- 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	SC0708000	10 oz.	14.90

LU737 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	SC0737000	11 oz.	13.90

DRY FILM PTFE LUBRICANT

- Ideal for releasing moulded 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	11 oz.	20.50

LU200 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	SC0200000	11 oz.	12.60

FORCE 842® DRY MOLY LUBRICANT

- Works under high temperatures up to 842°F (450°C) and pressures up to 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.	30.40

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.	21.70

POWER LUBE W/PTFE

- Maximum Working Temperature: 300°F (148.9°C)
- Contains PTFE for long-lasting lubrication and protection
- High performance
- NSF Registered H2



Model No.	Mfg. No.	Size	Price /Each
AF239	73045	312 g	13.50

CHEMICALS



FOOD PLANT PENETRATING OIL

- General purpose lubricant for use on food processing equipment
- Penetrates and loosens rust, scale, corrosion, and dirt to free corroded parts and fasteners
- Does not contain silicones
- Approved for use in Canadian food processing facilities
- NSF Registered H1



Model No.	Mfg. No.	Size	Price /Each
AF203	73086	312 g	8.99

FOOD PLANT CHAIN LUBE

- Keeps roller drive and conveyor chains lubricated
- Blend of synthetic lubricants and mineral oil
- Penetrates, lubricates and protects moving parts by reducing friction and wear
- Approved for use in Canadian food processing facilities
- NSF Registered H1



Model No.	Mfg. No.	Size	Price /Each
AF201	73056	340 g	14.50

DI-ELECTRIC GREASE

- Non-curing silicone compound used for electrical sealing
- Waterproofs electrical connections and components
- Improves electrical performance
- NSF Registered H1



Model No.	Mfg. No.	Size	Price /Each
AF248	73082	284 g	29.50

FOOD GRADE SILICONE LUBRICANT

- Provides excellent lubrication
- Non-staining
- Non-corrosive
- Fast evaporating
- No chlorinated solvents
- Made of FDA compliant materials
- NSF registered category code H1
- Accepted for use in Canadian food processing facilities
- Metal and x-ray detectable plastic aerosol components
- Excellent for high temperature applications up to 500°F (260°C)



Model No.	Mfg. No.	Size	Price /Each
AA917	C01716	10 oz.	14.40



MULTI-PURPOSE FOOD PLANT GREASE

- Appearance: White Semi-Solid/Solid Grease
- Effective Temperature Range: -5°F - 370°F (-20.6°C to 187.8°C)
- Base Type: Aluminum Complex
- Flash Point: 221°C
- NSF Registered H1



Model No.	Mfg. No.	Size	Price /Each
AF202	73600	397 g	13.20

FOOD GRADE ELECTRONIC CLEANER

- Can be applied to: Breakers, Connectors, Contacts, Controls, Digital Equipment, Office Equipment, Printed Circuits, and Switches
- Ideal for removing dirt, moisture, and oxides from electronic equipment
- Allows for offline electronics to be cleaned without stopping production
- Evaporates rapidly without leaving residue
- Safe for use in all food plant areas
- Plastic safe



Model No.	Mfg. No.	Size	Price /Each
AF342	C58116	312 g	26.20

LU210 FOOD GRADE 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	SC0210000	10 oz.	7.96

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	12 oz.	19.40

FOOD GRADE MACHINE & PENETRATING OIL

- Penetrates to loosen frozen nuts and bolts
- Displaces water
- Provides excellent lubricity
- Does not contain silicone
- Eliminates sticking, binding and squeaking
- Non-staining lubricant, safe on most surfaces
- Inverts 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
- Metal and x-ray detectable plastic aerosol components



Model No.	Mfg. No.	Size	Price /Each
AB623	C01316	11 oz.	15.90

LU700 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	SC0700000	10 oz.	13.10

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.	23.50

LU202 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	SC0202000	11 oz.	9.40



FOOD GRADE CHAIN LUBRICANT

- Excellent for applications involving incidental food contact on food processing equipment
- Foaming action provides extra penetration and lubrication
- Oily, wet film extends chain life
- Low flammability with high flash point
- Reduces wear caused by friction
- NSF registered category code H1
- Accepted for use in Canadian food processing facilities
- Metal and x-ray detectable plastic aerosol components



Model No.	Mfg. No.	Size	Price /Each
AD731	C06016	12 oz.	21.30

CRC® 3-36® MULTI-PURPOSE LUBRICANT

- NSF Category Code: H2
- Multi-purpose lubricant that also serves as a penetrant and corrosion inhibitor
- Leaves a clear, thin and long-lasting film



Model No.	Mfg. No.	Size	Price /Each
YA180	73005	311 g	13.50

CRC® CHAIN & WIRE ROPE LUBRICANT

- NSF Category Code: H2
- Blend of synthetic lubricants that penetrate deep and leave a tough protective film
- Extends the working life of chains and wire rope
- Reduces wear caused by corrosion and friction



Model No.	Mfg. No.	Size	Price /Each
MLN961	73050	283 g	16.50

EXTREME DUTY OPEN GEAR LUBE

- Recommended for reducing friction and wear in harsh environments
- Resists to heat and pressure



Model No.	Mfg. No.	Size	Price /Each
AF267	73058	340 g	19.50

CHEMICALS

MR311 DRY FILM RELEASE AGENT

- Non-silicone mould release
- Exceptional anti-stick properties that will not transfer to finished parts allowing for multiple releases per application
- Compatible with most mouldable 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	SC0311000	12 oz.	22.50

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 pulley 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
- Metal and x-ray detectable plastic aerosol components



Model No.	Mfg. No.	Size	Price /Each
AA869	C02216	10 oz.	17.10

YELLOW 77® WIRE PULLING LUBRICANT

- Wax-based formula provides superior lubricity
- Safe to use with most cable types except low-density polyethylene and semi-conducting jackets
- Clings to cable through long pulls
- Environmentally safe - non-toxic, non-flammable, non-corrosive
- Dries to a thin, non-conductive film that won't clog conduit



Model No.	Description	Price /Each
AB488	1 qt. Squeeze Bottle	15.50
AB489	1 gal. Tub	31.50

LU767 INDOOR METAL PROTECTANT

- 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	SC0767000	10 oz.	15.00

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



Model No.	Mfg. No.	Size	Colour	Price /Each
AC013	338124	14.5 oz.	Black	29.10
AC014	338125	1 gal.	Black	195.00
AC016	338127	14.5 oz.	Blue	29.10
AC017	338128	1 gal.	Blue	195.00
AC011	338130	14.5 oz.	Red	29.10
AC012	338131	1 gal.	Red	195.00
AC159	338133	14.5 oz.	Yellow	29.10
AC015	338134	1 gal.	Yellow	195.00

SF 7900™ CERAMIC SHIELD FOR WELDING

- Ceramic dry film protective coating for MIG/MAG welding processes
- Protects contact tips and welding nozzles by preventing adhesion of welding spatter
- Once applied the coating dries by solvent evaporation within 5 to 10 seconds at room temperature (Thicker films will need longer drying time)
- Ceramic, silicone-free protective coating, easy to apply
- Protects contact tips, welding nozzles and jigs, eliminating cost for cleaning equipment
- Reduces running costs for consumables by up to 40%
- Prevents adhesion of welding spatter for many hours with just one application
- Colour: White



Model No.	Mfg. No.	Size	Price /Each
AD492	1616692	9.5 oz.	41.40

SF7607™ RUBBERIZED UNDERCOATING

- Heavy-duty undercoating seals, protects, and insulates
- Rubberized for maximum durability



Model No.	Mfg. No.	Size	Price /Each
AA635	234926	16 oz.	8.90

LU103 RUST BREAKER™ HEAVY DUTY RUST 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	SC0103000	10 oz.	12.10

TKX ALL-PURPOSE LUBRICANT

- Non-flammable CO₂ propellant
- Displaces moisture
- High flash point of 175°F (79°C)
- Protects against corrosion
- Loosens rusted or frozen parts
- Does not contain chlorinated solvents or silicones
- Safe on most surfaces
- Inverta spray valve lets you spray in all directions
- NSF registered category code H2
- Provides non-drying long-lasting, oily film



Model No.	Mfg. No.	Size	Price /Each
AA846	C02016	11 oz.	9.49
AB490	C02028	1 gal.	57.90
AB638	C02005	5 gal.	279.00
AB639	C02055	55 gal.	2869.00

5-WAY PLUS™ PENETRANT

- Penetrates, lubricates, demineralizes, cleans and prevents rust
- Inhibits corrosion and pitting of moulding 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.	18.07

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.	14.40

PENETRATING OIL

- Flashpoint: 60.6°C
- Slow evaporation rate
- A no-compromise penetrant that attacks corrosion to free corroded fasteners and mechanical components
- A super-fast, powerful, concentrated penetrating solvent that loosens and cleans
- Instantly penetrates tightly fitted crevices
- NSF Registered H2



Model No.	Mfg. No.	Size	Price /Each
YB991	73060	312 g	9.99

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
- Inverta spray valve
- NSF registered category code H2
- VOC compliant



Model No.	Mfg. No.	Size	Price /Each
AD970	C02316	13 oz.	18.20
AD297	C02322	20 oz. trigger	23.90

WD-40

- Loosens rusted parts
- Displaces moisture
- Non-conductor, dries out electrical and electronic equipment
- Stops squeaks
- Lubricates and protects against moisture and corrosive
- Operating temperature: -50°F to 300°F
- Minimum flash point 110°F open cup



Model No.	Mfg. No.	Size	Price /Each
NA611	01111	11 oz. aerosol	8.20
NA609	01010	3.785 L	39.90
NA608	01000	Spray bottle empty	7.97

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	15.10
AC310	53-D 893	500 ml trigger	22.50
AA479	53-D 897	20 L	343.00
AC311	53-D 898	200 L	2544.00

SCREWLOOSE™ SUPER PENETRANT

- Maximum Working Temperature: 141°F (61°C)
- Ideal for rusted and frozen metals
- Can also be used as a multi-purpose lubricant



Model No.	Mfg. No.	Size	Price /Each
AF244	75330	312 g	7.79

CHEMICALS

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
- Accepted for use in Canadian food processing facilities



Model No.	Mfg. No.	Size	Price /Each
AA808	C00316	11 oz.	25.80
AB559	C00322	20-oz. trigger	32.10
AB558	C03128	1 gal.	119.00
AB556	C00305	5 gal.	489.00
AB557	C00355	55 gal.	4239.00

BRIGHT COAT COLD GALVANIZE 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.	17.80

BIO-RUST NEUTRAL PH RUST REMOVERS

- Removes rust and other metallic particles
- VOC free, solvent free, non-flammable, pH neutral solution biodegradeable
- Not controlled under WHMIS
- Non-corrosive rust remover
- High workload - can remove 1.5 kg (3.3 lbs.) of iron oxide per 20 L
- For use with iron and mild steel
- Deeply rusted parts may require longer soaking time
- After application of Bio-Rust, rinse parts in water to remove loosened contaminants
- After removing rust, dip pack into fresh bath or Bio-Rust to provide short term corrosion protection
- It is recommended to degrease part before using Bio-Rust
- Bio-Rust is designed for immersion applications only
- Immerse parts in Bio-Rust at room temperature and let react for at least 30 minutes



Model No.	Mfg. No.	Size Litres	Gallons	Price /Each
AD441	53-G-247	20	5.2	286.00
AD442	53-G-248	208	55	2059.00

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 unruined metals



Model No.	Mfg. No.	Size	Price /Each
AD049	ER1	1 L	11.88
AD050	ER4	3.78 L	36.03
AD051	ER20	18.9 L	171.00
AD052	ER205	205 L	1523.00

ZINC MATE™

- Flashpoint: -19°C
- Fast evaporation rate
- Working Temperature: 54.4°C (Continuous) and 65.6°C (Intermittent)
- High performance coating of >93% pure zinc that electrochemically bonds with ferrous metals to form a galvanic cell
- Actively fights rust and corrosion
- Use as a touch-up for damaged galvanized coatings



Model No.	Mfg. No.	Size	Price /Each
YA185	73054	369 g	16.90

COLD GALVANISED CORROSION INHIBITORS

- 95% zinc-rich galvanized 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.	20.50
AB552	C05128	1 gal.	429.00

WD-40® SPECIALIST™ RUST RELEASE PENETRANT

- Penetrates deep into crevices, threads and seams to break the bonds that hold stuck parts together
- Ideal for use on nuts, bolts, threads and locks
- Leaves behind a protective layer and helps prevent rust and corrosion from re-forming
- Quickly goes to work on rusted nuts, bolts, threads, locks and chains



SPECIALIST

Model No.	Mfg. No.	Size	Price /Each
AF171	01078	311 g	9.63

SP-400™ CORROSION INHIBITOR

- Long-term indoor/outdoor corrosion inhibitor that provides protection of all equipment subject to heat, humidity, chemicals or severely corrosive atmospheres
- Ideal on machined surfaces and assemblies subjected to long periods of storage
- NSF Registered H2



Model No.	Mfg No.	Size	Price /Each
AF108	73282	284 g	16.90

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
AA633	234981	1 qt.	54.10
AA634	160802	1 gal.	185.00
AC110	234984	5 gal.	834.00

ZINC-100™ BRIGHT GALVANIZING SPRAY

- Bright galvanizing spray provides long-lasting corrosion protection
- Specially formulated for the touch-up and repair of hot galvanized parts
- Zinc flakes permanently bond to metallic surfaces
- Bright metallic finish matches hot dipped look
- Fast drying
- Zinc-rich formula meets ASTM A780 standard
- For use on ferrous metals and steel
- Suitable for touch-up, repair, manufacturing or installation of food processing equipment, water storage tanks, fencing, outside structures, playground and sports equipment, scaffolding, ducting and air conditioning systems, marine equipment, architectural and ornamental structures, and steel components



Model No.	Mfg. No.	Size	Price /Each
AA196	53H102	400 ml	22.50

ZINC-200™ COLD GALVANIZING SPRAY

- High-performance, fast-drying corrosion protection spray specially formulated for ferrous metals
- Actively fights rust and corrosion
- Dual-action protection with its resin coat and galvanic action
- 95% pure zinc
- Dull finish and dries to touch in 3-5 minutes
- Meets ASTM A780 & MIL specifications
- Applications include manufacturing, repair, and installation of fencing, outside structures, playground and sports equipment, scaffolding, ducting and air conditioning systems, marine equipment, and architectural and ornamental structures



Model No.	Mfg. No.	Size	Price /Each
AB646	53H152	400 ml	21.30

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 350°F (177°C)
- Dropping point: 429°F (220°C)
- NLGI Grade: No. 2
- Lithium complex



Model No.	Mfg. No.	Size	Price /Each
AA847	C70614	400 g	10.80

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
- Aluminum complex



Model No.	Mfg. No.	Size	Price /Each
AA851	C70514	400 g	10.80

THERMAPLEX® HI-LOAD BEARING GREASE

- Withstands shock loading
- Reduces wear from vibration
- Excellent anti-wear properties
- Wide operating temperature range
- Blue/black colour paste
- Lithium complex
- Petroleum odour
- Moly-fortified for extreme applications to 350°F (177°C)
- Dropping point: 429°F (220°C)
- NLGI Grade: No. 2



Model No.	Mfg. No.	Size	Price /Each
AA850	C70414	400 g	14.40

THERMAPLEX® FOODLUBE BEARING GREASE

- Metal & X-ray detectable plastic component
- Ensures safety in areas where incidental food contact may occur
- Does not contain, solvents or silicone
- Non-staining and non-emulsifying
- White coloured paste
- Mild odour
- Aluminum complex
- Temperature range: -4°F (-20°C) to 302°F (150°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	400 g	17.10

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
- Lithium complex
- Temperature range: -15°F (-26°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	400 g	20.50

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	400 g	15.50

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 \$33.50
Model No. AC476
Price/Each \$41.05



aurora tools

FOR OUR COMPLETE LINE OF GREASE GUNS, SEE PAGES 1686-1687

CHEMICALS

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
- Non-melting



Model No.	Mfg. No.	Size	Price /Each
AA873	C05816	11 oz.	17.80

WHITE LITHIUM GREASE W/PTEF

- 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.	18.20

LU100 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 mould equipment
- NSF registered category code H2



Model No.	Mfg. No.	Size	Price /Each
AA103	SC0100000	11 oz.	11.60

VIPERLUBE™ HIGH PERFORMANCE SYNTHETIC GREASE

- Grease provides superior protection against equipment exposed to a wide range of operating temperatures and environments
- Use as a lubricant and protective anti-rust film on bearings, machine parts, equipment, or as a release agent on gaskets and seals
- Temperature resistance: 400°F (204°C) continuous
- NLGI Grade: 2/Severe Duty GC-LB
- NSF registered category code H1
- Accepted for use in Canadian food processing facilities



Model No.	Mfg. No.	Size	Price /Each
AB505	457456	3 oz.	9.74
AB508	457457	14 oz.	19.20
AB507	457458	400 g.	26.80
AE853	1906102	10.1 oz.	13.00
AB509	459782	30 lbs.	565.00

DIELECTRIC GREASE

- Moisture proof barrier that lubricates and protects electrical equipment from salt, dirt, and corrosion
- High dielectric strength
- Good thermal, oxidation and chemical stability
- Temperature resistance: 400°F (204°C) continuous



Model No.	Mfg. No.	Size	Price /Each
AC365	270640	0.33 oz.	6.76

WHITE LITHIUM GREASE

- For metal-to-metal and metal-to-plastic applications
- Corrosion protection
- No ODC's
- Temperature resistance: 380°F (193°C) dropping point



Model No.	Mfg. No.	Size	Price /Each
AA611	270638	1.5 oz. tube	4.73
AE854	1906122	10.75 oz. Aerosol	10.20

CLEAR PENETRATING GREASE

- Protects against corrosion
- Resists water washout
- Quick penetrating action
- High tack
- Metal detectable plastic components-DETEX™



Model No.	Mfg. No.	Size	Price /Each
AD479	C06716	11 oz.	19.40

MULTI-PURPOSE CONCRETE REPAIR & ADHESIVE

- Excellent for bridging horizontal or vertical cracks, even under water
- Twice as strong as concrete
- Works on concrete, masonry, brick, steel and more
- For indoor or outdoor use
- Colour: Light Gray



Model No.	Mfg. No.	Size	Price /Each
KP497	257395	9 oz.	34.60
KP498	257397	Replacement Static Mixers - 3 Pack	15.90

TURBOKRETE CONCRETE PATCH COMPOUND KITS

- Easily repair deep holes and cracks
- 100%-solids epoxy patch kit is designed for floors exposed to heavy traffic and intermittent chemicals
- Protects against abrasion, impact and most chemicals—no sealer required
- Creates an extremely hard surface—3-4 times stronger than concrete
- For interior/exterior use on damaged or severely spalled floors, curbs, ramps, etc.
- Odorless
- Easy-mix kit includes base, activator and aggregate
- Colour: Light Gray



Model No.	Mfg. No.	Size	Price /Each
KP495	253479	2 gal.	121.00
KP496	5494323	3.5 gal.	241.00

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	1617851	1 gal.	Clear	318.00

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	1602678	1 gal.	Black	243.00

BIG FOOT™ ANTI-SLIP FLOOR COATINGS

HEAVY-DUTY PEDESTRIAN GRADE

- Fire retardant when cured
- 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	1602679	1 gal.	Black	188.00
AA604	1602121	1 gal.	Grey	195.00
AF069	1592315	1 gal.	Yellow	195.00

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
- Accepted for use in Canadian food processing facilities



LOCTITE

Model No.	Mfg. No.	Size	Colour	Price /Each
AA748	235572	1 gal.	Grey	125.00
AD917	235573	5 gal.	Grey	256.00

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	235637	5 gal.	Black	345.80

LOCTITE® FIXMASTER® MAGNA-GROUT™

- A two-component, rapid-setting concrete repair and grouting system with same properties as the Magna-Crete™ but containing smaller aggregate so that the mixed material can be poured thinner for resurfacing applications and feather edging.



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AE625	1477097	1 gal.	114.00
AE626	1476710	5 gal.	229.00

ACRYLIC URETHANE FLOOR PAINT

- Convenient, high-gloss, water-based coating is ideal for use in mild industrial or commercial setting
- Protects concrete floors from dusting, water damage, staining and mildew
- Paint and go—no measuring or mixing; minimal surface prep
- Dries fast—accepts next-day foot traffic
- Finish: High Gloss



RUST-OLEUM

Model No.	Mfg. No.	Size	Colour	Price /Each
KP490	251286	1 gal.	Safety Yellow	74.20
KP491	251291	1 gal.	Silver Grey	74.20
KP492	251293	5 gal.	Silver Grey	384.00

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-minute working time
- 24 hours, functional cure



LOCTITE

Model No.	Mfg. No.	Size	Colour	Price /Each
AC362	235632	10 lbs.	Grey	163.00
AA747	235633	40 lbs.	Grey	458.00

WATER-BASED SINGLE COMPONENT ACRYLIC FLOOR COATING

- 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, aiseways, or previously painted floor surfaces in sound condition
- Not recommended for areas subject to hot tire pickup
- General purpose
- 100% acrylic
- Low odour
- For exterior/interior use



KRYLON INDUSTRIAL

Model No.	Size	Colour	Price /Each
AC603	1 gal.	Grey	93.80
AC606	5 gal.	Grey	469.00

CHEMICALS

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



MAGNAFLUX®

Model No.	Mfg. No.	Description	Price /Each
NP701	01-5149-68	SKL-SP1 Penetrant	41.40
NP702	01-5352-68	SKD-S2 Developer	33.90
NP703	01-5750-68	SKC-S Cleaner	29.10

FORM-A-THREAD®

STRIPPED THREAD REPAIR KIT

- Permanently repairs stripped threads and fasteners in 5 minutes
- Allows up to 128 lbs. of torque
- Operating temperature between -65°F & 300°F
- Accepted for use in Canadian food processing facilities



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA458	236382	4.8 ml	30.10

PIPE REPAIR KITS

- Urethane impregnated fiberglass 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 fiberglass tape, and gloves
- Accepted for use in Canadian food processing facilities



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA641	209818	2" x 6' tape	77.10

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 sq.ft. coverage, at 1/4" thickness
- 225°F maximum operating temperature
- 4900 PSI tensile strength
- 30 minutes working time
- Functional cure in 6 hours
- Accepted for use in Canadian food processing facilities
- Colour: Grey



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC341	219292	1 lb. kit	73.70

FIXMASTER® ALUMINUM PUTTY

- Rebuilds and repairs aluminum equipment, forming a non-rusting finish
- 0.5 sq.ft. coverage, at 1/4" thickness
- 225°F maximum operating temperature
- 4000 PSI tensile strength
- 20 minutes working time
- Functional cure in 6 hours
- Accepted for use in Canadian food processing facilities
- Colour: Aluminum



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC334	235615	1 lb. kit	102.00

FIXMASTER® STAINLESS STEEL PUTTY

- Forms a non-rusting, very hard, durable finish on damaged stainless steel surfaces
- 0.25 sq.ft. coverage, at 1/4" thickness
- 225°F maximum operating temperature
- 4600 PSI tensile strength
- 20 minutes working time
- Functional cure in 6 hours
- Accepted for use in Canadian food processing facilities
- Colour: Grey



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC332	235613	1 lb. kit	118.00

Ask us about volume prices!

In many cases you will benefit from quantity prices.



FIXMASTER® STEEL LIQUID

- Steel filled
- Pourable and self-leveling
- Recommended for casting into hard to reach areas, anchoring and leveling, and forming moulds 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
- Accepted for use in Canadian food processing facilities
- Colour: Grey



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC340	235617	1 lb. kit	83.90

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
- Accepted for use in Canadian food processing facilities
- Colour: Aluminum



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC333	235614	1 lb. kit	129.00

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	1324007	1 oz.	10.10

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	209717	10 x 4 g	50.40
AC125	209718	10 x 1 oz.	147.00

LOCTITE® 2000 PUTTIES

- Tensile Strength on Grit Blasted Steel: 675 PSI
- A self-leveling aluminum liquid that can be poured into molds and cavities
- Recommended for casting aluminum replacement parts and for making molds
- Is paintable and sandable



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AB739	235579	8 oz.	118.00

FIXMASTER® FAST SET STEEL PUTTY

- Faster setting version of the Loctite® Fixmaster® steel putty
- Sets in 3 minutes
- Accepted for use in Canadian food processing facilities



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AD012	219293	1 lb.	86.60

LOCTITE® FIXMASTER® METAL MAGIC STEEL™

- Kneadable, two-part paste
- Working time: 3 minutes
- Sets in 10 minutes
- Adheres to damp surfaces
- Can be drilled, filed and painted
- Ideal for emergency sealing of leaking tanks and pipes
- Smooths welds, repairs small cracks in castings and fills oversized bolt holes
- NSF/ANSI 61 certified



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AD915	209681	4 oz.	23.30

FIXMASTER™ MAGNA-CRETE™ CONCRETE REPAIR

- Rapid setting concrete repair and grouting system
- Bonds to concrete, wood, glass, steel and construction materials
- CFIA approved
- Two-component system requires mixing of two parts.



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AF282	1012500	1 lb.	25.80

LOCTITE® FIXMASTER® UNDERWATER REPAIR EPOXY™

- Two-component, room temperature curing epoxy adhesive used for high strength, permanent bonding of metals, ceramics, concrete, wood and most plastics
- Can withstand temperatures of up to 150°C (300°F)
- Works on both wet and dry surfaces and sets up and cures underwater
- Putty like material is ideal for plumbing, irrigation and marine applications because it is unaffected by chlorinated or salt water
- Typical applications include plugging and filling gaps, leaks and holes in pipes, fitting tanks, valves and pumps
- Accepted for use in Canadian food processing facilities



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AE628	235487	4 oz.	22.40



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



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
AB417	ABS Premium Cement Yellow	473 ml	7.55
AB418	ABS Premium Cement Yellow	946 ml	12.30

Model No.	Description	Size	Price /Each
AB419	ABS Standard Cement Yellow	473 ml	7.17
AB420	ABS Standard Cement Yellow	946 ml	12.30

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



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
AB423	PVC Heavy-Duty Grey	473 ml	15.70
AB424	PVC Heavy-Duty Grey	946 ml	18.50

Model No.	Description	Size	Price /Each
AB421	PVC Medium Grey	473 ml	9.48
AB422	PVC Medium Grey	946 ml	16.60

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



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
AB436	Putty – Plastic Container	14 oz.	2.19

Model No.	Description	Size	Price /Each
AB434	Clear Primer – NSF Listed	473 ml	8.64
AB435	Clear Primer – NSF Listed	946 ml	14.90

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

Model No.	Size	Price /Each
AC180	473 ml	18.60
AC181	946 ml	34.10

LEPAGE



FASTSTEEL®



- Moulds 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	10.66

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	10.66

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, mouldings, statues, birdbaths, and other concrete lawn ornaments



Model No.	Size	Price /Each
AA268	114 g	10.66

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	10.66

QUIKCOPPER®



- 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	10.66

QUIK 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	11.67

QUIKWOOD®



- Fill holes, scratches, gouges, cracks, dry rot and knot holes
- Repair furniture, moulding and frames
- Reshape woodcarvings, remould wood knobs and handles
- Can be sanded, sawed, painted or stained
- Interior and exterior applications



Model No.	Size	Price /Each
AA265	57 g	10.66

QUIKPLASTIK®



- 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	10.66

QUIKALUMINUM®



- 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	10.66

ULTRA SEAL LOW EXPANDING STRAW FOAM

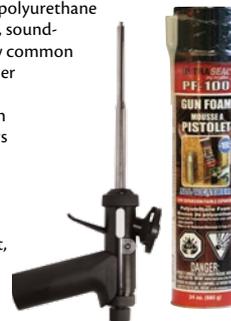
- A one component polymeric insulating foam/sealant that cures to a rigid seal which will allow for normal movement between building components
- Fills and seals gaps, cracks and holes within most types of construction materials to eliminate drafts
- Ideal for sealing around wall outlets, sill plates, foundation walls, behind baseboards, windows and doors
- Colour: White



Model No.	Size	Price /Each
AC612	12 oz.	6.59
AC613	24 oz.	13.70

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	15.12
AC610	32 oz.	White	19.79
AC611	31 oz.	Black	21.42
AC608	Gun		179.00

FLEXTEC™ ADHESIVE & SEALANT

- Used for bonding and sealing dissimilar substrates
- High viscosity, sag resistant one component adhesive/sealant based on silane
- Modified polymer, which cures to an elastic product
- Free of solvents, isocyanates and silicones

LOCTITE



Model No.	Mfg. No.	Size	Colour	Price /Each
AD124	1562044	300 ml	Grey	16.90
AD125	1562042	300 ml	White	16.90
AD123	1560557	300 ml	Black	16.90
AF071	1562040	300 ml	Clear	18.00

CHEMICALS



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	13.10
AD893	White	13.10
AD894	Aluminum	13.10
AD895	Black	13.10

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	270642	80 ml tube	8.96
AC199	270639	300 ml cartridge	18.10

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
- Accepted for use in Canadian food processing facilities



LOCTITE

Model No.	Mfg. No.	Size	Colour	Price /Each
AC157	193996	80 ml tube	Black	8.96
AC158	193997	300 ml cartr.	Black	18.50
AC196	160809	80 ml tube	Clear	9.12
AC197	193999	300 ml cartr.	Clear	17.80
AC121	135506	80 ml tube	White	9.12
AC113	193998	300 ml cartr.	White	18.50

3006™ ALL PURPOSE ADHESIVE CAULK

- Siliconized acrylic latex caulk perfect for most general purpose jobs
- Cured caulk is mildew & rust resistant
- Excellent colour retention
- Excellent flexibility and elasticity
- Smooth, professional application
- Exceeds performance requirements of ASTM C-834
- Net Volume: 295 ml
- Container Type: Cartridge



Model No.	Colour	Price /Each
AG833	White	6.29

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
- Accepted for use in Canadian food processing facilities



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC166	135507	80 ml tube	11.30
AC167	198817	300 ml cartridge	19.60

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
- Temperature range: -75°F to 625°F (-59°C to 329°C) intermittent
- Colour: Black
- Accepted for use in Canadian food processing facilities



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA488	234609	70 ml tube	16.20
AC195	135508	300 ml cartridge	34.50

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	10.30
AD891	White	10.30

587™ BLUE RTV SILICONE GASKET MAKER

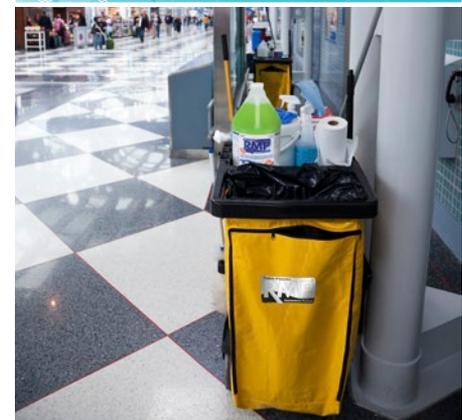
- Adheres well to oily surfaces
- Low odour and volatility
- Fills gaps to 0.25"
- Forms tough, flexible gaskets directly on the flange
- Resistant to most chemicals and solvents
- Non-corrosive
- Tack free in 30 min. 24 hrs., full strength
- Withstands temperatures to 500°F (260°C) intermittent
- Colour: Blue
- Accepted for use in Canadian food processing facilities



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA489	135504	70 ml tube	15.60
AC201	234590	300 ml cartridge	34.50

Janitor Cleaning Carts



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	299175	8 oz.	31.20
TDP003	275026	16 oz.	44.80

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	#N/A	8 oz.	32.20

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	234347	9 oz.	48.60
AC328	209758	1.2 lb.	73.50

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	199012	8 oz.	24.00
YA275	135541	12 oz. aerosol	24.90
YA276	235005	1 lb.	32.30

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.	29.30
AA925	C02908	1/2 lb.	23.90
AA874	C02910	1 lb.	37.20

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	234263	8 oz.	24.00
AA533	1786073	12 oz. aerosol	32.20
AB467	160796	1 lb.	34.20

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	235028	8 oz.	36.70
AA117	135543	1 lb.	48.90

ANTI-SEIZE QUICKSTICKS™

- Provides exceptional lubrication, as well as protection against rust, corrosion, seizing and galling
- Reduces friction and wear of critical parts
- Ideal for use in extreme cold and extreme heat applications between -20°F (-29°C) to 1600°F (870°C)
- Stick form offers less mess and portability
- Typical applications include copper, brass, cast iron, all alloys including stainless steel, all plastics and all non-metallic gasket materials
- Perfect for bolts, bushings, pipes, fittings, flanges, gaskets, headers, manifolds, studs and more
- Can withstand the stress of high heat ovens, crane assemblies, turbine studs, coal crushers, casting and molding equipment and heat exchangers



ALL-PURPOSE ANTI-SEIZE

- Service rating: -65°F (-54°C) to 1800°F (982°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.	17.80
AB475	C04110	1 lb.	25.80

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



Model No.	Mfg. No.	Size	Price /Each
AA926	C03908	1/2 lb.	31.50
AB637	C03910	1 lb.	60.30

LOCTITE



Model No.	Mfg. No.	Format	Grade	Price /Each
AB653	466863	20 g	Copper	10.20
AB654	466864	20 g	Silver	10.10

CHEMICALS

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
- Accepted for use in Canadian food processing facilities



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA540	88551	50 ml	23.90
AA541	88552	250 ml	81.60

567 HIGH TEMPERATURE THREAD SEALANT

- General purpose instant thread sealant for taper/taper threads and fittings
- High temperature thread sealant with PTFE
- Designed for the locking and sealing of metal pipes and fittings as well as other threaded assemblies
- Provides an instant, low-pressure seal for metal pipes and fittings
- Excellent chemical and thermal resistance
- Colour: White
- Temperature resistance up to: 480°F



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AF206	2087068	6 ml	8.76
AF207	2087067	50 ml	24.90
AF208	2087069	250 ml	91.60

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
- Accepted for use in Canadian food processing facilities



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC100	209761	50 ml	25.00
AB349	88568	250 ml	85.70

518 GASKET ELIMINATOR®

- Medium-strength gasket sealant
- Cures when confined in the absence of air between close-fitting metal surfaces
- Anaerobic gasketing material designed for use on rigid iron, aluminum, and steel flanged mating surfaces
- Colour: Red
- For gaps up to: 0.05"
- Temperature resistance up to: 300°F



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AF213	2096062	6 ml	9.07
AF214	2096064	50 ml	26.80
AF215	2096061	250 ml	96.90

FLANGE SEALANT 515™

- Flexible gaskets for rigid machined flanges
- 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
- Accepted for use in Canadian food processing facilities



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC088	135479	50 ml	26.80
AC089	88541	300 ml	96.90

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
- Accepted for use in Canadian food processing facilities



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC357	303420	10 ml	17.80
AA542	135486	50 ml	53.40

PST® 561™ THREAD SEALANT STICK

- 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
- No mess, portable stick
- Accepted for use in Canadian food processing facilities



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AB652	463973	19 g	19.70

QUICKSTIX™ 548™ GASKET ELIMINATOR®

- 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"
- Accepted for use in Canadian food processing facilities



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AB938	640484	18 g	29.10

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
- Accepted for use in Canadian food processing facilities



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA538	135511	10 ml	17.40
AA539	135512	50 ml	54.30

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
- Accepted for use in Canadian food processing facilities



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA457	234772	10 ml	18.50
AC102	135514	50 ml	55.50

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
- Accepted for use in Canadian food processing facilities



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC355	233546	10 ml	19.80
AA546	231121	50 ml	56.60

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
- Accepted for use in Canadian food processing facilities



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AC103	209765	6 ml	14.20
AC104	135527	50 ml	57.10

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)
- Accepted for use in Canadian food processing facilities



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AB937	640470	19 g	46.70

680™ HIGH STRENGTH/ HIGH VISCOSITY RETAINING COMPOUNDS

- Ideal curing adhesive for joining fitted cylindrical parts
- Fixtures in 10 minutes and provides a shear strength of 4000 PSI
- Capable of filling diametral gaps up to 0.015 inches
- Gives the best resistance to dynamic, axial and radial loads
- Full Cure Time: 24 hrs.
- Colour: Green



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AF074	1835205	10 ml	18.50
AF075	1835201	50 ml	55.30

648™ HIGH STRENGTH/ RAPID CURE RETAINING COMPOUNDS

- Ideal for clearance and interface fit parts
- Excellent performance for dynamic, axial and radial loads
- Works through contaminants such as oils and corrosion protection fluids
- Cures on metals without needing an applicator
- Application Time: 3 minutes
- Full Cure Time: 24 hrs.
- Shear Strength: 3900 PSI
- Ideal for gap distance up to 0.006"



LOCTITE

Model No.	Mfg. No.	Size/Colour	Price /Each
AF076	1835922	10 ml Green	20.10
AF077	1835920	50 ml Green	64.30

TEFLON SEALING TAPE

- Commonly used in plumbing for sealing pipe threads
- Ensures a tight seal
- Works for both water and air
- Colour: White
- Tape Material: PTFE
- Thickness: 3 mils (0.0762mm)
- Density: 0.37 grams/cubic centimeter
- Working Temperatures Range: -190°C to 260°C (-310°F to 500°F)



aurora tools®

Model No.	Width"	Length"	Price /Each
PG148	1/2	520	0.75
PG149	3/4	520	1.95

INSULATING & 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	Colour	Price /Each
AD155	1212164	1" x 10' Roll	Red	15.40
AF072	1540599	1" x 10' Roll	Black	15.40

CHEMICALS

290™ WICKING GRADE THREADLOCKER

MEDIUM STRENGTH

- 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	233731	10 ml	15.90
AA455	135392	50 ml	54.10
AA024	135393	250 ml	187.00

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
- Colour: Red
- Steel fixture time is 15 min, brass 8 min and stainless steel 180 min



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA452	231926	10 ml	17.20
AA453	135374	50 ml	55.40
AA741	135375	250 ml	190.00

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	88442	50 ml	54.10
AC324	195542	250 ml	186.00

263™ HIGH STRENGTH/ RAPID CURE THREADLOCKER

- Designed for the permanent locking and sealing of threaded fasteners
- 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 360°F
- Fixture in 4 min., full 24 hrs.
- Colour: Red
- Acceptable for use in Canadian food processing establishments



LOCTITE

Model No.	Mfg. No.	Size ml	Price /Each
AD289	1330583	10	17.20
AD290	1330585	50	54.10
AD291	1330335	250	187.00

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	135354	10 ml	17.20
AA451	135355	50 ml	55.40
AA652	135356	250 ml	190.00

243™ OIL TOLERANT/ 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 360°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	1329837	10 ml	17.20
AA555	1329467	50 ml	54.10
AC322	1329505	250 ml	187.00

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	196508	10 ml	20.40
AC330	234172	50 ml	63.10
AC321	234174	250 ml	225.00

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	135333	10 ml	17.20
AA015	135334	50 ml	54.10
AA513	135335	250 ml	187.00

THREADLOCKER STICKS



LOCTITE

Model No.	Mfg. No.	Size	Price /Each
248™ MEDIUM STRENGTH - BLUE			
AB649	462476	19 gr.	42.10
AB648	826034	9 gr.	19.90
268™ HIGH STRENGTH - RED			
AB651	826035	19 gr.	42.10
AB650	826036	9 gr.	20.80

LOGISTRAP™

- Base material: Nylon with metal buckle
- Applications: Distribution centers, warehouses and logistics
- Working Load Limit: 225 lbs. (102 kg)
- Secure pallet boxes, sleeve packs and collapsible containers
- Reusable straps are cost effective and reduce waste
- Easily and quickly secures goods to a pallet
- Made with VELCRO® brand woven hook and loop
- Style: Hook and Loop
- Length: 16.4'
- Width: 2"
- Colour: Orange

Model No. PF734
Price/Each 15.30



STICKY BACK TAPE

- Base Material: Nylon
- Applications: Apparel, office folders, stationery, rigid packaging and trays, medical equipment
- Quantity per pack: 12
- Both Hook and Loop components supplied in package
- Width: 3/4"
- Length: 15'

Model No.	Colour	Price /Each
OP764	Black	27.60
OP765	White	27.20



SEW ON ROLL

- Hook and Loop Material: Nylon
- Application: Ideal for applications requiring high cycle life closure
- Hoop 88 and Loop 1000 included in package
- Easy to sew & easy to fasten
- An adjustable alternative to snaps, buttons, zippers, hooks & eyes
- Width: 3/4"
- Length: 30'

Model No.	Colour	Price /Each
OP785	White	30.20
OP786	Black	30.30



STICKY BACK SQUARES

- Base Material: Nylon
- Applications: Apparel, office folders, stationery, rigid packaging and trays
- Squares per pack: 12
- Both Hook and Loop components supplied in package
- Ideal for smooth indoor surfaces
- Excellent for keeping things organized and connected
- Perfect for everyday applications
- Diameter: 7/8"

Model No.	Colour	Price /Each
OP639	Black	3.11
OP640	White	3.00



VELCOIN® HOOK 88

- Base Material: Nylon
- Suggested paired component: Loop 1000
- Applications: Apparel, office folders, stationery, rigid packaging and trays
- Coins per roll: 1028
- Peel and stick coins provide VELCRO® Brand convenience in a precut fastener
- Colour: White
- Diameter: 3/4"

Model No. OP766
Price/Each \$91.70



QWIK TIES

- Hook Material: Polypropylene
- Loop Material: Nylon
- Applications: Cable management, medical equipment bundling and materials handling
- Ideal for other applications requiring an adjustable and reusable self-engaging fastener
- VELCRO® Brand Qwik Ties self-gripping fasteners are ideal for cable management applications
- Self-engaging
- Colour: Black
- Width: 3/4"
- Length: 25 yds

Model No. OP759
Price/Each 32.20



ONE-WRAP® TAPE

- Hook Material: Polypropylene
- Loop Material: Nylon
- Applications: Cable management, medical equipment bundling and materials handling
- Ideal for other applications requiring a strong, durable, adjustable and reusable self-engaging fastener
- Self-engaging
- Strong, reusable ONE-WRAP® fasteners feature hook and loop laminated back to back without glue, so there's no chemical residue
- Colour: Black
- Length: 25 yds

Model No.	Width"	Price /Each
OP622	1/2	46.30
OP623	1	74.60



SEW-ON TAPE

- Base Material: Nylon
- Applications: Apparel, furnishings, straps, medical equipment and fabric applications
- Both Hook and Loop components supplied in package
- Easy to sew & easy to fasten
- An adjustable alternative to snaps, buttons, zippers, hooks & eyes
- Machine washable and dry cleanable
- Width: 1-1/2" • Length: 15'

Model No.	Colour	Price /Each
OP643	Black	26.80
OP644	White	26.80



ONE-WRAP® ROLL

- Hook Material: Polypropylene
- Loop Material: Nylon
- Applications: Cable management, medical equipment bundling and materials handling
- Ideal for other applications requiring a strong, durable, adjustable and reusable self-engaging fastener
- Self-engaging
- Strong, reusable ONE-WRAP® fasteners feature hook and loop laminated back to back without glue, so there's no chemical residue
- Colour: Black

Model No.	Width"	Length'	Price /Each
OP628	3/4	12	10.00
OP629	1-1/2	30	23.50



STICKY BACK ROLL

- Hook and Loop Material: Nylon
- Application: Ideal for applications requiring high cycle life closure
- Hoop 88 and Loop 1000 included in package
- Ideal for smooth indoor surfaces
- Excellent for keeping things organized and connected
- Perfect for everyday applications
- Colour: Black
- Width: 3/4"
- Length: 15'

Model No. OP787
Price/Each \$27.90





BAR CLAMPS FOR WELDING & FABRICATING

SHOP FLOOR CLAMPS

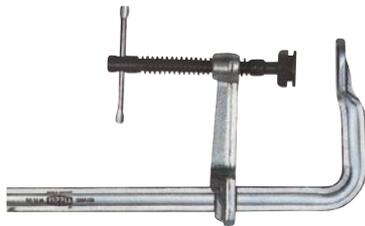
- Swivel pressure pad
- Rail and fixed top jaw are heat treated and tempered
- High quality construction insures long life



Model No.	Mfg. No.	Pad	Clamping Capacity"	Throat Depth"	Clamping Force (lbs.)	Price /Each
TKZ890	6605-8	Standard-duty	8	4	660	74.50
TKZ891	6605-12	Standard-duty	12	4	660	76.00
TKZ892	6605-18	Standard-duty	18	4	660	80.20
TN210	SQ-4	Standard-duty	6	4 3/4	1330	72.40
TN211	SQ-8	Heavy-duty	8	5 1/2	2660	125.00
TD320	SQ-12	Heavy-duty	12	5 1/2	2660	155.00
TKZ893	SQ-16	Heavy-duty	16	5 1/2	2660	184.00
TD321	SQ-20	Heavy-duty	20	5 1/2	2660	210.00
TKZ894	SQ-24	Heavy-duty	24	5 1/2	2660	237.00

PROFESSIONAL CLAMPS

- Bessey® Morpad™ allows for greater angle of pivot
- Rail and fixed top jaw are heat treated and tempered
- High quality construction insures long life



Model No.	Mfg. No.	Clamping Capacity"	Throat Depth"	Clamping Force (lbs.)	Price /Each
HEAVY-DUTY					
TN047	48005-12	12	7	4880	409.00
THZ886	48005-18	18	7	4880	459.00
TKZ901	48005-24	24	7	4880	499.00
THZ887	48005-36	36	7	4880	559.00
TKZ902	48005-48	48	7	4880	609.00
TKZ903	48005-60	60	7	4880	689.00
EXTRA HEAVY-DUTY					
TN177	72005-12	12	8	7770	979.00
THZ888	72005-18	18	8	7770	899.00
THZ889	72005-36	36	8	7770	1029.00

REGULAR-DUTY ALL-STEEL BAR CLAMPS WITH ERGONOMIC BESSEY® GRIP



Model No.	Mfg. No.	Clamping Capacity"	Throat Depth"	Clamping Force (lbs.)	Price /Each
TLY342	24005-8	8	5 1/2	2800	194.00
TLY343	24005-12	12	5 1/2	2800	216.00
TLY344	24005-16	16	5 1/2	2800	244.00
TLY345	24005-20	20	5 1/2	2800	275.00
TLY346	24005-24	24	5 1/2	2800	299.00
TLY347	24005-36	36	5 1/2	2800	379.00
TLY348	24005-48	48	5 1/2	2800	439.00
TLY349	24005-60	60	5 1/2	2800	499.00

STEP-OVER STEEL CLAMPS

- Rail, fixed jaws and pressure plate heat-formed in one piece from cold drawn profiled and precision steel
- Heat treated, high carbon Acme threaded screw, spatter resistant
- Unique Bessey® Morpad™ tilts to 35° comes standard with TLY352 and TLY353
- Ergonomic Bessey® grip handle on model TLY352



Model No.	Mfg. No.	Clamping Capacity"	Throat Depth"	Clamping Force (lbs.)	Step-Over"	MorPad	Bessey® /Grip	Price /Each
TLY351	J18-8	10	4 3/4	880	2 1/4	-	Yes	135.00
TLY352	2400J-12	12	5 1/2	2660	4	Yes	Yes	249.00
TLY353	4800J-20	20	7	4880	6	Yes	-	499.00

LEVER CLAMPS (LC SERIES)

- Large tilting pressure plate
- Secure ratchet mechanism for rapid vibration-resistant clamping
- Torsion-resistant, fixed bracket and pressure plate produced and tempered in one piece for maximum tensile strength and sturdiness



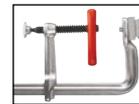
Model No.	Mfg. No.	Clamping Capacity"	Throat Depth"	Clamping Force (lbs.)	Price /Each
TLV282	LC4	4	2 3/8	400	105.00
TN207	LC8	8	4	660	122.00
TN205	LC12	12	5 1/2	1200	167.00
TN206	LC20	20	4 3/4	1200	184.00
TLV283	1800L12	10	5 1/2	1800	239.00

MULTI-PURPOSE CLAMPS

- KombiKlamp™ robust Variable Angle Device (VAD) allows for a solid grip on odd shapes - also reverses for spreading
- Ergonomic Bessey® grip offers greater comfort and slides with the T-handle
- Removable screw acts as a slide stop
- Easily converts to a spreading device



Spreading



Clamping



Model No.	Mfg. No.	Clamping Capacity"	Throat Depth"	Clamping Force (lbs.)	Load Limit (lbs.)	Price /Each
TLY350	SG30VAD	11	4.75	2600	3000	163.00

REGULAR-DUTY I BAR CLAMPS NO. 640

- A rapid acting powerful clamp designed and constructed for hard, everyday production work
- Patented, quick action, no slip clutches are 3/4" apart and formed in the web for greater bar strength
- High strength ductile slide cannot slip or bind, easily released
- Steel handle, with comfortable wood crank handle for fast clamping
- Bar dimensions: 7/16" x 1 1/2" x 5/32"
- Screw diameter: 5/8"
- Throat depth is 1 13/16" and clamp face is 1 7/8"



Model No.	Mfg. No.	Opening Capacity	Load Capacity lbs.	Price /Each
TD798	21801	2	6000	81.00
TD800	21803	3	6000	101.00
TD801	21804	4	6000	113.00
TD802	21805	5	6000	125.00
TD803	21806	6	6000	145.00



VICES, MAGNETS & CLAMPS

WELDERS ANGLE CLAMPS

- Automatic adjustment to work pieces of different thicknesses
- Sturdy jaws and base made from high grade cast iron
- Copper plated spindles resist spatter
- Accurate 90° angle



Model No.	Mfg. No.	Jaw Height"	Maximum Material Size for Mitre Joints"	Price /Each
TLV361	WSM9	1 3/8	3 1/2	235.00
TLV362	WSM12	2 2/8	4 3/4	319.00

U STYLE BAR CLAMPS

- Light-duty U style bar clamp offers a unique step-over design
- Small, lightweight and very handy
- Rail is made of quality steel drawn in a single piece for durability and strength
- Sliding arm is made of die cast zinc: light, stable and break resistant
- Comes with non-marking plastic caps on both jaws



Model No.	Mfg. No.	Clamping Capacity"	Throat Depth"	Clamping Force (lbs.)	Price /Each
TLV358	LMU2.004	4	2	330	11.70
TLV359	LMU2.006	6	2	330	12.20
TLV360	LMU2.008	8	2	330	12.70

PIPE CLAMPS, H STYLE

- H shape foot assembly stabilizes clamp in two dimensions giving dual-axis stability
- Extra high base provides industry leading clearance from the work surface
- Cast jaws for durability
- Smooth action spindle
- Pipe not included



Model No.	Mfg. No.	Pipe Diameter"	Throat Depth"	Price /Each
TLV267	BPC-H34	3/4"	1 3/4	31.10
TLV268	BPC-H12	1/2"	1 1/2	27.30

CLUTCH STYLE BAR CLAMPS

- Powder coated, malleable cast iron jaws
- 2-piece slip clutch plates for quick adjustment
- Nickel-plated, drawn serrated rail
- Non-marring pads on the top and bottom jaws to protect work surface
- Ergonomically shaped wood handle



Model No.	Mfg. No.	Clamping Capacity"	Throat Depth"	Clamping Force (lbs.)	Price /Each
TLV269	GSCC2.506	6	2.5	600	16.30
TLV270	GSCC2.512	12	2.5	600	18.20
TLV271	GSCC2.518	18	2.5	600	21.70
TLV272	GSCC2.524	24	2.5	600	24.00
TLV273	GSCC2.530	30	2.5	600	26.40
TLV274	GSCC2.536	36	2.5	600	27.80
TLV275	GSCC3.512	12	3.5	1000	27.20
TLV276	GSCC3.518	18	3.5	1000	28.80
TLV277	GSCC3.524	24	3.5	1000	31.10
TLV278	GSCC5.012	12	5	1200	50.40
TLV279	GSCC5.018	18	5	1200	63.20
TLV280	GSCC5.024	24	5	1200	71.80

KANT-TWIST® CLAMPS



Model No.	Mfg. No.	Throat Deep Open"	Throat Deep Closed"	Clamping Capacity"	Clamping Force (lbs.)	Price /Each
ORIGINAL KANT-TWIST®						
TKZ949	1KT	1/2	1/2	1 1/16	300	35.20
TKZ950	2KT	1 1/8	1 1/4	2	700	45.50
TKZ952	3KT	1 1/4	1 3/4	3	1500	60.80
TKZ953	4 1/2KT	2 1/4	2 1/2	4 1/2	1500	64.60
TKZ954	6KT	2 1/8	3 3/8	6	1800	98.80
TKZ955	6DKT	4 5/8	5 1/2	6	1800	107.00

QUICK-GRIP® PIPE CLAMPS

- Innovative clutch system eliminates the need for threaded pipe
- Larger feet offer more stability and clearance between handle and worktop
- Larger, more ergonomic handle offers easier clamping with reduced hand fatigue
- Larger clutch plates allow for easier release and increased durability and dependability



Model No.	Mfg. No.	Pipe Size	Throat Depth	Price /Each
TBR730	224134	3/4" (19 mm)	1 7/8" (47 mm)	27.20
TBR731	224212	1/2" (12 mm)	1 1/2" (37 mm)	22.00

QUICK-GRIP® CLUTCH LOCK BAR CLAMPS

- Soft-Grip handle is larger and more ergonomic, allowing high clamping pressure with less effort
- I-beam bar reduces flexing and bowing
- Larger clutch plates allow for easier release, and increase durability and dependability
- 3" throat depth accommodates a variety of projects



Model No.	Mfg. No.	Clamping Capacity	Throat Depth	Price /Each
TBR488	223106	6" (15 cm)	3 1/8" (76 mm)	20.20
TBR424	223112	12" (30 cm)	3 1/8" (76 mm)	21.20
TBR425	223118	18" (45 cm)	3 1/8" (76 mm)	26.20
TBR426	223124	24" (60 cm)	3 1/8" (76 mm)	28.70
TBR427	223136	36" (91 cm)	3 1/8" (76 mm)	34.40

QUICK-GRIP® PASSIVE LOCK BAR CLAMPS

- Soft-Grip handle is larger and more ergonomic, allowing high clamping pressure with less effort
- I-beam bar reduces flexing and bowing



Model No.	Mfg. No.	Clamping Capacity	Throat Depth	Price /Each
TBR357	223212	12" (30 cm)	4 7/8" (12 cm)	42.20
TBR358	223218	18" (45 cm)	4 7/8" (12 cm)	49.10
TBR359	223224	24" (60 cm)	4 7/8" (12 cm)	53.60
TBR360	223230	30" (75 cm)	4 7/8" (12 cm)	58.10

VICES, MAGNETS & CLAMPS

BAR CLAMPS FOR CONSTRUCTION & WOODWORKING

PARALLEL BAR CLAMPS K BODY® REVO™

- Large parallel jaw surfaces are made from non-marring polyamide
- Internal steel frames insure 90° angles
- Large composite handle for better comfort while working
- Bessey® anti-slip system for improved grip and safety
- Swivel fitting ensures clamp sits parallel to the bench top
- 3 3/4" throat depth



Model No.	Mfg. No.	Clamping Capacity"	Spreading Capacity"	Price /Each
UAD669	KRE3512	12	10-1/2 to 15-5/16	91.40
UAD670	KRE3524	24	10-1/2 to 28-3/4	99.70
UAD671	KRE3531	31	10-1/2 to 36-1/2	108.00
UAD672	KRE3540	40	10-1/2 to 44-1/2	117.00
UAD673	KRE3550	50	10-1/2 to 52-1/2	126.00
UAD674	KRE3560	60	10-1/2 to 63-3/8	133.00
TKZ910	KRE3582	82	10-1/2 to 81-7/8	159.00
UAD676	KRE3598	98	10-1/2 to 101-1/2	169.00

ACCESSORIES FOR PARALLEL CLAMPS

KP FRAMING SYSTEMS

- Blocks align clamps for door and panel construction
- Clamps sit in grooves to make 90° angles
- Four blocks to a set



Model No. TKZ957
Mfg. No. KP Blocks
Price/Set \$38.00

K BODY® EXTENDERS

- Connects two Bessey® clamps together for extended reach
- Durable aluminum construction
- Includes: Extender, nuts, bolts and washers

Model No. TKZ959
Mfg. No. K Body Extender
Price/Each \$32.30



TG PROFESSIONAL SERIES MALLEABLE CAST CLAMPS

- High quality construction
- Perfect for high pressure applications and wide openings
- Two part composite handle



Model No.	Mfg. No.	Clamping Capacity"	Throat Depth"	Clamping Force (lbs.)	Price /Each
LIGHT-DUTY					
TKZ912	TGJ2.5062K	6	2 1/2	600	27.30
TKZ913	TGJ2.5122K	12	2 1/2	600	29.60
TKZ914	TGJ2.5182K	18	2 1/2	600	32.50
TKZ915	TGJ2.5242K	24	2 1/2	600	35.80
TKZ916	TGJ2.5302K	30	2 1/2	600	39.20
TKZ917	TGJ2.5362K	36	2 1/2	600	42.80
TKZ918	TG4.0082K	8	4	880	41.00
TKZ919	TG4.0122K	12	4	880	50.10
TKZ920	TG4.0162K	16	4	880	52.20
TKZ921	TG4.0242K	24	4	880	67.90

Model No.	Mfg. No.	Clamping Capacity"	Throat Depth"	Clamping Force (lbs.)	Price /Each
MEDIUM-DUTY					
TKZ922	TG4.5122K	12	4 1/2	1000	56.60
TKZ923	TG4.5182K	18	4 1/2	1000	64.90
TKZ924	TG4.5242K	24	4 1/2	1000	69.10
TKZ925	TG4.5302K	30	4 1/2	1000	77.20
TKZ926	TG4.5402K	40	4 1/2	1000	86.90
TKZ927	TG5.5122K	12	5 1/2	1320	65.50
TKZ928	TG5.5182K	18	5 1/2	1320	79.40
TKZ929	TG5.5242K	24	5 1/2	1320	85.50
TKZ932	TG7.0162K	16	7	1320	78.90
TKZ933	TG7.0242K	24	7	1320	92.60
TKZ936	TG7.0482K	48	7	1320	126.00

Model No.	Mfg. No.	Clamping Capacity"	Throat Depth"	Clamping Force (lbs.)	Price /Each
HEAVY-DUTY					
TKZ937	TGK4.5162K	16	4 1/2	1540	74.50
TKZ938	TGK4.5242K	24	4 1/2	1540	86.30
TKZ939	TGK4.5402K	40	4 1/2	1540	105.00
TKZ940	TGK4.5502K	50	4 1/2	1540	117.00
TKZ941	TGK4.5792K	79	4 1/2	1540	157.00

Model No.	Mfg. No.	Clamping Capacity"	Throat Depth"	Clamping Force (lbs.)	Price /Each
DEEP REACH					
TKZ942	CDS24-10WP	24	10	1550	189.00
TKZ943	CDS24-12WP	24	12	1550	209.00
TKZ944	CDS24-20WP	24	20	990	329.00

QUICK-GRIP® ONE-HANDED CLAMPS

BAR CLAMPS/SPREADERS

- Quick-Change® jaw quickly converts from clamp to spreader and requires no tools
- Constructed of high-tech reinforced resin for strength and durability
- Exerts up to 250 lbs. of clamping pressure
- Patented pistol grip design enhances comfort and ease of use
- Non-marring pads grip firmly and protect workpiece
- Ideal for clamping/gluing, holding work for sawing/drilling and positioning work for fastening



MINI BAR CLAMPS

- 25% smaller than Quick-Change® clamps for smaller projects or for working in confined spaces
- Constructed of high-tech reinforced resin for strength and durability
- Exerts up to 150 lbs. of clamping pressure
- Patented pistol grip design enhances comfort and ease of use
- Non-marring pads grip firmly and protect workpiece
- Ideal for clamping/gluing, holding work for sawing/drilling and positioning work for fastening



Model No.	Mfg. No.	Clamping Capacity	Spreading Capacity	Throat Depth	Price /Each
TAW063	506QC	6" (15 cm)	7 1/2" - 14 5/8" (195 mm - 360 mm)	3 1/4" (80 mm)	31.60
TAW062	512QC	12" (30 cm)	7 1/2" - 20 5/8" (195 mm - 515 mm)	3 1/4" (80 mm)	35.20
TBR688	518QC	18" (45 cm)	7 1/2" - 26 5/8" (195 mm - 665 mm)	3 1/4" (80 mm)	40.40
TBR689	524QC	24" (60 cm)	7 1/2" - 32 5/8" (195 mm - 820 mm)	3 1/4" (80 mm)	43.90

Model No.	Mfg. No.	Clamping Capacity	Spreading Capacity	Throat Depth	Price /Each
TBR758	5412	12" (30 cm)	-	2 7/16" (62 mm)	19.10



XP™ ONE-HANDED BAR CLAMP & SPREADER

- I-beam bar resists twisting and bowing
- Power Locks™ hold better, allowing for up to 600 lbs. of force
- Quick-Change™ jaw, converts clamp to spreader quickly
- Non-marring pads grip securely
- Quick-Release™ trigger

Model No.	Mfg. No.	Clamping Capacity	Spreading Capacity	Throat Depth	Price /Each
TKZ880	2021406	6" (15 cm)	7 1/2"-14 5/8" (190 mm-371 mm)	3 1/4" (83 mm)	40.60
TKZ881	2021412	12" (30 cm)	7 1/2"-20 5/8" (190 mm-523 mm)	3 1/4" (83 mm)	45.30
TKZ882	2021418	18" (45 cm)	7 1/2"-26 5/8" (190 mm-676 mm)	3 1/4" (83 mm)	50.30
TKZ883	2021424	24" (60 cm)	7 1/2"-32 5/8" (190 mm-828 mm)	3 1/4" (83 mm)	56.20
TKZ884	2021436	36" (91 cm)	7 1/2"-44 5/8" (190 mm-1133 mm)	3 1/4" (83 mm)	67.20
TKZ885	2021450	50" (127 cm)	7 1/2"-58 5/8" (190 mm-1489 mm)	3 1/4" (83 mm)	76.60



IRWIN.

PARALLEL JAW CLAMPS

- Deep 3 3/4" jaw depth for optimized pressure distribution
- Secure locking system prevents jaws from slipping
- ProTouch handle for an ergonomic grip
- Resin body and jaws prevents marring and glue adhesion
- Up to 1150 lbs. of pressure



IRWIN.

Model No.	Mfg. No.	Clamping Capacity	Throat Depth"	Price /Each
TLY300	2026500	24" (60 cm)	3 3/4	69.80
TLY301	2026501	48" (115 cm)	3 3/4	83.70

PARALLEL JAW CLAMPS

- Aluminum die-cast handles have a quick adjustment mechanism for easy sizing
- Serrations in the steel rails engage with a hardened steel insert in the jaw to eliminate slipping
- Clamp jaws are encased in non-marring, glue resistant polypropylene casing
- Clamps up to 2.5 KN of pressure



aurora tools®

Model No.	Clamping Capacity	Throat Width	Throat Depth	Price /Each
TYB500	24"	1 1/2"	3 1/3"	72.20
TYB501	50"	1 1/2"	3 1/3"	88.55








CANADA'S LEADING MATERIAL HANDLING SUPPLIER

VICES, MAGNETS & CLAMPS



QUICK-GRIP® HANDI-CLAMP®

- Quick-Release™ trigger allows for fast and easy positioning and release
- Patented ratcheting mechanism provides adjustable clamping pressure and significantly reduces hand force required to generate clamping pressure
- High-tech resin construction provides strength and durability
- Specially designed jaws hold odd-shaped workpieces



IRWIN

Model No.	Mfg. No.	Clamping Capacity	Spreading Capacity	Throat Depth	Price /Each
TBQ662	59100CD	1 1/2" (37 mm)	1 1/2" (37 mm)	1 1/2" (37 mm)	5.39
TBR083	59200CD	2" (50 mm)	2" (50 mm)	2" (50 mm)	10.70
TBR085	59400CD	4" (10 cm)	4" (10 cm)	3" (75 mm)	12.90

STEEL QUICK CLAMPS

- One hand mechanism for ease of clamping
- Adjustable and reversible: changes from a clamp to a spreader
- Vinyl-covered grips and tips



TGZ582

FULLER

Model No.	Mfg. No.	Clamping Capacity"	Price /Each
TGZ581	450-0101	1	1.46
TGZ582	450-0102	2	3.40
TGZ583	450-0103	3	5.83

QUICK CLAMPS

- One hand mechanism for ease of clamping
- Adjustable and reversible: Changes from a clamp to a spreader



TGZ585

BESSEY

Model No.	Mfg. No.	Clamping Capacity"	Price /Each
TGZ584	XC2-2	1	2.89
TGZ585	XC5-2	2	4.70

LOCKING PLIERS C-CLAMPS W/SWIVEL PADS

- Tempered chrome vanadium steel jaws
- Hardened tension bar with toggle mechanism provides secure locking action
- Smooth screw adjustment for easy and rapid setting
- Meets ANSI standards



aurora tools

Model No.	Grip	Length"	Price /Each
TJZ096	Steel	6	15.45
TJZ097	Steel	11	26.90

PROFESSIONAL ONE HAND EDGE CLAMPS

- Twin Spindle: Outer spindle acts as the clamping jaws on work surface while inner spindle applies pressure to the edge
- Large Jaws: Soft non slip pads for positive grip



BESSEY

Model No.	Clamping Capacity"	Clamping Force	Throat Depth"	Price /Each
TKZ945	2 1/8	500 lbs.	3	103.00

LOCKING LONG REACH CLAMPS

- Overall Length: 20"
- Style: Omnium Grip
- Max. Opening: 20"



GRAY TOOLS

Model No.	Mfg. No.	Price /Each
TYR738	134-20	94.40

VICES, MAGNETS & CLAMPS

QUICK-GRIP® C-CLAMPS

- Double-rolled thread for faster clamping and increased durability
- Larger handle for greater clamping pressure with less effort and reduced hand fatigue
- Larger swivel pad reduces marring on work surface and increases stability



Model No.	Mfg. No.	Clamping Capacity	Throat Depth	Price /Each
TBR751	225101	1" (25 mm)	1 3/16" (30 mm)	2.69
TBR752	225102	2" (50 mm)	1 5/16" (33 mm)	3.89
TBR753	225103	3" (75 mm)	2 1/4" (51 mm)	7.89
TBR754	225104	4" (10 cm)	3" (75 mm)	13.40
TBR755	225106	6" (15 cm)	3 1/2" (87 mm)	20.40
TBR756	225108	8" (20 cm)	4" (10 cm)	29.30
TBQ959	225123	2" (50 mm)	3 1/2" (87 mm)	12.20
TBQ960	225134	3" (75 mm)	4 1/2" (12 cm)	18.10

ECONOMY C-CLAMPS

- Reinforced at all stress points designed to last through the toughest application
- Constructed of high quality ductile iron with a heavy-duty steel screw for maximum strength
- Fully enameled for long life



Model No.	Mfg. No.	Clamping Capacity"	Throat Depth"	Price /Each
VE830*	450-0761	1	1	2.80
VE831*	450-0762	2	1 1/2	3.59
VE833	450-0763	3	1 3/4	6.01
VE834	450-0764	4	2 3/8	8.47
VE835	450-0765	5	2 1/2	11.20
VE836	450-0766	6	2 3/4	14.80
VE837	450-0768	8	3 3/8	18.30
VE838	450-0769	2 1/2	4 3/8	9.99

* Constructed of malleable iron

C-CLAMPS

- Drop forged steel frame
- Lead screw and pad are copper plated to resist welding splatter
- Limited lifetime warranty



TYQ473



TYQ475



Model No.	Mfg. No.	Clamping Capacity	Throat Depth	Clamping Force lbs.	Overall Dimensions			Weight lbs.	Price /Each
					L"	x W"	x H"		
TYQ473	C402	2" (50 mm)	1-3/4" (44.45 mm)	3500	7-1/2	x 5	x 1-1/4	1.4	49.80
TYQ474	C403	3" (76 mm)	2-1/2" (63.5 mm)	3500	8-1/4	x 6-1/2	x 2	2.2	57.20
TYQ475	C404	4" (102 mm)	3" (76.2 mm)	6200	11	x 6	x 1	3.3	69.10
TYQ476	C408	8" (203 mm)	4-1/2" (114.3 mm)	6900	15	x 8	x 2	7.4	125.00
TYQ477	C412	12" (305 mm)	5-1/2" (139.7 mm)	9300	22-1/2	x 10-1/2	x 2	12.75	267.00

HI-VIS SAFETY C-CLAMPS

- Coated in high visibility yellow
- Powder coat finish resists scratches and corrosion
- Alloy steel spindles, black oxide coated



TJW241



Model No.	Mfg. No.	Clamping Capacity"	Throat Depth"	Price /Each
TJW241	14300	2-1/8	2-1/4	29.50
TJW242	14301	3	1 1/2	36.80
TJW244	14303	6-1/16	4-1/8	85.90
TJW245	14305	8-1/4	5	110.00
TJW246	14306	10-1/8	6	150.00
TJW247	14307	12-1/4	6-5/16	238.00

C-CLAMPS

- Manufactured from SG iron with over 60000 PSI of tensile strength
- Swiveling pad adapts to the correct angle to apply even pressure on the work piece
- Textured powder coat finish on frame and black oxide finish on spindle increases corrosion resistance



TYB504



Model No.	Clamping Capacity"	Throat Depth"	Min. Proof Test lbs.	Price /Each
TYB502	2	1 5/8	800	15.25
TYB503	3	1 11/16	1000	19.30
TYB504	4	2 11/32	1200	24.30
TYB505	6	3	1400	31.15
TYB506	8	3 1/8	1700	40.85
TYB507	10	3 1/2	2200	53.15
TYB508	12	4	2500	67.95

VICES, MAGNETS & CLAMPS

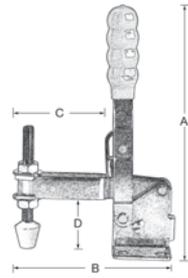


AURORA TOOLS® HOLD DOWN CLAMPS

- Commonly used clamps in manufacturing
- Perfect for holding work pieces in place
- Durable steel construction

VERTICAL HOLD-DOWN CLAMPS

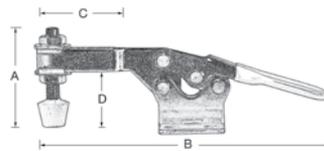
- Includes bonded neoprene-tipped spindle and flanged washers
- Open arm provides adjustable spindle location



Model No.	Holding Cap. lbs.	Dimensions"				Base			Wt. lbs.	Price /Each
		A	B	C	D	L"	x	W"		
TLV625	200	4	2 1/2	1	1	1	x	1 3/4	0.34	12.30
TLV626	375	6	4 5/8	2 3/4	1 1/4	1 13/16	x	1 7/16	0.65	13.95
TLV627	600	8 1/8	4 13/16	3	1 3/4	1 7/8	x	2 1/2	1.25	17.15

HORIZONTAL HOLD-DOWN CLAMPS

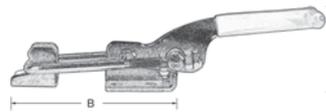
- Includes bonded neoprene-tipped spindle and flanged washers
- Low height design is ideal when space is a concern
- Open arm provides adjustable spindle location



Model No.	Holding Cap. lbs.	Dimensions"				Base			Wt. lbs.	Price /Each
		A	B	C	D	L"	x	W"		
TLV628	200	1 1/16	5 5/8	2 1/4	1	1 7/16	x	1 7/16	0.28	12.30
TLV629	500	1 13/16	6 3/4	2 11/16	1 5/16	1 3/8	x	1 1/2	0.52	13.95

LATCH CLAMPS

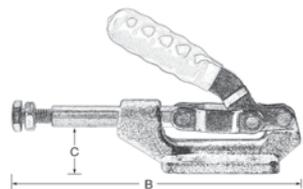
- Commonly used to hold molds, dies, and jigs together
- Includes latch plate



Model No.	Holding Cap. lbs.	Dimensions"		Base			Wt. lbs.	Price /Each
		A	B	L"	x	W"		
TLV630	360	1 1/4	4	1 1/16	x	1	0.16	13.80
TLV631	700	1 5/8	6 7/8	1 1/2	x	1 11/16	0.55	17.45

STRAIGHT LINE CLAMPS

- Commonly used in assembly operations or with welding jigs



Model No.	Holding Cap. lbs.	Dimensions"			Base			Wt. lbs.	Price /Each
		A	B	C	L"	x	W"		
TLV632	600	3 1/8	5 5/8	1 1/2	1 7/8	x	2 1/4	0.80	23.15
TLV633	300	4 5/16	4 1/2	-	N/A	x	-	0.42	21.10

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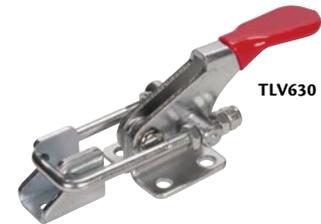
TLV626



TLV628



TLV630



TLV632



TLV633



AUTO-ADJUST TOGGLE CLAMPS

- Automatically adjust to variations in work piece dimensions
- The integrated clamping force adjustment screw can be used to create an actually applied clamping force from 25 to 550 lbs. (max holding capacity of 700 lbs.)
- The large (2 1/4" x 2 1/2") flanged base is designed for use with 1/4" or M6 fasteners
- The removable non-marring plastic cap is included on the 7/8" diameter swivel pads



Model No.	Mfg. No.	Opening"	Clamping Force Range (lbs.)	Holding Capacity (lbs.)	Price /Each
HORIZONTAL TOGGLE CLAMPS					
TNB028	STC-HH20	13/16	25 - 550	450	39.60
TLV284	STC-HH50	1 9/16	25 - 550	700	41.80
TLV285	STC-HH70	2 3/8	25 - 550	700	43.10
INLINE TOGGLE CLAMPS					
TNB029	STC-IHH15	3/8	25 - 550	450	43.20
TLV286	STC-IHH25	5/8	25 - 550	700	44.90

TLV284

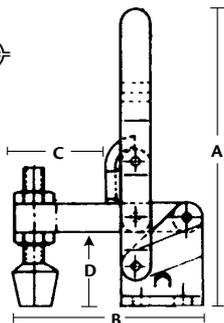


TLV286



VERTICAL HOLD-DOWN CLAMPS

The most popular type of hold-down clamp, manufactured in capacities of up to 6000 lbs. The hold-down bar exhibits a minimum 90° opening angle and can be solid or U-shaped. Stainless steel units are available for the food industry or corrosive environments.



201 SERIES

The smallest vertical clamp available. U-shaped hold-down bar furnished with bonded neoprene-tipped 10-32 spindle assembly (TN140) and flanged washers (TN121).

202 SERIES

200-lb. capacity version of 201 series. Furnished with bonded neoprene-tipped 1/4-20 spindle (TN134) lock nuts and flange washers (TN123).



207 SERIES

Available in solid bar model, including bolt retainer (TN141) 500-lb.-capacity. U-bar model includes two flanged washers (TN125) and accommodates 5/16" spindle (not supplied).

210 SERIES

Heavy-duty clamp holds up to 750 lbs. U-bar model includes two flanged washers (TN124). Bolt retainer supplied with solid bar models (TN142) accommodates any 3/8" spindle (not supplied).



Model No.	Mfg. No.	Holding Cap. lbs.	Dimensions"				Base			Wt. lbs.	Price /Each
			A	B	C	D	L"	x	W"		
TN059	201-U	100	3 1/16	2 1/64	11/16	5/8	1	x	1 5/16	0.15	24.50
TN061	202-U	200	3 3/4	2 3/8	1	15/16	1	x	1 9/16	0.35	26.00
TN065	207-S	500	5 1/2	3 25/32	-	1 9/16	13/8	x	1 3/4	0.69	34.50
TN064	207-U	375	5 1/2	3 25/32	1 3/8	1 9/16	1 3/8	x	1 3/4	0.67	34.00
TN066	210-U	600	7 1/2	5 7/8	2 5/8	1 11/16	1 29/32	x	2 17/32	1.29	50.50
TN067	210-S	750	7 1/2	5 7/8	-	1 11/16	1 29/32	x	2 17/32	1.29	59.00

TOGGLE-LOCK PLUS™ LATCH CLAMPS

Feature a release lever catch accessory which allows clamps to lock in the closed position only. Supplied with latch plate and equipped with an ergonomic handle grip. Model TV727 same as model TV726 only with greater holding capacity.

Model No.	Mfg. No.	Holding Cap. lbs.	Dimensions"		Thread Adjustment"	L"	Base		Drawing Cap."	Wt. lbs.	Price /Each
			A	B			L"	W"			
TV726	331-R	700	1 15/32	6 1/4	11/64	1 9/16	x	1 3/4	2	0.6	66.50
TV727	341-R	2000	2 3/4	6 1/2	9/16	2 3/8	x	2 3/8	2 1/2	0.6	97.00

Equipped with a release lever catch accessory which allow clamps to stay locked in the closed position. Large handle pad improves operation of clamp.

Model No.	Mfg. No.	Holding Cap. lbs.	Dimensions"		Thread Adjustment"	L"	Base		Drawing Cap."	Wt. lbs.	Price /Each
			A	B			L"	W"			
TV728	351-R	375	1 7/16	9 11/16	5/16	1 1/2	x	1 15/16	4	0.8	63.50
TV729	371-R	750	2 1/4	13	11/16	1 15/16	x	1 15/16	5 3/8	0.6	119.00



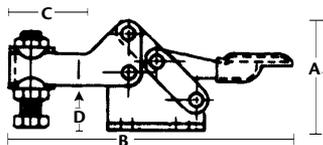
TV726

TV728



HORIZONTAL HOLD-DOWN CLAMPS

Low height design makes clamps outstanding when headroom is a concern. Unlike the handle on the vertical clamp, the horizontal clamp moves in the opposite direction. Hold down bar available in solid or U-shaped format. Some models available in stainless steel on request. Holding capacities to 500 lbs. Larger capacities available.



205 SERIES

The smallest clamps in the horizontal series clamps supplied with nylon spindle assembly (TN126). Flanged washers supplied with U-bar models (TN122).

215 & 225 SERIES

U-bar horizontal clamps provide greater rigidity and overall performance. The 215 Series includes a 1/4-20 bonded neoprene-tipped spindle assembly (TN134) and washers (TN123). The 225 Series includes a 5/16-18 bonded neoprene spindle assembly (TN135) and flanged washers (TN125).

305 SERIES

Feature a handle that can be operated from either side or from behind. U-bar model includes bonded neoprene-tipped spindle (TN140) and flanged washers (TN121).

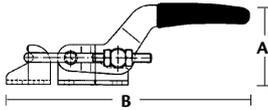


Model No.	Mfg. No.	Holding Cap. lbs.	Dimensions"				L"	Base		Wt. lbs.	Price /Each
			A	B	C	D		x	W"		
TN062	205-U	60	3/4	2 21/32	3/8	5/16	15/16	x	15/16	0.06	19.00
TN063	205-S	60	3/4	2 3/4	-	3/8	15/16	x	15/16	0.06	19.00
TN068	215-U	200	1 1/2	5 7/16	1 1/4	1	1 7/16	x	1 3/8	0.32	26.00
TN069	225-U	500	1 7/8	6 19/32	1 11/32	1 3/8	1 1/2	x	1 3/8	0.55	29.50
TN070	305-U	150	1 3/8	2 1/4	1/2	1/2	1 1/32	x	1	0.13	24.50



LATCH CLAMPS

Commonly used to hold lids, molds, dies and jigs together. Completely adjustable hook grabs latch installed on material or jig to be pulled together, and holds both sides together. Clamps can be bolted or welded into place. Ideal for high vibration applications. Pull bar is threaded for easy adjustment.



300 SERIES

The over-center toggle locking action of these clamps suits them ideally for holding against heavy forces such as those generated in plastic molding operations, clamping of doors, lids and access covers. Each clamp includes latch plate.



LATCH CLAMPS

Model No.	Mfg. No.	Holding Cap. lbs.	Dimensions"			Thread Adjustment"	Base L" x W"	Drawing Cap."	Wt. lbs.	Price /Each
TN073	323	360	15/32	3 27/32	1/2	25/32	5/8 x 1 7/64	1 3/16	0.15	27.50
TN074	324	500	15/32	3 27/32	-	25/32	5/8 x 1 7/64	1 1/2	0.25	42.50
TN076	331	700	15/8	5 5/8	-	1	3/4 x 1 39/64	1 1/4	0.56	36.50
TN077	341	2000	2 3/4	8 1/4	-	1 1/2	2 3/8 x 2 33/64	2 1/2	1.43	58.00
TN081	375	4000	4	10 3/8	-	1/2	3 3/8 x 3 1/8	3 1/2	2.75	129.00

PLIER CLAMPS

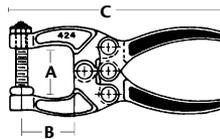
Model No.	Mfg. No.	Holding Cap. lbs.	Clamping Thickness" (A)	Throat Depth" (B)	Overall Length" (C)	Spindle Thread"	Wt. lbs.	Price /Each
TN097	424	200	1	1 1/8	4 1/2	1/4 x 20	0.31	39.50
TN102	462	700	1 3/4	2 3/4	8 1/2	3/8 x 16	1.13	78.00

STRAIGHT LINE CLAMPS

Model No.	Mfg. No.	Holding Cap. lbs.	Dimensions"			Base L" x W"	Plunger Travel"	Wt. lbs.	Price /Each
TN103	601	100	1 1/4	2 27/32	1/2	1 5/16 x 1 1/6	5/8	0.09	25.50
TN104	602	200	3 3/32	2 7/16	-	-	33/4	0.25	35.50
TN105	603	600	3 1/2	4 1/2	31/32	2 x 1 7/8	1 1/4	0.83	47.50
TN106	604	300	4 1/16	4 15/16	-	-	1 1/2	0.44	40.00
TN107	609	300	3 3/8	4 7/16	31/32	3 9/16 x 2 3/16	1 1/4	0.88	44.50

PLIER HOLD-DOWN CLAMPS

Quick action pliers offer excellent workholding capacity, they are portable to many applications and highly versatile. Only normal hand pressure is required to close and lock clamps in place. Clamp thickness may be adjusted by turning the threaded spindle. Once set, the clamp can be used repeatedly at that opening. Standard style clamps open by pulling handles apart. Trigger release style pull the two-way release (up and down) for easy one-handed release.



424 SERIES

Has a single 1/4-20 adjustable neoprene-tipped spindle assembly. Clamp opens by manually pulling handles apart.



462 SERIES

Two trigger release clamp includes 3/8-16 steel swivel foot adjustment spindle assembly.

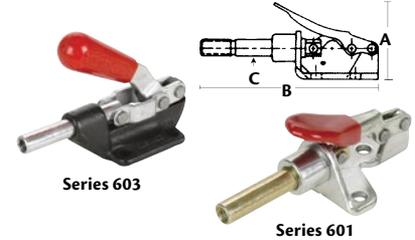


STRAIGHT LINE CLAMPS

Popular in assembly operations or used in conjunction with welding jigs. Straight line clamps provide quick, strong holding force. Most clamps lock in two positions allowing them to be used as a push or pull clamp.

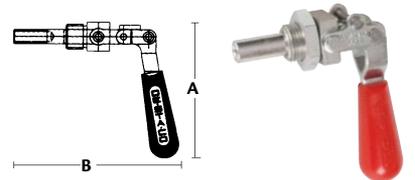
601, 603 & 609 SERIES

These models can be bolted or welded to a flat surface. Plungers extend out to clamp material against a fence or square surface. Model TN103 includes a 8-32 nylon spindle assembly (TN126). Model TN105 plunger is tapped for 5/16-18 adjustment spindle (not provided). Model TN107 plunger is tapped for 5/16-18 neoprene tip or other custom fixture.



602 & 604 SERIES

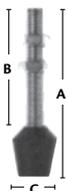
Fully retractable locators mount directly through a member by a jam nut on the work side or flush by drilling and tapping the member, a flat surface is not required. Locks in extended or retracted position. When flush-mounted, plunger completely retracts from work area.



REPLACEMENT SPINDLES & ACCESSORIES

FLAT-TIP BONDED NEOPRENE CAPS

Adjustable spindles provide a cushion between clamps and clamped item. Neoprene tip resists oils and chemicals and has a durometer of 60-70 and an operating temperature of -40°F to 220°F. Each spindle includes two adjusting nuts.



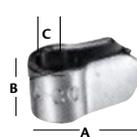
FLANGED WASHERS

Carbon steel replacements for U-bar clamps only.



BOLT RETAINERS

Carbon steel replacements for S solid hold-down bars.



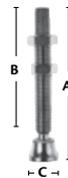
NEOPRENE CAPS

Slip-on heads of hex nut spindles, durometer 60-70 and operates between -40°F and 220°F.



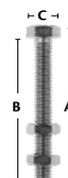
SWIVEL FOOT ADJUSTING SPINDLES

Used primarily for model TN102 plier clamp, but may be used with any clamp with the proper thread size. Steel swivel shoe provides a firm clamp and is suitable for more heavy-duty applications. Includes two adjusting nuts.



HEX HEAD ADJUSTING SPINDLES

Carbon steel fully threaded adjusting spindles are used in applications where a neoprene or swivel type spindle is not necessary. A neoprene cap foot is available for all sizes. Two adjusting nuts included.



Model No.	Mfg. No.	Dimensions			Thread"	Price /Each
FLAT-TIP BONDED NEOPRENE CAPS						
TN134	202208	1 5/8	1 1/8	5/8	1/4-20	4.80
TN135	225208	2 3/16	1 9/16	3/4	5/16-18	5.65
TN136	235208	5 1/2	4 3/4	7/8	3/8-16	10.00
TN137	424208	1 1/2	1 1/8	5/8	1/4-20	4.60
TN138	507208	3	2 1/4	3/4	5/16-18	5.80
TN139	527208	3 1/2	2 1/2	7/8	3/8-16	8.45
STEEL SWIVEL FOOT SPINDLE						
TN133	468206	3	2	5/8	3/8-16	11.50
HEX-HEAD FULL THREAD						
TN129	441203	1 15/16	1 3/4	1/2	5/16-18	4.40
TN127	207203	2 3/4	2 1/2	1/2	5/16-18	3.40
TN131	491203	1 1/2	1 1/4	9/16	3/8-16	4.70
TN128	210203	3	2 3/4	9/16	3/8-16	3.60

Model No.	Mfg. No.	Dimensions			Thread"	Price /Each
FLANGED WASHERS (PER PAIR)						
TN122	105106	11/64	7/16	5/16	Fits Spindle #8	0.75
TN123	215105	17/64	11/16	29/64	1/4	0.90
TN125	507107	21/64	7/8	5/8	5/16	1.05
TN124	235106	13/32	1	23/32	3/8	1.30
BOLT RETAINERS						
TN141	207105	1 1/4	5/8	21/64	Fits Spindle 5/16"	8.85
TN142	210114	1 1/2	3/4	17/32	3/8	8.05
NEOPRENE CAPS						
TN118	215119	7/16	-	5/8	Fits Spindle 1/4"	1.50
TN119	225119	1/2	-	5/8	5/16	1.60
TN120	235119	17/32	-	3/4	3/8	1.85

VICES, MAGNETS & CLAMPS

OFF-SET BENCH VISES

- Heavy-duty industrial grade vise
- V notched hardened jaws for vertical gripping
- Ideal for tall work pieces
- Hardened anvil striking surface used for forming & shaping
- Safety locking plate in base prevents the vise from slippage
- Mount Type: Fixed



aurora tools®

Model No.	Jaw Width"	Max. Opening"	Throat Depth"	Price /Each
TYL103	6	6 1/2	4	202.00

UTILITY WORKSHOP VISES

- 80 000 PSI Industrial grade ductile iron
- Built in pipe jaws hold round objects
- Hardened anvil striking surface used for forming & shaping
- Safety locking plate in base prevents the vise from slippage
- Mount Type: Swivel



aurora tools®

Model No.	Jaw Width"	Jaw Opening"	Throat Depth"	Price /Each
TYL097	6	6 1/2	3 4/10	191.00

MULTI-PURPOSE BENCH VISES

- Heavy-duty casting for demanding applications
- Rotating head for gripping at any angle
- Permanent pipe jaws holds round objects
- Hardened anvil striking surface used for forming & shaping
- Safety locking plate in base prevents the vise from slippage
- Mount Type: Swivel



aurora tools®

Model No.	Jaw Width"	Jaw Opening"	Throat Depth"	Price /Each
TYL102	5	5 1/2	3 1/10	272.00

HEAVY-DUTY FIXED BASE BENCH VISES

- 80 000 PSI Industrial grade ductile iron
- Built in pipe jaws hold round objects
- Hardened anvil striking surface used for forming & shaping
- Safety locking plate in base prevents the vise from slippage
- Mount Type: Fixed



aurora tools®

Model No.	Jaw Width"	Jaw Opening"	Throat Depth"	Price /Each
TYL093	4	4 1/2	2 7/10	163.00
TYL094	5	5 1/2	3 3/10	247.00
TYL095	6	6 1/2	3 1/2	341.00
TYL096	8	8 1/2	4	415.00

HEAVY-DUTY INDUSTRIAL BENCH VISES

- 90 000 PSI drop forged alloy steel construction for top performance
- Perfect parallel jaw design for secure clamping
- Forged pipe jaws hold up to 2 1/2" pipe (TNB035)
- Precision ground and induction hardened jaws and anvil for dependable and long life of vise
- Long length alloy steel spindle handle for fast and high force clamping
- 360° rotation swivel base for versatile positioning of parts



Model No.	Mfg. No.	Jaw Width"	Jaw Opening"	Throat Depth"	Pipe Jaw Capacity"	Price /Each
TNB033	BV-DF4SB	4	4 1/2	2 3/8	1/4 - 3	509.00
TNB034	BV-DF5SB	5	6 1/2	3	1/4 - 4	559.00
TNB035	BV-DF6SB	6	7	4	1/4 - 5	729.00

HEAVY-DUTY SWIVEL BASE BENCH VISES

- 80 000 PSI Industrial grade ductile iron
- Built in pipe jaws hold round objects
- Hardened anvil striking surface used for forming & shaping
- Safety locking plate in base prevents the vise from slippage



aurora tools®

Model No.	Jaw Width"	Jaw Opening"	Throat Depth"	Price /Each
TYL098	4	4 1/2	2 1/2	125.00
TYL099	5	5 1/2	3	172.00
TYL100	6	6 1/2	3 4/10	212.00
TYL101	8	8 3/10	3 8/10	326.00

VICES, MAGNETS & CLAMPS



COMBINATION PIPE & BENCH VISES

- Perfect to handle any work holding jobs
- Tool steel serrated top jaws and pipe jaws
- Suitable for plant maintenance, oil field service, heavy construction



Model No.	Mfg. No.	Jaw Width"	Jaw Opening"	Throat Depth"	Pipe Jaw Capacity"	Price /Each
TM838	C-0	3 1/2	5	4 1/2	1/8 - 2 1/2	1889.00
TM839	C-1	4 1/2	6	4 3/4	1/8 - 3 1/2	2609.00
TM840	C-2	5	7	5 5/16	1/8 - 4 1/2	3529.00
TM841	C-3	6	9	6 5/8	1/4 - 6	5179.00

MECHANIC'S VISES

- Meets all Government specifications
- Replaceable hardened steel serrated jaw inserts and replaceable pipe jaws provide sure grip
- Enclosed, unbreakable box frame, steel channel
- Large anvil
- Swivel base rotated 360° and has double lockdowns ensuring maximum stability
- Straight line design - positions spindle and nut horizontally, reducing thread wear and increasing clamping power
- 30 000 PSI castings for long life and added strength
- Ideal for professional mechanics



Model No.	Mfg. No.	Jaw Width"	Jaw Opening"	Throat Depth"	Pipe Jaw Capacity"	Price /Each
TD669	744	4	4 1/2	3 7/16	1/4 - 2	379.00
TD670	745	5	5 1/4	3 3/4	1/4 - 2 1/2	529.00
TD671	746	6	5 3/4	4 1/8	1/4 - 3 1/2	689.00

TRADESMAN VISES

- Meets all Government specifications
- Replaceable top and pipe jaws
- Provides greater clamping surface
- Large anvil
- Fully enclosed spindle
- Straight line design
- Mounting template and parts list included with every vise
- Precision thrust bearing creates greater clamping pressure and increased longevity
- 60 000 PSI ductile iron
- Top jaws are reversible - either standard serrated jaws for extra grip on sturdier materials or smooth jaws for more delicate pieces
- 360° swivel base



Model No.	Mfg. No.	Jaw Width"	Jaw Opening"	Throat Depth"	Pipe Jaw Capacity"	Price /Each
TD665	1755	5 1/2	5	3 3/4	1/4 - 3	1479.00
TD667	1780A	8	7	4 3/4	1/8 - 3 1/2	1849.00

HIGH VIS SAFETY VISE

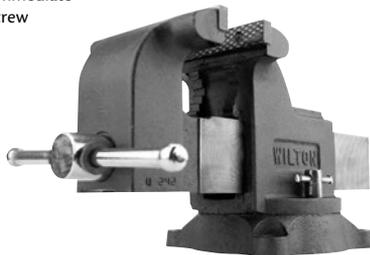
- Wilton's safety vises are coated in high visibility yellow
- Safety colour conforms to OSHA standard for physical hazards regulation #1910.144
- Powder durable coat finish
- Corrosion resistant black oxide coated handles and lockdowns
- 30000 PSI castings
- Meets all Government specifications



Model No.	Mfg. No.	Jaw Width"	Throat Depth"	Price /Each
TD673	63187	5	3-3/4	499.00
TD674	63188	6	4-1/8	709.00

SHOP VISES

- General duty use
- Instant-Action™ vise design ensures immediate engagement of the nut and spindle screw
- Vise rotates 360°
- Rubber pinch point safety guards
- 25 000 PSI castings for long life



Model No.	Mfg. No.	Jaw Width"	Jaw Opening"	Throat Depth"	Price /Each
VE839	WS4	4	4	2 3/4	248.00
VE840	WS5	5	5	3	299.00

ALL WEATHER VISE

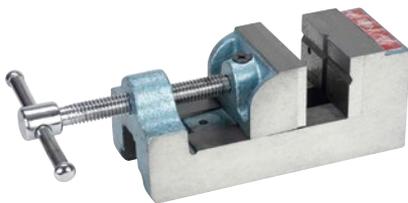
- Rust inhibiting finish
- Heavy zinc plating treated vise jaws, pipe jaws, spindle assembly and lock nuts
- Perfect for permanent outdoor use
- Mounting on utility or maintenance trucks
- Suitable for construction sites, pipeline projects, oil field service
- Jaw Width: 3-1/2"
- Jaw Opening: 3-1/2"
- Throat Depth: 4-1/2"



Model No.	Mfg. No.	Jaw Width"	Jaw Opening"	Throat Depth"	Price /Each
TM836	10400	3-1/2	3-1/2	4-1/2	1979.00

DRILL PRESS VISE

- Precision ground sides and front side face, permits additional mounting positions for drilling, tapping or reaming
- The body and sides are also ground perfectly parallel and square to further ensure complete jaw alignment
- Combining a smooth moveable jaw plate with a cross-patterned 90° V-groove stationary jaw, the vise is recommended for general use



Model No.	Mfg. No.	Jaw Width"	Jaw Opening"	Jaw Depth"	Overall Height"	Price /Each
TM798	25	2 1/2	2 1/2	1 1/2	3 2/3	128.00

VERTI-LOCK® MACHINE VISES

- Jaw widths from 5" up to 8"
- Needle thrust bearing
- Flat bed parallel to 0.0001 per inch
- Ductile steel alloy body parts

SWIVEL BASE

- 360° rotation via two 360° scales
- Calibrated in 1° increments for easy use

WORKSTOP

- Quick, accurate positioning
- Ideal for highly repetitive operations



Model No.	Mfg. No.	Jaw Width"	Jaw Opening"	Type of Base	Price /Each
MACHINE VISES					
TE166	1250N	5	4 1/2	Stationary	1139.00
TE167	1275N	6	7 1/2	Stationary	1339.00
TE168	1280N	8	7 1/2	Stationary	2609.00
SWIVEL BASES					
TE170	5S	5	-	Swivel	292.00
TE171	6S	6	-	Swivel	329.00
TE172	8S	8	-	Swivel	619.00

SUPER PRECISION 2 WAY ANGULAR MACHINE VISES

- Perfect vise for grinding, jig boring and shaping jobs
- Jaw plates hardened and ground
- 90° vertical and 180° horizontal indexing
- 360° swivel base and 90° tilting range



Model No.	Mfg. No.	Jaw Width"	Jaw Opening"	Jaw Depth"	Price /Each
TJW135	AMV/SP-50	2	2	1 5/16	459.00
TJW136	AMV/SP-75	3	3	1 5/16	749.00
TJW137	AMV/SP-100	4	4	1 9/16	929.00
TJW138	AMV/SP-125	5	5	2	1329.00
TJW139	AMV/SP-150	6	6	2	1669.00

VERSATILE DRILL PRESS VISES

Rugged design and large workload capacity make these vises perfect for the most difficult drilling, tapping or reaming operations.

MODELS VE855, TE622 & E586

- Made of graded cast iron and offers a ground vise bed for a smooth, consistent jaw movement and hardened top U-groove jaws

MODELS VE858 & VE859

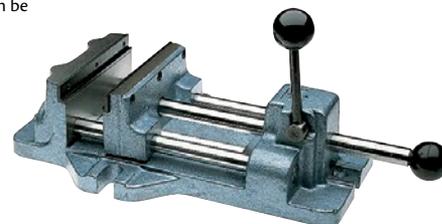
- Made of graded cast iron and features precision 90° machining of the vise's sidebodies, which allows them to be used as bases
- Rapid action nut allows for fast loading and unloading of production material and extra tightening capabilities
- Main castings provide extra strength and increased durability



Model No.	Mfg. No.	Jaw Width"	Jaw Opening"	Jaw Depth"	Price /Each
CONTINUOUS NUT					
VE855	1335	3	2 3/4	1 7/8	165.00
TE622	1345	4	4	2 1/8	241.00
VE856	1360	5	5	2 1/8	319.00
RAPID ACTING NUT					
VE858	1445	4 1/2	4 3/4	1 7/8	369.00
VE859	1460	6	6 3/4	2 1/8	509.00

CAM ACTION DRILL PRESS VISES

- Holding pressure is adjustable from 400 to 1100 lbs.
- Recessed parallel steel jaw inserts level work, and can be removed to accommodate your jig and fixture components
- The base is designed for clear through drilling applications
- For added durability, bars and locking mechanisms are hardened and ground
- The unique top locking lever can be raised or lowered to tighten or loosen against the workpiece



Model No.	Mfg. No.	Jaw Width"	Jaw Opening"	Jaw Depth"	Overall Height"	Price /Each
TE162	1204	4	4 11/16	1 5/16	3 1/4	309.00
TE163	1206	6	6 3/16	1 13/16	3 3/4	539.00
TE164	1208	8	8 3/16	2	4 7/16	669.00

SUPER PRECISION 3 WAY TILTING MACHINE VISES

- Perfect vise for 3 axis jobs in milling, drilling, grinding, shaping and jig boring
- Jaw plates hardened and ground
- Accurately indexed for 3 way angular work
- 90° vertical indexing
- 360° swivel base and 45° tilting range on either side



Model No.	Mfg. No.	Jaw Width"	Jaw Opening"	Jaw Depth"	Price /Each
TJW130	TLT/SP-50	2	2	5/16	639.00
TJW131	TLT/SP-75	3	3	1 5/16	1129.00
TJW132	TLT/SP-100	4	4	1 9/16	1429.00



WISE COMBINATIONS

PANAWISE®

PV JR

- More like a tool than a vise, the grooved jaws open to 2 7/8" (73 mm) and are made from fibre reinforced thermal composite alloy
- Jaws are controlled with a fine/coarse adjusting knob, which permits very delicate work
- Head movement is through three planes (360° rotation, 360° swivel and 210° pivot) and is controlled with a single knob
- Base is made of die cast zinc, with a 4 5/16" (109.5 mm) bolt circle countersunk for 1/4" (6.3 mm) flathead bolts (not included)
- 6 3/4" tall (171.4 mm) and weighs 1 1/4 lbs. (0.6 kg)

Model No. TGZ417 Mfg. No. 201
Price/Each \$99.32



STANDARD

- All-purpose work holding unit, perfect for both industrial and home hobbyist applications
- A single knob controls the "tilt, turn and rotate" function of the patented split ball, which allows the head to move easily and conveniently through three planes (360° rotation, 360° swivel and 90° pivot)
- Jaws are 2 1/2" (63.5 mm) wide and open to 2 1/4" (57.1 mm), and the base features a 4 5/16" (109.5 mm) bolt circle
- The combination stands 6 3/4" (171.4 mm) tall, weighs 2 lbs. 11 oz. (1.2 kg)

Model No. WJ595 Mfg. No. 301
Price/Each \$183.00



VACUUM BASE

- A half turn of the mount lever attaches or releases the powerful suction pad and allows rapid set-ups in a variety of locations (for use on smooth, non-porous surfaces only)
- This combination stands 6 1/8" (155.6 mm) tall and weighs 2 lbs. 13 oz. (1.3 kg)

Model No. WJ596 Mfg. No. 301
Price/Each \$247.00



WIDE-OPEN HEAD

- This vise provides a wide gripping head with the full "tilt, turn and rotate" capabilities of the split ball (found in every 300 and 400 series base)
- Unit stands 7 5/16" (185.7 mm) tall and weighs 3 lbs. (1.4kg)

Model No. WJ597 Mfg. No. 396
Price/Each \$232.00



MULTI-PURPOSE WORK CENTRE

- This is a most versatile combination, perfect for home or hobby needs
- This unit stands 7 7/8" (200 mm) tall and weighs 5 lbs. (2.3 kg)

Model No. WJ598 Mfg. No. 350
Price/Each \$339.00



PALMGREN® DUAL FORCE PRECISION MACHINE VISES

- High quality precision vise
- Wide clamping capacities
- Equipped with dual force anti-lift mechanism
- Vise nut does not extend past the vise body
- Hardened jaw plates and vise bed
- Bed heights matched to +/- 0.0004"
- 80 000 PSI stress relieved ductile iron castings
- Lifetime guarantee
- Jaw Plate: Smooth
- Overall Length: 18-15/16"
- Jaw Deflection: 0.001" @ 4000 lbs.
- Base Type: Slotted



Model No.	Jaw Width"	Jaw Opening"	Throat Depth"	Price /Each
TY0551	5-15/16	8-63/64	1-3/4	1019.00
TY0552	8-7/64	10-7/16	2-13/64	1989.00

PALMGREN® DUAL FORCE PRECISION DOUBLE STATION MACHINE VISES

- Dual force anti-lift mechanism at both ends of the vise
- 80 000 PSI ductile iron casting
- Can be mounted horizontally or vertically
- One handle operates the two moveable jaws
- Can clamp two of the same size parts
- Clamping force equalization
- Precision ground on all sides
- Height tolerance is within 0.001"
- Different work piece clamping applications
- Lifetime guarantee
- Jaw Plate: Smooth
- Overall Length: 21-7/64"
- Base Type: Slotted



Model No.	Jaw Width"	Jaw Opening"	Throat Depth"	Price /Each
TY0553	5-63/64	12-7/16	1-3/4	3059.00

PALMGREN® TRADITIONAL DRILL PRESS VISES

- Vise is ideal for use for drilling, tapping, reaming, spot-facing, counter boring and countersinking operations
- Made from 30 000 PSI tensile strength, fine grain cast iron
- Base and bed parallel to 0.001"
- Centre of base is open for holding work through the body of the vise
- Can be mounted on base, sides or on end for general use
- Lifetime guarantee
- Jaw Plate: Grooved
- Overall Length: 5-1/8"
- Overall Height: 1-13/16"
- Jaw Deflection: 0.002" @ 2000 lbs.
- Base Type: Universal



Model No.	Jaw Width"	Jaw Opening"	Throat Depth"	Price /Each
TY0554	1-1/2	1-1/2	1	149.00
TY0555	4	4	1-3/4	445.00
TY0556	6	6	2	752.00

PALMGREN® DUAL FORCE SWIVEL VISE BASES

- Allows position to 1 degree increments
- Comes with 11/16" keyways to align the vise to the machine table
- Base Type: Slotted



Model No.	Overall Length"	Overall Height"	Price /Each
TY0557	11	2-1/2	199.00
TY0558	13	2-1/2	349.00

WISE ACCESSORIES

IMPROVE CLAMPING VERSATILITY & SAFETY



WILTON MAGNEFIX VISE JAW CAPS TEMPORARY WORK-HOLDING SYSTEMS

- Designed to protect both the vise jaws and the workpiece from marring and distortion during any clamping application
- Caps are constructed from a hardened aluminum alloy with two built-in circular permanent magnets on the backside which hold the product securely to the vise
- The caps are magnetic towards the vise side to prevent steel filings from attaching themselves to the jaws and keep the clamped part from becoming magnetized

MODEL A - ALUMINUM MAGNEFIX JAW CAPS

- Aluminum alloy design includes six grooves to compensate for the unevenness of the workpiece
- Deeper Vee-Groove ensures more secure clamping of circular work pieces
- Use together with Rubber Magnefix Jaw Caps when clamping taper pins and spherical parts

MODEL F - FIBER FACE MAGNEFIX JAW CAPS

- Aluminum alloy with laminated fiber cover to prevent the absorption of outside materials
- Heat parts rapidly by concentrating heat into part
- Use on workpieces to avoid distortion and clamping marks

MODEL R - RUBBER FACE MAGNEFIX JAW CAPS

- Aluminum alloy with synthetic rubber cover
- Jaw cap conforms to workpiece and grips firmly without slipping while protecting work surface
- Use in combination with aluminum and prism jaw caps to clamp taper pins or tapered workpieces

MODEL P - PRISM MAGNEFIX JAW CAPS

- Jaw construction includes a 120° horizontal Vee-Groove, three vertical Vee-Grooves and a 90° groove for marking out and centre punching
- Ideal for light tapping and thread cutting applications



Model No.	Mfg. No.	Jaw Width"	Price /Each	Model No.	Mfg. No.	Jaw Width"	Price /Each
STANDARD ALUMINUM MAGNEFIX JAW CAPS							
TM832	A-4	4	62.60	TJW079	A-5.5	5 1/2	70.00
TM833	A-4.5	4 1/2	65.10	TM835	A-6	6	73.70
TM834	A-5	5	67.50	TJW081	A-6.5	6 1/2	76.10
FIBER FACE MAGNEFIX JAW CAPS							
TM844	F-4	4	65.10	TM846	F-5	5	70.00
TM845	F-4.5	4 1/2	67.50	TM847	F-6	6	73.70
RUBBER FACE MAGNEFIX JAW CAPS							
TM856	R-4	4	62.60	TJW092	R-5.5	5 1/2	70.00
TM857	R-4.5	4 1/2	65.10	TM859	R-6	6	73.70
TM858	R-5	5	67.50	TJW094	R-6.5	6 1/2	76.10
PRISM MAGNEFIX JAW CAPS							
TM851	P-4	4	67.50	TJW100	P-5.5	5 1/2	76.10
TM850	P-4.5	4 1/2	70.00	TM853	P-6	6	78.60
TM852	P-5	5	73.70	TJW102	P-6.5	6 1/2	81.00

TELESCOPIC MAGNETIC RETRIEVERS

- Ideal for reaching behind, underneath or around machinery and/or difficult to reach areas
- Rare earth magnet material
- Max. temperature of 180° F (82° C)



Model No.	Mfg. No.	Strength lbs.	Diameter"	Length"	Extended Length"	Weight lbs.	Price /Each
TYO508	927	7.5	1/2	17	26 1/2	0.36	29.20
TYO509	931	12	1/2	13	26	0.44	46.20
TYO510	240N	2	5/16	5 1/2	25 1/2	0.07	9.49
TYO511	926	14	5/8	23 1/2	50	0.42	61.90
TYO512	925	7	5/8	8	35	0.19	42.10
TYO513	923	5	3/8	6 1/2	32	0.14	28.60
TYO514	924	7	5/8	6 1/2	32	0.18	38.60
TYO515	990SM	20	1 1/8	16 1/2	29	0.65	95.60

MAGNETS



MAGNETIC PARTS RETRIEVERS

Remove steel parts from bins, boxes, kegs, tables or floors.

- Durable aluminum housing with comfortable non-slip handle
- Powerful, lightweight permanent magnet
- Easy release of collected parts or scrap



MAG-MATE

SHORT HANDLED VERSION

Model No.	Holding Capacity lbs.	L"	W"	H"	Price /Each
TGY633	7	4 1/2	2 3/8	7 1/2	199.00
TGY635	11	4 1/2	2 3/8	7 1/2	249.00

MAGNETIC TRIGGER LIFTS

Hand held lift provides a strong grip on parts with an easy to use trigger release.

- Lightweight aluminum housing
- One hand operation
- Move sheets and parts fast, safely and easily
- Retrieve hot parts from burn tables



MAG-MATE

BURN TABLE/PARTS HANDLING

Model No.	Holding Capacity lbs.	L"	W"	H"	Price /Each
TGY637	55	3 3/8	2 3/8	4 13/16	269.00

HOSE CORD HOOK/HOLDER MAGNET

- Sturdy stainless steel holder
- Plated permanent ceramic cup magnet
- Secure hoses, cables, cords and more to any flat surface
- Holds up to 45 lbs.
- Width: 73 mm
- Length: 111 mm

Model No. TYX074
Mfg. No. MX2750HC1
Price/Each \$32.20



POWER GRIPS

- Holds against shear force
- Securely grips heavy parts
- Aluminum insulated
- Epoxy encapsulated magnet



MAG-MATE

Model No.	Length"	Height"	Width"	Holding Value lbs.	Price /Each
LS717	2 1/8	2	3/4	25	69.90
LS718	4	2 1/4	3/4	51.5	84.60
LS719	5 1/4	2 3/4	1 7/8	92.5	94.10

MAGNETIC PRINT HOLDERS

- Ideal for holding papers, prints and charts against steel partitions, machinery and metal desks
- Magnetic strength holds through many layers of paper
- Does not mark or tear paper



MAG-MATE

Model No.	Pull lbs.	Dia."	Height"	Price /Each
TGY600	7	1 13/64	11/16	7.19
TGY601	12	1 13/32	9/32	8.29
TGY602	19	2 1/32	5/16	10.70

MAGNETIC STRIPS

- Conforms to any contour
- Holds many times its weight
- Can be cut, drilled or shaped
- Available with or without adhesive backing



Thick"	Width"	Length'	Max. Pull per Lin. Ft. (lbs.)	Model No. w/o Adhesive	Price /Roll	Model No. w/Adhesive	Price /Roll
1/32	1/2	200	2	TGY640	73.60	TGY648	129.00
1/32	3/4	200	3	TGY641	119.00	TGY649	179.00
1/32	1	100	4	TGY642	67.70	TGY650	119.00
1/32	1	200	4	TGY643	119.00	TGY651	209.00
1/16	1/2	100	3	TGY644	62.60	TGY652	109.00
1/16	3/4	100	5	TGY645	82.80	TGY653	129.00
1/16	1	50	6	TGY646	60.90	TGY654	90.30
1/16	1	100	6	TGY647	119.00	TGY655	169.00

ON/OFF MAGNETIC HANGING HOOKS

- Hanging hooks are perfect for temporary holding of lines, hoses, lights, tools and more
- Powerful rare earth magnet
- Locking On/Off handle
- Attaches to flat or round surface with ease



MAG-MATE

Model No.	Strength lbs.	Diameter"	Length"	Height"	Weight lbs.	Price /Each
TY0548	35	1 3/4	5 3/4	2 3/4	0.95	139.00
TY0549	110	2 1/2	7 5/8	4 5/8	4.65	429.00

MAG-MAID MAGNETIC CLEAN-UP TOOLS

- Picks up steel chips, fasteners and scrap from swarf
- To clean, simply pull the plunger handle to the top of the tube and the collected metal falls off
- Powerful rare earth magnet



MAG-MATE

Model No.	Length"	Diameter"	Wt. lbs.	Price /Each
TGY638	15	1	1.25	139.00
TGY639	36	1	2.75	219.00

LONG REACH MAGNETIC RETRIEVERS

- Powerful pickup tools
- Durable handle with grip
- Model TGY621 has a 45° angled head



MAG-MATE

Model No.	Handle Length"	Head Dimensions	Holding Capacity lbs.	Price /Each
TGY621	38	3 1/4" Dia.	47.5	51.60
TGY622	39.72	6" x 1 3/8"	28	129.00

MAGNETIC TOOL HOLDERS

- Mount to walls, work benches, ladders, etc.
- 3/16" mounting holes and screws provided
- TLY308 and TLY309: holes on 16" centres
- Holds a 10-lb. hammer!



MAG-MATE

Model No.	Thickness"	H"	L"	Pull lbs.	Wt. lbs.	Price /Each
TLY307	1 1/8	2	12	120	2.0	56.40
TLY308	1 1/8	2	18	180	3.0	65.20
TLY309	1 1/8	2	24	240	4.0	75.00

MAX-ATTACH™ RARE EARTH MAGNETS

- Utilizes Polymagnet® multi-pole magnetizing technology to produce superior attachment force
- Stronger than conventional magnets



Model No.	Strength lbs.	Diameter"	Height"	Weight lbs.	Price/Each
DISC					
TY0517	7.7	0.125	0.5	0.007	3.09
TY0518	9.3	0.187	0.5	0.037	3.49
TY0519	8.8	0.125	0.5	0.007	3.09
TY0520	10.5	0.187	0.5	0.037	3.59
TY0521	15.3	0.062	0.75	0.007	3.39
TY0522	18	0.125	0.75	0.015	5.29
TY0523	16.5	0.062	1	0.013	5.49
TY0524	37.3	0.125	1	0.027	7.99
TY0525	38.4	0.187	1	0.040	11.30
TY0526	77	0.125	1.5	0.060	17.50
RING					
TY0528	16	0.125	0.75	0.011	6.99
TY0527	16.3	0.125	0.75	0.014	5.09
TY0529	33.2	0.125	1	0.026	8.59
TY0530	67.3	0.125	1.5	0.059	18.90
TY0531	119	0.187	2	0.128	48.00

Model No.	Strength lbs.	Diameter"	Height"	Width"	Weight lbs.	Price/Each
SQUARE						
TY0533	13.1	0.125"	0.5	0.5	0.008	3.49
TY0532	39.8	0.125"	1	1	0.034	11.30
TY0537	86.4	0.125"	1.5"	1.5	0.076	22.50
RECTANGULAR						
TY0534	17.1	0.125	1	0.5	0.017	5.49
TY0535	62.1	0.187	1.5	1	0.076	25.40
TY0536	64.8	0.187	1.5	1	0.076	26.00

LOW PROFILE CUP MAGNETS

Cup magnets are ideal for hanging signs, lights, etc. or retrieving steel items from tanks, vats and bins.



Model No.	Holding Capacity lbs.	Diameter"	Cup Height"	Magnet I.D."	Hole I.D."	Wt. lbs.	Price /Each
PLATED CUP							
TYG603	7	1 1/4	3/16	1/4	5/32	0.10	3.59
TYG605	10	1 13/32	9/32	3/8	3/16	0.38	4.09
TYG606	13	2 1/32	5/16	7/8	3/16	0.42	6.19
TYG609	41	2 5/8	3/8	1	9/32	0.58	8.49
TYG611	35	2 7/8	3/8	1	1/4	0.59	11.30
TYG612	48	3 3/16	7/16	1 7/32	9/32	0.60	12.20
TYG613	95	4 29/32	1/2	1 3/4	1/2	0.80	31.00

Model No.	Holding Capacity lbs.	Diameter"	Cup Height"	Total Height"	Thread Size	Wt. lbs.	Price /Each
PLATED CUP & BOLT							
TYG614	7	1 1/4	3/16	1 3/16	6 - 32	0.15	9.29
TYG615	13	2 1/32	5/16	1 13/16	10 - 24	0.56	13.10
TYG616	5	2 1/4	3/16	1 7/8	5/16" - 8	0.32	13.10
TYG617	41	2 5/8	3/8	1 15/16	3/8" - 16	0.60	29.50
TYG618	48	3 3/16	7/16	1 3/16	3/8" - 16	0.68	36.90

Model No.	Holding Capacity lbs.	Dia."	Cup Height"	Total Height"	Loop I.D."	Wt. lbs.	Price /Each
PLATED CUP & LOOP							
TYG619	41	2 5/8	3/8	1 15/16	1/2	0.60	29.50
TYG620	48	3 3/16	7/16	1 3/16	1/2	0.68	36.90

RECTANGULAR FIXTURE ASSEMBLIES

- A:** Ceramic magnet (TKZ965 is Rare Earth). 400 stainless steel channel. Use 1/4"-20 (m6) fasteners for mounting.
- B:** Nickel plated rare earth magnet. Bright plated steel channel. Use 1/4"-20 (m6) fasteners for mounting.
- C:** Ceramic magnet, 400 stainless steel channel & epoxy filled. Use 10-24 (m5) fasteners for mounting.



Model No.	Style	Pull lbs.	Thickness"	W"	L"	Ctrs"	Wt. lbs.	Price /Each
TYG707	A	12.5	3/8	1 3/8	3 1/4	2 5/8	0.10	44.60
TKZ965	A	43.5	3/8	1 3/8	3 1/4	2 5/8	0.20	85.30
TYG708	A	13.5	7/16	1 3/8	3 1/4	2 5/8	0.30	46.90
TYG709	A	15.5	9/16	1 3/8	3 1/4	2 5/8	0.30	49.90
TKZ966	B	14	3/16	9/16	1 3/4	1 1/2	0.10	7.49
TLY310	C	9	9/16	1	2 1/2	2	0.20	30.60
TLY311	C	21	9/16	1	4 1/2	4	0.40	51.20
TLY312	C	29	9/16	1	6 1/2	6	0.60	60.80
TLY313	C	60	9/16	1	12 1/2	12	1.30	99.30
TYG683	C	63	5/8	1 1/2	12	11	1.62	119.00
TYG685	C	150	5/8	2 1/2	12	11	2.74	139.00

CUP MAGNETS W/HOLDERS

- Secure cables, wires, brooms and more to any steel surface



Model No.	Strength lbs.	Width"	Length"	Clamp Opening"	Price/Each
TY0538	19	2.03	2-5/16	5/8-1-1/4	20.40
TY0539	11	1.41	1-17/32	3/4-1-1/8	14.20
TY0540	11	1.41	1-17/32	3/4-1-1/8	16.30
TY0541	19	2.03	2-3/16	1-1/2-1-7/8	18.40
TY0542	19	2.03	2.44	1.38	19.40
TY0543	41	2.63	1.13	0.87-1.25	22.50
TY0544	7	1.24	0.44	0.38-0.16	9.09
TY0545	7	0.75	0.75	0.44-1.00	9.09

RARE EARTH MAGNET MATERIAL

- Extremely powerful magnet is ideal for miniaturized applications
- Operates best at temperatures below 94°C
- High resistance to demagnetization
- Nickel plated finish



Model No.	Mfg. No.	Dia."	Length"	Holding Capacity lbs.	Price /Each
TYG656	NE1206NP35	0.120	0.060	0.2	0.57
TYG657	NE1806NP35	0.187	0.060	0.6	0.80
TYG658	NE2225NP35	0.220	0.250	1.5	1.71
TYG659	NE2250NP35	0.220	0.500	1.8	2.09
TYG660	NE2510NP35	0.250	0.100	1.0	1.31
TYG661	NE2512NP35	0.250	0.125	1.2	1.49
TYG662	NE2518NP35	0.250	0.187	1.5	1.71
TYG663	NE2525NP35	0.250	0.250	1.8	2.09
TYG664	NE2550NP35	0.250	0.500	2.1	3.49
TYG665	NE3706NP35	0.375	0.060	1.0	1.68
TYG666	NE3710NP35	0.375	0.100	2.0	1.99
TYG667	NE3712NP35	0.375	0.125	2.6	1.99
TYG668	NE3718NP35	0.375	0.187	4.5	4.49
TYG669	NE3720NP35	0.375	0.200	4.5	4.49
TYG670	NE3725NP35	0.375	0.250	4.6	3.19
TYG671	NE3737NP35	0.375	0.375	5.7	3.29
TYG672	NE3750NP35	0.375	0.500	6.7	3.99
TYG673	NE5006NP35	0.500	0.060	3.0	1.99
TYG674	NE5012NP35	0.500	0.125	4.0	2.09
TYG675	NE5018NP35	0.500	0.187	5.7	2.29
TYG676	NE5020NP35	0.500	0.200	6.0	2.49
TYG677	NE5025NP35	0.500	0.250	6.5	4.39
TYG678	NE5037NP35	0.500	0.375	8.9	3.39
TYG679	NE5050NP35	0.500	0.500	11.2	10.30



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	4217.00
NP839	26 x 36	50	6519.00
TG415	28 x 44	13	4535.00
NP840	28 x 44	50	6851.00
TG417	36 x 48	13	5379.00
NP842	36 x 48	50	7682.00

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	5811.00
NP828	26 x 36	50	8082.00
NP829	28 x 36	100	10450.00
TG421	36 x 48	50	6638.00
NP833	36 x 48	100	11090.00

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	-	400	2275.00
TG423	Heavy-Duty Dust Collector	100	-	600	4377.00
NP827	Heavy-Duty Dust Collector	230	-	1200	P.O.A.
TG422	Dust Bag	13	0.33	400	180.00
NP766	Dust Bag	30	1	600	310.00



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	\$557.00



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: 50' sandblasting hose and one tungsten carbide nozzle

TMA027 includes: 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 lbs.	Price/Each
TMA021	646101	Pneumatic Sandblaster Only	225	5134.00
TMA026	734400	Portable Pressure Blaster Kit #1 (Sandblaster Not Included)	275	940.00
TMA027	735000	Portable Pressure Blaster Kit #2	300	1913.00
TMA028	-	Portable Pressure Blaster Complete Kit	500	6616.00



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	40.60
BZ692	Ceramic Nozzle	5/16	Econo	44.70
NP769	Tungsten Carbide Nozzle	1/4	Econo	224.00

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	26.50
NP771	Ceramic Nozzle	5/16	Ecab, M	30.30
NP776	Ceramic Nozzle	3/8	Ecab, M	19.60
NP772	Ceramic Nozzle	7/16	Ecab, M	13.70
NP773	Tungsten Carbide Nozzle	1/4	Ecab, M	154.00
NP774	Boron Carbide Nozzle	1/4	Ecab, M	185.00
BZ694	Boron Carbide Nozzle	5/16	Ecab, M	193.00
NP775	Boron Carbide Nozzle	7/16	Ecab, M	115.00

ACCESSORIES FOR SUCTION CABINETS

BLAST GUNS & NOZZLES

Model No.	Description	Dimensions"	For cabinets	Price/Each
TG424	With Ceramic Nozzle	5/16	Econo	414.00
TG425	With Ceramic Nozzle	5/16	Ecab, M	366.00
NP823	With Boron Carbide Nozzle	5/16	Ecab, M	605.00
BZ715	Gun Body Only	-	Econo	325.00
BZ719	Gun Body Only	-	Ecab, M	175.00

ACCESSORIES FOR SUCTION & PRESSURE CABINETS

Model No.	Description	Dimensions	Price/Each
NP768	Cabinet gloves – Leather Sleeves	30" x 8"	262.00
BZ690	Cabinet gloves – Nylon Sleeves	30" x 8"	94.40
BZ720	Replacement Laminated Window	22" x 14"	121.00
BZ681	Replacement Plastic Shields	23 3/4" x 18 3/4"	9.90
BZ682	Replacement Plastic Shields	20 3/4" x 12 7/8"	6.35
BZ684	Plastic Pail White	23 Liters	38.40
NP806	Blast Hose	I.D. 1/2", O.D. 1 1/2"	91.00
NP807	Blast Hose	I.D. 3/4", O.D. 1 1/2"	194.00
BZ699	Blast Hose Kit includes NP806 and BZ700	-	163.00
BZ700	Quick Connect Stem Coupling for NP806	-	6.57
NP809	Quick Connect Stem Coupling for NP807	-	16.10



SANDBLAST MEDIA ABRASIVES

- All abrasives are sold in 50-lb. bags
- Other grades of abrasives also available
- Steel grit and steel bead also available



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	72.10
TG393	30-40	Coarse	72.10
TG394	40-60	Coarse	72.10
TG398	40-70	Med. Coarse	72.10
TG399	50-80	Medium	72.10
TG400	60-120	Med. Fine	72.10
TG401	80-120	Fine	59.90
TG402	100-170	Fine	72.10
TG403	120-270	Fine	72.10
BZ738	170-325	Fine	68.90

ALUMINUM OXIDE

Highly aggressive abrasive. Ideal for applications where tough contamination is encountered and surface removal of 0.0005" to 0.08" is acceptable. Resulting finish is ideal for painting, plating and coating. Grit sizes range from #16 (coarse) to #220 (fine).

Model No.	Grit	Application	Price/Each
TG404	16	Coarse	165.00
NP845	20	Coarse	165.00
BZ740	30	Coarse	165.00
BZ739	36	Coarse	165.00
TG406	46	Med. Coarse	165.00
BZ741	54	Med. Coarse	165.00
TG407	60	Med. Coarse	165.00
TG408	70	Medium	165.00
TG409	80	Medium	165.00
TG410	100	Med. Fine	165.00
NP847	120	Med. Fine	165.00
TG411	150	Med. Fine	165.00
TG412	180	Fine	165.00
TG413	220	Fine	200.00

JETMAG (SYNTHETIC OLIVINE PYROXENE SAND)

The only true substitute to sand (silica), JetMag offers excellent sanding quality and its 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	17.20
NP849	30-60	24 Mesh	17.20
NP850	35-70	40 Mesh	17.20

Ask us about volume prices!



In many cases you will benefit from quantity prices.

ZENITH SAFETY PRODUCTS FOR INDUSTRY



CURVED HANDLE SCRATCH BRUSHES



BZ606

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	12.00
BZ606	6	13 11/16	Steel	3 x 19	1 1/8	5.49
NP248*	6	13 11/16	Steel	3 x 19	1 1/8	7.29
BZ607**	6	13 11/16	Steel	4 x 19	1 1/8	6.89

*With scraper ** Heavy-duty

SCRATCH BRUSHES WITH SCRAPER

- Durable hardwood handles that have a smooth finish for extra comfort
- Hang-up hole for easy storage



NUS40



Model No.	Brush Width"	Brush Length"	O.A. Length"	Fill Material	Wire Rows	Trim Length"	Price /Each
STRAIGHT HANDLE							
TT171	1 1/2	5 1/2	11 3/8	Steel	5 x 13	1 1/8	13.24
CURVED HANDLE							
NUS40	15/16	5 3/4	13	Steel	3 x 19	1	7.29
NUS41	2	4	20	Steel	3 x 10	1	19.70
NUS42	2	4	20	Stainless Steel	3 x 10	1	27.10

CURVED-HANDLE SCRATCH BRUSHES

- Durable hardwood handles that have a smooth finish for extra comfort



TC065



Model No.	Brush Width"	Brush Length"	O.A. Length"	Fill Material	Wire Rows	Trim Length"	Price /Each
TC065	15/16	6	14	Steel	3 x 19	1 1/8	3.77
TC068	15/16	6	14	Stainless Steel	3 x 19	1 1/8	9.15
TT167	15/16	6	14	Brass	3 x 19	1 1/8	9.76
TC066	1 1/8	6	14	Steel	4 x 19	1 1/8	5.62
TT170	1 1/8	6	14	Stainless Steel	4 x 19	1 1/8	10.41
TT169	1 1/8	6	14	Brass	4 x 19	1 1/8	11.71

FLAT WIRE BUTCHER BLOCK BRUSHES

- Flat wire butcher block that offers a more aggressive scrub than round wire counterparts
- Durable hardwood block



NUS48



Model No.	Brush Width"	Brush Length"	O.A. Length"	Fill Material	Wire Rows	Trim Length"	Price /Each
NUS46*	4	8 1/2	9	Flat Steel Wire	8 x 12	1 1/8	26.05
NUS48	2 5/8	7	7 5/8	Flat Steel Wire	5 x 10	1	22.88

* Comes with a wood handle

SHOE HANDLE SCRATCH BRUSHES

- Durable hardwood handles that have a smooth finish for extra comfort
- Brush Width: 1 1/16"



TC067



Model No.	Brush Length"	O.A. Length"	Fill Material	Wire Rows	Trim Length"	Price /Each
TC067	5 1/4	10	Steel	5 x 13	1 1/8	4.47
TC074	5 1/4	10	Stainless Steel	5 x 13	1 1/8	10.59
TT168	5 1/4	10	Brass	5 x 13	1 1/8	12.86

ROUND WIRE BUTCHER BLOCK BRUSHES

- Round wire butcher block that offers a gentler scrub than flat wire counterparts
- Durable hardwood block
- Brush Width: 2 1/2"



Model No.	Brush Length"	O.A. Length"	Fill Material	Wire Rows	Trim Length"	Price /Each
NW102	7	7 1/4	Steel	6 x 19	1 1/8	8.49

INDUSTRIAL-DUTY SCRATCH BRUSHES

- Wood handle
- Choice of carbon or stainless steel bristles



NT607

NT609

NT615



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	2.95
NT608	5 3/4	13 3/4	Carbon Steel	4 x 19	1	3.70
NT611	5 3/4	13 3/4	Stainless Steel	3 x 19	1	4.60
NT612	6	10 1/4	Stainless Steel	4 x 19	1	5.50
SHOE HANDLE BRUSHES						
NT609	5 1/4	10 1/2	Carbon Steel	3 x 16	1	2.95
NT610	5 1/4	10 1/2	Carbon Steel	4 x 16	1	3.15
NT613	5	10 1/2	Stainless Steel	3 x 16	1	5.60
NT614	5	10 1/4	Stainless Steel	4 x 16	1	5.90
"TOOTHBRUSH" CLEANING BRUSH						
NT615	1 1/2	7 3/4	Stainless Steel	3 x 7	1/2	1.45

FUME EXTRACTORS



MOBILE FILTERS & MOBILE FILTERS 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 Filter w/2 m Extraction Arm	4499.00
BA656	P-150/P-003	Mobile Filter w/3 m Extraction Arm	4699.00
BA657	P-160	Replacement Filter Cartridge for BA655-BA656 (Cleanable with Compressed Air)	509.00
BA659	P-160-W	Replacement Filter Cartridge for BA655-BA656 (Washable with Soap and Hot Water, Suitable for Oily Smoke)	639.00
EA452	P-535/P-002	"Self Cleaning" Mobile Fume Extractor w/2 m Extraction Arm	5199.00
EA453	P-535/P-003	"Self Cleaning" Mobile Fume Extractor w/3 m Extraction Arm	5399.00
EA454	P-541	"Eco" Replacement Filter Cartridge for EA452-EA453 (Cleanable with Compressed Air)	439.00



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
- Textiles
- Rubber Dust
- Grinding Dust
- Powders
- Dry Chemicals
- Composites
- Cotton Dust
- Synthetics

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:** 1200 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.



Model No.	Mfg. No.	Description	Price /Each
BA710	PCH-1-1.5	Self Cleaning Mobile Filter w/2-m arm	12299.00
BA667	7FR02020	Replacement Filter Cartridge	399.00
BA712	PCH-1-PG-5	0-5" Dial Pressure Gauge	569.00

Note: 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		Nominal (At-The-Hood) CFM	Price /Each
			HP	CFM		
EA263*	P-149-1	115/1/60	1.0	1200	1 @ 700 CFM	1443.00
EA562	P-149	115/1/60	1.5	1200	1 @ 700 CFM	1699.00
BA683	P-152-1	115/1/60	1.5	1400	1 @ 1000 CFM	1929.00
BA689	P-152-2	208-230-460/3/60	2.0	1700	2 @ 600 CFM or 1 @ 900 CFM	1929.00
BA693	P-152-3	575/3/60	2.0	1700	2 @ 600 CFM or 1 @ 900 CFM	1929.00
EA264	P-154-1	208-230-460/3/60	3.0	1800	3 @ 600 CFM or 2 @ 900 CFM	3392.00
EA265	P-154-2	575/3/60	3.0	1800	3 @ 600 CFM or 2 @ 900 CFM	2761.00
EA266	LD-130-1	208-230-460/3/60	5.0	2000	4 @ 600 CFM or 3 @ 900 CFM	5315.00
EA267	LD-130-2	575/3/60	5.0	2000	4 @ 600 CFM or 3 @ 900 CFM	5299.00
EA268	LD-150-1	208-230-460/3/60	7.5	3000	6 @ 600 CFM or 5 @ 900 CFM	6599.00
EA269	LD-150-2	575/3/60	7.5	3000	6 @ 600 CFM or 5 @ 900 CFM	6599.00

*Complete with Plug & Play



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, clearance of 1m (50") required
- **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.

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EXTRACTOR ARMS

Description	Flexi I, 6.5" dia Model No.	Mfg. No.	Price /Each	Flexi II, 8" dia Model No.	Mfg. No.	Price /Each
7' (2 m) Extractor Arm w/Wall Bracket	BA660	P-007	1059.00	BA978	P-143	1179.00
10' (3 m) Extractor Arm w/Wall Bracket	BA661	P-008	1229.00	BA979	P-144	1399.00
14' (4 m) Extractor Arm w/Wall Bracket	BA662	P-009	1399.00	BA980	P-145	1639.00
17' (5 m) Extractor Arm w/Wall Bracket	BA663	P-010	1589.00	BA985	P-146	1879.00



H MAX F SERIES COMBOS

- Boom and extractor arm combos
- Combos specially developed for welding, mixing of chemicals, grinding, and other applications when you need to reach over long distances
- Hoses are made of flame proof PVC with internal steel spiral
- Comes with Super-Flex[®] horizontal arm with ball bearing, extractor arm, hood with ring handle and built-in damper, wall bracket, hose and hood
- Fan and motor not included



H MAX F SERIES COMBOS

Description	Model No.	Price /Each
20' Boom & Extractor Arm Combo	BA675	P.O.A.
24' Boom & Extractor Arm Combo	BA678	2299.00
28' Boom & Extractor Arm Combo	BA680	P.O.A.

MINI-FLEX

MINI FLEX DUAL HOSE MOUNT

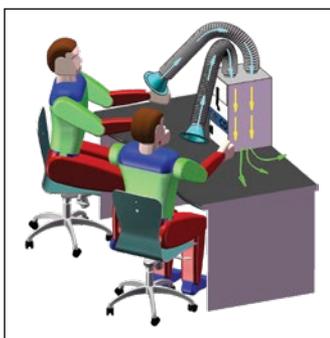
- "At source" fume collector designed for soldering, TIG welding and other toxic applications
- The compact design ensures convenient mobility and features 2 flexible extractor arms that retain their position to source capture fume and gases before entering the operators breathing zone.
- Easily mounted 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	3459.00

FUME EXTRACTORS



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:

- Casters
- 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"
- 1.5 hp (1.1 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% @ 0.5 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:

- 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	P-578	Down Draft Table	4699.00
EA454	P-541	Replacement Filter Cartridge for EA455 (Cleanable with compressed air)	439.00

MINI-VAC

- Multi-purpose low flow 150-300 CFM
- 2 1/2" dia. extractor arm
- Designed for ducted source capture applications
- 2 or 3 inlets

CONSTRUCTION:

- 18-gauge steel cabinet
- Ultra seal filter mounting system

FEATURES AND BENEFITS:

- Swivel casters
- 120 CFM single arm
- 210 CFM dual arm
- 250 CFM 3 arms
- Plugs into any 115V outlet
- Lightweight
- Side inlets also available



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Model No.	Mfg. No.	Description	Price /Each
BA745	66-1E	Mini-Vac portable air cleaner with one 6' arm	6199.00
BA658	66-2E	Mini-Vac portable air cleaner with one 6' arm with charcoal after filter	7199.00
EA563	66-3E	Mini-Vac portable air cleaner with three EZ arms	8399.00

Can't find what you're looking for?



Call us today!

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 15kg
- 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



EA515, PORTA-FLEX 200 (1KW) 160M³/H

- EA515 comes standard with EA517 400 mm Porta-Flex nozzle
- 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 200 AUTO (1KW) 160M³/H & 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/115V/60Hz, 650(W)x250(D)x450mm(H)	2399.00
EA516	P-614	Porta-Flex 200 Auto 1-phase/1kW/115V/60Hz with automatic start/stop	3599.00
EA517	P-615	400mm Porta-Flex Nozzle with Magnetic Base	220.00
EA518	P-616	300mm Porta-Flex Nozzle with Magnetic Base	220.00
EA519	P-617	200mm Porta-Flex Nozzle with Magnetic Base	203.00
EA520	P-618	80mm Porta-Flex Nozzle with Magnetic Base	203.00
EA521	P-619	Replacement Main Filter for the Porta-Flex	629.00
EA522	P-620	Replacement HEPA Filter for the Porta-Flex	989.00



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	214.00
EA091	1200XL	High Speed – 1120 CFM Low Speed – 877 CFM	N/A	Duplex, Grounded Weather-Resistant	436.00

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.	167.00
EA093	300EXT	Extension accessory. 10' x 6" flexible duct with connecting sleeve and clamp. Use to extend EA092 and EA094 in 10' increments.	142.00
EA094	300IA	Intake accessory. 10' x 6" flexible duct with quick-mount fittings at both ends.	207.00
EA095	300FE	Welding Fume Exhaust Nozzle. Clamps to EA094 to direct intake of welding fumes.	105.00
FOR MODEL EA091			
EA096	1200EA	Extension accessory. Easily attaches to connect EA098 to unit.	133.00
EA097	1200IA	Intake Adaptor. Quick-mount fitting to attach duct to unit.	52.40
EA098	1200FD	Flexible Duct. 10' x 8" duct to be used with either EA096 or EA097.	214.00
EA099	1200DC	Duct Coupling. Clamp-on connector for additional EA098 ducts.	37.70
EA100	1200FE	Welding Fume Exhaust Nozzle. Clamps to EA098 for extraction of welding fumes.	112.00

ACCESSORIES FOR MODEL EA090



ACCESSORIES FOR MODEL EA091



GAS WELDING OUTFITS & ACCESSORIES



WELDING & CUTTING OUTFITS

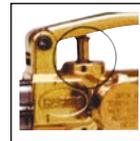
All Harris Classic outfits come complete with tool bag and include the following torch features: Solid forged head, brazed triangular tube design, ease-on cutting valve and protected torch union



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" with larger tips

- 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 \$819.00



TTU521

PIPELINER® CLASSIC WITH TOOL BAG

- Cuts to 6" and welds to 1" with larger tips

- 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 \$1169.00



TTU520

IRONWORKER® MEDIUM-DUTY WITH TOOL BAG

- Cuts to 5" and welds to 1/2" with larger tips

- 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 1/4" hose
 - Goggles
 - Striker

Model No. TTV225
Mfg. No. 4400366
Price/Each \$729.00



TTV225

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
- Tool bag not included

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	1139.00
TTU625	4403214	V-Series Style	V100C	V1350	V-W1	V-V3-101	1139.00



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 \$1069.00



PROWELD
 by **GENTEC**

SILVER MEDIUM-DUTY WELDING & CUTTING OUTFITS

- Can weld up to 1/4" and cut up to 1/2"
- Ideal general purpose kit for construction, facility maintenance, petroleum and chemical industries
- Victor® Cutskill® compatible
- Comes in environmentally-friendly packaging for easy transportation

Includes:

- Torch handle with check valve
- Cutting attachment
- Oxygen/acetylene regulators with 2" double-scale gauges
- Cutting tip #0
- Welding nozzle #2
- T-Grade 17.5' twin hose
- Goggles
- Striker

Model No. TTV021
Mfg. No. 7120
Price/Each \$509.00



GENTEC
 GENSTAR TECHNOLOGIES

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 \$1169.00



GENTEC
 GENSTAR TECHNOLOGIES

SILVER HEAVY-DUTY WELDING & CUTTING OUTFITS

- Can weld up to 1/2" and cut up to 3/4"
- Ideal for industrial and commercial applications
- Victor® Cutskill® compatible
- Comes in environmentally-friendly packaging for easy transportation

Includes:

- Torch handle with check valve
- Cutting attachment
- Oxygen/acetylene regulators with 2 1/2" double-scale gauges
- Cutting tip #1
- Welding nozzle #2
- T-Grade 17.5' twin hose
- Goggles
- Striker

Model No. TTV022
Mfg. No. 7130
Price/Each \$679.00



GENTEC
 GENSTAR TECHNOLOGIES

Industrial Multi-Purpose Cleaning Products



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)



333-102201209

333-102201204

GENTEC
 GENSTAR TECHNOLOGIES

Model No.	Mfg. No.	Description	Price /Each
333-102201204	GKSTA06	Kit w/o Regulators	249.00
333-102201209	GKSTA16	Kit with Oxy/Fuel Regulators	599.00

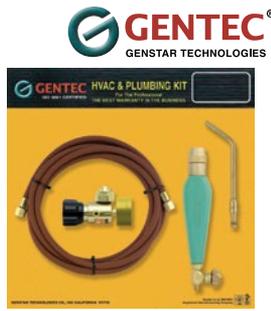
GAS WELDING OUTFITS & ACCESSORIES



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	KA5BSP	1 1/2	3/4	66QT-RA	6Q-5TA	409.00
SOFT FLAME, SCREW-CONNECT STYLE OUTFITS						
333-102205701	KASF4BSP	1	n/a	77ST-RA	7S-4SA	249.00
SWIRL FLAME, QUICK-CONNECT STYLE OUTFITS W/AUTO-IGNITE TIPS						
333-102205608	KASLSBSP	1 1/2	3/4	66QT-RA	6Q-STASL	409.00

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	229.00
330-1669	KA-2H	BA-3	"MC" Cylinder	229.00

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	469.00
330-1780	KX-7B	GA-8	"B" Cylinder	369.00

AIR-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	129.00
330-1426	EA-2G	"MC" Cylinder	129.00

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
- 500 000 BTU rating
- Includes:**
10' neoprene hose
On/off valve
Durable cast iron and steel nozzle
Striker



Model No.	Mfg. No.	Price /Each
312-4904	WB-101	149.00

PROPANE TORCH KITS

- Lightweight and durable steel construction
- Designed for heavy-duty outdoor applications such as weed burning, ice melting, 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	109.00



AUTO-IGNITE HAND TORCHES

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



Model No.	Mfg. No.	Replacement Tip End	Price /Each
333-9120750400	8Q-44TP	4TPESL	219.00

AIR-ACETYLENE FEATHER FLAME® SCREW-IN TIPS

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



Model No.	Mfg. No.	Tip "	Soft Solder"	Price/Each
330-1054	BA-1	1/16	1/16 - 1/8	30.80
330-1057	BA-2	1/8	1/8 - 1/4	30.50
330-1060	BA-3	3/16	1/4 - 1/2	28.30
330-1066	BA-4	1/4	1/2 - 1	28.30
330-1069	BA-5	5/16	1 - 1 1/2	35.50
330-1072	BA-6	7/16	2 - 4	39.40



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 \$374.00



CLASSIC TORCH HANDLES NO. 85

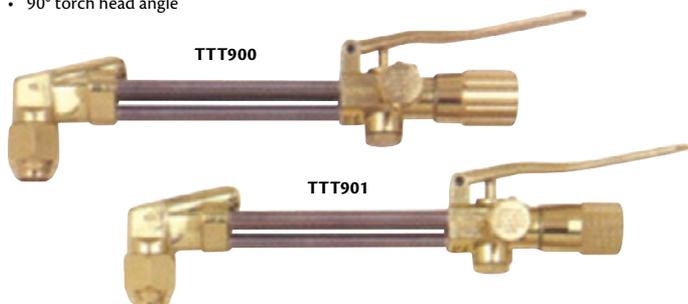
- Silver brazed twin tube construction for safety and durability
- Equipped with FlashGuard® check valves
- Capacity: cuts 5", welds to 1/2"
- 8 1/2" length

Model No. TTT899
Mfg. No. 1401340
Price/Each \$290.00



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 \$529.00



TTU646



Model No.	Mfg. No.	Uses Torch Head	Price/Each
TTT900	1300340	43-2	374.00
TTT901	1300380	85	288.00

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



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	149.00
TTU646	1601111	5/16	5.80	3/4 - 1 1/2	1/4 - 3/4	179.00
TTU647	1601112	3/8	6.60	1 - 2	1/2 - 1	189.00
TTU648	1601113	7/16	9.80	1 1/4 - 3	7/8 - 1 5/8	199.00

STRAIGHT CUTTING V242 HAND CUTTING TORCHES

- Victor® compatible medium-duty torch
- Designed for use with all fuel gases
- Cutting capacity: 6"
- Uses Victor® series 1 tips
- Features stainless steel cutting lever, ease on cutting valve, triangular tube design and Flashguard® check valves
- Equal pressure mixer
- UL listed
- Meets CGA E.5 standards



TTV175



TTT905

Model No.	Mfg. No.	Head Angle°	Length"	Price/Each
POSITIVE PRESSURE "E" TORCHES				
TTT902	1003464	70	21	859.00
TTT903	1003440	90	21	859.00
TTT904	1003351	70	36	1139.00
TTT905	1003441	90	36	1139.00
LOW PRESSURE "F" INJECTOR TORCHES				
TTT906	1003370	70	21	859.00
TTT907	1003470	90	21	859.00
TTT910	1003400	70	36	1139.00
TTT911	1003480	90	36	1139.00

Model No.	Mfg. No.	Head Angle°	Length"	Price /Each
TTV175	1004639	70	18	459.00
TTV176	1004618	90	18	459.00
TTV177	1004637	70	21	459.00
TTV178	1004603	90	21	459.00

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	319.00
TTT921	3000450	Propane*	500	0-50	60	400	CGA510P	9/16"-18 LH	319.00
TTT922	3000510	Oxygen	3000	0-100	150	4000	CGA540	9/16"-18 RH	319.00
TTT923	3000540	Ar, N ₂ , He	3000	0-100	150	4000	CGA580	9/16"-18 RH	319.00
TTT924	3000550	Industrial Air	3000	0-100	150	4000	CGA590	9/16"-18 RH	319.00
TTT925	3000806	N ₂	3000	0-200	400	4000	CGA580	9/16"-18 RH	399.00

GAUGE GUARDS

TTT926	4300140	Fuel Gas							67.10
TTT927	4300139	Oxygen							67.10

*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)	209.00
331-3585	152Y-15	Acetylene	400/2-15	2", 400 PSI	2", 30 PSI, RL	CGA510	9/16"-18 LH (M)	209.00

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)	409.00
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)	409.00

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
- Self re-seating external pressure relief valve on oxygen, inert gases and carbon dioxide models
- Sintered bronze inlet filter
- 2" gauges for easy reading
- Chrome plated housing cap
- 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)	199.00
331-4380	452X-175	Oxygen	3000/5-175	2", 4000 PSI	2", 300 PSI	CGA540	9/16"-18 RH (M)	189.00
331-4395	452Y-15	Acetylene	400/2-15	2", 400 PSI	2", 30 PSI, RL	CGA510	9/16"-18 LH (M)	199.00
TTT120	452C-175	Carbon Dioxide	3000/5-175	2", 4000 PSI	2", 300 PSI	CGA320	5/8"-18 RH (F)	199.00
331-4285	452C-300	Carbon Dioxide	3000/20-300	2", 4000 PSI	2", 400 PSI	CGA320	5/8"-18 RH (F)	319.00
TTT118	452N-80	Inert Gases*	3000/4-80	2", 4000 PSI	2", 100 PSI	CGA580	5/8"-18 RH (F)	199.00
331-4340	452N-300	Inert Gases*	3000/20-300	2", 4000 PSI	2", 400 PSI	CGA580	5/8"-18 RH (F)	279.00
804-1975	452N-450	Inert Gases*	3000/30-450	2", 4000 PSI	2", 600 PSI	CGA580	5/8"-18 RH (F)	299.00

*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	GP31X	Oxygen Gauge Protector	26.00
TTT894	GP31Y	Acetylene Gauge Protector	26.00



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	169.00
331-1575	190CD-45	Carbon Dioxide	0-45	2", 4000 PSI	2", 50 SCFH	CGA320	5/8"-18 RH (F), 0.32" Orifice	169.00



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)	209.00
TTT131	191CD-60	Carbon Dioxide	50	1 1/2", 4000 PSI	60	CGA320	5/8"-18 RH (F)	219.00

WITH 6-FOOT HOSE INCLUDED

331-4150	191AR-60-6HSP	Argon	50	1 1/2", 4000 PSI	60	CGA580	5/8"-18 RH (M)	249.00
331-3200	191CD-60-6HSP	Carbon Dioxide	50	1 1/2", 4000 PSI	60	CGA320	5/8"-18 RH (F)	269.00



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)	289.00
331-4166	195AR-60-680	Argon	50	2", 6000 PSI	60	CGA680	5/8"-18 RH (F)	299.00
331-4175	195CD-60	Carbon Dioxide	50	2", 4000 PSI	60	CGA320	5/8"-18 RH (F)	299.00



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	159.00



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)	569.00



BRASS PRESSURE GAUGES

- Dual scale
- Lexan™ cover lens
- 1/4" NPT inlet



Model No.	Description	Price /Each
NT616	2" x 100 PSI	12.10
NT618	2" x 30 PSI – Red line	12.10
NT619	2" x 400 PSI	12.10
NT620	2" x 4000 PSI	13.90
NT622	2 1/2" x 200 PSI	13.90
NT623	2 1/2" x 30 PSI – Red line	13.90
NT624	2 1/2" x 400 PSI	13.90
NT625	2 1/2" x 4000 PSI	13.90



STEEL PRESSURE GAUGES

- Dual scale
- Lexan™ cover lens



Model No.	Mfg. No.	Scale Ranges	Entry Type	Price /Each
1 1/2" STEEL CASE, 1/8" NPT INLET				
331-2980	G15-030RL	0-30 PSI – Red Line	Side	14.30
331-2985	G15-100	0-100 PSI	Side	14.30
331-2990	G15-400	0-400 PSI	Side	14.30
331-2995	G15-4000	0-4000 PSI	Side	17.20
331-2445	GR15-4000	0-4000 PSI	Rear	17.20
2" STEEL CASE, 1/4" NPT INLET				
331-2405	G20-050CF	0-50 SCFH	Side	14.30



PROPANE REGULATORS

- High pressure industrial/commercial regulator
- Vapour service with portable torches or construction heaters
- Rated for approximately 2 000 000 BTU
- Includes fittings: 0 – 60 PSIG
- **Hose sold separately**

Model No. TTV219
Price/Each \$49.90



PROPANE HOSES

- For use with propane regulator
- Quality flexible hose
- 350 PSI rating
- CGA approved

Model No.	Mfg. No.	Length'	Price /Each
722-1070	HP-6	6	21.50
722-1010	HP-10	10	26.90
722-1030	HP-20	20	47.10
722-1040	HP-25	25	57.10





Maintain the ideal temperature in your workplace.



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	54.60



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	84.20



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	119.00



4 IN 1 CUTTING ATTACHMENT

CIRCLES-STRAIGHT CUTS-BEVELS-REGULAR LINE CUTS

- Converts any standard torch into an accurate convenient multi-use tool
- Cut perfect circles up to 25" in diameter
- Make precision straight edge and end cuts
- Adjustable guide wheels provide a steady base making it easy to follow irregular patterns and odd cuts

Model No. TTV221
Price/Each \$35.10



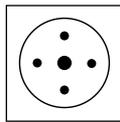


CUTTING TIP CHART

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

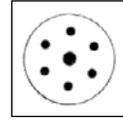
- For general hand or machine cutting
- Acetylene-oxygen
- Medium preheat
- Fits Airco® 3790, 4690, 4700, 4800, 5700, 5800, 1100, 3000, 9000 and 9500 torches



Model No.	Size	Price/Each
TTU465	00	18.90
TTU466	0	18.90
TTU467	1	18.90
TTU468	2	18.90
TTU469	3	18.90
TTU470	4	18.90
328-1351	5	14.80
328-1354	6	14.80

AIRCO® 164/ALC 803 STYLE CUTTING TIPS

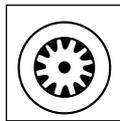
- For general, cast iron and stainless steel cutting
- Acetylene-oxygen
- Very high preheat
- Fits Airco® 3790, 4690, 4700, 4800, 5700, 5800, 1100, 3000, 9000 and 9500 torches



Model No.	Size	Price/Each
TTU471	00	18.90
TTU358	0	19.00
TTU359	1	19.00
TTU360	2	19.00
TTU361	3	19.00
TTU362	4	19.00
TTU472	5	19.00
TTU473	6	18.90
TTU474	7	18.90
328-1468	8	16.40

AIRCO® 261/ALC 829 STYLE CUTTING TIPS

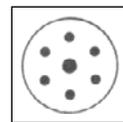
- For general cutting, two-piece tip for hand cutting
- Propane or oxygen-natural gas
- High preheat
- Fits Airco® 2900, 3790, 4690, 4700, 4800, 5700, 5800, 1100, 3000, 9000 and 9500 torches



Model No.	Size	Price/Each
328-1681	00	20.90
TTU475	0	19.55
TTU476	1	19.55
TTU477	2	19.55
TTU478	3	19.55
TTU479	4	19.55
TTU480	5	19.55
328-1702	6	20.90
328-1705	7	20.90
328-1708	8	23.50

PUROX® 4202/ESAB STYLE CUTTING TIPS

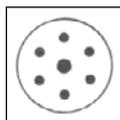
- For general cutting
- Acetylene-oxygen
- Medium preheat
- Fits CW-200, CW-202, CW-300 Type E torches and C-205 machine torch



Model No.	Size	Price/Each
TTU481	3	17.05
TTU482	4	17.05
TTU483	5	17.05
TTU484	7	17.05
TTU485	9	17.05
328-3238	11	17.90
328-3241	13	17.90

SMITH® MC12 STYLE CUTTING TIPS

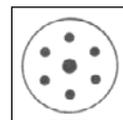
- For hand cutting with oxy-acetylene
- Medium preheat
- Fits Smith® cutting assemblies MC505, MC509, AC305, and AC309



Model No.	Size	Price/Each
TTU530	1	25.10

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



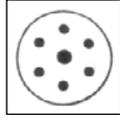
Model No.	Size	Price/Each
TTU531	1	25.10

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

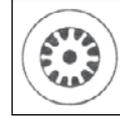
- For general hand cutting
- Acetylene-oxygen
- Medium preheat
- Fits Harris® 42-3, 62-3, 72, 72A, 73, 73A and 85 torches



Model No.	Size	Price/Each
TTU458	000	13.15
TTU459	00	13.15
TTU349	0	13.15
TTU350	1	13.15
TTU351	2	13.15
TTU352	3	13.15
TTU460	4	13.15
TTU461	5	13.15
TTU462	6	13.15

HARRIS® 6290-NX STYLE CUTTING TIPS

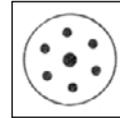
- For general hand cutting
- Propane or oxygen-natural gas
- Medium preheat
- Fits Harris® 42-3, 49AF, 49F, 62-3, 72, 73, 85 and 142 torches



Model No.	Size	Price/Each
TTU463	000	13.65
328-2125	00	10.40
TTU353	0	13.65
TTU354	1	13.65
TTU355	2	13.65
TTU356	3	13.65
TTU357	4	13.65
TTU464	5	13.65
328-2146	6	10.40

VICTOR® 3-101 STYLE CUTTING TIPS

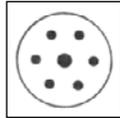
- For general hand cutting
- Acetylene-oxygen
- Medium preheat
- Fits CA 1260, CA 1350, C 1450, CA 2060, CST 800 and C 1400 torches



Model No.	Size	Price/Each
TTU448	000	12.80
TTU449	00	12.80
TTU340	0	12.80
TTU341	1	12.80
TTU342	2	12.80
TTU343	3	12.80
TTU450	4	12.80
TTU451	5	12.80

VICTOR® 1-101 STYLE CUTTING TIPS

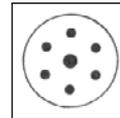
- For general cutting
- Acetylene-oxygen
- Machine preheat for hand and machine cutting
- Fits 2460, CA 1060, ST, SST and 1400C machine torches



Model No.	Size	Price/Each
TTU441	000	13.80
TTU333	00	13.80
TTU334	0	13.80
TTU335	1	13.80
TTU336	2	13.80
TTU337	3	13.80
TTU338	4	13.80
TTU339	5	13.80
TTU442	6	13.80
TTU443	7	13.80
TTU444	8	13.80

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	35.10
TTU445	2	31.45
TTU446	4	31.45
TTU447	6	34.45
328-4027	8	62.20

VICTOR® GPN STYLE CUTTING TIPS

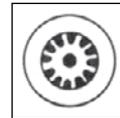
- For general cutting
- Propane or oxygen-natural gas
- Medium preheat for hand and machine cutting
- Fits 2450, CA 1060, CAN 1060, ST, SST, STN and 1400C machine torches



Model No.	Size	Price/Each
328-3826	000	11.30
TTU452	00	13.40
TTU344	0	13.40
TTU345	1	13.40
TTU346	2	13.40
TTU347	3	13.40
TTU348	4	13.40
TTU453	5	13.40
328-3850	6	12.50
328-3853	7	12.50
328-3856	8	12.50

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	12.55
TTU455	1	12.55
TTU456	2	12.55
TTU457	3	12.55

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GAS WELDING OUTFITS & ACCESSORIES



HEATING TIPS

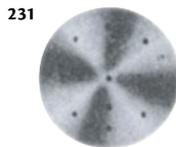
TIP DIAMETERS AS FOLLOWS:

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



GOSS
PROFESSIONAL TORCH EQUIPMENT

Model No.	Mfg. No.	Tip Size	Thread"	Price /Each
FOR USE WITH LP OR NATURAL GAS				
328-1015	221-1	1	1/2-25	57.70
328-1018	221-2	2	1/2-25	57.70
328-1021	221-3	3	1/2-25	89.40
328-1024	221-4	4	1/2-25	129.00
FOR USE WITH ACETYLENE GAS				
328-1072	231-1	1	1/2-25	42.70
328-1075	231-2	2	1/2-25	48.90
328-1078	231-3	3	1/2-25	60.80



HEATING TIP ADAPTORS FOR CUTTING TORCHES

- For use with the designated cutting torches



Airco®



Harris®



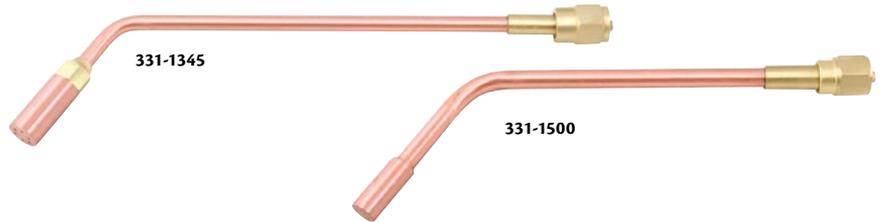
Victor®

GOSS
PROFESSIONAL TORCH EQUIPMENT

Model No.	Mfg. No	Seat Style	Thread"	Price/Each
328-1252	801-S	Airco® Air Products	1/2-25	43.70
328-2305	1361-S	Harris® 6290	1/2-25	21.20
328-3628	2301-S	Victor® 1 Series	1/2-25	31.20

OXY-ACETYLENE & OXY-HYDROGEN HEATING NOZZLES

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

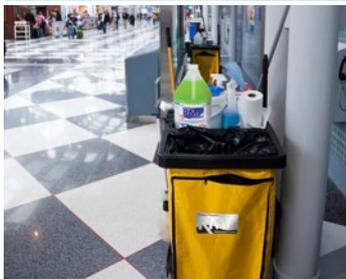


GENTEC
GENSTAR TECHNOLOGIES

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		99.00
TTU285	172H-4	4	Medium	8/12	6/10	7/22	6/20	4-MFA-1		99.00
331-1345	172H-6	6	Medium	10/15	8/12	15/44	14/40	6-MFA-1	142T	99.00
331-1355	172H-8	8	Medium	20/30	10/15	33/88	30/80	8-MFA-1		99.00
TTU286	173H-4	4	Heavy	8/12	6/10	7/22	6/20	4-MFA		149.00
331-1495	173H-6	6	Heavy	10/15	8/12	15/44	14/40	6-MFA	143T/143TL/	149.00
331-1500	173H-8	8	Heavy	20/30	10/15	33/88	30/80	8-MFA	143TLH	149.00
TTU287	173H-10	10	Heavy	30/40	12/15	44/110	40/100	10-MFA		189.00

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Industrial Multi-Purpose Cleaning Products



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

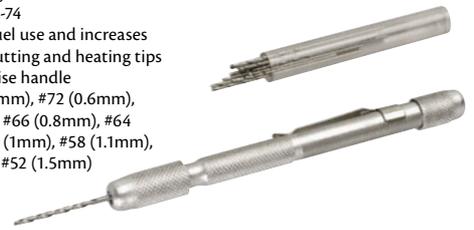
Model No.	Description	Price/Each
NT641	Standard Set	2.85



TIP DRILL KITS

- Cleans cutting tips and a variety of other fuel orifices and injectors
- Includes 12 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
- Includes Tip Sizes: #74 (0.5mm), #72 (0.6mm), #70 (0.7mm), #68 (0.8mm), #66 (0.8mm), #64 (0.9mm), #62 (0.9mm), #60 (1mm), #58 (1.1mm), #56 (1.2mm), #54 (1.4mm), #52 (1.5mm)

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. TTV488
Mfg. No. 4301278
Price/Each \$34.50



TIP-NIP TIP REFACERS

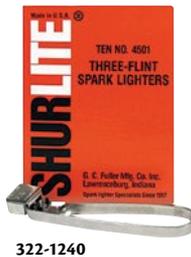
- For easy, fast precision tip resurfacing
- Insert tip and give a few turns
- Pitted tip is resurfaced for new performance
- Extends tip life

Model No. NT820
Price/Each \$24.25

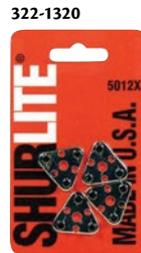


THREE-FLINT LIGHTERS

- Triangular flint holder easily rotatable for a fresh flint
- Flint assembly can be replaced with a Shurlite three flint renewal
- A large hood for trapping flammable gases for quick ignition
- The round file is easily rotatable for a fresh striking surface



322-1240

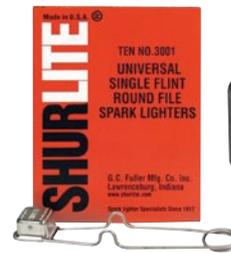


322-1320

Model No.	Mfg. No.	Description	Price/Each
322-1240	4501	Spark Lighter	10.19
322-1320	5012X	Three-Flint Renewal, 4/Pkg.	6.89

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	5.39
322-1560	3001X	Single Flint Renewal, 5/Holder	2.39

FLINT LIGHTERS

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



NT663



NT642



TTU071



TTU072



Model No.	Description	Price/Each
NT642	Single Flint Lighter	3.10
TTU432	Single Flint Lighter w/ 5 Flint Holders	11.40
NT663	Flints, 5 per Holder	2.10
TTU071	Three-Flint Lighter	3.75
TTU072	Flints - Each	1.00

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. D1013
Price/Each \$9.89



TANK KEYS

- For B and MC acetylene valves, double ended

Model No. TTU322
Mfg. No. B-MC
Price/Each \$0.78



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 2 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

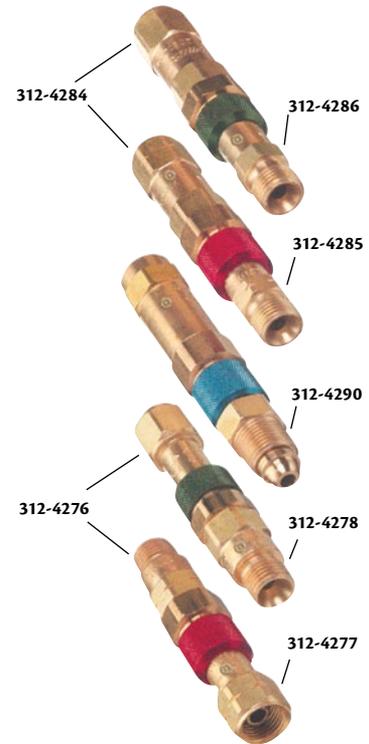


QUICK CONNECT SETS

Model No.	Mfg. No.	Description	Components	Price/Each
312-4276	QDB10	Torch-to-Hose Set w/Check Valves	QDB11—Fuel Gas/QDB12—Oxygen/Inert	76.30
312-4280	QDB20	Hose-to-Hose Set w/Check Valves	QDB21—Fuel Gas/QDB22—Oxygen/Inert	80.30
312-4284	QDB30	Regulator-to-Hose w/Check Valves	QDB31—Fuel Gas/QDB32—Oxygen	80.30

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	42.10
312-4278	QDB12	Oxygen/Inert Gas w/Check Valve	QDB100—Male Plug/QDB101—Female Socket	42.10
HOSE-TO-HOSE				
312-4281	QDB21	Fuel Gas w/Check Valve	QDB205—Male Plug/QDB201—Female Socket	42.20
312-4282	QDB22	Oxygen/Inert Gas w/Check Valve	QDB105—Male Plug/QDB101—Female Socket	42.20
REGULATOR-TO-HOSE				
312-4285	QDB31	Fuel Gas w/Check Valve	QDB205—Male Plug/QDB206—Female Socket	42.20
312-4286	QDB32	Oxygen w/Check Valve	QDB105—Male Plug/QDB106—Female Socket	43.80
312-4287	QDB33	Inert Gas—Regulator-to-Hose	QDB300—Male Plug/QDB301—Female Socket	42.10
312-4290	QDB34	Inert Gas—Hose-to-Machine	QDB302—Male Plug/QDB303—Female Socket	42.10



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



Model No.	Mfg. No.	Description	Components	Price/Each
312-3376	FA-10	Flashback Arrestor Set, Torch Style	FA-100P, FA-200P	74.90
312-3377	FA-30	Flashback Arrestor Set, Regulator Adaptor Style	FA-130P, FA-230P	81.90

FLASHBACK ARRESTORS INDIVIDUAL UNITS

Model No.	Mfg. No.	Description	Price/Each
312-3378	FA-100P	Flashback Arrestor, Oxygen, Torch Style	43.40
312-3380	FA-200P	Flashback Arrestor, Fuel Gas, Torch Style	43.40
312-3379	FA-130P	Flashback Arrestor, Oxygen, Regulator Adaptor Style	45.70
312-3381	FA-230P	Flashback Arrestor, Fuel Gas, Regulator Adaptor Style	45.70



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)



Model No.	Mfg. No.	Description	Service	Price/Each
312-1572	111	Oxygen RH: B-Size F Inlet to B-Size M Outlets	CGA-022	48.90
312-1584	112	Acetylene/F. Gases LH: B-Size F Inlet to B-Size M Outlets	CGA-023	48.90
312-1852	411	Inert Gas RH: 5/8"-18 M Inlet to 5/8"-18 F Outlets	CGA-032	61.70
312-1854	412	Water, Industrial Air LH: 5/8"-18 M Inlet to 5/8"-18 F Outlets	CGA-033	70.30



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**



HBD/Thermoid, 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	2.59
302-5020	00521804205	1/4	0.53	1.50	1.39
302-5070	00521806400	3/8	0.72	2.25	1.99
RED HOSES					
302-5000	00521903205	3/16	0.44	1.25	2.59
302-5015	00521904205	1/4	0.53	1.50	2.99
302-5065	00521906400	3/8	0.72	2.25	4.59

TULINE TWIN WELDING HOSE ASSEMBLIES

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



HBD/Thermoid, Inc.

Model No.	Mfg. No.	Nominal I.D."	Length'	Price /Each
GRADE R HOSES				
PB087	00521403225	3/16	25	49.50
PB090	00521484225	1/4	25	56.00
PB091	00521484250	1/4	50	92.70
PB092	00521484290	1/4	100	179.00
PB094	00521405252	5/16	50	149.00
PB095	00521405291	5/16	100	469.00
302-1260	00521406251	3/8	50	199.00
302-1270	00521406290	3/8	100	369.00

Model No.	Mfg. No.	Nominal I.D."	Length'	Price /Each
GRADE T HOSES				
PB069	00521584225	1/4	25	90.60
PB070	00521584250	1/4	50	169.00
PB071	00521584290	1/4	100	309.00
302-7170	00521586250	3/8	50	209.00
302-7180	00521586290	3/8	100	389.00

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 \$119.00



WESTERN ENTERPRISES

BULK TULINE TWIN WELDING HOSES, GRADE T

HBD/Thermoid, Inc.

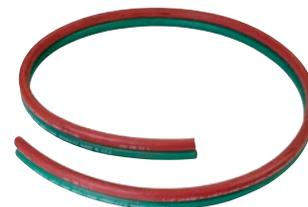
- For use with all fuel gases and where a flame and oil resistant tube and cover are required
- CR (polychloroprene) tube and cover offers medium-high fuel gas resistance
- Two spiral polyester yarn reinforcement, more flexible than braid reinforced hose, easier to coil and handle
- Conforms to RMA/CGA 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**



Model No.	Mfg. No.	Nominal I.D."	Nominal O.D."	Min. Bend Radius"	Price /Each
302-7010	00521504200	1/4	0.53	1.50	2.89

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**



HBD/Thermoid, 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	2.99
302-1010	00521404200	1/4	0.53	1.50	1.72
302-1020	00521405200	5/16	0.59	2.00	5.29
302-1030	00521406200	3/8	0.66	2.25	6.49

MIG/TIG INERT GAS HOSES

- Working pressure: 300 PSI
- Connection: 5/8" - 18 RH(M)
- I.D.: 1.4"
- Length: 6'
- Hose Inside Diameter: 1/4"



GENTEC GENSTAR TECHNOLOGIES

Model No.	Mfg. No.	Price/Each
TTU563	HA14-0061N	22.70

EMERGENCY WELDING HOSE REPAIR KITS

- **Plastic kit box contains:**
 - Standard jaw pincers
 - Oxygen "B" RH brass nuts
 - Acetylene "LH" brass nuts
 - 1/4" brass nipples
 - 1/4" brass hose menders
 - 3/16" brass nipples
 - 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 \$239.00



OETIKER Connecting Technology

HOSE REELS & ACCESSORIES



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

aurora tools®



Model No.	Drive Type	Hose I.D."	Hose Length'	Max PSI	Oxygen		Acetylene		Dimensions			Wt lbs.	Price /Each
					Inlet & Outlet	Inlet & Outlet	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	25.9	160.00		
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	42.2	229.00		

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
- Good for air and water

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	26.6	189.00
TLZ483	Spring	3/8	25	300	1/4	3/8	6	x 15 1/8	x 13 7/8	26.2	199.00
TLZ484	Spring	3/8	35	300	1/4	3/8	6 5/8	x 17 1/2	x 16 1/2	34.7	245.00
TLZ485	Spring	3/8	50	300	1/4	3/8	6 1/2	x 20	x 18 3/8	40.3	333.00
TLZ486	Spring	1/2	50	300	1/2	1/2	6 5/8	x 20 1/4	x 17 7/8	44.3	351.00

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

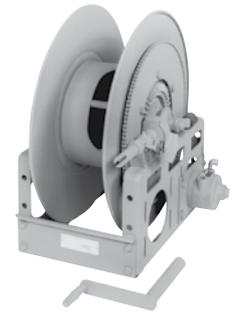
SWCR SERIES

- 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
- Auxiliary rewind and pinion brake standard



Hannay Reels®
The reel leader.

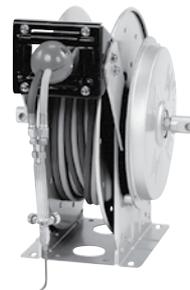
Model No.	Mfg. No.	Cable Capacity of Reel¹							Approx. Weight		Standard Roller Assembly	Price /Each
		Gauge of Cable O.D."	#2	#1	1/0	2/0	3/0	4/0	Net lbs.	Ship lbs.		
SWCR												
886-1130	SWCR716-23-24-15.5G		85	85	60	60	60	40	85	120	R204	1779.00
TTT563	SWCR716-25-26-15.5B		-	-	-	-	60	50	91	126	R204	1839.00
TTT564	SWCR716-25-26-15.5A		-	-	100	-	-	-	106	141	R205	2099.00
WCR												
886-1921	WCR16-19-21		-	275	200	200	150	150	71	106	-	1309.00
TTT565	WCR16-23-24		-	-	-	-	300	200	78	113	-	1309.00

GAS WELDING REELS

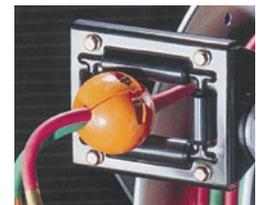
SPRING REWIND TO HANDLE TWIN 1/4" THROUGH 3/8" WELDING HOSE

- 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
- Hose sold separately

Hannay Reels®
The reel leader.



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



Model No.	Mfg. No.	Hose Capacity of Reel¹			Approx. Wt.		Standard Roller Assembly	Price /Each
		I.D." O.D."	1/4	3/8	Net lbs.	Ship lbs.		
TTV150	N416-17-18-8L	2/50	-	-	64	71	N204	1129.00
TTV151	N416-19-20-8L	-	2/50	-	68	75	N204	1269.00
TTT568	N416-19-20-10.5C	2/25	2/25	-	70	77	N204	1179.00
886-1060	N416-19-20-8J	2/50	2/50	-	74	83	N204	1239.00
TTT569	N416-23-24-10.5G	2/75	2/75	-	94	112	N204	1619.00
886-1080	N417-23-24-10.5G	2/100	2/100	-	95	115	N205	1619.00

Model No.	Mfg. No.	Description	Price /Each
886-1030	HS-3	Hose Stop	35.60

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.



SAF848



SAF837



SEB837



SEB838



SAF847

KLETON

COMPRESSED GAS (9" DIAMETER CYLINDERS)

Model No.	Dimensions					Cylinder Capacity	Wt. lbs.	Price /Each
	W"	x	D"	x	H"			
SAF837	44	x	30	x	74	10	210	1139.00
SAF848*	88	x	30	x	74	20	420	2006.00

*Consists of two units of the SAF837

LIQUID PROPANE (35-LB CYLINDERS)

Model No.	Dimensions					Cylinder Capacity	Wt. lbs.	Price /Each
	W"	x	D"	x	H"			
SEB837*	30	x	17	x	37	2	70	549.00
SEB838*	17	x	17	x	69	2	85	659.00
SAF836	44	x	30	x	37	6	135	999.00
SAF847	44	x	30	x	74	12	270	1273.00

*All-welded, fully assembled

ALUMINUM LPG CYLINDER LOCKER STORAGE

- 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.

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.



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

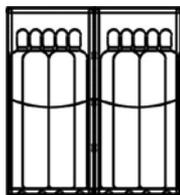
Easy to use rack positions cylinders securely and stores 20 and 33-lb. cylinders.

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

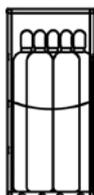
Cylinders stay clear of ground with strong floor plate.

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

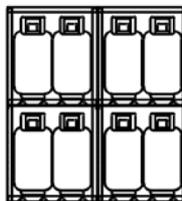
Complies with NFPA 58 and OSHA 1910.110 or CSA-B149.2.



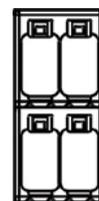
SAI577



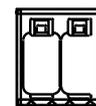
SAI576



SAI575



SAI574



SAI573

Justrite

Model No.	Mfg. No.	Description	Cylinder Type	Capacity	Dimensions			Wt. lbs.	Price /Each
					W"	x	H" x D"		
SAI573	23009	4-Cylinder Vertical	LPG	4 - 20 or 33-lb cylinders	30	x	33 1/2 x 32	76	2039.00
SAI574	23010	8-Cylinder Vertical	LPG	8 - 20 or 33-lb cylinders	30	x	65 x 32	84	2408.00
SAI575	23011	16-Cylinder Vertical	LPG	16 - 20 or 33-lb cylinders	60	x	65 x 32	154	5147.00
SAI576	23006	10-Cylinder Vertical	Compressed Gas	Up to 10 comp. gas cylinders	30	x	65 x 32	93	2902.00
SAI577	23007	20-Cylinder Vertical	Compressed Gas	Up to 20 comp. gas cylinders	60	x	65 x 32	169	3959.00

GAS CYLINDER CARTS

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.	No. of Cylinders	Price /Each
ML413	25 x 13	16" Dia. pneumatic	244 cu.ft. oxygen, 300 cu.ft. acetylene cylinders	55	2	449.00
ML414	12 x 10	10" Dia. semi-pneumatic	300 cu.ft. 9" Dia. cylinder	22	1	209.00
ML415	25 x 13	14" Dia. x 3" rubber	244 cu.ft. oxygen, 300 cu.ft. acetylene cylinders	55	2	409.00
ML416	12 x 16	10" Dia. semi-pneumatic	144 cu.ft. or 244 cu.ft. oxygen, 130 cu.ft. acetylene cylinders	27	1	219.00
ML417	19 x 10	10" Dia. semi-pneumatic	144 cu.ft. or 244 cu.ft. oxygen, 130 cu.ft. acetylene cylinders	30	2	219.00

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 \$259.00



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 23.5" W x 45" H
- Weight: 57 lbs.
- Load capacity: 500 lbs.

Model No. SAP856
Mfg. No. 7302-BK
Price/Each \$972.00



PROFESSIONAL GAS CYLINDER TRUCKS

- Safety chain helps secure load
- 3 positions: 2 wheel, 4 wheel tilt and 4 wheel storage
- Easy conversion between all 3 modes using spring loaded position lock mechanism
- 8" mold-on rubber wheels, 3" swivel casters
- Holds cylinders up to 9 1/4" diameter
- Cart Material: Steel
- Ships knocked-down and boxed



Model No.	Mfg. No.	No. of Cylinders	Base Dimensions W" x L"	Overall Dimensions W" x D" x H"	Capacity lbs.	Price /Each
MO344	210123	1	9 x 7-1/4	19 x 17-1/2 x 41-3/4	250	379.00
MO345	210124	2	16-7/8 x 7-1/4	29 x 18-1/2 x 42-1/4	500	449.00

WELDING CYLINDER TORCH CARTS

- Designed for transporting cylinders and cutting torch
- Includes two tank compartments with heavy-duty ratchet straps
- Brackets are included for holding cutting torch and hose
- Convenient open-top storage tray included
- Includes lockable storage box for regulators
- Fork pockets included for easy transportation
- Not designed for use as a storage means for gas cylinders
- Cart Material: Steel



Model No.	Mfg. No.	Base Dimensions W" x L"	Overall Dimensions W" x D" x H"	Price /Each
TTV168	CYL-2	24 x 19	27-1/4 x 47-1/2 x 48	1717.00

GAS CYLINDER STANDS & TRUCKS

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: 14 lbs.
- Colour: Yellow
- OSHA 29 CFR.1910 approved

Model No. SE966
Mfg. No. 7212-YE
Price/Each \$323.00



GAS CYLINDER BRACKETS

- Brackets are constructed of epoxy powder coated 11-gauge hot rolled steel
- 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
- Wall mount brackets support 4" to 12" diameter cylinders

SB860



SB863



SB864



Model No.	Mfg. No.	Description	Dimensions			Wt. lbs.	Price /Each
			W"	D"	H"		
SB860	G-100	Single Cylinder Wall Bracket, Grey	8	x 2 1/4	x 4 1/4	3	48.00
SB863	G-200	Double Cylinder Wall Bracket, Grey	23 3/4	x 2 1/4	x 4 1/4	9	117.00
SB864	G-300	Triple Cylinder Wall Bracket,	35 3/4	x 2 1/4	x 4 1/4	11	141.00

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.
- Optional black rack ramp attaches for easy manoeuvring of cylinders
- Handling capacity of 1000 lbs.
- Handles 3" to 10" diameter cylinders
- OSHA 29 CFR.1910 approved

SE970



SE967



Model No.	Mfg No.	Description	Dimensions			Wt. lbs.	Price /Each
			L"	W"	H"		
SE967	7202-YE	Cylinder Rack	48	x 31	x 41	62	839.00
SE968	7204-BK	Caster Frame	33 1/2	x 31 1/2	x 41 1/2	50	413.00
SE969	7205-BK	Bottom Straps	-	-	-	1	27.50
SE970	7203-BK	Rack Ramp	46	x 20	x 6	21	251.00

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 \$34.40



HYDRAULIC LARGE LIQUID GAS CYLINDER CARTS

- Foot operated hydraulic pump
- Overall lift height 71.25" & 71" to top of lifting hook
- Overall lowered height 66.25" & 54" to top of lifting hook
- Rear total lock caster (swivel and turn) for secure loading and unloading
- 8" polyurethane tread, non marking crowned swivel casters with rolling and swivel lock
- 10" polyurethane tread wheels
- Cart Material: Steel
- Overall Dim.: 29-3/4" W x 44-3/4" D x 66-1/4" H

MO347



Model No.	Mfg. No.	Brake Option	Base Dimensions		Capacity lbs.	Price /Each
			W"	D"		
MO347	240250	Not Included	20	x 20	1000	3109.00
MO348	240251	Included	20	x 20	1000	3609.00

LARGE LIQUID GAS CYLINDER TRUCKS

- Easy transport of 20" large liquid gas cylinders
- Low profile design eases cylinder loading
- Provides great manoeuvrability in confined spaces
- 8" polyurethane tread, non-marking crowned swivel casters with rolling and swivel lock
- 10" polyurethane tread main wheels
- Heavy duty structural steel and schedule 40 pipe frame
- Quick connecting chain to secure load
- Cart Material: Steel
- Overall Dim.: 30" W x 31" D x 48-5/8" H



Model No.	Mfg. No.	Base Dimensions		Capacity lbs.	Price /Each
		W"	D"		
MO346	210131	20	x 20	1000	1319.00

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

Weller®

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 \$264.00



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 \$285.00



REPLACEMENT TIPS

Model No.	Mfg. No.	Description	Price /Each
BW165	WPT1	Taper Needle	28.50
BW166	WPT2	2.0 mm Chisel	31.00
BW169	WPT5	Taper Needle	31.00
BW172	WPT8	2.0 mm 35° Spade	31.00
BW175	WPT11	8.0 mm High Powered Chisel	37.40
BW177	WPT13	5.0 mm High Powered Long Taper Chisel	34.50

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 \$74.20



Weller®

REPLACEMENT TIPS

Model No.	Mfg. No.	Description	Price /Each
TTU439	WPS10	Conical Tip, 0.3125"	17.70
TTU440	WPS11	Chisel Tip, 0.125"	17.90

PORTASOL® ECONOMICAL BUTANE SOLDERING IRONS

Weller®

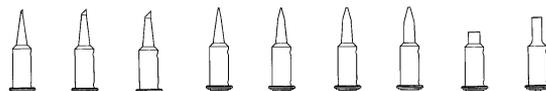
- Self-igniting portable butane heat tool can solder, cut rope, and perform other open flame operations
- Allows anti-static soldering, ideal for electronics, avionics, cellular communications, alarm systems, marine and automotive
- Rugged stainless steel body
- Up to 125 W of power
- Fully adjustable 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
- **BW200** 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	150.00
BW163*	PSI100K	Portasol® Soldering Tool Kit	199.00

* 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



BW188 BW189 BW190 BW192 BW193 BW194 BW195 BW196 BW197

Model No.	Mfg. No.	Description	Price /Each
BW188	PSI1	1.0 mm Single Flat	23.10
BW189	PSI2	2.4 mm Single Flat	23.70
BW190	PSI3	3.2 mm Single Flat	23.70
BW192	PSI5	1.0 mm Double Flat	23.50
BW193	PSI6	2.4 mm Double Flat	23.70
BW194	PSI7	3.2 mm Double Flat	23.00
BW195	PSI8	4.8 mm Double Flat	23.70
BW196	PSI9	Hot Blower Tip	22.00
BW197	PSI10	Hot Knife Tip	23.70

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

PREMIUM BUTANE

- Use for cordless Portasol and Pyropen butane soldering irons
- Gas Type: Butane
- Net Weight: 2.1 oz.

Model No. TTV482
Mfg No. TTBW1
Price/Each \$7.89



Weller®

PROFESSIONAL SOLDERING GUNS

- Fingertip trigger to select high or low output
- Twin lights to illuminate work
- Tin-plated copper tip for high efficiency
- Ready to use in 6 seconds



KITS

TW149 and **TW151** includes: Carrying case, soldering gun, 1 soldering tip, and 1 coil of lead free solder

Weller®

GUNS & KITS

Model No.	Mfg. No.	Description	Watts	Price /Each
TW148	D550	Professional Soldering Gun	260/200	108.00
TW149	D550PK	Professional Soldering Gun Kit	260/200	125.00
TW150	D650	Professional Soldering Gun	300/200	152.00
TW151	D650PK	Professional Soldering Gun Kit	300/200	156.00

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
TW153	6150	Cutting Tip Only	10.10
TW155	6160	Smoothing Tip Only	9.89
TW156	7250	Standard Tip Only, 2/Pkg.	9.99
TW157	7250N	Standard Tip w/Hex Nut	9.92

HIGH PERFORMANCE LED SOLDERING IRONS

- Three LED lights help illuminate the work area
- Round co-molded soft grip handle design for easy tip positioning
- Triangular handle area for maximum tip control
- Ceramic insulated stainless steel encased heater construction
- Excellent quality consumer iron 8 1/4" long
- Cord length: 5'
- Tip and iron stand included
- **TTV156** and **TTV158** include lead-free solder and soldering aid tool
- cUL listed

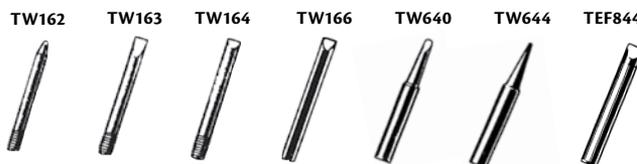


Model No.	Mfg. No.	Description	Volts	Watts	Temp °F/°C	Standard Tip	Price /Each
TTV155	SP25NCN	Standard Duty	120	25	750/400	TW162	36.80
TTV156	SP25NKN	Standard Duty - Kit	120	25	750/400	TW162, TW163, TW164	56.70
TTV157	SP40NCN	Medium Duty	120	40	900/482	TW166	57.90
TTV158	SP40NKN	Medium Duty - Kit	120	40	900/482	TW166, TW640, TW644	51.90
TTV159	SP80NCN	Heavy Duty	120	80	900/482	TEF844	60.40

Weller®

TIPS

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



Model No.	Mfg. No.	Description	Tips	Use With Iron No.	Tip Size"	Price /Each
TW162	MT1	Cone Shaped Tip, 2/Pkg.	Nickel Plated	TTV155, TTV156	1/8	9.62
TW163	MT2	Screwdriver Tip, 2/Pkg.	Nickel Plated	TTV155, TTV156	1/8	9.82
TW164	MT3	Chisel Tip, 2/Pkg.	Nickel Plated	TTV156	1/8	9.82
TW166	MT10	Chisel Tip, 2/Pkg.	Nickel Plated	TTV157, TTV158	1/4	17.30
TW640	ST3	Screwdriver Tip	Iron, Nickel, Chromium Plated	TTV158	1/8	8.86
TW644	ST7	Conical Tip	Iron, Nickel, Chromium Plated	TTV158	0.031	6.58
TEF844	MTG20	Chisel Tip	Iron Plated	TTV159	3/8	16.60

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
TW634	WP35	Soldering Iron w/TW640 Tip	120	35	50/60	97.50

ST SERIES TIPS

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



Model No.	Mfg. No.	Description	Tip Size"	Reach"	Price /Each
TW638	ST1	Screwdriver Tip	0.062	0.75	6.85
TW639	ST2	Screwdriver Tip	0.093	0.75	6.98
TW640	ST3	Screwdriver Tip	1/8	0.75	8.86
TW641	ST4	Screwdriver Tip	0.187	0.75	8.31
TW642	ST5	Single Flat Tip	0.031	0.75	6.66
TW643	ST6	Screwdriver Tip	0.031	0.75	6.81
TW644	ST7	Conical Tip	0.031	0.75	6.58
TW645	ST8	Narrow Screwdriver Tip	0.062	0.75	6.75

Weller®

SOLDERING TOOLS & ACCESSORIES



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 \$345.00

PENCIL

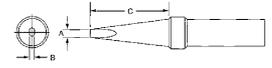
Model No. BW010
Mfg. No. TC201T
Price/Each \$176.00



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	6.44
BW037	PTB7	0.093	0.020	0.62	6.50
BW039	PTC7	0.125	0.027	0.62	6.50
BW041	PTD7	0.187	0.035	0.62	6.50
LONG SCREWDRIVER - 700°F					
BW046	PTJ7	0.031	0.012	1.00	6.50
BW047	PTK7	0.046	0.026	1.00	6.50
CONICAL - 700°F					
BW052	PTP7	0.031	0.012	0.62	6.01
LONG CONICAL - 700°F					
BW051	PT07	0.031	0.044	1.00	6.67

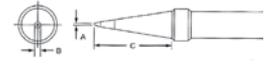
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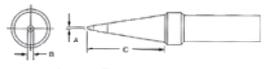
Screwdriver



Long Screwdriver



Conical



Long Conical

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 \$242.00

PENCIL

Model No. TEF891
Mfg. No. PESS1
Price/Each \$85.60



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 \$352.00

PENCIL

Model No. TEF891
Mfg. No. PESS1
Price/Each \$85.60



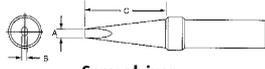
Wireless temperature lockout gives you control over the process



Weller®

ET SERIES TIPS FOR TEF891 SOLDERING PENCIL

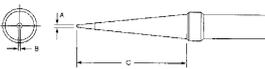
Model No.	Mfg No.	A"	B"	C"	Price/Each
SCREWDRIVER					
BW087	ETA	0.062	0.032	0.625	7.16
BW088	ETB	0.093	0.020	0.625	7.16
BW089	ETC	0.125	0.027	0.625	7.00
CONICAL					
BW092	ETP	0.031	0.012	0.625	7.00
LONG CONICAL					
BW100	ETO	0.031	0.044	1.000	7.16
BW101	ETS	0.015	0.000	1.000	7.16



Screwdriver



Conical



Long Conical

WD1002 DIGITAL SILVER SERIES SOLDERING STATIONS

HIGH PERFORMANCE SOLDERING STATION

- Features a powerful 95-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 \$661.00

PENCIL

Model No. BW119
Mfg. No. WP80
Price/Each \$234.00



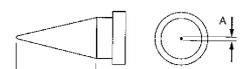
Weller®

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	8.25
TEF754	LTH	0.031	0.016	0.430	8.25
TEF755	LTK	0.047	0.016	0.730	8.09
ROUND					
TEF738	LT1	0.010	-	0.430	8.25
TEF739	LT1L	0.008	-	0.980	8.25



Chisel



Round

SOLDERING TOOLS & ACCESSORIES

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

- 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
- 6 brazing/welding rods

Model No. NKD150
Price/Each \$169.00



PENCIL FLAME TORCH KITS

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

Includes:
BV769 torch head
TTU686 14.1-oz. propane cylinder

Model No. TTU690
Price/Each \$42.30



TRIGGER START TORCH KITS

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

Includes:
TTV240 torch head
TTU686 14.1-oz propane cylinder

Model No. TTU691
Price/Each \$77.10



TRIGGER START CAST ALUMINUM MAP-PRO™ GAS TORCH KITS

- 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
Price/Each \$119.00



2-PIECE SELF-IGNITING TORCH KITS

- For small, soft soldering jobs
- Adjustable flame control knob to be used with Propane fuel

Includes:
TTV154 Self-igniting torch
TTU686 14.1-oz propane cylinder.

Model No. TTV153
Price/Each \$54.60



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

Model No. TTU299
Price/Each \$49.90



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

Model No. WN963
Price/Each \$109.00



FUELS

14.1-OZ. PROPANE CYLINDER

Use with torches and most portable appliances requiring propane.

Model No. TTU686 Price/Each \$16.10

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 Price/Each \$21.20

1.4-OZ. DISPOSABLE OXYGEN CYLINDER

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

Model No. TTU688 Price/Each \$24.40

5.5-OZ. DISPOSABLE BUTANE CYLINDER

Use with refillable butane torches.

Model No. TTU636 Price/Each \$6.19



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
- Electrode capacity: 3/32" (2 mm) - 3/16" (5 mm)



Model No.	Amps	Description	Price /Each
NT629	400	Electrode Holder w/Neck Ring	20.95
NT631	600	Electrode Holder w/Neck Ring	24.40
NT630	400	Slimline – Bernard® Style Holder	20.95
NT818	-	Replacement Head for 400 Amps Electrode Holder	18.85
TTV098	-	Replacement Head for 600 Amps Electrode Holder	27.25

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	79.00

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	20.50
NT649	Male Half with Insulator	11.25
NT650	Female Half with Insulator	9.85

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	27.90
380-1620	05043	Male Half	13.90
380-1615	05046	Female Half	13.90

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	69.00

DUAL POWER PLUGS

- Tough thermoplastic shell for long life
- Each dual combination plug is supplied with 30A blades and a flat 50A blade
- Built-in rejection feature prevents closure if blades are incorrectly positioned
- Shell and bottom are hinged in front for ease of assembly
- Solid brass blades with colour-coded terminals help to simplify wiring
- Nema Configuration: 6-30P/6-50P
- AC Voltage: 250 V
- Cord Diameter: 0.63" - 1.05"



Model No.	Mfg. No.	Description	Price /Each
XH645	931	Plug	22.90

ELECTRICAL RECEPTACLES

- For use with copper or aluminum wire
- 50 amps, 250 volts



Model No.	Mfg. No.	Description	Price /Each
NP496	1252	Receptacle	15.90

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	14.50
NT605	1/0 - 2/0	15.50
NT604	3/0 - 4/0	22.90

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	1.85
PB131	3/0 - 4/0	11.09

TOUGHFLEX™ WELDING CABLE

- Industry's best selling welding cable
- Durable and flexible
- Highly flexible annealed 30 (0.010) gauge bare copper conductor, insulated with an EPDM jacket and paper separator
- Durable jacket resists cuts, tears, abrasion, grease, oil, water and flame
- Operating temperature range: -50°C to 105°C (-58°F to 221°F)
- Rated to 600 V
- Ideal for any welding application that requires leads, grounds, and stinger/whips
- Custom lengths and jacket colours available upon request
- Sold per spool or boxed



TLV134



KALAS

CABLE SPECS:

Gauge	Stranding	O.D."	Average Wall"	Weight lbs./1000'	Resistance OHMS/1000'
#6	259/0.010	0.320	0.060	113	0.406
#4	364/0.010	0.348	0.060	147	0.287
#2	624/0.010	0.420	0.060	236	0.167
#1	780/0.010	0.503	0.080	313	0.137
1/0	988/0.010	0.533	0.080	378	0.110
2/0	1235/0.010	0.586	0.080	463	0.086
3/0	1539/0.010	0.625	0.080	563	0.070
4/0	2014/0.010	0.720	0.080	734	0.055

AMPACITY GUIDE:

Gauge	50'	75'	100'	125'	150'	175'	200'	225'	250'	300'	350'
#4	100	100	-	-	-	-	-	-	-	-	-
#3	150	-	-	-	-	-	-	-	-	-	-
#2	200	150	100	100	-	-	-	-	-	-	-
#1	250/300	200	150	-	100	-	-	-	-	-	-
1/0	350	250	200	150	-	100	100	-	-	-	-
2/0	400/450	300	250	200	150	-	100	100	-	-	-
3/0	500	350/400	300	250	200	150	150	-	-	100	-
4/0	550/600	450/500	350/400	300	250	200	200	150	150	-	100

DO NOT USE for 600 volt in-line applications. Product for welding applications only. Values are nominal and approximate.

Model No.	Mfg. No.	Gauge	Price /Each
300' SPOOL			
TTV126	640069.A4.001	#6	P.O.A.
TTV127	640068.A4.001	#4	P.O.A.
TTV128	640067.A4.001	#2	P.O.A.
TTV129	640066.A4.001	#1	P.O.A.
TTV130	640065.A4.001	1/0	P.O.A.
TTV131	640064.A4.001	2/0	P.O.A.
TTV132	640063.A4.001	3/0	P.O.A.
TTV133	640062.A4.001	4/0	P.O.A.
50' BOXED			
TTV134	06T1050B0000	#6	P.O.A.
TTV135	04T1050B0000	#4	P.O.A.
TTV136	02T1050B0000	#2	P.O.A.
TTV137	01T1050B0000	#1	P.O.A.
TTV138	10T1050B0000	1/0	P.O.A.
TTV139	20T1050B0000	2/0	P.O.A.
TTV140	30T1050B0000	3/0	P.O.A.
TTV141	40T1050B0000	4/0	P.O.A.
100' BOXED			
TTV142	06T1100B0000	#6	P.O.A.
TTV143	04T1100B0000	#4	P.O.A.
TTV144	02T1100B0000	#2	P.O.A.
TTV145	01T1100B0000	#1	P.O.A.
TTV146	10T1100B0000	1/0	P.O.A.
TTV147	20T1100B0000	2/0	P.O.A.
TTV148	30T1100B0000	3/0	P.O.A.
TTV149	40T1100B0000	4/0	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 \$56.40



ARC WELDING TOOLS & ACCESSORIES



GROUND CLAMPS

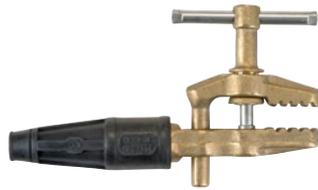
- Manufactured from nickel-plated steel with forged brass conductors
- Heavy-duty springs provide positive strength at jaws
- **NT661** is ideal for farm welder and light shop work; current flows directly from lower jaw to welding cable
- **NT662** is ideal for portable gas drive welders; braided zinc 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	6.40
NT662	500	11.60

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	54.50

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	3.95
NT627	Large	6 1/4 x 4 x 3/4	6.55
NT628	X-Large	8 x 5 x 1	9.95

MAGNETIC WELDING SQUARES

- Provides fast set-up and accurate holding of steel sheet stock, plate and tubing for welding
- Holds work pieces at 45°, 90°, 135° and 180° angles
- **TGY629**, **TYO502** and **TGY630** models feature "Breakaway Handle"



Model No.	Description	Pull lbs.	Dimensions L" x W" x H"	Price /Each
TGY624	Multi-Angle	55	4 3/8 x 3/4 x 3	21.90
TGY625	Compact	60	3 3/4 x 3/4 x 3 3/4	17.20
TYO501	Compact Multi-Angle	60	3 3/4 x 3/4 x 3 3/4	28.10
TLV266	Inside 90°, Outside 45/90°	40	5 1/2 x 5/8 x 2 7/8	37.10
TGY626	Adjustable	120	7 5/8 x 1 3/8 x 3 3/4	34.10
TGY627	Mid-Size	75	3 3/4 x 3/4 x 4 3/8	30.90
TGY628	Mid-Size, Covered*	75	3 3/4 x 3/4 x 4 3/8	38.30
TGY629	Mid-Size, Extra Power Covered HD	150	3 3/4 x 1 1/2 x 4 3/8	85.00
TYO502	Large Covered	160	8 x 3/4 x 8	109.00
TGY630	Large, Extra Power Covered*	325	8 x 1 1/2 x 8	199.00

* Weld spatter resistant cover

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	18.50
NT669	500	21.80

GROUND CLAMPS

- 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
- Run at a cooler temperature at higher AMPS for better arc starting
- Fully insulated pivots and springs



Model No.	Mfg. No.	Amps	Cable Capacity	Jaw Capacity"	Price /Each
140-1775	14730	200	4 - 1/0	1 1/4	22.40
140-1780	14731	300	1/0 - 2/0	1 5/8	32.80
140-1785	14732	500	3/0 - 4/0	2	43.30

MAGNETIC WELDING GROUNDS

- Powerful magnet attaches securely to your steel work surface
- Spring loaded 1/2" diameter stud assures constant electrical ground contact



Model No.	Holding Capacity lbs.	Stud Type Amperage	Diameter"	Height"	Price /Each
TGY631	35	250 A/Brass	3 1/2	2 1/4	55.50
TGY632	35	800 A/Copper	3 1/2	2 1/4	74.00

MAG90™ ON/OFF MAGNETIC SQUARES

- Locking On/Off handle for safety and ease of use
- Simple, fast work holding on multiple sides
- Eliminate the need for tedious clamping
- Can be used on flat or round steel
- Pre-tapped holes on all sides for mounting



TYO503

Model No.	Pull lbs.	L" x W" x H"	Tap	Tap Depth"	Wt. lbs.	Price /Each
TYO503	150	1 1/2 x 1 1/2 x 2 3/4	#8-32	0.330	0.8	129.00
TYO504	450	3 x 2 1/2 x 4 5/8	1/4-20	0.500	4.3	369.00
TYO505	1000	4 1/4 x 4 x 4 3/4	3/8-16	0.625	10.5	709.00

WELDING GROUND CLAMP

- Dual purpose work piece clamp and welding ground
- Non-twist clamp
- Copper plating prevent weld splatter from sticking
- Beveled jaws hold both flat or round surfaces
- Deep throat jaw depth



Model No.	Jaw Capacity"	Dimensions L" x W" x H"	Wt. lbs.	Price /Each
TYO506	400	4-1/2 x 9 x 4-7/16 x 1-1/8	1.9	109.00

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 changes 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	199.00

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	30.20
NT633	3/16	50	18.75
NT634	1/4	50	23.35
NT635	5/16	50	28.60
NT636	3/8	50	41.75
NT637	1/2	50	77.65

INDUSTRIAL-DUTY SCRATCH BRUSHES

- Wood handle
- Choice of carbon or stainless steel bristles

Long Handle



Shoe Handle



"Toothbrush"



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	2.95
NT608	5 3/4	13 3/4	Carbon Steel	4 x 19	1	3.70
NT611	5 3/4	13 3/4	Stainless Steel	3 x 19	1	4.60
NT612	6	10 1/4	Stainless Steel	4 x 19	1	5.50
SHOE HANDLE BRUSHES						
NT609	5 1/4	10 1/2	Carbon Steel	3 x 16	1	2.95
NT610	5 1/4	10 1/2	Carbon Steel	4 x 16	1	3.15
NT613	5	10 1/2	Stainless Steel	3 x 16	1	5.60
NT614	5	10 1/4	Stainless Steel	4 x 16	1	5.90
"TOOTHBRUSH" CLEANING BRUSH						
NT615	1 1/2"	7 3/4	Stainless Steel	3 x 7	1/2	1.45

CHIPPING HAMMERS

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

Model No. NP532
Price/Each \$6.25



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	22.40
380-1875	LPHH	Chisel and Pick	16	22.40
380-1880	LPHHC	Cross Chisel and Pick	16	22.40
380-1870	LPHG	Chisel and Cross Chisel	20	23.50



ARC WELDING TOOLS & ACCESSORIES



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



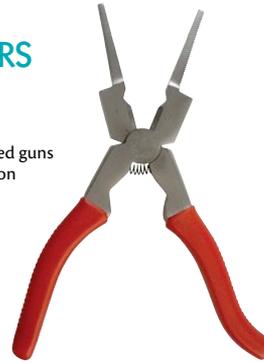
NP537



Model No.	Description	Price /Each
TYX128	Premium Pliers	20.95
NP537	Pliers	12.85
NT666	Holster for Pliers	5.15

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	44.20

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 \$5.90



AIR FLUX CHIPPERS

- Lightweight and compact design permits increased operator efficiency
- Paddle style trigger offers better speed control and precision
- Low noise, low vibration
- Durable
- 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/s ²	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	215.00

ACCESSORIES

Model No.	Description	Price/Each
TLZ134	20 mm Flat Chisel	31.45
TLZ135	35 mm Flat Chisel	31.45
TLZ136	Moil Pointed Chisel	31.45

Canada's Best Value in Industrial Tools

aurora tools®

ARC WELDING TOOLS & ACCESSORIES

SAFETUBE® ROD CANISTERS

- Protects electrodes from dirt, grease and moisture
- Pressure fitted O-ring provides a watertight seal
- Withstands electrodes heated to 250°F
- Requires only a quarter turn to remove cap
- Square sides prevent rolling
- 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

40" CANISTER

- Holds up to 15 lbs. (7.5 kg) of 36" TIG/brazing rods

CARRY STRAP

- Provides easy transport for electrode canisters
- For use with 14" and 18" Safetubes®

WALL STORAGE RACK

- Provides storage for four 40" Safetube® TIG rod canisters



Model No.	Mfg. No.	Description	Capacity	Price /Each
ELECTRODE CANISTERS				
382-4010	1205441	Canister	Up to 10 lbs. of 14" Electrodes	11.20
382-4040	1205455	Canister	Up to 15 lbs. of 18" Electrodes	17.00
382-4020	1205451	Adjustable Carry Strap	-	11.40
TIG ROD CANISTER				
TTV109	1205488	Canister	Up to 15 lbs. of 36" TIG Rods	28.90
TTV110	1205490	Wall Storage Rack	-	84.90

DRYROD® PORTABLE ELECTRODE OVENS

- Heating elements provide uniform, continuous heat for 100% protection of electrodes
- Standard features include an adjustable thermostat, indicator light and removable power cord with locking power inlet
- Optional digital thermometer available on Types 2, 5, and 15, reads in °F or °C
- Type 5 and 15 available with wheels and pull-handle for easy transport
- All units cUL approved



Model No.	Mfg. No.	Voltage	Capacity lbs.	Temperature Range °F	Price /Each
TYPE 1					
382-1205500	1205500	100/240 V AC/DC @ 60 watts	10	Preset to 300	439.00
TYPE 2					
TTT575	1205512	100/240 V AC/DC @ 70 watts	20	100 - 300	509.00
382-1205510*	1205510	100/240 V AC/DC @ 70 watts	20	100 - 300	619.00
TYPE 5 W/HANDLES					
TTU576	1205523	120/240 V AC @ 300 watts	50	100 - 300	1059.00
TTU577*	1205521	120/240 V AC @ 300 watts	50	100 - 300	1219.00
TYPE 5 W/WHEELS					
TTT576	1205522	120/240 V AC @ 300 watts	50	100 - 300	1139.00
382-1205520*	1205520	120/240 V AC @ 300 watts	50	100 - 300	1299.00
TYPE 15					
TTT577	1205532	120/240 V AC @ 600 watts	150	100 - 300	1969.00
382-1205530*	1205530	120/240 V AC @ 600 watts	150	100 - 300	2129.00

*With digital thermometer

DRYROD® BENCH OVENS

TYPE 15B

- Designed for small fabrication shops, jobsite trailer or welding lab
- Wire wrapped heating elements provide uniform, continuous heat for 100% protection of electrodes
- Adjustable thermostat ensures full temperature control
- Optional digital thermometer reads in °F or °C
- Powder coat finish enhances durable steel body
- cUL approved

TYPE 300

- Designed for large fabrication shops, refineries and on-site job trailers
- Ovens feature adjustable thermostatic control, indicator light and optional thermometer for instant temperature indication
- Circular shape promotes even heat distribution
- Redesigned shelving accommodates 50-lb cans
- cUL and CSA approved units



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	1849.00
382-1205531*	1205531	120/240 V AC @ 600 watts	150	100 - 300	2039.00
TYPE 300					
382-1060	1200200	120/240 V AC @ 1000 watts	400	100 - 550	2499.00
382-1070**	1200202	120/240 V AC @ 1000 watts	400	100 - 550	2839.00
382-1065	1200100	240/480 V AC @ 1000 watts	400	100 - 550	2889.00
382-1075**	1200102	240/480 V AC @ 1000 watts	400	100 - 550	3219.00

* With digital thermometer

**Stacking version

ROD HOLDERS

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

Model No. NP519
Price/Each 10.45



WELDING MACHINES



OUTPUT ICONS



For constant current stick and TIG processes



Direct current welding output



For constant voltage MIG, flux-cored and subarc processes



For multiprocess constant current or constant voltage applications



Alternating current welding output



Alternating or direct current welding output

INPUT ICONS



Single phase input power



115 V input power



50 Hertz input power



120 V input power



60 Hertz input power



230 V input power



50/60 Hertz 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, 90 days 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			Rated Output			Input Current @ Rated Output	Pilot Current	Output Range	Air Pressure Required	Air Flow Required	Price /Each
		Voltage	Phase	Hertz	Current	Voltage	Duty Cycle						
TTU662	K2806-1	208/230	1	60	13 A	85.2 V	100%	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)	3539.00
					18 A	87.2 V	60%						
					25 A	90 V	35%						

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, 90 days 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			Rated Output			Input Current @ Rated Output	Pilot Current	Output Range	Air Pressure Required	Air Flow Required	Price /Each
		Voltage	Phase	Hertz	Current	Voltage	Duty Cycle						
TTU663	K2807-1	208/230	1	50/60	24 A	89.6 V	100%	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)	4789.00
					29 A	91.8 V	60%						
					40 A	96.0 V	35%						

INVERTEC® V155-S STICK/TIG WELDERS

PORTABLE, PROFESSIONAL, RUGGED, AFFORDABLE

- Weighs less than 15 lbs. (6.8 kg)
- 120/230 V auto reconnect operation, can operate from a portable generator
- Plugs into a 200' (61 m) 230 V extension cord so you can weld just about anywhere
- Tough dent resistant case is IP23-rated for outdoor use
- Two stick modes, SOFT and CRISP, provide the right arc characteristics for different types of electrodes
- Auto-Adaptive Arc Force™ minimizes electrode sticking in the puddle without compromising arc stability or increased spatter
- Automatic Hot-Start™ boosts the current during starting to make striking an arc easier
- Touch Start TIG™ DC operation allows you to strike the arc easily without high frequency or tungsten contamination
- Available in two models: a base unit (TTU115) with stick accessories or a complete Stick/TIG ready-to-weld package (TTU116) in an Easy-Store/Easy-Carry suitcase
- 3-year warranty on parts and labour



Processes

Stick
DC TIG

Output



Input



Includes:

- Invertec® V155-S
- Stick electrode holder, cable and Twist-Mate™ plug
- Work cable and clamp with Twist-Mate™ plug
- Fully adjustable shoulder strap
- 120/230 V 6.6' (2 m) input cord with a 120 V 15 Amp plug
- Extra 120 V 20 Amp plug

Ready-Pak® Includes:

- All of the above plus
- Gas regulator
- PTA-17V TIG torch with Ultraflex™ cable and Twist-Mate™ adapter
- PTA-17 TIG accessory kit
- Easy-Store/Easy-Carry suitcase



Model No.	Mfg. No.	Input Power			Rated Output			Input Current @ Rated Output*	Output Range	Price /Each
		Voltage	Phase	Hertz	Current	Voltage	Duty Cycle			
TTU115	K2605-1	120	1	50/60	75A	23.0V	100% Stick	24.0A	5-155 Amps DC Max. OCV: 75V	2409.00
					100A	24.0V	30% Stick	33.8A		
					105A	14.2V	100% TIG	21.5A		
					130A	15.2V	30% TIG	28.8A		
TTU116	K2606-1	115/230	1	50/60	100A	24.0V	100% Stick	21.0A	5-155 Amps DC Max. OCV: 75V	3529.00
					145A	25.8V	30% Stick	31.0A		
					100A	14.0V	100% TIG	14.1A		
					155A	16.2V	30% TIG	22.8A		

* Input amps on 60 Hz input

PRECISION TIG® 225 STICK/TIG WELDERS

GREAT FOR CUSTOM FABRICATORS

The Precision TIG® 225 gives you the "Power to PerformSM", for general fabrication, automotive/motorsports, vocational schools or serious hobby work. Micro-Start™ II Technology delivers precision arc performance to improve arc starting, welding and weld cratering.

- 5-230 amps is the widest welding range in its class
- Patented Micro-Start™ II Technology delivers extremely stable low amperage starting, welding and cratering for AC and DC welding
- AC Auto-Balance™ automatically sets the optimal cleaning vs. penetration levels for great looking aluminum welds
- Built-in TIG pulser helps control heat input in the weld
- 115 volt auxiliary power receptacles with 20 amp service reliably powers water coolers or other tools
- Shielding gas sold separately
- Fan-As-Needed™ (F.A.N.) prevents overheating, reduces power consumption noise, motor wear and dust in the machine
- **Ready-Pak® with Cart** includes everything listed above and the understorage cart
- CSA C/US certified
- 3-year warranty on parts and labour



Processes

Stick
TIG

Output



Input



Ready-Pak® Includes:

- Precision TIG® 225
- Removable Lift Eye
- 10 ft. Work Cable and Clamp
- NEMA 6-50R Receptacle
- TIG Procedure Guide
- GTAW (TIG) Handbook
- PTA-17 One-Piece TIG Torch, 12.5"
- Gas Regulator with Hose
- Foot Amptrol®



Model No.	Mfg. No.	Description	Input Power			Rated Output			Input Current @ Rated Output*	Output Range	Price /Each
			Voltage	Phase	Hertz	Current	Voltage	Duty Cycle			
TTT398	K2535-1	Ready-Pak® Pkg.	208/230	1	60	90A	23.4V	100%	42/39A	5-230A AC	6849.00
TTT399	K2535-2	Ready-Pak® Pkg. w/cart								5-230A DC Max. OCV: 75V	7399.00

*All inputs reported include 20 amp output on 115 volt auxiliary



FABRICATOR® 141I PORTABLE WELDING MACHINE



- Delivers 3-in-1 MIG/TIG/Stick capabilities from one integrated system
- Features digital meters, 4T trigger control and quick-change polarity from the front of the power source
- Overload protection shuts down the power source to protect the internal electrical components from overheating
- Intelligent fan control operates when welding commences to cool components and reduce airborne contaminants pulled through the power source
- Infinite voltage control for precise voltage settings, inductance control for arc stability and spatter-control, and adjustable burnback control
- Durable metal feed plate features a 2-roll drive system, reversible drive rolls and easy-to-set single-scaled wire tension knob
- Includes Tweco Spool Gun
- Voltage Input Power: 120 V
- Phase Input Power: 1 Ph
- Hertz Input Power: 50/60 Hz

Model No. NV075
Mfg. No. W1003141
Price/Each \$1455.00



POWER MIG® 180 DUAL WIRE FEED WELDERS

THE PROFESSIONAL'S CHOICESM

- Dual 120 or 208/230 volt input power capability, you can use the same machine to weld at home and generator-driven environments, or choose 208/230 volt input power for shop or out on the job site applications on thicker materials
- Ideal for sheet metal and light frame autobody work, farm or small shop applications
- Diamond Core Technology™ – Delivers a forgiving arc, excellent out-of-position arc action, low spatter and a wide voltage sweet spot at a given wire feed speed for steel, stainless steel or aluminum
- Dual gear-driven cast aluminum drive rolls deliver positive traction
- Patented split wire guides ensure optimal wire alignment and a brass-to-brass gun connection aids critical conductivity
- Large industrial closed-design drive motor improves torque and enhances trouble-free performance
- No hassle tool-less design for input power changes, wire spool mounting, wire drive service and polarity changes
- Spool Gun Ready, remove the standard MIG gun and plug in the economical Magnum® 100SG spool gun **TTU118** (optional) for enhanced aluminum wire feeding performance
- 3-year warranty on machine, 90 days on torch



Processes

Mig
Flux-Cored

Output



Input



Includes:

- Magnum® Pro 100L gun, 10' (3.0 m) cable
- 120V and 230V Input Cables
- Input Cable Bag
- Gas and Gasless Nozzles
- Gun Cable Liner (pre-installed in gun)
- Work Cable and Clamp
- Adjustable Gas Regulator and Hose
- Spindle Adapter
- Sample (0.90 kg) Spool of SuperArc® L-56® Mild Steel MIG Wire
- Sample (0.45 kg) Spool NR®-211-MP Flux-Cored Wire
- 0.025" (0.6 mm) and 0.035" (0.9 mm) Contact Tips
- 0.025 - 0.030" (0.6 - 0.8 mm) and 0.035" (0.9 mm) Drive Rolls
- 0.030 - 0.045" (0.8 - 1.1 mm) Knurled Drive Rolls
- 0.025 - 0.035" (0.6 - 0.9 mm) and 0.045" (1.1 mm) Wire Guides
- Learn-To-Use DVD



Model No.	Mfg. No.	Input Power			Rated Output			Input Current @ Rated Output	Output Range	Wire Feed Speed Range	Price /Each
		Voltage	Phase	Hertz	Current	Voltage	Duty Cycle				
TTV164	K3018-2	120	1	60	120V: 90A	19.5V	20%	20A	120V: 30-140 Amps DC Max. OCV: 33 230V: 30-180 Amps DC Max. OCV: 34	50-500 ipm (1.3-12.7 m/min)	2929.00
		208/230	1	60	208V: 130A	17.6V	30%				

POWER MIG® 210 MP MULTI-PROCESS WELDER

ONE POWERFUL MACHINE

- Lightweight and portable-just 40 lbs.
- 210 Amps: The power to tackle any job
- Inverter based technology to weld multiple welding processes* of wire, stick, and TIG
- Dual voltage inputs (120V or 230V), plug into any common power supply
- Intuitive push-and-turn digital controls make setup a breeze
- Advanced options and settings are simple to access
- MIG: Weld up to 3/8" mild or stainless steel or aluminum* up to 3/16"
- Flux-Cored (Self- and Gas-shielded): Tackle the biggest jobs
- DC Stick: Handles up to 5/32" stick electrodes
- DC TIG: Enabled by Touch Start TIG® technology
- 3 year warranty on machine, 90 days on gun and cable assembly

* Additional accessories may be required for different welding processes



LINCOLN
ELECTRIC

THE WELDING EXPERTSSM



Processes

Mig Flux-Cored
DC Stick DC TIG

Output



Input



Includes:

- Magnum® PRO 175L gun, 10' (3.0 m) cable
- 120V and 230V input cables
- Work cable and clamp
- Electrode holder and lead assembly
- Adjustable gas regulator and hose
- Gas and gasless nozzles
- Gun cable liner (pre-installed in gun)
- Spindle adapter
- 2 lb (0.90 kg) spool of SuperArc® L-56® mild steel MIG wire
- 1 lb (0.45 kg) spool Innershield® NR®-211-MP flux-cored wire
- 0.025" (0.6 mm) and 0.035" (0.9 mm) contact tips
- 0.025" - 0.030" (0.6 - 0.8 mm) and 0.035" (0.9 mm) drive rolls
- 0.030" - 0.045" (0.8 - 1.1 mm) knurled drive rolls
- 0.025" - 0.035" (0.6 - 0.9 mm) and 0.045" (1.1 mm) wire guides

Model No.	Mfg. No.	Input Power Voltage/Phase/Hertz	Rated Output Current/Voltage/Duty Cycle	Input Current @ Rated Output	Output Range	Wire Feed Speed Range	Price /Each
TTV220	K3963-1	120/1/60	120V: 100A/19.0V/40%	15A	120V: 20-140A DC Max. OCV: 56	50-500 ipm (1.3-12.7 m/min)	3379.00
		230/1/60	230V: 200A/24V/25%	14.7A	230V: 20-220A DC Max. OCV: 56		

POWER MIG® 256 WIRE FEED WELDERS

THE PROFESSIONAL'S CHOICE™

- The Power MIG® 256 sets the standard for MIG and flux-cored welding in light industrial job shop fabrication, maintenance or repair work
- Diamond Core Technology™ delivers a forgiving arc, excellent out-of-position arc stability, low spatter and a wide voltage sweet spot at a given wire feed speed for steel, stainless steel or aluminum
- Maxtrac® cast aluminum industrial wire drive features dual driven rolls, regulated wire feed speed control, brass-to-brass connections and 100% wire supporting split wire guide system
- Digital meters for set up, meters display your preset voltage and wire feed speed
- Magnum® Pro gun and cable 15' (4.5 m) makes it easy to reach your work
- Copper Plus™ contact tips features larger tip diameter and mass improves heat dissipation to increase tip life
- Spool gun ready for the premium Magnum® 250LX gun (TTU319) and spool gun capable with the Magnum® SG (TTU318), requires adapter
- 115V auxiliary receptacle to power a grinder or other auxiliary equipment
- All-metal case front
- 3-year warranty on machine, 90 days on torch



Processes

Mig Flux-Cored

Output



Input



Includes:

- Magnum® Pro gun and cable 15' (4.5 m)
- Coil Claw™ Cable Management system keeps your workstation organized
- Convenient top-mounted gun expendables tray



LINCOLN
ELECTRIC

THE WELDING EXPERTSSM



Model No.	Mfg. No.	Input Power Voltage/Phase/Hertz	Rated Output Current/Voltage/Duty Cycle**	Input Current @ Rated Output	Output Range	Price /Each
TTV124	K3068-1	208/230/1/60	250A/26V/40%	56/52A***	30-300 A 50-700 ipm WFS (1.3-17.7 m/min) Max. OCV: 40V	5859.00
TTV162*	K3068-2	230/460/575/1/60	250A/26V/40%	50/24/19A	30-300 A 50-700 ipm WFS (1.3-17.7 m/min) Max. OCV: 40V	6539.00

* Does not include input cable ** Cannot be powered by an engine-driven welder

*** Input current is at the rated output with the 115V auxiliary receptacle also drawing 15 amps

CALL US FOR OPTIONAL ACCESSORIES FOR LINCOLN ELECTRIC WELDING MACHINES

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	228.00
379-1101	B2-4215AM	Miller DP	229.00
379-4510	B2-4215AE	Euro DP	216.00
379-4201	B2-4215AL	Lincoln DP	228.00
TTT009	B2-4215AWM	Lincoln Wirematic	228.00
TTT010	B2-4215AT	Tweco DP	228.00
300 AMPS			
NT172	B2-4315A	Bernard DP	254.00
NT174	B2-4315AM	Miller DP	212.00
NT173	B2-4315AE	Euro DP	216.00
NT204	B2-4315AL	Lincoln DP	216.00
TTT011	B2-4315AWM	Lincoln WM 250	216.00
NT175	B2-4315AT	Tweco DP	216.00

Model No.	Mfg. No.	Feeder Plug	Price /Each
350 AMPS			
379-4570	B2-43515A	Bernard DP	281.00
379-1113	B2-43515AM	Miller DP	245.00
TTT012	B2-43515AE	Euro DP	265.00
379-4223	B2-43515AL	Lincoln DP	245.00
TTT013	B2-43515AWM	Lincoln Wirematic	245.00
379-4920	B2-43515AT	Tweco DP	245.00
400 AMPS			
TW978	B2-4415A	Bernard DP	287.00
TW983	B2-4415AM	Miller DP	245.00
TW979	B2-4415AE	Euro DP	254.00
TW981	B2-4415AL	Lincoln DP	245.00
TW984	B2-4415AT	Tweco DP	245.00



Contact Tip



Long Contact Tip



BERNARD® STYLE CONSUMABLES

Model No.	Mfg. No.	Description	Size"	200 Amps	300 Amps	350 Amps	400 Amps	Price /Each
NT183	B7497	Contact Tip	0.023	X	X	X		0.68
NT179	B7488	Contact Tip	0.030	X	X	X		0.67
NT180	B7489	Contact Tip	0.035	X	X	X	X	0.67
PB052	B7496	Contact Tip	0.040	X	X	X	X	0.68
NT181	B7490	Contact Tip	0.045	X	X	X	X	0.67
PB054	B7498	Contact Tip	0.052	X	X	X	X	0.68
NT182	B7491	Contact Tip	1/16	X	X	X	X	0.67
PB048	B7492	Contact Tip	5/64				X	0.68
PB050	B7494	Contact Tip	7/64				X	0.68
PB043	B1597	Contact Tip, Long	0.023	X	X	X		1.06
TW993	B1589	Contact Tip, Long	0.035	X	X	X	X	1.07
TW994	B1590	Contact Tip, Long	0.045	X	X	X	X	1.07
PB044	B1598	Contact Tip, Long	0.052	X	X	X	X	1.06
TW995	B1591	Contact Tip, Long	1/16	X	X	X	X	1.07
TW996	B1592	Contact Tip, Long	5/64				X	2.89
TW997	B1593	Contact Tip, Long	3/32				X	1.07
TW998	B1594	Contact Tip, Long	7/64				X	2.89
379-1124	B4281	Contact Tip, Tapered	0.035	X	X	X		1.59
TTT133	B4282	Contact Tip, Tapered	0.045	X	X	X		1.61
TTT134	B4283	Contact Tip, Tapered	0.052	X	X	X		1.61
TTT132	B4280	Contact Tip, Tapered	1/16	X	X	X		1.61

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	7.61
PB064	B4591	Nozzle, Brass	3/4 I.D.			X		8.35
NT177	B4391	Nozzle, Brass	5/8 I.D.	X	X			6.07
NT178	B4393	Nozzle, Copper	5/8 I.D.	X	X			7.25
BZ934	B4392	Nozzle, Brass, Standard	1/2 I.D.	X	X			14.50
379-4224	B4394	Nozzle, Copper	1/2 I.D.	X	X			7.25
PB059	B4492	Nozzle, Brass	9/16 I.D.			X	X	8.07
PB060	B4592	Nozzle, Copper	9/16 I.D.			X	X	8.28
379-1125	B4295	Nozzle, Brass	11/32 I.D.	X	X			8.83
NT176	B4335	Head Assembly, Standard		X	X			4.75
PB057	B4435	Head Assembly, Standard				X	X	5.28
379-1231	B7126	O-Ring		X	X			0.66
379-1232	B7127	O-Ring				X	X	0.66
379-1140	B4323R	Silicone Cap, Standard		X	X			1.42
379-1186	B4423R	Silicone Cap, Standard				X	X	1.53
379-1223	B4786	Body Tube Assembly		X	X			20.90
TTT137	B4790	Body Tube Assembly				X	X	20.90
379-1222	B4780	Insulator Hex Nut		X	X	X	X	1.34
379-1225	B5662	Trigger Assembly		X	X	X		5.09
379-1178	B4422	Trigger Assembly					X	24.40
379-1127	B43015	Liner Assembly, 15'	0.023 - 0.030	X	X			9.51
379-1135	B43115	Liner Assembly, 15', Standard	0.035 - 0.045	X	X			7.95
379-1139	B43215	Liner Assembly, 15'	0.045 - 0.062	X	X			8.08
379-5840	B43115X	Liner Assembly, Teflon®, 15'	0.035 - 3/64	X	X	X		13.90
379-1170	B44115	Liner Assembly, 15'	0.035 - 0.045			X	X	8.57
379-1175	B44215	Liner Assembly, 15'	0.045 - 0.062			X	X	7.95
379-1188	B44315	Liner Assembly, 15'	5/64				X	9.46

MILLER® STYLE REPLACEMENT AIR-COOLED MIG GUNS

• Guns are complete with 15' cable length

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
NT206	M169-598	250	Miller DP	358.00

CONSUMABLES

Model No.	Mfg. No.	Description	Size"	150 Amps	250 Amps	Price /Each
NT168	M087-299	Contact Tip	0.023	X	X	0.47
NT165	M000-067	Contact Tip	0.030	X	X	0.47
NT166	M000-068	Contact Tip	0.035	X	X	0.47
NT167	M000-069	Contact Tip	0.045	X	X	0.47
379-M169-715	M169-715	Nozzle	1/2	X		5.43
NT169	M169-724	Nozzle, 1/8" Tip Recess	1/2		X	8.81
NT170	M169-725	Nozzle, 5/8" Tip Recess	5/8		X	8.81
379-1050	M169-726	Nozzle, Flush	5/8		X	8.85
TTT177	M169-727	Nozzle, 1/8" Tip Stickout	5/8		X	8.94
379-1055	M169-729	Nozzle Retainer			X	4.68
TTT178	M170-467	Replacement Retaining Ring		X		2.60
TTT179	M170-468	Replacement O-Ring			X	0.46
TTT180	M169-716	Retaining Head		X		4.06
TTT181	M170-470	Replacement Retaining Ring		X		2.60
TTT182	M170-471	Replacement O-Ring		X		0.46
TTT183	M169-717	Shock Washer		X		4.43
TTT184	M169-730	Shock Washer			X	3.06
TTT185	M169-718	Gooseneck, 45°		X		39.60
TTT186	M169-731	Gooseneck, 45°			X	63.70
NT171	M169-728	Gas Diffuser			X	1.89
TTT188	M194-010	Liner Conduit, 15'	0.023 - 0.025	X	X	8.16
TTT189	M194-011	Liner Conduit, 15'	0.030 - 0.035	X	X	8.00
TTT190	M194-012	Liner Conduit, 15'	0.035 - 0.045	X	X	8.00
TTT191	M194-014	Liner Conduit, 15', Aluminum	0.035 - 3/64		X	38.30

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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	219.00
TTT030	CC35-15	Century DP	219.00
TTT031	CL35-15	Lincoln SP100-185 DP	197.00
TTT032	CWM35-15	Lincoln Wirematic	219.00
TTT033	CSP35-15	Lincoln SP150/200DP	197.00
TTT034	CM35-15	Miller DP	197.00
TTT035	CT35-15	Tweco DP	197.00
TTT036	CX35-15	Euro DP	197.00
200 AMPS			
TTT037	C215-3035	Tweco Plug	184.00
TTT038	CM215-3035	Miller DP	184.00
TTT039	CL215-3035	Lincoln "LN" DP	184.00
TTT040	CLPM215-3035	Lincoln Power MIG	184.00
TTT042	CX215-3035	Euro DP	168.00
300 AMPS			
NT189	C315-3545	Tweco Plug	240.00
NT192	CM315-3545	Miller DP	235.00
NT207	CL315-3545	Lincoln "LN" DP	248.00
NT208	CH315-3545	Hobart DP	236.00
NT209	CX315-3545	Euro DP	236.00
400 AMPS			
379-1590	C415-3545	Tweco Plug	241.00
379-1680	CM415-3545	Miller DP	249.00
TTT043	CL415-3545	Lincoln "LN" DP	249.00
TTT044	CH415-3545	Hobart DP	249.00
TTT045	CX415-3545	Euro DP	249.00

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CONSUMABLES

Model No.	Mfg. No.	Description	Size"	Price /Each
160 AMPS				
379-1265	C11-23	Contact Tip	0.023	0.41
379-1270	C11-30	Contact Tip	0.030	0.41
379-1275	C11-35	Contact Tip, Standard	0.035	0.41
TTT224	C11-40	Contact Tip	0.040	0.41
379-1280	C11-45	Contact Tip	0.045	0.41
379-1285	C11H-35	Contact Tip, Heavy-Duty	0.035	0.53
TTT227	C11H-45	Contact Tip, Heavy-Duty	0.045	0.53
379-4209	C11T-23	Contact Tip, Tapered	0.023	0.53
TTT228	C11T-30	Contact Tip, Tapered	0.030	0.53
TTT229	C11T-35	Contact Tip, Tapered	0.035	0.53
TTT230	C11T-40	Contact Tip, Tapered	0.040	0.53
TTT231	C11T-45	Contact Tip, Tapered	0.045	0.53
379-1455	C21-50	Nozzle, Standard	1/2 I.D.	5.53
TTT232	C21-50-F	Nozzle, Flush	1/2 I.D.	5.95
379-1460	C21-62	Nozzle	5/8 I.D.	4.33
TTT233	C21-62-F	Nozzle, Flush	5/8 I.D.	5.95
379-1445	C21-37	Nozzle	3/8 I.D.	5.66
TTT234	C21-37-F	Nozzle, Flush	3/8 I.D.	5.95
379-1465	C21T-37	Nozzle Tapered	3/8 I.D.	5.66
379-1570	C35-50	Gas Diffuser, Standard		2.01
TTT236	C35-60-45	Conductor Tube, 45°		13.90
TTT237	C35-60-60	Conductor Tube, 60°, Standard		13.90
379-1488	C23-40-15	Liner Assembly, 15'	0.023	7.58
379-1569	C35-40-15	Liner Assembly, 15', Standard	0.035	7.27
TTT239	C45-40-15	Liner Assembly, 15'	0.045	8.16
TTT240	C35TF-40-10	Liner Assembly, Teflon® 10'	0.035	27.90
TTT241	C35TF-40-15	Liner Assembly, Teflon® 15'	0.035	27.90
TTT242	C45TF-40-10	Liner Assembly, Teflon® 10'	0.045	16.40
TTT243	C45TF-40-15	Liner Assembly, Teflon® 15'	0.045	16.40

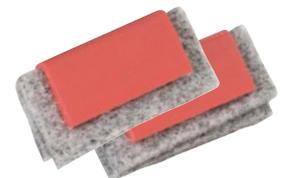
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MIG WIRE CLEANING PADS

- 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	11.50
720-1010-KIT	24	46.50



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			0.51
NP603	C14-30	Contact Tip	0.030	X	X		0.50
NP604	C14-35	Contact Tip, Standard	0.035	X	X	X	0.50
NP605	C14-40	Contact Tip	0.040	X	X	X	0.51
NP606	C14-45	Contact Tip	0.045	X	X	X	0.51
NP608	C14A-364	Contact Tip, Aluminum	3/64	X	X	X	0.51
NP607	C14-52	Contact Tip	0.052		X	X	0.51
NP601	C14-116	Contact Tip	1/16		X	X	0.51
TTT244	C14-564	Contact Tip	5/64			X	0.51
NP611	C14H-35	Contact Tip, Heavy-Duty	0.035	X	X	X	0.64
NP612	C14H-40	Contact Tip, Heavy-Duty	0.040	X	X	X	0.65
NP613	C14H-45	Contact Tip, Heavy-Duty	0.045	X	X	X	0.64
NP609	C14AH-364	Contact Tip, Heavy-Duty, Aluminium	3/64	X	X	X	0.76
NP614	C14H-52	Contact Tip, Heavy-Duty	0.052		X	X	0.65
NP610	C14H-116	Contact Tip, Heavy-Duty	1/16		X	X	0.64
NP615	C14H-564	Contact Tip, Heavy-Duty	5/64			X	0.65
TTT245	C14T-23	Contact Tip, Tapered	0.023	X			0.55
TTT246	C14T-30	Contact Tip, Tapered	0.030	X	X		0.55
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	0.55
379-1400	C14T-45	Contact Tip, Tapered	0.045	X	X	X	0.57
TTT248	C14T-52	Contact Tip, Tapered	0.052		X	X	0.55
TTT249	C14T-116	Contact Tip, Tapered	1/16			X	0.55
379-1475	C22-50	Nozzle, Adjustable, Standard	1/2 I.D.	X			2.61
379-1480	C22-62	Nozzle, Adjustable	5/8 I.D.	X			2.76
NP621	C24A-50	Nozzle, Adjustable	1/2 I.D.		X	X	3.31
NP622	C24A-62	Nozzle, Adjustable, Standard	5/8 I.D.		X	X	3.24
NP623	C24A-75	Nozzle, Adjustable	3/4 I.D.		X	X	3.31
TTT250	C22-37-SS	Nozzle, Short Stop	3/8 I.D.	X			3.19
379-4960	C22-50-SS	Nozzle, Short Stop	1/2 I.D.	X			2.76
TTT251	C22-62-SS	Nozzle, Short Stop	5/8 I.D.	X			2.76
NP620	C24A-37-SS	Nozzle, Short Stop	3/8 I.D.		X	X	3.31
NP697	C24A-50-SS	Nozzle, Short Stop	1/2 I.D.		X	X	3.31
NP698	C24A-62-SS	Nozzle, Short Stop	5/8 I.D.		X	X	3.31
NP699	C24A-75-SS	Nozzle, Short Stop	3/4 I.D.		X	X	3.31
379-1485	C22T-37-SS	Nozzle, Tapered, Short Stop	3/8 I.D.	X			2.76
NP700	C24AT-37-SS	Nozzle, Tapered, Short Stop	3/8 I.D.		X	X	3.31
NP616	C23-37	Nozzle, Self Insulated	3/8 I.D.	X	X	X	8.10
NP617	C23-50	Nozzle, Self Insulated	1/2 I.D.	X	X	X	8.10
NP618	C23-62	Nozzle, Self Insulated	5/8 I.D.	X	X	X	8.02
TTT252	C23-75	Nozzle, Self Insulated	3/4 I.D.		X	X	8.10
379-1500	C23T-37	Nozzle, Self Insulated, Tapered	3/8 I.D.	X	X	X	8.52
NP624	C24CT-37-S	Nozzle, Coarse Thread	3/8 I.D.	X	X	X	5.41
NP625	C24CT-50-S	Nozzle, Coarse Thread	1/2 I.D.	X	X	X	5.41
NP626	C24CT-62-S	Nozzle, Coarse Thread	5/8 I.D.	X	X	X	5.35
NP627	C24CT-75-S	Nozzle, Coarse Thread	3/4 I.D.		X	X	5.41
NP629	C34CT	Nozzle Insulator, Fixed Nozzle		X	X	X	8.52
379-1550	C32	Nozzle Insulator, Standard		X			1.18
NP628	C34A	Nozzle Insulator, Standard			X	X	1.21
379-1630	C52	Gas Diffuser, Standard		X			3.38
NT191	C54A	Gas Diffuser, Standard			X	X	1.69
379-1635	C52FN	Gas Diffuser for Fixed Nozzle		X			3.44
379-1595	C42-3035-15	Liner Assembly, 15', Standard	0.030 - 0.035	X			7.28
NP631	C44-3545-15	Liner Assembly, 15', Standard	0.035 - 0.045		X	X	8.99
379-1600	C42-4045-15	Liner Assembly, 15'	0.040 - 0.045	X			7.21
NP630	C44-116-15	Liner Assembly, 15'	0.062		X	X	7.95
NP706	C44-564-15	Liner Assembly, 15'	5/64			X	8.08
TTT267	C42-3035-25	Liner Assembly, 25'	0.030 - 0.035	X			13.90
TTT268	C42-4045-25	Liner Assembly, 25'	0.040 - 0.045	X			13.90
379-1618	C44-3545-25	Liner Assembly, 25'	0.035 - 0.045		X	X	19.20
379-1610	C44-116-25	Liner Assembly, 25'	0.062		X	X	19.20
TTT269	C44-564-25	Liner Assembly, 25'	5/64			X	13.90
379-7010	C42N-3545-15	Liner Assembly, Nylon, 15'	0.035 - 0.045	X			18.40
NP633	C44N-3545-15	Liner Assembly, Nylon, 15'	0.035 - 0.045		X	X	17.00
NP632	C44N-116-15	Liner Assembly, Nylon, 15'	0.062		X	X	17.00



NP611



379-1400



379-1500



379-1635



379-1600

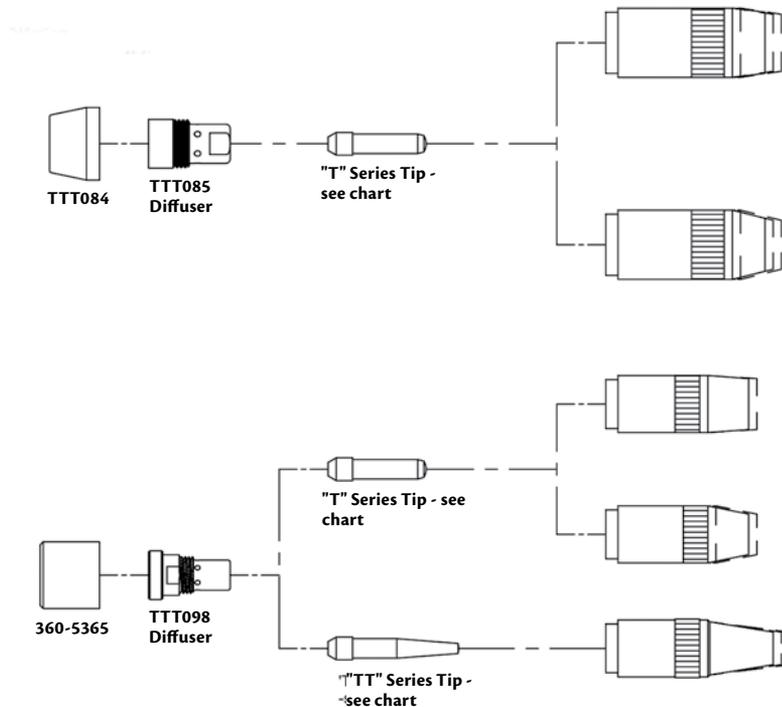
Note: All reference to genuine manufacturer's equipment numbers and/or trade names or trademarks are for identification and convenience only. The trademarks and trade names are the property of their respective owners.

MIG GUNS & ACCESSORIES



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	-	11.00
TTT085	D-1	Diffuser	-	19.50
CONTACT TIPS				
TTT086	T-030	1.50" Long	0.030	2.59
TTT087	T-035	1.50" Long	0.035	2.59
TTT088	T-039	1.50" Long	0.039	2.59
TTT089	T-045	1.50" Long	0.045	2.59
TTT090	T-052	1.50" Long	0.052	2.59
TTT091	T-062	1.50" Long	1/16	2.59
NOZZLES				
TTU273	N-3400C	Copper, Flush Tip	3/4 I.D.	27.00
TTU037	N-3418C	Copper, 1/8" Tip Recess	3/4 I.D.	27.00
TTT092	N-3414C	Copper, 1/4" Tip Recess	3/4 I.D.	27.00
TTT093	N-3418B	Brass, 1/8" Tip Recess	3/4 I.D.	26.00
TTT094	N-3414B	Brass, 1/4" Tip Recess	3/4 I.D.	26.00
TTU274	N-5800C	Copper, Flush Tip	5/8 I.D.	27.00
TTU038	N-5818C	Copper, 1/8" Tip Recess	5/8 I.D.	26.50
TTT095	N-5814C	Copper, 1/4" Tip Recess	5/8 I.D.	27.00
TTT096	N-5818B	Brass, 1/8" Tip Recess	5/8 I.D.	26.00
TTT097	N-5814B	Brass, 1/4" Tip Recess	5/8 I.D.	26.00

TT SERIES		"TT" Series Tip 		
Model No.	Mfg. No.	Description	Wire Size"	Price /Each
DIFFUSERS				
360-5365	4323R	Insulator Cap	-	11.00
TTT098	DS-1	Diffuser	-	19.50
CONTACT TIPS				
TTT099	TT-030	2.00" Long	0.030	3.09
TTT100	TT-035	2.00" Long	0.035	3.09
TTT101	TT-045	2.00" Long	0.045	3.09
TTT102	TT-052	2.00" Long	0.052	3.09
TTT103	TT-062	2.00" Long	1/16	3.09
NOZZLES				
TTT104	NS-5818B	Brass, 1/8" Tip Recess	5/8 I.D.	20.00
TTT106	NS-1200B	Brass, Flush Tip	1/2 I.D.	20.00
TTT105	NS-1218B	Brass, 1/8" Tip Recess	1/2 I.D.	20.00
TTU275	NST-3800B	Brass, Flush Tip	3/8 I.D.	24.00
TTT107	NST-3818B	Brass, 1/8" Tip Recess	3/8 I.D.	23.50
TTU276	NST-38XTB	Brass, 1/8" Tip Extension	3/8 I.D.	24.00

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



820-1905

821-1760



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	359.00
TTT376	FL1325	25	130	1-Piece	FL2L	429.00
820-1920	FL1512	12 1/2	150	1-Piece	FL3L	359.00
820-1930	FL1525	25	150	1-Piece	FL3L	429.00
WITH VALVE						
TTT379	FL1312V	12 1/2	130	1-Piece	FL2L	439.00
820-1915	FL1325V	25	130	1-Piece	FL2L	499.00
820-1925	FL1512V	12 1/2	150	1-Piece	FL3L	439.00
820-1935	FL1525V	25	150	1-Piece	FL3L	499.00
WATER-COOLED TORCHES WITHOUT VALVE						
820-1940	FL2312	12 1/2	230	Tri-Flex	FL2L	419.00
820-1945	FL2325	25	230	Tri-Flex	FL2L	449.00
820-2075	FL2512	12 1/2	250	Tri-Flex	FL3L	419.00
820-1950	FL2525	25	250	Tri-Flex	FL3L	449.00

TORCH HEAD SELECTOR CHART

Model No.	Mfg. No.	Amps		Head Style	Price /Each
		Gas-Cooled	Water-Cooled		
821-1750	FL2L	130	230	2 Series	92.20
821-1760	FL3L	150	250	3 Series	93.30

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

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	409.00
TTT283	WP-225-25	25	45V04	45V08	45V10	429.00
TTT286	WP-225-12-R	12, Neoprene	45V03R	45V07R	45V09R	499.00
366-7200	WP-225-25-R	25, Neoprene	45V04R	45V08R	45V10R	559.00

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	339.00
366-4741	WP-25-25	25	45V04	45V08	45V10	419.00
TTT290	WP-25-12-R	12, Neoprene	45V03R	45V07R	45V09R	469.00

FLEXIBLE TORCH BODY

Model No.	Mfg. No.	Max. Amps	Price /Each
FOR USE WITH INTERCHANGEABLE HEADS			
366-7000	WP-225	225	259.00

LONG REACH FLEX-PENCIL TYPE TORCH BODY

Model No.	Mfg. No.	Max. Amps	Price /Each
366-4735	WP-25	200	219.00

INTERCHANGEABLE HEADS



Model No.	Mfg. No.	Max. Amps A/C*	W/C**	Head Angle°	Fits	Price /Each
366-1315	9-70	125	200	70	WP-9, WP-9V WP-20 WP-225	59.20
TTT292	9P	125	200	180	WP-9, WP-9V WP-20 WP-225	63.60
TTT293	24	80	160	70	WP-24, WP-24W WP-225	62.50
366-2998	1726	150/200	225	70	WP-17, WP-17V WP-18, WP-18V, WP-26, WP-26V WP-225	58.80
TTT294	1726P	150/200	225	180	WP-17, WP-17V WP-18, WP-18V, WP-26, WP-26V WP-225	63.60
TTT295	24-90	80	160	90	WP-24, WP-24W WP-225	70.20

* Air cooled

** Water cooled

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
WP-24 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
WP-9 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
WP-17 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
WP-26 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 1550 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	109.00				820-1590	CK80	72.40
TTT271	WP-24F	179.00				820-1615	CK90	119.00
TTT272	WP-24FV	209.00				820-2070	CK90V	169.00
TTT273*	WP-24-25-R	309.00						
TTT275*	WP-24F-25-R	369.00	363-1945	VT-9F-25-R	209.00			
TTT276*	WP-24FV-25-R	409.00	363-1970	VT-9FV-25-R	269.00			
366-4249	WP-9	73.10				820-2205	CK130V	119.00
366-4378	WP-9V	119.00						
366-4278	WP-9F	139.00						
366-4300	WP-9FV	189.00						
366-4402*	WP-9-25-R	219.00				820-2270	CK1325H RG	229.00
366-4399*	WP-9V-25-R	259.00				820-2105	CK1325VH RG	279.00
TTT277*	WP-9F-25-R	289.00						
366-4324*	WP-9FV-25-R	329.00				820-2090	CK1325VH FX	319.00
366-4438	WP-17	80.10				820-1115	CK150 RG	65.80
366-4513	WP-17V	119.00				820-1125	CK150V RG	93.30
366-4462	WP-17F	149.00				820-1110	CK150 FX	119.00
366-4486	WP-17FV	189.00				820-1120	CK150V FX	149.00
NP473	WP-17-25-2	299.00						
NP474	WP-17V-25-2	339.00				820-1200	CK1525VN RG	259.00
366-4459*	WP-17-25-R	229.00				820-1165	CK1525H RG	209.00
366-4540*	WP-17V-25-R	269.00				820-1185	CK1525VH RG	259.00
366-4483*	WP-17F-25-R	299.00						
366-4510*	WP-17FV-25-R	339.00				820-1180	CK1525VH FX	309.00
366-4744	WP-26	92.90	363-1280	VT-26	71.30	820-1280	CK210-R / CK26 RG	85.60
366-4822	WP-26V	149.00	363-1640	VT-26V	109.00	820-1290	CK210V-R / CK26V RG	119.00
366-4774	WP-26F	179.00	363-2025	VT-26F	119.00	820-1275	CK210-F / CK26 FX	149.00
366-4795	WP-26FV	219.00	363-2050	VT-26FV	159.00	820-1285	CK210V-F / CK26V FX	189.00
NP476	WP-26V-25-2	429.00	363-1220	VT-26-25-2	289.00			
366-4765*	WP-26-25-R	309.00	363-1455	VT-26V-25-2	299.00	820-1355	CK2125H-R / CK26-25-R RG	309.00
366-4843*	WP-26V-25-R	359.00	363-1435	VT-26-25-R	309.00	820-1390	CK2125VH-R / CK26V-25-R RG	329.00
366-4792*	WP-26F-25-R	389.00	363-1460	VT-26V-25-R	319.00	820-1350	CK2125H-F / CK26-25-R FX	359.00
366-4819*	WP-26FV-25-R	429.00	363-2045	VT-26F-25-RFX	329.00	820-1380	CK2125VH-F / CK26-25-R FX	409.00
			363-2070	VT-26V-25-RFX	349.00			

* 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	-	-
W/insulating gasket	180	70°	No	1-Piece Rubber Jacketed	-
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

** See page 1550 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

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	139.00						
366-4732*	WP-24W-25	329.00						
TTT278*	WP-24W-25-R	449.00						
366-4597	WP-20	139.00				820-1260	CK200	98.80
TTT279	WP-20V	229.00				820-1265	CK200V	149.00
NP477	WP-20-25	329.00				820-1405	CK225	309.00
NP478	WP-20V-25	419.00				820-1420	CK225V	359.00
366-4610*	WP-20-25-R	449.00				818-1471	CK225SF	389.00
366-4543	WP-18	189.00	363-1285	VT-18	109.00	820-1505	CK300	119.00
366-4585	WP-18V	289.00				820-1510	CK300V	179.00
NP479	WP-18-25	369.00				820-1530	CK325	349.00
NP480	WP-18V-25	469.00				820-1545	CK325V	439.00
TTT281*	WP-18-25-R	509.00				TTU659	CK325VSF	549.00
TTT282*	WP-18V-25-R	599.00						

* Power cable adapter must be ordered separately

TIG TORCHES & ACCESSORIES



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.	C-K Mfg. No.	Price /Each
LAVA NOZZLES - 1 27/32" LENGTH								
4	1/4	WP-17, WP-17V,	NP431	105Z43	22.90	818-2185	3C4	39.00
5	5/16	WP-18, WP-18V,	366-2800	105Z42	21.80	818-2210	3C5	39.00
6	3/8	WP-26, WP-26V	366-2806	105Z44	21.80	818-2230	3C6	39.00
7	7/16		366-2809	105Z45	21.80	818-2240	3C7	39.00
8	1/2		366-1000	08N78	24.70	818-2250	3C8	39.00
10	5/8		NP430	08N79	25.10	818-2150	3C10	39.00
12	3/4					TTT001	3C12	39.00
LAVA NOZZLES - 1 5/32" LENGTH								
4	1/4	WP-9, WP-9V,	366-1609	13N14	17.40	818-1730	2C4	34.60
5	5/16	WP-20,	366-1612	13N15	17.40	818-1755	2C5	34.60
6	3/8	WP-25,	366-1615	13N16	17.40	818-1765	2C6	34.60
7	7/16		NP440	13N17	17.40	818-1775	2C7	34.60
8	1/2		NP441	13N18	18.50	818-1780	2C8	34.60
10	5/8		366-1624	13N19	18.50	818-1695	2C10	34.60
LAVA NOZZLES - 5/8" LENGTH								
4	1/4		366-2368	53N24	19.20	818-2785	8C4	30.20
5	5/16		366-2371	53N25	18.10	818-2800	8C5	30.20
6	3/8		366-2377	53N27	19.20	818-2805	8C6	30.20
LAVA NOZZLES - 1 1/8" LENGTH								
6L	3/8		366-2374	53N26	20.70			
LONG LAVA NOZZLES - 3 7/32" LENGTH								
4L	1/4	WP-17, WP-17V,	NP456	12N03	38.30	818-2205	3C4L	48.90
5L	5/16	WP-18, WP-18V,	NP457	105Z60	36.80	818-2225	3C5L	48.90
6L	3/8	WP-26, WP-26V	366-1576	12N02	38.30	818-2235	3C6L	48.90
7L	7/16		NP459	105Z61	38.30	818-2245	3C7L	48.90
LONG LAVA NOZZLES - 1 7/8" LENGTH								
3L	3/16	WP-9, WP-9V,	366-2941	796F70	26.90	818-1725	2C3L	43.80
4L	1/4	WP-20,	366-2926	796F71	26.90	818-1750	2C4L	43.80
5L	5/16	WP-25	366-2929	796F72	25.80	818-1760	2C5L	43.80
6L	3/8		366-2932	796F73	25.80	818-1770	2C6L	43.80
LONG LAVA NOZZLES - 2 1/2" LENGTH								
3XL	3/16	WP-9, WP-9V,	TTT310	796F74	29.50			
4XL	1/4	WP-20, WP-25	366-2938	796F75	29.50			

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



366-1000



818-1730



NP457



ZENITH
SAFETY PRODUCTS
FOR INDUSTRY

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.	C-K Mfg. No.	Price /Each
ALUMINA NOZZLES – 1 27/32" LENGTH								
4	1/4	WP-17, WP-17V,	366-1504	10N50	3.59	818-2050	3A4	2.49
5	5/16	WP-18, WP-18V,	NP396	10N49	3.59	818-2060	3A5	2.49
6	3/8	WP-26, WP-26V	366-1492	10N48	3.29	818-2070	3A6	2.49
7	7/16		366-1486	10N47	3.59	818-2080	3A7	2.49
8	1/2		366-1483	10N46	3.59	818-2090	3A8	2.49
10	5/8		366-1480	10N45	3.69	818-2040	3A10	2.49
12	3/4		366-1477	10N44	3.89	818-2045	3A12	2.49
ALUMINA NOZZLES – 1 5/32" LENGTH								
4	1/4	WP-9, WP-9V,	366-1591	13N08	3.29	818-1615	2A4	2.49
5	5/16	WP-20,	366-1594	13N09	3.29	818-1625	2A5	2.49
6	3/8	WP-25	366-1597	13N10	3.29	818-1635	2A6	2.49
7	7/16		366-1600	13N11	3.29	818-1645	2A7	2.49
8	1/2		366-1603	13N12	3.29	818-1655	2A8	2.49
10	5/8		366-1606	13N13	3.39	818-1610	2A10	2.49
ALUMINA NOZZLES – 5/8" LENGTH								
4	1/4	WP-24, WP-24W	TTT300	A53N24	11.90			
5	5/16		TTT301	A53N25	11.90			
LONG ALUMINA NOZZLES – 3" LENGTH								
5L	5/16	WP-17, WP-17V,	NP445	10N49L	35.70	818-3625	3A5L	26.90
6L	3/8	WP-18, WP-18V,	NP446	10N48L	26.90	TTT004	3A6L	26.90
7L	7/16	WP-26, WP-26V	366-1489	10N47L	35.70	TTT005	3A7L	26.90
ALUMINA GAS LENS NOZZLES – 1 5/8" LENGTH (ALSO ORDER INSULATOR)								
4	1/4	WP-17, WP-17V,	366-2467	54N18	3.89	818-2115	3AG4	2.49
5	5/16	WP-18, WP-18V,	366-2461	54N17	3.69	818-2120	3AG5	2.49
6	3/8	WP-26, WP-26V	NP386	54N16	3.59	818-2125	3AG6	2.49
7	7/16		366-2449	54N15	3.59	818-2130	3AG7	2.49
8	1/2		366-2446	54N14	3.39	818-2135	3AG8	2.49
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	3.89	818-2105	3AG11	2.49
ALUMINA GAS LENS NOZZLES – 1" LENGTH (ALSO ORDER INSULATOR)								
4	1/4	WP-9, WP-9V,	366-2392	53N58	3.59	818-1665	2AG4	2.49
5	5/16	WP-20,	NP390	53N59	3.49	818-1670	2AG5	2.49
6	3/8	WP-24,	NP391	53N60	3.09	818-1675	2AG6	2.49
7	7/16	WP-25,	366-2404	53N61	3.09	818-1680	2AG7	2.49
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	7.69	818-2100	3AG10LD	5.49
12	3/4	WP-12	366-2431	53N87	7.79	818-2110	3AG12LD	5.49
Short	15/16		366-2437	53N89	8.59			



NP396



366-1591



**CANADA'S LEADING
MATERIAL HANDLING SUPPLIER**

TIG TORCHES & ACCESSORIES

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



366-2473



366-1882



TTT322



TTT325



WELDCRAFT

Size"	Fits Torch Series	Model No.	Weldcraft Mfg. No.	Price /Each	Model No.	C-K Mfg. No.	Price /Each
COLLETS							
0.020	WP-9, WP-9V,				818-1710	2C20	1.99
0.040	WP-20,	366-1633	13N21	2.99	818-1735	2C40	1.99
1/16	WP-25	366-1639	13N22	2.69	818-1700	2C116	1.99
3/32		NP413	13N23	2.59	818-1715	2C332	1.99
1/8		NP412	13N24	2.69	818-1740	2C418	1.99
0.020	WP-17, WP-17V,				818-2170	3C20	2.39
0.040	WP-18, WP-18V,	366-1435	10N22	5.39	818-2190	3C40	2.39
1/16	WP-26, WP-26V	366-1441	10N23	4.79	818-2155	3C116	2.39
3/32		366-1447	10N24	4.79	818-2175	3C332	2.39
1/8		366-1453	10N25	4.79	818-2195	3C418	2.39
5/32		366-2473	54N20	5.19	818-2215	3C532	2.39
0.020	WP-24, WP-24W				TTT006	8C20	4.39
0.040		TTT313	53N16	4.29	818-8C40	8C40	4.39
1/16		366-2338	53N14	4.69	818-2770	8C116	4.39
3/32		366-1882	24C332	4.69	818-2780	8C332	4.39
0.020	For Gas Lens				TTT007	8CG20	4.59
0.040		TTT315	53N63	5.69	818-2845	8CG40	4.59
1/16		TTT316	53N64	5.99	818-2835	8CG116	4.59
3/32		366-1891	24GLC332	4.99	818-2840	8CG332	4.59
COLLET BODIES							
0.020	WP-9, WP-9V,	TTT322	13N25	5.89	818-1790	2CB20	3.99
0.040	WP-20,	366-1660	13N26	5.89	818-1800	2CB40	3.99
1/16	WP-25	366-1663	13N27	5.19	818-1785	2CB116	3.99
3/32		NP406	13N28	5.19	818-1795	2CB332	3.99
1/8		366-1669	13N29	5.19	818-1805	2CB418	3.99
0.040	WP-18, WP-18V,	NP400	10N30	9.69	818-2270	3CB40	5.19
1/16	WP-26, WP-26V	366-1471	10N31	7.09	818-2255	3CB116	5.19
3/32		366-1474	10N32	6.69	818-2265	3CB332	5.19
1/8		366-1462	10N28	7.09	818-2275	3CB1418	5.19
5/32		366-3484	406488	7.69	818-2280	3CB532	5.19
0.020	WP-24, WP-24W*				818-3645	8CB20	4.19
0.040		TTT324	53N18	14.10	818-3650	8CB40	4.19
1/16		366-2353	53N19	10.50	818-2815	8CB116	4.19
3/32		TTT325	24CB332	9.69	818-2825	8CB332	4.19



366-1627



366-3484

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

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



TTT008



818-2375



NP424



366-3490

WELDCRAFT



Size"	Fits Torch Series	Model No.	Weldcraft 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,				TTT008	2GL20	10.30
0.040	WP-20,	366-2203	45V42	12.60	818-1830	2GL40	10.30
1/16	WP-25	366-2206	45V43	12.60	818-1820	2GL116	10.30
3/32		NP423	45V44	12.60	818-1825	2GL332	10.30
1/8		366-2212	45V45	12.60	818-1835	2GL418	10.30
0.020	WP-17, WP-17V,				818-2360	3GL20	11.50
0.040	WP-18, WP-18V,				818-2375	3GL40	11.50
1/16	WP-26, WP-26V	366-2185	45V25	15.20	818-2345	3GL116	11.50
3/32		NP419	45V26	14.10	818-2365	3GL332	11.50
1/8		366-2191	45V27	15.20	818-2380	3GL418	11.50
5/32		366-2194	45V28	15.20	818-2390	3GL532	11.50
0.020 - 0.040	WP-17, WP-17V,	NP424	45V0204	30.60			
1/16	WP-18, WP-18V,	NP418	45V116	29.10			
3/32	WP-26, WP-26V	366-2227	45V64	28.00	818-2370	3GL332LD	25.10
1/8	Large Dia. Gas Lens	366-3490	995795	28.00	818-2385	3GL418LD	25.10
5/32		366-2221	45V63	29.10	818-2395	3G6532LD	25.10
INSULATORS							
	WP-17, WP-17V, WP-18, WP-18V, WP-26, WP-26V Gas Lens	366-2440	54N01	6.49			
	Large Diameter Gas Lens (use on above torches)	366-2497	54N63	13.70			
	WP-9, WP-9V, WP-20, WP-25 (supplied on torch body)	366-3487	598882	4.09			
	WP-24, WP-24V Gas Lens	366-2419	53N66	9.69			
	WP-12 Gas Lens Stubby Collet Body	TTT331	12GLG	31.70			
		366-1756	18CG20	16.30			
BACK CAPS							
Short	WP-9, WP-9V,				818-1390	200S	6.09
Medium	WP-20	366-2119	41V35	10.30	818-1380	200M	5.59
Long		366-2083	41V24	10.90	818-1375	200L	6.09
Long	WP-17, WP-17V,				818-1925	300L	4.89
Short	WP-18, WP-18V, WP-26, WP-26V	366-2626	57Y04	18.50	818-1940	300S	3.69



366-2119



366-2611



366-2626

TIG TORCHES & ACCESSORIES



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	9.09	818-2505	4C40	5.39
1/16	WP-18, WP-18V,	366-1444	10N23S	8.89	818-2480	4C116	5.39
3/32		NP472	10N24S	7.79	818-2495	4C332	5.39
1/8		366-1459	10N25S	8.19	818-2510	4C418	5.39

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.	C-K Mfg. No.	Price /Each
WP-18, WP-18V, WP-20, WP-24W, WP-25, WP-12	366-2179	45V11	31.30	818-1850	2PCA	29.50
WP-9, WP-9V*, WP-17*, WP-17V*	366-2827	10S257	20.30	818-1185	15PCA	18.90
WP-24	366-2383	53N43	33.90	818-1315	1PCA	24.70
WP-26*, WP-26V*	366-2218	45V62	31.30			

*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 \$48.90

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 \$65.80

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 \$76.80



WP-20 TORCH SERIES

- 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 \$74.60

WP-24 TORCH SERIES

- 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 \$91.10

POWER CABLES – WATER & GAS HOSES



WELDCRAFT



Description	Size'	Fits Torch Series	Model No.	Weldcraft 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	89.60			
Power Cable	25	WP-17, WP-17V	366-2614*	57Y03	139.00			
Power Cable	12 1/2	WP-18, WP-18V	366-1993	40V64	90.70	818-1965	312PC	82.30
Power Cable	25		366-2086	41V29	119.00	818-1995	325PC	129.00
Water Hose	12 1/2		366-2002	40V74	29.10	818-1975	312WH	23.60
Water Hose	25		366-2104	41V32	38.30	818-2005	325WH	30.20
Gas Hose	12 1/2		TTT412	40V75	29.10	818-1950	312AH	25.80
Gas Hose	25		366-2095	41V30	38.30	818-1980	325AH	32.80
Power Cable	12 1/2	WP-20, WP-20V				818-1430	212PC	76.80
Power Cable	25	WP-25				818-1465	225PC	94.00
Water Hose	12 1/2					818-1440	212WH	25.10
Water Hose	25					818-1475	225WH	32.80
Gas Hose	12 1/2		366-2167	45V09	28.40	818-1415	212AH	21.80
Gas Hose	25		366-2173	45V10	28.40	818-1455	225AH	31.70
Heavy-Duty Power Cable	12 1/2		TTT333	45V03HD	129.00			
Heavy-Duty Power Cable	25		TTT334	45V04HD	159.00			
Heavy-Duty Water Hose	12 1/2		TTT335	45V07HD	44.50			
Heavy-Duty Water Hose	25		TTT336	45V08HD	65.80			
RUBBER POWER CABLES (RUBBER HOSE CONSTRUCTION)								
Power Cable	12 1/2	WP-17, WP-17V	TTT339	57Y01R	98.80	818-1150	1512PCHF	129.00
Power Cable	25		366-2623	57Y03R	149.00	818-1170	1525PCHF	159.00
Power Cable	12 1/2	WP-18, WP-18V	TTT340	40V64R	109.00			
Power Cable	25		366-2092	41V29R	139.00			
Power Cable	12 1/2	WP-26, WP-26V	366-2254	46V28R	139.00			
Power Cable	25		366-2263	46V30R	199.00			
2-PIECE POWER CABLES - GAS HOSES								
Power Cable & Gas Hose	12 1/2	WP-9, WP-9V,	TTT341	57Y01-2	129.00	TTT187	1512PCN	109.00
Gas Hose only	12 1/2	WP-17, WP-17V	366-2170	45V09R	54.80			
Power Cable & Gas Hose	25		366-2617	57Y03-2	259.00	818-1180	1525PCN	159.00
Gas Hose only	25		366-2176	45V10R	83.40			
Power Cable & Gas Hose	12 1/2	WP-26, WP-26V	366-2251	46V28-2	149.00			
Power Cable & Gas Hose	25		366-2260	46V30-2	309.00			

*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 \$43.95



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 \$70.30



Can't find what you're looking for?



Call us today!



TUNGSTEN ELECTRODES

- 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**



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

0.8% 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

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

PURE:

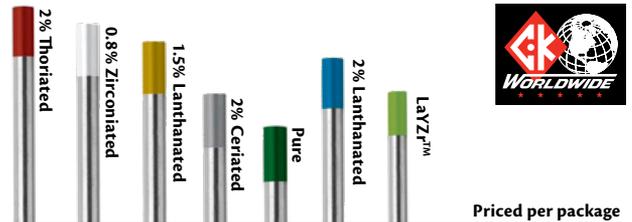
- Lowest current capacity and least expensive
- Maintains a clean balled end for welding on AC
- More prone to weld contamination than other types of tungsten electrodes
- Tends to spit at higher currents • Used for non-critical welds only

2% LANTHANATED:

- Non-radioactive
- Best general purpose electrode at medium to higher amperages for both A/C or D/C using inverter or transformer based constant current power sources
- Good for low-alloyed steels, non corroding steels, aluminum alloys, magnesium alloys, titanium alloys, nickel alloys, and copper alloys
- Good arc starts and stability, low erosion rate, medium to high current range

LAYZR™:

- Non-radioactive
- Best for automated or robotic applications in A/C or D/C due to low voltage tolerance (changes in tip to work piece distance) using inverter or transformer based constant current power sources
- Good for low-alloyed steels, non corroding steels, aluminum alloys, magnesium alloys, titanium alloys, nickel alloys, and copper alloys
- Very stable tip geometry runs cooler than 2% thoriated, longer life
- Very best low amperage starts



Priced per package

Model No.	Mfg. No.	ISO Colour Chart	Dia. "	Price /Each
2% THORIATED				
TTT403	T0207GT2	Red	0.020	3.59
NP552	T0407GT2	AWS A5.12 EWTh-2	0.040	11.20
NP544	T1167GT2	ISO 6848 WT20	1/16	21.80
NP545	T3327GT2		3/32	48.90
NP543	T187GT2		1/8	88.90
714-1150	T5327GT2		5/32	159.00
0.8% ZIRCONIATED				
TTT408	T0207GZ	White	0.020	3.59
TTT409	T0407GZ	AWS A5.12 EWZr-8	0.040	13.00
NP546	T1167GZ	ISO 6848 WZ8	1/16	22.50
NP547	T3327GZ		3/32	49.30
NP553	T187GZ		1/8	91.10
714-1185	T5327GZ		5/32	169.00
1.5% LANTHANATED				
TTT404	T0207GL	Gold	0.020	3.59
TTT405	T0407GL	AWS A5.12 EWLa-1.5	0.040	12.60
714-1200	T1167GL	ISO 6848 WL15	1/16	21.80
714-1205	T3327GL		3/32	48.90
714-1210	T187GL		1/8	88.90
TTT406	T5327GL		5/32	149.00
2% CERIATED				
TTT407	T0207GC2	Grey	0.020	2.79
NP548	T0407GC2	AWS A5.12 EWCe-2	0.040	11.20
NP549	T1167GC2	ISO 6848 WC20	1/16	21.40
NP550	T3327GC2		3/32	47.10
NP551	T187GC2		1/8	85.60
714-1177	T5327GC2		5/32	149.00
PURE				
TTT410	T0207G	Green	0.020	2.79
NP539	T0407G	AWS A5.12 EWP	0.040	11.20
NP540	T1167G	ISO 6848 WP	1/16	21.40
NP542	T3327G		3/32	47.10
NP541	T187G		1/8	88.90
714-1060	T5327G		5/32	139.00
2% LANTHANATED				
TTV117	T0207GL2	Blue	0.020	3.59
TTV118	T0407GL2	AWS A5.12 EWLa-2	0.040	11.20
TTV119	T1167GL2	ISO 6848 WLZ0	1/16	22.50
TTV120	T3327GL2		3/32	49.30
TTV121	T187GL2		1/8	88.90
TTV122	T5327GL2		5/32	149.00
LAYZR™				
TTV111	T0207GTM	Chartreuse (Lime Green)	0.020	3.59
TTV112	T0407GTM	AWS A5.12 EWG	0.040	12.60
TTV113	T1167GTM	ISO 6848	1/16	21.80
TTV114	T3327GTM		3/32	48.90
TTV115	T187GTM		1/8	91.10
TTV116	T5327GTM		5/32	199.00

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 oz. net jars, over 500 sharpenings per jar

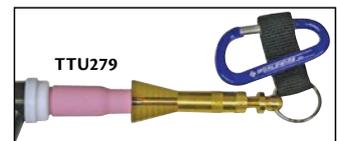


DYNAFLUX
QUALITY PRODUCTS

Model No.	Mfg. No.	Description	Price /Each
881-1300	DF600-6	Jar, 5 oz. net	23.29
881-1305	DF601-6	Tungsten Holder	41.39
881-1310	DF602-4	Kit w/1 Jar and Holder	67.59

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	64.30
TTU280	TG1-24	For 24 Series and Micro Torch	61.00

TURBO-SHARP® X TUNGSTEN ELECTRODE GRINDERS

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
- 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

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



821-3707

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

3 position adjustable head!



Grinding disc last 3x longer!



Turbo-Sharp®



TTT401



Model No.	Mfg. No.	Description	Price /Each
TTT401	TS10	115 V Grinder	1869.00
TTT402	TS10-230	230 V Grinder	2309.00
821-3707	TS3-W	Replacement Diamond Coated Disc Wheel	189.00
TTT413	TS3-HB	Grinder Head - 0.040" - 1/8" (included in TTT401)	439.00
821-3706	TS3-HR	Grinder Head - 0.040" - 5/32", 3/16", 1/4"	439.00
TTT414*	TS3-STK	Short Tungsten Kit	259.00

* For use with 821-3706 grinder head only



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:	30000 RPM
Weight:	3.7 lbs. (1690 g)
Guarantee:	2 years



MT200-AC/DC TIG WELDING SYSTEM

CREATE, REPAIR & CUSTOMIZE

- Provides the ability to quickly and efficiently adapt to dynamic welding situations
- High-performance dual voltage inverter for 115V and 220V
- Two dynamic welding modes: GTAW (TIG) and SMAW (Stick)
- Easy-to-use interface allows for quick setting adjustments
- Compact, portable design for use in multiple applications
- Features square wave technology allowing arc to start as low as 5 amps
- 3-year limited warranty

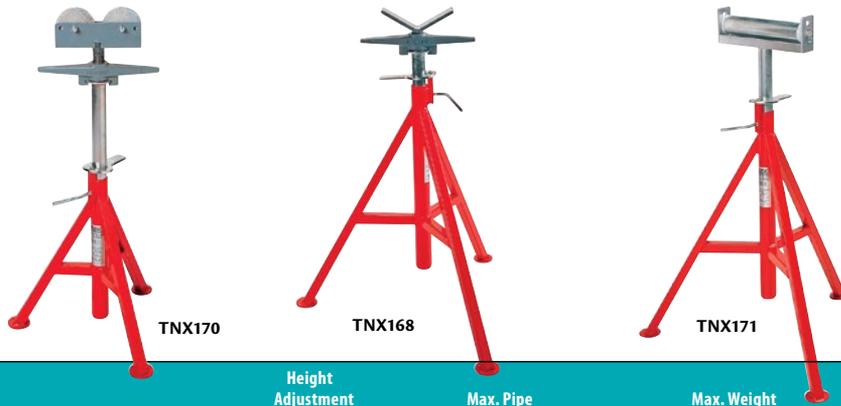
- **Use to Weld:** Aluminum, Titanium, Magnesium, Stainless Steel, Low Alloy Steel, Deoxidized Copper, and much more!
- **Includes:** CK17 Flex-Head Gas-Cooled TIG Torch with 12.5' Super Flex™ Cable, Dinse® Connector, AK-3 Accessory Kit, Foot Pedal Amperage Control, Ground Clamp with 12.5' Cable, Single-Flow Regulator, 6' Argon Hose, 220V to 115V power adapter



Model No.	Mfg. No.	Input Power Voltage/Phase/Hz	Input Current	Output Current Range		Rated Output		Price Each
				GTAW	SMAW	GTAW	SMAW	
TTV224	MT200-AC/DC	115/1/50/60	21A	115V:	115V:	115V: 140A@15.6V,	115V: 110A@24.4V,	4359.00
				5-140 Amps	10-110 Amps	40% duty cycle	25% duty cycle	
		220/1/50/60	34A	220V:	220V:	220V: 200A@18.0V,	220V: 160A@26.4V,	
				5-200 Amps	10-160 Amps	25% duty cycle	30% duty cycle	

PIPE LAYOUT MEASURING TOOLS

PIPE STANDS



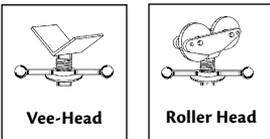
RIDGID

Model No.	Cat. No.	Mfg. No.	Description	Height Adjustment Low-High		Max. Pipe Capacity		Max. Weight Capacity		Weight		Price /Each
				in.	cm	in.	mm	lbs.	kg	lbs.	kg	
TNX167	56657	VJ-98	V Head Low Pipe Stand	20-38	51-96	12	300	2500	1136	21	9.5	129.00
TNX168	56662	VJ-99	V Head High Pipe Stand	28-53	71-132	12	300	2500	1136	23	10.4	129.00
TNX169	56667	RJ-98	Roller Head Low Pipe Stand	23-41	59-104	12	300	1000	454.5	24	10.9	169.00
TNX170	56672	RJ-99	Roller Head High Pipe Stand	32-55	82-140	12	300	1000	454.5	27	12.3	169.00
TNX171	56682	CJ-99	Conveyor Head High Stand	29-44	74-112	12	300	1000	454.5	19	8.6	219.00

FOLD-A-JACK® HI JACKS

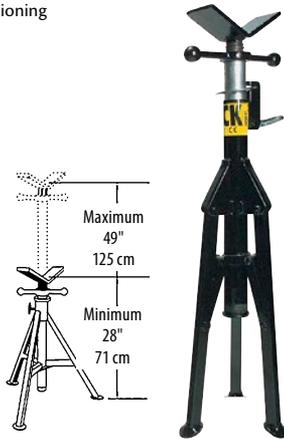
- 1" square tube base construction
- Quick-action lock washer for quick height positioning
- Large, convenient adjustment handle
- Set screw for double margin of safety, can lock jack head to stand for transportation, no loose pieces
- Perfect for work height on shapes or pipes 24" in diameter or smaller
- Carrying handle for ease of transporting
- Jack independently load tested for quality assurance
- 2500-lb capacity
- CE rated

HEAD STYLES



Model No.	Mfg. No.	Description	Price /Each
432-1161	781300	ST-881 w/Vee-Head	163.00
432-1162	781301	ST-882 w/Roller Head	234.00

SUMMER



#1 MARKER

MADE FROM DURABLE, LIGHTWEIGHT ALUMINUM

- Curv-O-Mark® Contour® Marker 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
- 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
- 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
- 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. 14771

Price/Each P.O.A.

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



CURV-O-MARK

Model No.	Mfg. No.	Description	Radius"	Price /Each
430-2580	14780	Mini	Up to 8	P.O.A.
430-2590	14781	Small	Up to 20	P.O.A.
430-2600	14782	Standard	Up to 24	P.O.A.
430-2610	14783	Jumbo	Up to 40	P.O.A.

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.

#6 Standard Model

- Used on pipe 1/2" to 4" diameter or larger
- Fitted with an adjustable dial bubble protractor (DSL), manually operated centering pin

#7 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

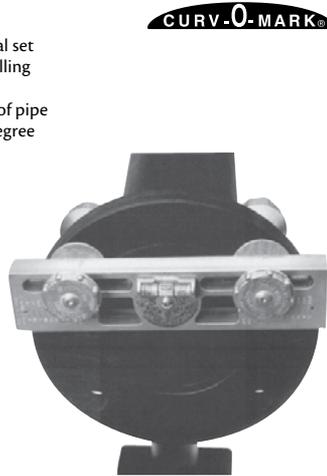


Model No.	Mfg. No.	Type	Head Type	Head Width"	Price /Each
430-2050	14775	Standard	Y	4	P.O.A.
430-2070	14776	Jumbo	Y	8	P.O.A.

#33 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 set level 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
 - Truing 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
- 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

Model No. 430-2240
Mfg. No. 14796
Price/Each P.O.A.



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 except X-small
- 3.88" and 5.00" wraps feature a metric scale and pitch chart



CURV-O-MARK®

Model No.	Mfg. No.	Size	Dimensions			Pipe Dia."	Price /Each
			L'	x	W"		
430-2330	14752	Medium	4	x	3.88	3 to 6	P.O.A.
430-2370	14753	Large	6	x	3.88	3 to 10	P.O.A.
430-2410	14754	X-Large	7	x	5.00	4 to 12	P.O.A.
430-2450	14756	XX-Large	9	x	5.00	6 to 16	P.O.A.

PIPE ALIGNMENT CLAMP

- Heavy duty forged pipe alignment clamps allow the efficient preparation for welding
- Stainless steel ball bearing in each wing-nut
- Suited for quick alignment of pipe to pipe, pipe to elbow and pipe to flange
- Forged steel construction

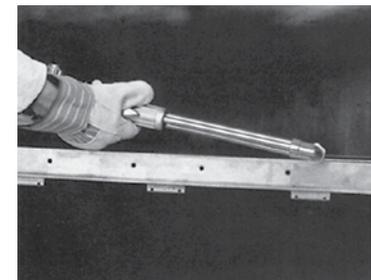


INTERCON ENTERPRISES INC.

Model No.	Mfg. No.	Pipe Clamp Range		Price /Each
		inches	mm	
TTV279	INT-1-3	3/4 to 3-1/2	20 to 90	327.00
TTV280	INT-2-6	2 to 6-5/8	50 to 170	415.00
TTV281	INT-6-12	6-5/8 to 13	170 to 330	589.00

#28 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

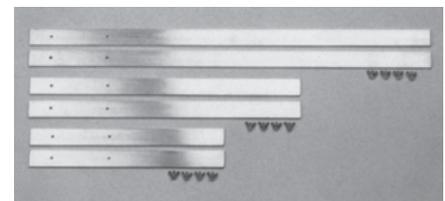


Model No. 430-2190
Mfg. No. 14791
Price/Each P.O.A.

CURV-O-MARK®

ATTACHMENTS FOR PRO-MAG BURNING SQUARE & MAGNETIC BURNING GUIDE

- Each is in two sections



CURV-O-MARK®

Model No.	Mfg. No.	No.	Overall Length"	Price /Each
430-2200	14792	29	34	P.O.A.
430-2210	14793	30	48	P.O.A.
430-2220	14794	31	72	P.O.A.

Industrial Multi-Purpose Cleaning Products

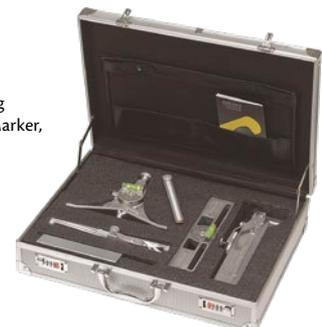


WORKER KITS

- **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 lockable metal carrying case

Model No. TTT484
Mfg. No. 20664
Price/Each P.O.A.

CURV-O-MARK®





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



Priced 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	6.90
NT550	0.030"/0.8 mm	2 lbs./0.9 kg	18	4.85
NT551	0.035"/0.9 mm	2 lbs./0.9 kg	18	4.75
NT552	0.045"/1.14 mm	2 lbs./0.9 kg	18	4.60
NT553	0.023"/0.6 mm	11 lbs./5 kg	4	29.50
NT554	0.030"/0.8 mm	11 lbs./5 kg	4	17.95
NT555	0.035"/0.9 mm	11 lbs./5 kg	4	17.50
NT556	0.023"/0.6 mm	33 lbs./15 kg	1	79.95
NT557	0.030"/0.8 mm	33 lbs./15 kg	1	46.95
NT560	0.035"/0.9 mm	44 lbs./20 kg	1	61.85
NT561	0.045"/1.14 mm	44 lbs./20 kg	1	57.25

Priced per Drum

Model No.	Diameter	Drum Weight	Qty Per Pallet	Price /Each
TTU049	0.035"/0.9 mm	550 lbs./250 kg	4	835.00

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 galvanised and mild steels



weldcote
metals

Priced per Spool

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price /Each
TTU700	E71TGS030X2SP	0.030	2	20.70
TTU701	E71TGS035X2SP	0.035	2	20.20
TTU702	E71TGS030X10SP	0.030	10	90.60
TTU703	E71TGS035X10SP	0.035	10	84.90
TTU704	E71TGS030X25SP	0.030	25	239.00
TTU705	E71TGS035X25SP	0.035	25	229.00
TTU706	E71TGS045X25SP	0.045	25	229.00

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



DYNAFLUX
QUALITY PRODUCTS

Priced per Package

Model No.	Qty/Pkg.	Price/Each
720-1000-KIT	6	11.50
720-1010-KIT	24	46.50



Maintain the ideal temperature in your workplace.






MILD STEEL STICK ELECTRODES

• Priced 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, galvanized 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

• Priced 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 R45
- AWS A5.2-80



Model No.	Mfg. No.	Dia."	Wt. lbs	Price /Each
ER70S-2				
TTU722	E70S2035X36T	0.035	10	96.30
TTU723	E70S2045X36T	0.045	10	87.70
TTU724	E70S2116X36T	1/16	10	66.00
TTU725	E70S2332X36T	3/32	10	61.90
TTU726	E70S218X36T	1/8	10	61.30
TTU727	E70S2532X36T	5/32	10	60.20
R45				
TTU728	R45116X36T	1/16	10	44.50
TTU729	R4532X36T	3/32	10	42.90
TTU730	R4518X36T	1/8	10	42.30
TTU731	R4532X36T	5/32	10	42.30
TTU732	R45316X36T	3/16	10	42.30
R60				
TTU733	R60116X36T	1/16	10	60.90
TTU734	R6032X36T	3/32	10	59.70
TTU735	R6018X36T	1/8	10	58.40
TTU736	R60532X36T	5/32	10	57.70
TTU737	R60316X36T	3/16	10	57.70

Priced per Tube

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price /Each
6010				
TTU707	6010332E5	3/32	5	26.70
TTU708	601018E5	1/8	5	25.70
TTU709	6010532E5	5/32	5	25.70
6011				
TTU710	6011332E5	3/32	5	25.70
TTU711	601118E5	1/8	5	25.00
TTU712	6011532E5	5/32	5	25.00
6013				
TTU713	6013332E5	3/32	5	19.90
TTU714	601318E5	1/8	5	19.20
TTU715	6013532E5	5/32	5	19.20
7014				
TTU716	7014332E5	3/32	5	21.00
TTU717	701418E5	1/8	5	20.30
TTU718	7014532E5	5/32	5	20.30
7018				
TTU719	7018332E5	3/32	5	20.60
TTU720	701818E5	1/8	5	20.20
TTU721	7018532E5	5/32	5	19.90

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 +/-



Priced per Tube

Model No.	Mfg. No.	Diameter"	Wt. kg	Price/Each
TTU006	EDS11006	3/32	4 (8.8 lbs.)	47.60
TTU007	EDS11007	1/8	5 (11 lbs.)	49.23
TTU008	EDS11008	5/32	5 (11 lbs.)	48.69

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

Priced per Tube

Model No.	Mfg. No.	Diameter"	Wt. kg	Price/Each
TTU009	EDS11213	3/32	4 (8.8 lbs.)	48.62
TTU010	EDS11011	1/8	5 (11 lbs.)	49.63
TTU011	EDS11012	5/32	5 (11 lbs.)	47.66

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 +/-

Priced per Tube

Model No.	Mfg. No.	Diameter"	Wt. kg	Price/Each
TTU012	EDS11016	3/32	4 (8.8 lbs.)	48.21
TTU013	EDS11017	1/8	5 (11 lbs.)	49.63
TTU014	EDS11018	5/32	5 (11 lbs.)	46.59

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

Priced per Tube

Model No.	Mfg. No.	Diameter"	Wt. kg	Price/Each
TTU016	EDS11042	1/8	5 (11 lbs.)	46.59
TTU017	EDS11043	5/32	5 (11 lbs.)	46.57

ALLOYS

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



Priced per Spool

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price/Each
ER308L SPOOLED WIRE				
TTU760	308L025X2SP	0.025	2	44.70
TTU751	308L025X10SP	0.025	10	219.00
TTU738	308L025X25SP	0.025	25	379.00
TTU761	308L030X2SP	0.030	2	38.60
TTU752	308L030X10SP	0.030	10	179.00
TTU739	308L030X25SP	0.030	25	329.00
TTU762	308L035X2SP	0.035	2	38.30
TTU753	308L035X10SP	0.035	10	179.00
TTU740	308L035X25SP	0.035	25	309.00
TTU741	308L045X25SP	0.045	25	309.00
TTU742	308L116X25SP	1/16	25	299.00
ER309L SPOOLED WIRE				
TTU754	309L025X10SP	0.025	10	249.00
TTU763	309L030X2SP	0.030	2	45.50
TTU755	309L030X10SP	0.030	10	219.00
TTU743	309L030X25SP	0.030	25	419.00
TTU764	309L035X2SP	0.035	2	45.20
TTU756	309L035X10SP	0.035	10	219.00
TTU744	309L035X25SP	0.035	25	409.00
TTU745	309L045X25SP	0.045	25	399.00
TTU746	309L116X25SP	1/16	25	369.00
ER316L SPOOLED WIRE				
TTU765	316L025X2SP	0.025	2	52.50
TTU757	316L025X10SP	0.025	10	249.00
TTU766	316L030X2SP	0.030	2	46.30
TTU758	316L030X10SP	0.030	10	219.00
TTU747	316L030X25SP	0.030	25	439.00
TTU767	316L035X2SP	0.035	2	46.00
TTU759	316L035X10SP	0.035	10	219.00
TTU748	316L035X25SP	0.035	25	399.00
TTU749	316L045X25SP	0.045	25	389.00
TTU750	316L116X25SP	1/16	25	379.00

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
- **Priced per 10-lb. tube**



Priced per Tube

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price/Each
308L				
TTU768	308L030X36T	0.030	10	159.00
TTU769	308L035X36T	0.035	10	149.00
TTU770	308L045X36T	0.045	10	129.00
TTU771	308L116X36T	1/16	10	119.00
TTU772	308L332X36T	3/32	10	119.00
TTU773	308L18X36T	1/8	10	149.00
TTU774	308L532X36T	5/32	10	149.00
TTU775	308L316X36T	3/16	10	149.00
309L				
TTU776	309L035X36T	0.035	10	179.00
TTU777	309L045X36T	0.045	10	179.00
TTU778	309L116X36T	1/16	10	159.00
TTU779	309L332X36T	3/32	10	159.00
TTU780	309L18X36T	1/8	10	159.00
TTU781	309L532X36T	5/32	10	179.00
316L				
TTU782	316L030X36T	0.030	10	189.00
TTU783	316L035X36T	0.035	10	189.00
TTU784	316L045X36T	0.045	10	189.00
TTU785	316L116X36T	1/16	10	169.00
TTU786	316L332X36T	3/32	10	159.00
TTU787	316L18X36T	1/8	10	159.00
TTU788	316L532X36T	5/32	10	159.00
TTU789	316L316X36T	3/16	10	159.00

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

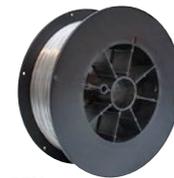
Most frequently used for base metals of similar composition such as AISI Types 301, 302, 304, 305 and 308.

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

Priced per Spool

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price /Each
308LT1-1				
TTU790	308LT11035X25SP	0.035	25	519.00
TTU791	308LT11045X25SP	0.045	25	489.00
TTU792	308LT11116X25SP	1/16	25	489.00
309LT1-1				
TTU793	309LT11035X25SP	0.035	25	609.00
TTU794	309LT11045X25SP	0.045	25	589.00
TTU795	309LT11116X25SP	1/16	25	589.00
316LT1-1				
TTU796	316LT11035X25SP	0.035	25	629.00
TTU797	316LT11045X25SP	0.045	25	599.00
TTU798	316LT11116X25SP	1/16	25	599.00

STAINLESS STEEL ELECTRODES



- Exactly manufactured to conform to the requirements of AWS5.4
- **Priced per 5 or 10-lb. tube**



Priced per Tube

Model No.	Mfg. No.	Dia." x Length"	Wt. lbs.	Price /Each
308L-16				
TTU799	308L16116E	1/16 x 10	5	109.00
TTU800	308L16332E	3/32 x 12	10	109.00
TTU801	308L1618E	1/8 x 14	10	109.00
TTU802	308L16532E	5/32 x 14	10	109.00
TTU803	308L16316E	3/16 x 14	10	109.00
309L-16				
TTU804	309L16332E	3/32 x 12	10	149.00
TTU805	309L1618E	1/8 x 14	10	139.00
TTU806	309L16532E	5/32 x 14	10	139.00
TTU807	309L16316E	3/16 x 14	10	139.00
316L-16				
TTU808	316L16332E	3/32 x 12	10	149.00
TTU809	316L1618E	1/8 x 14	10	149.00
TTU810	316L16532E	5/32 x 14	10	149.00
TTU811	316L16316E	3/16 x 14	10	149.00

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



Priced per Spool

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price/Each
TTU812	D0C035X30SP	0.035	30	789.00
TTU813	D0C045X30SP	0.045	30	779.00
TTU814	D0C116X30SP	1/16	30	769.00
TTU815	D0C332X30SP	3/32	30	769.00

36" CUT LENGTH				Priced per Tube
TTU827	D0C116X36T	1/16	10	269.00
TTU828	D0C332X36T	3/32	10	269.00
TTU829	D0C18X36T	1/8	10	269.00
TTU830	D0C316X36T	3/16	10	269.00

SILICON BRONZE WELDING WIRE

- Used for inert gas arc welding of copper, copper-silicon, 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



Priced per Spool

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price/Each
TTU824	S1B030X2SP	0.030	2	55.00
TTU825	S1B035X2SP	0.035	2	54.00
TTU826	S1B045X2SP	0.045	2	54.00
TTU820	S1B025X10SP	0.025	10	319.00
TTU821	S1B030X10SP	0.030	10	269.00
TTU822	S1B035X10SP	0.035	10	269.00
TTU823	S1B045X10SP	0.045	10	269.00
TTU816	S1B030X30SP	0.030	30	789.00
TTU817	S1B035X30SP	0.035	30	779.00
TTU818	S1B045X30SP	0.045	30	779.00
TTU819	S1B116X30SP	1/16	30	769.00

36" CUT LENGTH				Priced per Tube
TTU831	S1B035X36T	0.035	10	339.00
TTU832	S1B045X36T	0.045	10	339.00
TTU833	S1B116X36T	1/16	10	229.00
TTU834	S1B332X36T	3/32	10	229.00
TTU835	S1B18X36T	1/8	10	219.00
TTU836	S1B532X36T	5/32	10	219.00
TTU837	S1B316X36T	3/16	10	219.00
TTU838	S1B14X36T	1/4	10	219.00

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
- Priced per 10-lb. tube



Priced per Tube

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price/Each
TTU851	NS116X36T	1/16	10	239.00
TTU852	NS332X36T	3/32	10	239.00
TTU853	NS18X36T	1/8	10	239.00
TTU854	NS316X36T	3/16	10	239.00
TTU855	NS14X36T	1/4	10	239.00

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
- Priced per 10-lb. tube



Priced per Tube

Model No.	Mfg. No.	Description	Dia."	Wt. lbs.	Price/Each
TTU839	LFB116X36T	Bare	1/16	10	179.00
TTU840	LFB332X36T	Bare	3/32	10	169.00
TTU841	LFB18X36T	Bare	1/8	10	169.00
TTU842	LFB532X36T	Bare	5/32	10	169.00
TTU843	LFB316X36T	Bare	3/16	10	169.00
TTU844	LFB14X36T	Bare	1/4	10	169.00
TTU845	LFB516X36T	Bare	5/16	10	169.00
TTU846	LFB38X36T	Bare	3/8	10	169.00
TTU847	LFBFC332X36T	Flux-Coated	3/32	10	169.00
TTU848	LFBFC18X36T	Flux-Coated	1/8	10	169.00
TTU849	LFBFC532X36T	Flux-Coated	5/32	10	169.00
TTU850	LFBFC316X36T	Flux-Coated	3/16	10	169.00

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



Priced per Spool

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	14.11
TTU957	40430351SP	0.035	1	13.09
TTU958	4043641SP	3/64	1	12.08
TTU959	40430305SP	0.030	5	74.72
TTU960	40430355SP	0.035	5	68.57
TTU961	404303016SP	0.030	16	224.00
TTU962	404303516SP	0.035	16	204.00
TTU963	40436416SP	3/64	16	192.00
TTU964	404311616SP	1/16	16	194.00

5356

TTU965	53560301SP	0.030	1	15.12
TTU966	53560351SP	0.035	1	14.11
TTU967	53563641SP	3/64	1	13.09
TTU968	53560305SP	0.030	5	75.75
TTU969	53560355SP	0.035	5	68.92
TTU020	53563645SP	3/64	5	61.40
TTU970	535603016SP	0.030	16	235.00
TTU971	535603516SP	0.035	16	204.00
TTU972	535636416SP	3/64	16	202.00
TTU973	535611616SP	1/16	16	204.00

36" CUT LENGTH

4043				Priced per Package
TTU974	404311636T	1/16	10	102.00
TTU975	404333236T	3/32	10	99.37
TTU976	40431836T	1/8	10	99.32
TTU977	404353236T	5/32	10	100.00
TTU978	404331636T	3/16	10	100.00

5356

TTU979	535611636T	1/16	10	112.00
TTU980	535633236T	3/32	10	101.00
TTU981	53561836T	1/8	10	102.00
TTU982	535653236T	5/32	10	102.00
TTU983	535631636T	3/16	10	102.00

ALLOYS

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
- **Priced 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.

Priced per Tube

Model No.	Mfg. No.	Dimensions Dia." x Length"	Wt. lbs.	Price /Each
TTU856	ALSM00TH340332E	3/32 x 14	5	219.00
TTU857	ALSM00TH34018E	1/8 x 14	5	199.00
TTU858	ALSM00TH340532E	5/32 x 14	5	199.00

NICKEL 55 ELECTRODES

- A general purpose, nickel-iron electrode for production, salvage and repair of all cast irons (AWS A5.15, ENiFeCl)
- Tensile strength – up to 70 000 PSI
- Suited to joining, filling and buildup of grey and alloyed cast irons
- **Priced per 10-lb. tube**

Applications: Can be used for fabrication and repair of pump housings, valves, castings, cast and malleable fittings, and for general repair of all cast irons. Deposits are machineable and have high strength.



Priced per Tube

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price /Each
TTU862	NI55332E	3/32	10	319.00
TTU863	NI5518E	1/8	10	319.00
TTU864	NI5532E	5/32	10	319.00
TTU865	NI55316E	3/16	10	319.00

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



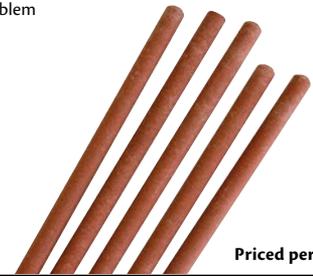
WELDCOTE 45CF

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	43.40
TTU871	45CF132X5T0C	1/32" x 5 T.O.	Bag-5	663°C	743°C	743-843°C	189.00
TTU872	45CF364X1T0C	3/64" x 1 T.O.	-	-	-	-	49.90
TTU873	45CF116X1T0C	1/16" x 1 T.O.	-	-	-	-	49.00
TTU874	45CF116X5T0C	1/16" x 5 T.O.	-	-	-	-	169.00
TTU875	45CF332X1T0C	3/32" x 1 T.O.	-	-	-	-	55.20
TTU876	45CF332X5T0C	3/32" x 5 T.O.	-	-	-	-	169.00
TTU877	45FCF116X18L4	Flux-Coated	-	-	-	-	135.00
		1/16" x 18" x 4 oz. Tube	-	-	-	-	
TTU878	45FCF332X18L4	Flux-Coated	-	-	-	-	145.00
		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"
- **Priced per 5 or 10-lb. tube**

Applications: Particularly advantageous when the alloy content of the steel to be welded is unknown.



Priced per Tube

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price /Each
TTU859	SUPER120332E	3/32	5	169.00
TTU860	SUPER12018E	1/8	10	299.00
TTU861	SUPER120532E	5/32	10	299.00

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
- **Priced 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.



Priced per Tube

Model No.	Mfg. No.	Dia."	Wt. lbs.	Price /Each
TTU866	NI99332E	3/32	10	439.00
TTU867	NI9918E	1/8	10	439.00
TTU868	NI99532E	5/32	10	439.00
TTU869	NI99316E	3/16	10	439.00

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	47.40
TTU880	56CF132X5T0C	1/32" x 5 T.O.	Bag-7	618°C	652°C	652-760°C	218.00
TTU881	56CF364X1T0C	3/64" x 1 T.O.	-	-	-	-	45.70
TTU882	56CF116X1T0C	1/16" x 1 T.O.	-	-	-	-	49.90
TTU883	56CF116X5T0C	1/16" x 5 T.O.	-	-	-	-	189.00
TTU884	56CF332X1T0C	3/32" x 1 T.O.	-	-	-	-	60.90
TTU885	56CF332X5T0C	3/32" x 5 T.O.	-	-	-	-	189.00
TTU886	56FCF116X18L4	Flux-Coated	-	-	-	-	159.00
		1/16" x 18" x 4 oz. Tube	-	-	-	-	
TTU887	56FCF332X18L4	Flux-Coated	-	-	-	-	167.00
		3/32" x 18" x 4 oz. Tube	-	-	-	-	

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

Priced 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	44.00
TTU889	4060332X1SP	3/32" x 1# Spool	-	183°C	238°C	41.50
TTU890	406018X1SP	1/8" x 1# Spool	-	-	-	39.90
50% TIN/50% LEAD SOLID						
TTU891	5050116X1SP	1/16" x 1# Spool	ASTM-B32, Sn-50	362°F	420°F	51.20
TTU892	5050332X1SP	3/32" x 1# Spool	-	183°C	215°C	48.20
TTU893	505018X1SP	1/8" x 1# Spool	-	-	-	46.70
50% TIN/50% LEAD ACID CORE						
TTU894	5050AC116X1SP	1/16" x 1# Spool	ASTM-B32, Sn-50	362°F	420°F	51.50
TTU895	5050AC332X1SP	3/32" x 1# Spool	-	183°C	215°C	49.00
TTU896	5050AC18X1SP	1/8" x 1# Spool	-	-	-	50.30
TTU897	5050AC18X5SP	1/8" x 5# Spool	-	-	-	239.00



TTU891

Priced 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	51.50
TTU899	5050RC332X1SP	3/32" x 1# Spool	-	183°C	215°C	49.00
TTU900	5050RC18X1SP	1/8" x 1# Spool	-	-	-	46.70
TTU901	5050RC18X5SP	1/8" x 5# Spool	-	-	-	239.00
95% TIN/5% ANTIMONY SOLID						
TTU902	955116X1SP	1/16" x 1# Spool	ASTM-B32, Sb-5	450°F	464°F	84.20
TTU903	955332X1SP	3/32" x 1# Spool	-	232°C	240°C	81.60
TTU904	95518X1SP	1/8" x 1# Spool	-	-	-	79.50

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
- 1-lb. tube



TTU932



TTU922



TTU938



TTU949

Priced per Tube

Model No.	Mfg. No.	Diameter"	Wt. lbs.	Price /Each
308L – STAINLESS STEEL				
TTU921	308L116X36T1P	1/16	1	19.60
TTU922	308L332X36T1P	3/32	1	19.40
TTU923	308L18X36T1P	1/8	1	19.40
309L – STAINLESS STEEL				
TTU924	309L116X36T1P	1/16	1	22.60
TTU925	309L332X36T1P	3/32	1	22.50
TTU926	309L18X36T1P	1/8	1	22.50
316L – STAINLESS STEEL				
TTU927	316L116X36T1P	1/16	1	22.90
TTU928	316L332X36T1P	3/32	1	22.80
TTU929	316L18X36T1P	1/8	1	22.80
4043 – ALUMINUM				
TTU930	4043116X36T1P	1/16	1	19.90
TTU931	4043332X36T1P	3/32	1	19.50
TTU932	404318X36T1P	1/8	1	19.40
5356 – ALUMINUM				
TTU933	5356116X36T1P	1/16	1	20.20
TTU934	5356332X36T1P	3/32	1	19.60
TTU935	535618X36T1P	1/8	1	19.50
ER70S-2 – TRIPLE DEOXIDIZED STEEL				
TTU936	ER70S2116X36T1P	1/16	1	10.10
TTU937	ER70S2332X36T1P	3/32	1	9.99
TTU938	ER70S218X36T1P	1/8	1	9.99

Priced per Tube

Model No.	Mfg. No.	Diameter"	Wt. lbs.	Price /Each
LOW FUMING BRONZE - BARE				
TTU942	LFB116X36T1P	1/16	1	22.20
TTU943	LFB332X36T1P	3/32	1	18.30
TTU944	LFB18X36T1P	1/8	1	18.30
LOW FUMING BRONZE – FLUX-COATED				
TTU945	LFBC332X36T1P	3/32	1	22.20
TTU946	LFBC18X36T1P	1/8	1	18.30
R45 – MILD STEEL				
TTU947	R45116X36T1P	1/16	1	9.59
TTU948	R45332X36T1P	3/32	1	9.39
TTU949	R4518X36T1P	1/8	1	9.29
R60 – HIGH TENSILE MILD STEEL				
TTU950	R60116X36T1P	1/16	1	11.10
TTU951	R60332X36T1P	3/32	1	11.00
TTU952	R6018X36T1P	1/8	1	10.80
S1B – SILICON BRONZE				
TTU953	S1B116X36T1P	1/16	1	27.50
TTU954	S1B332X36T1P	3/32	1	27.30
TTU955	S1B18X36T1P	1/8	1	26.90

FLUXES



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.	10.10
TTU907	WPFLUX12JAR	1/2 lb.	12.80
TTU908	WPFLUX1JAR	1 lb.	15.20
TTU909*	WPFLUX6OZ	6 oz.	12.10
TTU910	WPFLUX5JAR	5 lb.	68.40

*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.	10.70
TTU916	LIQUIDFLUX16OZ	16 oz.	20.50
TTU917	LIQUIDFLUX1GL	1 Gallon	82.90



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.	16.50
TTU912	BPFLUX1JAR	1 lb.	19.90
TTU913	BPFLUX5JAR	5 lb.	92.90



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.	10.10
TTU919	PASTEFLUX16OZ	16 oz.	14.80



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.	16.20



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.	25.60



TTU920

ACID/FLUX BRUSHES

- Perfect brushes for applying liquid or paste flux



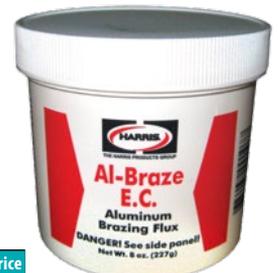
Model No.	Mfg. No.	Width"	Trim Length"	Overall Length"	Price /Each
BY189	74059	1/4	11/16	6	0.25
BY190	74060	3/8	7/8	6 1/8	0.25
BY191	74061	7/16	7/8	6 1/8	0.33
BY192	74062	9/16	7/8	6 1/8	0.33

AL-BRAZE E.C. ALUMINUM BRAZING FLUX

- Powdered flux is recommended to use with 4047 (formerly 718) brazing alloy, and other aluminum brazing alloys
- May be mixed with water or alcohol to form a paste
- Meets specs AMS 3412, AWS A5.31 Type FB1A



Model No.	Mfg. No.	Size	Price /Each
841-1137	ECDF1/2	8 oz.	21.90



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.	Description	Price /Each
PA418	White	4.35
PA419	Yellow	4.35
PA420	Red	4.35
PA421	Blue	4.35
PA422	Green	4.35
PA423	Aluminum	4.51
PA431	Black	4.35
PE935	Fluorescent Yellow	4.51
PE936	Fluorescent Green	4.51
PE937	Fluorescent Orange	4.15
PE938	Fluorescent Pink	4.51
PA424	Replacement Tips (Pkg. of 12)	9.96

PRO-LINE® FINE LINE MARKERS

- High strength, lightweight barrel for industrial use
- Ideal for metal, suitable for wood, glass, plastic and rubber
- Xylene-free
- Self-storing cap with integrated pocket clip



Priced per Marker

Model No.	Colour	Price /Each
PC461	White	5.10
PC462	Yellow	5.10
PC463	Black	5.10

THERMOMELT® HEAT STIK TEMPERATURE INDICATORS

ACCURATE SURFACE TEMPERATURE MEASUREMENT STICKS

- 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 Fahrenheit temperature
- Ideal for applications such as annealing, forging, welding, bending, forming and any place where temperature measuring is necessary
- Meets ANSI/ASME guidelines



Priced per Heat Stik

Model No.	Mfg. No.	Temperature °F/°C	Price /Each
HK860	86517	200/93	15.30
434-7260	86562	250/121	15.30
HK887	86625	300/149	15.30
434-7410	86697	350/177	15.90

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	1.98
PA309	Yellow	1.98
PA320	Black	1.98

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	6.63

PRO-LINE® HP PAINT MARKERS



- High performance paint marker has unsurpassed writing capabilities on oily surfaces
- Excellent on most metals, coatings, plastics, glass, ceramics and other non-porous materials
- Low in halogenated compounds and sulphur allowing use in stainless steel and other corrosion sensitive applications



Priced per Marker

Model No.	Colour	Price /Each
PE507	White	4.69
PE508	Yellow	4.69
PE509	Red	4.69
PE510	Black	4.69

LUMBER CRAYONS

-50° TO 150°F

- Weather and fade-resistant lead-free marking
- Use on cardboard, ceramics, concrete, lumber (rough or smooth), metal, plastics, rubber, shipping room, storage containers



Priced per Crayon

Model No.	Colour	Price /Each
ECONOMICAL WAX BASED #200		
PA371	Black	1.51
PA367	White	1.51
PA368	Yellow	1.51

QUIK STIK® TWIST-UP PAINT MARKERS

- All purpose paint marker for marking metal, wood, glass, plastic, cardboard and more
- Fast drying paint is fade and weather resistant
- 20% more marks than other brands
- Easy-to-use twist-up holder with self-storing cap keeps hands and clothing clean
- 72 per case



Priced per Marker

Model No.	Colour	Price /Each
PB937	White	9.46
PB938	Yellow	9.46
PB939	Red	9.46
PB940	Black	9.46

FLUORESCENT

OP543	Yellow	10.90
OP544	Green	10.90
OP545	Orange	10.90
OP546	Pink	10.90

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 5 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	-	15.10
REFILLS, 6/PKG.			
434-9915	96009	Orange	8.69
434-8985	96042	White	8.69
434-9910	96043	Yellow	8.69
434-8995	96044	Black	8.52
434-9920	96045	Red	8.52

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® SPRAYER

- Hand sprayer with 36" lead tube for gallon container



388-1180



388-1165



388-1175

Model No.	Mfg. No.	Description	Size	Price /Each
388-1170	007089	Weld-Kleen® 350®	1 Quart	13.20
388-1175	007090	Weld-Kleen® 350®	1 Gallon	20.50
388-1185	007091	Weld-Kleen® 350®	5 Gallons	115.00
388-1180	007092	Weld-Kleen® 350®	55-Gallon Drum	789.00
388-1165	007030	Weld-Kleen® H-D	20-oz. Aerosol	9.09

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® LUBE PADS

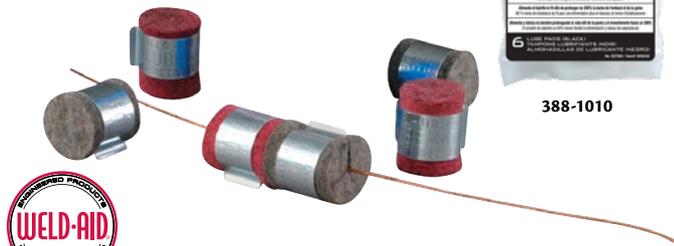
- Black lube pads are pre-treated with Lube Matic® liquid
- Lubrication allows smooth feeding of wires with poor cast, helix, rust and long feed liners

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%



388-1010



Model No.	Mfg. No.	Description	Size	Price /Each
388-1010	007060	Lube-Matic® Lube Pads	6/Pkg.	10.90
388-1190	007061	Lube-Matic® Wire Kleener® Pads	6/Pkg.	10.50

NOZZLE-KLEEN®

- The accumulation of spatter on nozzles and tips can lead to poor gas coverage resulting in poor welds
- Preventing spatter build-up will increase weld quality and reduce costly downtime
- Maintain a clean nozzle
- Eliminate build-up with a spray or dip



NOZZLE-KLEEN® #2

- Highest quality for most applications
- Non-flammable and paintable
- No fluorocarbons

NOZZLE-KLEEN® HEAVY-DUTY

- Used for highest temperature applications including pulsed welding and argon rich mixtures
- Outstanding fixture protection
- Excellent for stainless steel
- Non-flammable, paintable no fluorocarbons and ozone friendly



388-1145



388-1150

Model No.	Mfg. No.	Description	Size	Price /Each
388-1150	007022	Nozzle-Kleen® #2	16-oz. Aerosol	6.99
388-1145	007020	Nozzle-Kleen® H-D	16-oz. Aerosol	8.89

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
- Pocket clip
- Sold with one soapstone installed

ROUND HOLDERS

- Aluminum adjustable holder for 1/4" x 5" soapstone or chalk

FLAT HOLDERS

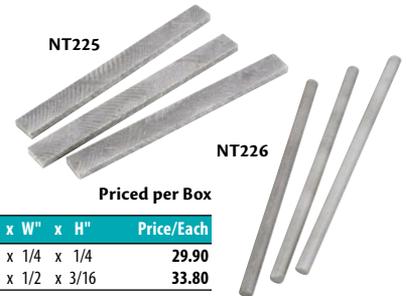
- Steel adjustable holder for 1/2" x 5" flat soapstone or chalk
- Locking nut soapstone length adjustment



Model No.	Description	Price/Each
NT638	Round Holder	4.15
NT639	Flat Holder	3.95

SOAPSTONES

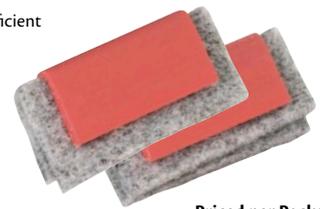
- White soapstone
- Sold in box quantity of 144



Model No.	Description	L" x W" x H"	Price/Each
NT226	Round Soapstone	5 x 1/4 x 1/4	29.90
NT225	Flat Soapstone	5 x 1/2 x 3/16	33.80

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



Model No.	Qty/Pkg.	Price/Each
720-1000-KIT	6	11.50
720-1010-KIT	24	46.50

METAL WORKING FLUIDS & EQUIPMENT

DEFENSE 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.



Model No.	Mfg. No.	Size	Price /Each
881-1355	DF927-PM	1 Gallon, Pre-Mixed	42.99
881-1350	DF929-4x1	1 Gallon	67.49
881-1365	DF929-5	5-Gallon Pail	319.00
881-1370	DF929-55	55-Gallon Drum	2829.00



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



Model No.	Mfg. No.	Description	Size	Price /Each
877-1125	DF309-16	Spray Galv	13-oz. Net Wt. Aerosol	16.89
877-1130	DF306-6x1	Cold Galv	1 Quart	149.00
877-1120	DF306-2x1	Cold Galv	1 Gallon	599.00



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-SP2 PENETRANTS

- 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

Model No.	Mfg. No.	Size	Price /Each
NP701	01-5155-78	16-oz. Aerosol	41.40

SKL-WP2 WATER WASHABLE PENETRANTS

- General purpose

Model No.	Mfg. No.	Size	Price /Each
TTU436	01-5190-78	16-oz. Aerosol	40.30



SKC-S SOLVENT CLEANERS

- Non-chlorinated cleaner/remover
- Used as a pre-cleaner, 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	29.10

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	33.90

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	36.50
906 PENETRANTS			
874-1080	906-16	16-oz. Aerosol	41.90
9PR50 CLEANERS/REMOVERS			
874-1180	9PR50-16	16-oz. Aerosol	32.40

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



Model No.	Mfg. No.	Description	Size	Price/Each
868-1000	SFB-1	Type B	1 lb	119.00
TTT435	SFI-1	Type I	1 lb	259.00

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	0.25
BY190	74060	3/8	7/8	6 1/8	0.25
BY191	74061	7/16	7/8	6 1/8	0.33
BY192	74062	9/16	7/8	6 1/8	0.33

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



Model No.	Mfg. No.	Size	Price /Each
NP597	DF781-12x1	1 Quart	17.29
NP596	DF781-4x1	1 Gallon	45.69
877-1190	DF781-55	55-Gallon Drum	1669.00

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
- Suitable 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 AS.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	70.90
870-1096	GF-5	5-Gallon Pail	329.00
870-1100	GF-55	53-Gallon Drum	3199.00

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



Model No.	Mfg. No.	Size	Price /Each
720-1071	DF731-16	16-fl. oz. Jar	11.39



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



Model No.	Mfg. No.	Size	Price /Each
876-1005	DF390-16	16-oz. Net Wt. Aerosol	10.29
876-1000	DF390-4x1	1 Gallon	41.59
876-1020	DF390-5	5-Gallon Pail	219.00
876-1025	DF390-55	55-Gallon Drum	2159.00



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



Model No.	Mfg. No.	Size	Price /Each
881-1100	DF304-16	11.5-oz. Net Wt. Aerosol	22.29



METAL WORKING FLUIDS & EQUIPMENT

WL739 SILVER GALVANIZING COMPOUND

- 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 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	SC0739000	14 oz.	19.20

E-WELD NOZZLE ANTI-SPATTER

- Maximum Operating Temperature: 1832°F (1000°C)
- Ceramic anti-spatter that protects welding nozzles
- Provides unrivaled protection of welding nozzles in manual, semi-automated and fully-automated MIG welding applications
- Reduces downtime by extending nozzle life
- Protects welding nozzles for 8 hours
- At least 125 uses with applicator

AF017

VV928



Model No.	Mfg. No.	Size	Description	Price /Each
AF017	53F512	400 ml	-	46.40
VV928	53L121	-	Applicator	22.10
VV929	53F912	-	Aerosol & Applicator Kit	56.20

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 discoloration 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	SC0738000	12 oz.	10.90

WL941 DRY WELD SPATTER PROTECTANT

- Powder formula that dries to a white film
- Prevents spatter from sticking to metal surfaces during welding
- Just brush or wipe off residue after welding
- Does not contain silicone
- Surface may be painted after use
- Formulation does not contain Methylene Chloride
- Uses: All types of maintenance and production welding, construction and body shops



Model No.	Mfg. No.	Size	Price /Each
AE835	C00941000	15.5 oz.	8.45

WL942 WET WELD SPATTER PROTECTANT

- 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	SC0942000	15.5 oz.	8.45

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	400 ml	13.5 fl.oz.	12.90
AC300	53-F 203	Trigger Spray	500 ml	16.9 fl.oz.	15.00
AA475	53-F 207	Liquid	20 L	5.2 gal	408.00
AC301	53-F 208	Liquid	208 L	55 gal	1543.00

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.	17.00
AA508	53-F 257	Liquid	20 L	5.2 gal	449.00
AC309	53-F 258	Liquid	208 L	55 gal	2453.00

METAL WORKING FLUIDS & EQUIPMENT



LPS 3[®] PREMIER RUST 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
- Accepted for use in Canadian food processing facilities



Model No.	Mfg. No.	Size	Price /Each
AA808	C00316	11 oz.	25.80
AB559	C00322	20-oz. Trigger	32.10
AB558	C03128	1 gal.	119.00
AB556	C00305	5 gal.	489.00
AB557	C00355	55 gal.	4239.00

COLD GALVANISED CORROSION INHIBITOR

- 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.	20.50
AB552	C05128	1 gal.	429.00

BRIGHT COAT COLD GALVANIZED CORROSION INHIBITOR

- 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.	17.80

EVAPO-RUST™ RUST REMOVER

- 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 unruined metals



Model No.	Mfg. No.	Size	Price /Each
AD049	ER1	1L	11.05
AD050	ER4	3.78 L	36.03
AD051	ER20	18.9 L	171.00
AD052	ER205	205 L	1523.00

EXTEND® RUST TREATMENT

- 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



AA633

LOCTITE

Model No.	Mfg. No.	Size	Price /Each
AA633	234981	1 qt. bottle	54.10
AA634	160802	1 gal. bottle	185.00
AC110	234984	5 gal. pail	834.00

WL740 ZINC-RICH GALVANIZING COMPOUND

- 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	SC0740000	14 oz.	13.20

BIO-RUST NEUTRAL PH RUST REMOVER

- Removes rust and other metallic particles
- VOC free, solvent free, non-flammable, pH neutral solution biodegradable
- Not controlled under WHMIS
- Non-corrosive rust remover
- High workload - can remove 1.5 kg (3.3 lbs.) of iron oxide per 20 L
- For use with iron and mild steel
- Deeply rusted parts may require longer soaking time
- After application of Bio-Rust, rinse parts in water to remove loosened contaminants
- After removing rust, dip pack into fresh bath or Bio-Rust to provide short term corrosion protection
- It is recommended to degrease part before using Bio-Rust
- Bio-Rust is designed for immersion applications only
- Immerse parts in Bio-Rust at room temperature and let react for at least 30 minutes



Model No.	Mfg. No.	Size	Price /Each	
		Litres	Gallons	
AD441	53-G 247	20	5.2	286.00
AD442	53-G248	208	55	2059.00

METAL WORKING FLUIDS & EQUIPMENT

EL601 RED INSULATING VARNISH

- Insulating spray for general coating, impregnating and insulating electrical and electronic work
- Resists oil, water, acids and alkalis
- Excellent adhesion
- Oil resistant per ASTM-D-115-55



Model No.	Mfg. No.	Size	Price /Each
AA179	SC0601000	15.25 oz.	10.90

SP603 BLUE LAYOUT DYE

- Applies a smooth, even coat for all layout work
- Fast-drying, non-flaking, non-etching, won't peel
- Adheres to metal or glass
- For pattern-making, tool and die making, machining and maintenance mechanicals



Model No.	Mfg. No.	Size	Price /Each
AA180	SC0603000	12 oz.	10.80

SP606 LAYOUT DYE REMOVER

- 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	SC0606000	12.75 oz.	10.40

CUTTING OIL THREAD CUTTING LUBRICANT

- Ideal for use on all types of metals, including brass, copper and aluminum
- NSF Registered P1



Model No.	Mfg. No.	Size	Price /Each
AF250	73500	340 g	10.50

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



Model No.	Size	Price /Each
AA149	4 oz.	3.90

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



Model No.	Size	Price /Each
AA160	4 oz.	5.49

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



Model No.	Description	Size	Price /Each
AA468	Liquid	350 ml	15.80
AG673	Liquid	3.78 L	89.60
AA470	Liquid	20 L	424.00
AB748	Liquid	208 L	3029.00
AA471	Stick	300 g	20.20
AA467	Aerosol Spray	350 ml	26.00
AE955	Trigger Spray	500 ml	20.60

ALUCUT™ ALUMINUM CUTTING LUBRICANT

- High-performance lubricant that extends cutting tool life
- Specially formulated for use with aluminum and other non-ferrous metals
- Clean, precise, stain-free application
- Ideal for inclined, vertical, and overhead surfaces
- Coats cutting edge or workpiece
- Applications include cutting with circular chopsaws, sawing with jigsaws or portable bandsaws, drilling, nibbling, and tapping



Model No.	Description	Size	Price /Each
AA191	Stick	300 g	19.50

COOLCUT™ S-30 WATER-MISCIBLE CUTTING LUBRICANT

- Ready-to-use, high-performance metal cutting lubricant specially designed for automatic and semi-automatic metal removing operations
- Will not gum up slides and glides
- Increases feed, speed, and production
- Prevents bacterial growth when not in use
- Formulated with extended corrosion protection
- Contains extreme pressure additives (EP), bacterial control ingredients, and no chlorine
- Can be diluted up to 1:30



Model No.	Description	Size	Price /Each
AG516	Jug	3.78 L	103.00
AF006	Jug	20 L	352.00
AF007	Drum	208 L	2334.00

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.	31.50

STAINLESSCUT™ EXTREME PRESSURE CUTTING LUBRICANT

- 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 Bottle	400 ml	29.10
AA510	Squeeze Bottle	350 ml	17.80

TAPCUT™ THREAD CUTTING LUBRICANT

- Specially formulated for thread cutting with taps and dies
- Special anti-wear additives for thread cutting
- Nontoxic and biodegradable
- Produces clean, accurate threads
- Safe for use with alloys, aluminum, brass, copper, stainless steel, and steel



Model No.	Description	Size	Price /Each
AA445	Bottle	350 ml	15.80

TAPMATIC® #1 GOLD CUTTING FLUID

- 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
- Accepted for use in Canadian food processing facilities



Model No.	Mfg. No.	Size	Price /Each
AA775	C40312	11-oz. Aerosol	21.20
AA776	C40320	16 oz.	21.20
AB565	C40330	1 gal.	119.00
AB563	C40340	5 gal.	489.00

TAPMATIC® TRICUT CUTTING FLUID

- Excellent for stainless steel and other 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.	28.40
AB578	C05328	1 gal.	199.00

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
- Biodegradable



Model No.	Mfg. No.	Size	Price /Each
AA922	C43200	13 oz.	29.30

TAPMATIC® AQUACUT CUTTING FLUID

- 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.	18.20
AB574	C01228	1 gal.	71.10
AB572	C01205	5 gal.	379.00

TAPMATIC® NATURAL CUTTING FLUID

- 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.	19.40
AB577	C44230	1 gal.	119.00

CIMTAP® II LIQUID TAPPING COMPOUND

- 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	13.40
AB789	4-L Jug	56.00

METAL WORKING FLUIDS & EQUIPMENT



1/4" SYSTEM - 1/4" INSIDE DIAMETER (CONT'D)

Model No.	Mfg. No.	Description	Price/Each
AA305	41472	 1/4" 90° Nozzle Pack of 4	12.24
AA306	49441	 Pack of 20	48.34
AA279	41473	 1/4" 90° Spray bar nozzle Pack of 2	13.26
AA307	49442	 Pack of 20	93.78
AA277	41407	 1" Flare nozzle Pack of 2	13.26
AA308	49427	 Pack of 20	93.78
AA275	41405	 1/8" NPT Connector Pack of 4	8.74
AA309	49425	 Pack of 50	86.36
AA310	41417	 1/8" BSPT* Connector Pack of 4	8.74
AA311	49437	 Pack of 50 * British Standard Pipe Thread	86.36
AA276	41406	 1/4" NPT Connector Pack of 4	8.74
AA312	49426	 Pack of 50	86.36
AA313	41418	 1/4" BSPT* Connector Pack of 4	8.74
AA314	49438	 Pack of 50 * British Standard Pipe Thread	86.36
AA278	41408	 1/4" Y fitting Pack of 2	13.26
AA315	49428	 Pack of 20	93.78
AA316	41409	 1/4" Double socket Pack of 4	9.75
AA317	49429	 Pack of 20	38.47
AA318	41411	 1/4" Socket to 1/8" FNPT Pack of 4	11.13
AA319	49431	 Pack of 20	43.98
AA320	41412	 3/8" SAE Flare nut adapter Pack of 4	13.26
AA321	49432	 Pack of 20 • 5/8" - 18 Thread	51.82
AA322	41414	 1/4" SAE Flare nut adapter Pack of 4	13.26
AA323	49434	 Pack of 20 • 7/16" - 20 Thread	51.82
AA324	41415	 1/4" Elbow fitting Pack of 2	12.24
AA325	49435	 Pack of 20	95.24
AA326	41416	 1/4" T fitting Pack of 2	14.67
AA327	49436	 Pack of 20	114.96
AA328	41478	 1/4" Side flow nozzle Pack of 4	14.67
AA329	49443	 Pack of 20	54.30
AA330	41480	 1/4" End cap Pack of 4	8.74
AA331	49447	 Pack of 20	34.54
AA332	41481	 1/4" Swivel nozzle 40 Pack of 2	19.62
AA333	49449	 Pack of 20 • 0.040 Hole diameter	157.80

Model No.	Mfg. No.	Description	Price/Each
AA334	41482	 1/4" Swivel nozzle 60 Pack of 2	19.62
AA335	49450	 Pack of 20 • 0.060 Hole diameter	157.80
AC407	41488	 2 1/2" Swivel nozzle 75 Pack of 2	20.73
AC374	49455	 Pack of 20 • 0.075 Hole diameter	165.99
AC418	41489	 1" Straight flow nozzle Pack of 2	13.26
AC381	49456	 Pack of 20	93.78
AA269	21192	 1/4" Male NPT valve* Pack of 2	22.09
AA338	29452	 Pack of 10	98.60
AA339	21193	 1/4" Female NPT valve* Pack of 2	22.09
AA340	29453	 Pack of 10	98.60
AA270	21194	 1/4" In-line valve* Pack of 2	22.09
AA341	29454	 Pack of 10	98.60
AA336	21191	 In-line check valve Pack of 2	22.09
AA337	29451	 Pack of 10	98.60
AC413	41483	 1/4" Flat slot 40 nozzle Pack of 4	14.01
AC394	49451	 Pack of 20 • 0.040 Slot height	56.08
AC414	41484	 1/4" Flat slot 60 nozzle Pack of 4	14.01
AC395	49452	 Pack of 20 • 0.060 Hole diameter	56.08
AC415	41485	 1/4" Flat 5 hole nozzle Pack of 4	14.01
AC396	49453	 Pack of 20 • 0.060 Slot height	56.08
AC416	41486	 1/4" Flat 7 hole nozzle Pack of 4	14.01
AC397	49454	 Pack of 20 • 0.040 Hole diameter	56.08
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	14.01
AA342	78001	 1/4" Hose assembly pliers One 1/4" pliers	22.13
AC398	78003	 1/4" and 1/2" pliers set	39.87

*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)

METAL WORKING FLUIDS & EQUIPMENT

1/2" SYSTEM - 1/2" INSIDE DIAMETER

Model No.	Mfg. No.	Description	Price/Each
AA231	50813	 13" length with fittings: 2 segments, 5 1/2" long 1/4", 3/8", 1/2" nozzles 3/8" and 1/2" male NPT connectors	19.86
AA343	51832	 1 each: 1/4", 3/8", 1/2" and spray bar nozzles	16.60
AA344	51835	 with element clamps Includes 4 each of 1/2" extended elements 1/2" element clamps	34.43
AA419	51837	 Assembled with 15 side flow nozzles 1/2" and 1 end cap 1/2"	44.30
AA345	51801	 2 - Segments, 5 1/2" long	13.42
AA346	59860	Bulk 25 ft., 59 Segments	310.93
AA347	59861	1/2" 50 Foot Coil	621.83
AA348	51833	 Pack of 4	22.09
AA349	59883	Pack of 20	88.39
AA350	51834	 Pack of 4 (w/screws)	17.19
AA351	59884	Pack of 20 (w/screws)	63.94
AA284	51806	 Pack of 4	9.99
AA352	59866	Pack of 50	98.72
AA280	51802	 Pack of 4	9.99
AA353	59862	Pack of 50	98.72
AA281	51803	 Pack of 4	9.99
AA354	59863	Pack of 50	98.72
AA355	51828	 Pack of 4	13.92
AA356	59878	Pack of 20	55.53
AA357	51829	 Pack of 4	13.92
AA358	59879	Pack of 20	55.53
AA359	51830	 Pack of 4	13.92
AA360	59880	Pack of 20	55.53
AA361	51831	 Pack of 2	14.92
AA362	51881	Pack of 20	103.63
AA363	51807	 Pack of 2	14.92
AA364	51867	Pack of 20	103.63
AA365	51809	 Pack of 2	17.19
AA366	59871	Pack of 20	113.48
AA282	51804	 Pack of 4	9.99
AA367	59864	Pack of 50	98.72
AA368	51826	 Pack of 4	9.99
AA369	59876	Pack of 50 * British Standard Pipe Thread	98.72

AA283	51805	 Pack of 4	9.99
AA370	59865	Pack of 50	98.72
AA371	51827	 Pack of 4	9.99
AA372	59877	Pack of 50 * British Standard Pipe Thread	98.72
AA285	51808	 Pack of 2	14.92
AA373	59868	Pack of 20	103.63
AA374	51822	 Pack of 2	14.92
AA375	59870	Pack of 20	103.63
AA376	51821	 Pack of 2	10.99
AA377	59869	Pack of 20	93.78
AA378	51811	 Pack of 4	11.13
AA379	59872	Pack of 20	43.98
AA380	51823	 Pack of 4	13.68
AA381	59873	Pack of 20 • 5/8" - 18 Thread	53.85
AA382	51824	 Pack of 4	13.92
AA383	59874	Pack of 20	109.02
AA384	51825	 Pack of 2	16.36
AA385	59875	Pack of 20	129.33
AA386	51836	 Pack of 4	16.60
AA387	59889	Pack of 20	60.44
AA388	51838	 Pack of 4	9.99
AA389	59885	Pack of 20	39.48
AC406	51845	 Pack of 2	21.89
AC373	59895	Pack of 20 • 0.075 Hole diameter	174.97
AA390	32091	 Pack of 2	27.02
AA391	39851	Pack of 10	120.80
AA271	32092	 Pack of 2	27.02
AA392	39852	Pack of 10	120.80
AA393	32093	 Pack of 2	27.02
AA394	39853	Pack of 10	120.80
AA272	32094	 Pack of 2	27.02
AA395	39854	Pack of 10	120.80
AA396	78002	 One 1/2" pliers	22.13
AC398	78003	1/4" and 1/2" pliers set	39.87
AC408	51840	 Pack of 4	15.71
AC389	59890	Pack of 20 • 0.080 Slot height	62.81
AC409	51841	 Pack of 4	15.71
AC390	59891	Pack of 20 • 0.125 Slot height	62.81

METAL WORKING FLUIDS & EQUIPMENT



1/2" SYSTEM - 1/2" INSIDE DIAMETER (CONT'D)

Model No.	Mfg. No.	Description	Price/Each
AC410	51842		1/2" Flat 5 hole nozzle
AC391	59892		Pack of 4 Pack of 20 • 0.125 Hole diameter
AC411	51843		1/2" Flat 7 hole nozzle
AC392	59893		Pack of 4 Pack of 20 • 0.080 Hole diameter
AC412	51844		1/2" Flat nozzle assortment
			Includes one each of:
			Flat slot 80 nozzle
			Flat slot 125 nozzle Flat 5 hole nozzle Flat 7 hole nozzle

Model No.	Mfg. No.	Description	Price/Each
AC426	51895		1/2" Fixed mount
AC383	59896		Pack of 2 Pack of 20 • Mounts with 1/4" bolt, not included
AC403	51846		1/2" Magnetic base
			Pack of 1 • 60 # holding force

*1/2" VALVE SPECIFICATIONS:

- Full 1/2" inside diameter
- Maximum working pressures:
1/2" hose: 20 PSI
1/2" In-line valve: 20 PSI
1/2" Male and female NPT valves: 100 PSI
- **Body and stern material:** Acetal Copolymer
- **Stern seal:** Nitrile (Buna-N)
- 1/4 turn shut off (1/2" hose limits most applications to 20 PSI)

3/4" SYSTEM - 3/4" INSIDE DIAMETER

Model No.	Mfg. No.	Description	Price/Each
AA232	60513		3/4" Hose kit
			14" length with fittings
			2 - segments, 5 3/4" long 5/8" and 3/4" nozzles 3/4" male NPT connector
AA397	61501		3/4" Segment Pack
AA398	69540		2 - segments, 5 3/4" long
AA399	69541		Bulk 25 ft., 54 Segments
			3/4" 50 foot Coil
AA400	61503		5/8" Round nozzle
AA401	69543		Pack of 4 Pack of 50
AA402	61502		3/4" Round nozzle
AA403	69542		Pack of 4 Pack of 50
AA404	61507		3" Flare nozzle
AA405	69547		Pack of 2 Pack of 20
AA406	61505		3/4" NPT connector
AA407	69545		Pack of 4 Pack of 50

Model No.	Mfg. No.	Description	Price/Each
AA408	61509		3/4" BSPT* connector
AA409	69549		Pack of 4 Pack of 50 * British Standard Pipe Thread
AA410	61511		3/4" Y fitting
AA411	69551		Pack of 2 Pack of 20
AA412	61512		3/4" to 1/2" Y reducer
AA413	69552		Pack of 2 Pack of 20
AA414	61508		3/4" to 1/2" adapter
AA415	69548		Pack of 2 Pack of 20
AA416	61514		3/4" Double socket
AA417	69554		Pack of 4 Pack of 20
AC400	78004		3/4" Hose assembly pliers
			Pack of 1

Shields & Modular Manifolds Kits - Also Available

VACUUM HOSES

The Loc-Line® 2 1/2" Vacuum hose is designed to be added to an existing central vacuum system to extract smoke, dust, fumes and particles at the source. It is easy to position within a work area and can be mounted to 3" thin walled PVC drain pipe, 3" sheet metal duct, or a portable shop vacuum.

Model No.	Mfg. No.	Description	Price/Each
AC401	81201		Vacuum segment packs
AC399	81301AS		9 elements 2.5" I.D. Anti-static, 9 elements (1 foot segment)
AC393	81202		18 elements 2.5" I.D.
AC388	81302AS		Anti-static, 18 elements (2 - one foot segments)
AC370	89220		180 elements 2.5" I.D.
AC369	89320AS		Anti-static, 180 elements (20 - one foot segments)
AC422	81203		4.5" Round nozzle
AC419	81303AS		Pack of 1
AC378	89223		Anti-static, pack of 1
AC375	89223AS		Pack of 10 Anti-static, pack of 10
AC423	81204		6" x 3.5" Rectangular nozzle
AC420	81304AS		Pack of 1
AC379	89224		Anti-static, pack of 1
AC376	89324AS		Pack of 10 Anti-static, pack of 10

Model No.	Mfg. No.	Description	Price/Each
AC424	81205		Tapered oval nozzle
AC421	81305AS		Pack of 1
AC380	89225		Anti-static, pack of 1
AC377	89325AS		Pack of 10 Anti-static, pack of 10
AC425	81206		3" PCV adapter
AC384	89226		Pack of 1 Pack of 10 * Not available in "anti-static"
AC428	81207		3" Sheet metal duct adapter
AC427	81307AS		Pack of 1
AC385	89227		Anti-static, pack of 1
AC382	89327AS		Pack of 10 Anti-static, pack of 10
AC404	81208		2.5" Slide valve
AC402	81308AS		Pack of 1
AC372	89228		Anti-static, pack of 1
AC371	89328AS		Pack of 10 Anti-static, pack of 10
AC429	81209		Shop vacuum hose adapter
AC386	89229		with mounting tab Pack of 1 Pack of 10
AC430	81210		Shop vacuum adapter
AC387	89230		Pack of 1 Pack of 10

Shields & Modular Manifolds Kits - Also Available

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 \$414.00



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 \$289.00



REFRACTOMETERS

- 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)



REED

Model No.	Scale	Range	Min. Div.	Accuracy	Price/Each
HX107	Brix	0 to 32%	0.2%	±0.2%	139.00

CIMPERIAL® 1070 METALWORKING FLUID

- Soluble oil recommended for heavy-duty machining and grinding operations such as milling, drilling, boring, reaming, tapping, sawing and broaching
- Excellent grinding ability where wheel life and part quality are vital



Model No.	Mfg. No.	Size	Price /Each
AG614	B00102-P000	19 L	303.00
AG613	B00102-D000	208 L	2800.00

CIMSTAR® 10-700VLC METALWORKING FLUID

- Semi-synthetic metalworking fluid offers cost-effective alternatives while maintaining good overall performance characteristics
- Light to moderate machining of ferrous and non-ferrous metals



Model No.	Mfg. No.	Size	Price /Each
AG635	B01258-P000	19 L	175.00
AG634	B01258-D000	208 L	1623.00

CIMTECH® 95 METALWORKING FLUID

- Synthetic metalworking fluid recommended for light-duty grinding operations of ferrous metals
- Designed for high agitation grinding applications such as surface, double disc, and Blanchard grinding
- Rejects tramp oil to keep product clean, which extends sump life



Model No.	Mfg. No.	Size	Price /Each
AG621	B00191-P000	19 L	147.00
AG620	B00191-D060	208 L	1391.00

MILCOOL® GP METALWORKING FLUID

- Economical cutting fluid for use in light-duty machining and grinding applications
- Developed for use on ferrous and most non-ferrous materials, including some yellow metals



Model No.	Mfg. No.	Size	Price /Each
AG631	B00623	19 L	115.00
AG630	B00623-D000	208 L	1067.00

CIMFREE® SAW PLUS BAND SAW FLUID

- Vegetable-based cutting fluid recommended for use in all band saw type applications
- Developed for use on all ferrous and non-ferrous materials, including some yellow metals
- Formula is derived from natural, renewable resources and does not contain mineral oil
- Excellent lubricity package, which extends blade life and reduces machine wear



Model No.	Mfg. No.	Size	Price /Each
AG641	B01997-P000	19 L	179.00

CIMTECH® 3100-VLZ METALWORKING FLUID

- Synthetic metalworking fluid recommended for moderate to heavy-duty machining and grinding operations
- Provides excellent tool life and surface finish
- Rejects tramp oil to keep product clean, which extends sump life



AG635



Model No.	Mfg. No.	Size	Price /Each
AG633	B01204-P000	19 L	224.00
AG632	B01204-D000	208 L	2057.00

SPECIALTY CUTTING FLUID



TRIM® C270CG HIGH-PERFORMANCE SYNTHETIC COOLANT

- Provides excellent cooling and chip settling
- Compatible with many materials including cast iron, steel, copper alloys, plastics and composites
- Ideal for grinding, drilling, tapping, and reaming operations without chlorine or sulfur based EP additives
- Low-foaming and misting
- Excellent corrosion inhibition on common ferrous alloys

AF459



Model No.	Format gal.	Container Type	Price /Each
AF457	1	Jug	55.00
AF458	5	Pail	232.00
AF459	54	Drum	2102.00
AF460	270	IBC Tote	9105.00

TRIM® C350 PREMIUM SYNTHETIC COOLANT

- Synthetic coolant that is optimized to meet the requirements of the North American aerospace industry
- Improves the performance of most aluminum machining operations
- Clear fluid is easy to use and maintain
- Superior non-ferrous corrosion prevention on aluminum alloys
- Low-foaming and misting
- Achieves the lubricity of soluble oil without the oily residue

AF461



Model No.	Format gal.	Container Type	Price /Each
AF461	1	Jug	68.00
AF462	5	Pail	301.00
AF463	54	Drum	2693.00
AF464	270	IBC Tote	11821.00

TRIM® E206 LONG-LIFE EMULSION COOLANT

- Ideal for a wide range of machining operations on ferrous and non-ferrous materials
- Composed of extreme-pressure additives to control build-up edge
- Stable and fine emulsion leads to reduced carryoff
- Leaves a soft fluid film

AF466



Model No.	Format gal.	Container Type	Price /Each
AF465	1	Jug	59.00
AF466	5	Pail	258.00
AF467	54	Drum	2348.00
AF468	270	IBC Tote	10214.00

TRIM® E850 PREMIUM EMULSION COOLANT

- Easy-to-maintain metal removal fluid
- Composed of vegetable-based technology and premium lubricity additives
- Robust enough to last long while avoiding rancid odours usually associated with emulsions
- Ideal for use on difficult-to-machine alloys, exotics, stainless and high-tensile strength steels
- Boron and halogen-free

AF472



Model No.	Format gal.	Container Type	Price /Each
AF469	1	Jug	68.00
AF470	5	Pail	301.00
AF471	54	Drum	2693.00
AF472	270	IBC Tote	11821.00

TRIM® MIST SYNTHETIC MISTING COOLANT

- Provides rapid and effective cooling for cutting and grinding applications
- Keeps grinding wheels clean and free of loading
- Compatible with all ferrous metals, most non-ferrous metals, and most non-metallic materials
- Very low odour
- Does not leave slippery films on work pieces, machinery, or in surrounding areas

AF473



Model No.	Format gal.	Container Type	Price /Each
AF473	1	Jug	46.00
AF474	5	Pail	198.00
AF475	54	Drum	1706.00
AF476	270	IBC Tote	7407.00

TRIM® MICROSOL® 690XT PREMIUM SEMI-SYNTHETIC COOLANT

- High-lubricity, semi-synthetic, micro-emulsion coolant
- Achieves excellent cooling and mechanical lubricity
- Works very well in mixed metal situations
- Compatible with titanium, high nickel alloys, steels, copper and aluminum alloys
- Low-foaming
- Contains no baron, halogen, nitrites, triazines, phenols, chlorinated or sulfurized EP additives
- Excellent corrosion inhibition on all ferrous and non-ferrous metals

AF487



Model No.	Format gal.	Container Type	Price /Each
AF485	1	Jug	66.00
AF486	5	Pail	292.00
AF487	54	Drum	2622.00
AF488	270	IBC Tote	11434.00

TRIM® MICROSOL® 585XT SEMI-SYNTHETIC COOLANT

- High-lubricity, semi-synthetic, micro-emulsion coolant
- Achieves excellent cooling and mechanical lubricity
- Ideal for machining and grinding gray iron
- Works very well in mixed metal situations
- Low-foaming
- Excellent corrosion inhibition on all ferrous and non-ferrous metals
- Contains no nitrites, triazines, phenols, chlorinated or sulfurized EP additives

AF479



Model No.	Format gal.	Container Type	Price /Each
AF477	1	Jug	61.00
AF478	5	Pail	267.00
AF479	54	Drum	2350.00
AF480	270	IBC Tote	10175.00

TRIM® SC520 SEMI-SYNTHETIC COOLANT

- General-purpose cutting and grinding fluid
- Ideal for multi-material and multi-operational shops
- Controls build-up edge and improves tool life in high-speed milling and turning operations
- Low odour and mist
- Compatible with a wide variety of materials including cast iron, steels, copper, aluminum alloys, most plastics and most composites

AF491



Model No.	Format gal.	Container Type	Price /Each
AF489	1	Jug	47.00
AF490	5	Pail	198.00
AF491	54	Drum	1663.00
AF492	270	IBC Tote	7173.00

VEGA WELDING GRADE ERGONOMIC CHAIR

- Adjustable seat height and backrest provides optimal back support for users of different sizes
- Provides lower limbs, back and shoulders support
- Colour: Black
- Flame retardant natural cow suede
- Standard Pneumatic Lift: 19" to 24"
- Backrest Dimension: 12" W x 15.5" H
- Seat Dimension: 17.5" W x 16" D
- Overall Dimensions: 25" W x 25" L x 37" H
- Weight Capacity: 300 lbs.
- Five 3" caster wheels that are adaptable to all surfaces

Model No. OP509
Mfg. No. VEGA-IND-MM
Price/Each \$637.00



Synetik
 ErgoDesign



FLEX WELDING GRADE ERGONOMIC CHAIRS

- Ergonomic chair that reduces pressure sensations felt in the buttocks, wrists and lumbar region
- Reduces fatigue by limiting muscular effort
- Colour: Black
- Flame retardant natural cow suede
- Standard Pneumatic Lift: 18.5" to 23.5"
- Seat: 15" L x 18" W
- Overall Dimensions: 19" L x 27" W x 21" H
- Weight Capacity: 300 lbs.
- Five 3" caster wheels adaptable to all surfaces

Model No. OP275
Mfg. No. FLEX-MM
Price/Each \$694.00



Synetik
 ErgoDesign

FLEX 2 WELDING GRADE ERGONOMIC CHAIRS

- Ergonomic chair that reduces pressure sensations felt in the buttocks and lumbar region
- Allows users to quickly adjust working position
- Colour: Black
- Upholstery: Flame retardant natural cow suede
- Backrest is adjustable at an angle of 15° to 85° to the ground
- Dimensions of backrest: 17" W x 28" H
- Overall dimensions when backrest is completely lowered: 49" L x 19" W x 14.5" H
- Weight Capacity: 300 lbs.
- Four 3" caster wheels that are adaptable to all surfaces

Model No. OP428
Mfg. No. FLEX2-MM
Price/Each \$1155.00



Synetik
 ErgoDesign



TA300 WELDING GRADE ERGONOMIC CHAIR

- Improves comfort while working on elevated surfaces
- The backrest provides support and reduces muscular fatigue and discomfort
- Colour: Black
- Flame retardant natural cow suede
- Standard Pneumatic Lift: 24.5" to 34.5"
- Backrest Dimension: 12.5" W x 10.5" H
- Seat Dimension: 11.5" W x 10.5" D
- Overall Dimensions: 21" L x 16.5" W x 51" H
- Weight Capacity: 300 lbs.

Model No. OP497
Mfg. No. TA300-MM
Price/Each \$549.00



Synetik
 ErgoDesign



TF150 WELDING GRADE ERGONOMIC CHAIR

- Reduces the feeling of pressure by promoting circulation and mobility
- Footrest reduces muscular effort in the lumbar region and in the legs
- Adjustable seat height and backrest provides optimal back support for users of different sizes
- Standard Pneumatic Lift: 19.75" to 27.5"
- Colour: Black
- Flame retardant natural cow suede
- Seat Dimension: 12.5" W x 12" D
- Backrest Dimension: 12" W x 6.5" H
- Overall Dimensions: 28" L x 28" W x 40" H
- Weight Capacity: 300 lbs.
- Five 3" caster wheels that are adaptable to all surfaces

Model No. OP503
Mfg. No. TF150-IND-MM
Price/Each \$578.00



Synetik
 ErgoDesign



TA180 WELDING GRADE ERGONOMIC STOOLS

- Ergonomic stool that improves user comfort and reduces foot and leg pain due to prolonged standing
- Ideal for users that need freedom of movement
- Colour: Black
- Base is equipped with non-skid pads
- Dual-density cushions and closed-cell foam padding
- Standard Pneumatic Lift: 26.75" to 36.75"
- Seat: 10" L x 12" W
- Overall Dimensions: 16" L x 22" W x 27" H
- Weight Capacity: 300 lbs.

Model No. OP277
Mfg. No. TA180-MM
Price/Each \$491.00

Synetik
 ErgoDesign



WELDING CHAIRS, SCREENS & BLANKETS



SF130 WELDING GRADE ERGONOMIC CHAIRS

- Ideal for confined areas or when fast and efficient movement is required
- Adjustable seat height allows flexibility and freedom of movement for users of different sizes
- Dual-density cushions and closed-cell foam padding
- Flame retardant natural cow suede
- Colour: Black
- Standard Pneumatic Lift: 18" to 23"
- Seat Dimension: 12.5" W x 12" D
- Overall Dim.: 23" L x 23" W x 23" H
- Weight Capacity: 300 lbs.
- Five 3" caster wheels that are adaptable to all surfaces

Model No. OP499
Price/Each \$429.00

Synetik
ErgoDesign



STAG4 WELDING GRADE ERGONOMIC BENCHES

- Ergonomic seat allows users to work in a kneeling position with comfort
- Reduces pressure sensations felt in the knees, ankles and lumbar region
- One lever mechanism for seat height adjustment and 20° adjustable slope for kneeling position
- Padding: Dual-density cushions and closed-cell foam
- Upholstery: Flame retardant natural cow suede
- Standard pneumatic lift: 17.5" to 22.5"
- Knees: 8.5" W x 15.5" D
- Dimensions of seat: 12.5" W x 12" L
- Five 3" caster wheel adaptable to all surfaces
- Includes tool tray
- Colour: Black
- Material: Suede
- Weight Capacity: 300 lbs.
- Overall Dimensions: 20" L x 28" W x 21" H

Model No. OG348
Price/Each \$677.00

Synetik
ErgoDesign



24-OZ. FIBREGLASS LAVASHIELD™ WELDING BLANKETS

- 24-oz. black 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 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	92.35
NT821	6 x 8	142.00

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: 2192°F (1200°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	62.95
NT825	6 x 6	250.00

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)

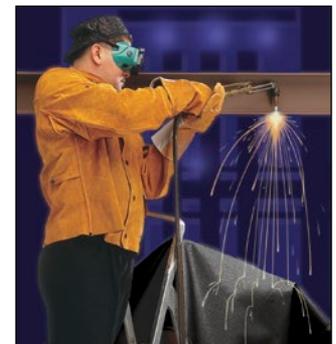
Applications: Heavy-duty drop cloth and vertical curtain protection against sparks, molten metal splash, welding spatter and grinding spray.



Model No.	Dimensions'	Price /Each
NT822	6 x 6	115.00
NT823	6 x 8	169.00

WELD-O-GLASS 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



Wilson

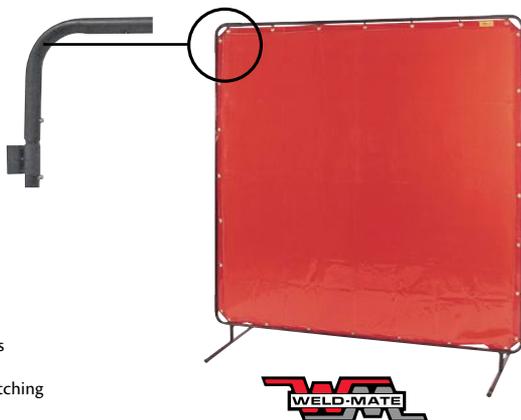
Model No.	Mfg. No.	Dimensions'	Price /Each
146-1312	36302	6 x 6	79.90
146-1367	36318	6 x 8	109.00

WELDING BLANKETS & SCREENS

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**: 25-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

CURTAINS ONLY

Model No.	Dimensions W' x H'		Transparency	UV Resistance	Colour	Price /Each	Model No.	Price /Each	
NT888	6	x	6	High	Moderate	Yellow	166.00	NT826	42.95
NT889	8	x	6	High	Moderate	Yellow	176.00	NT827	53.80
NT890	6	x	6	High	Moderate	Orange	166.00	NT828	42.95
NT891	8	x	6	High	Moderate	Orange	176.00	NT829	53.80
NT892	6	x	6	Moderate	Moderate	Green	166.00	NT830	42.95
NT893	8	x	6	Moderate	Moderate	Green	176.00	NT831	53.80
NT894	6	x	6	Opaque	Maximum	Olive	245.00	NT832	123.00
NT895	8	x	6	Opaque	Maximum	Olive	285.00	NT833	155.00

FRAMES ONLY

Model No.	Description	Price /Each
NT834	Modular Frame, Adjustable Width 6' or 8'	126.00

OPTIONAL CASTERS

Model No.	Description	Price /Each
SEB618*	2" Rubber Caster with Brake	6.40

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

Yellow



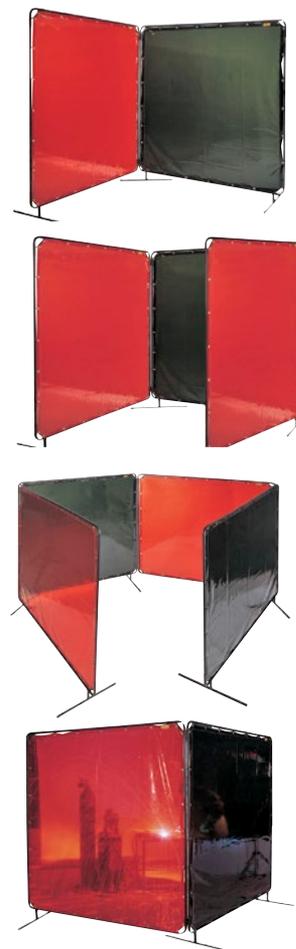
Orange



Green



Olive



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**



Wilson

Model No.	Mfg. No.	Dimensions W' x H'	Price /Each
CURTAINS & FRAMES			
TTV105	-	6 x 6	169.00
TTV106	-	8 x 6	196.00
TTV107	-	10 x 6	220.00
FRAME ONLY			
TTV099	36336	6 x 6	113.00
TTV100	36338	8 x 6	120.00
TTV101	36333	10 x 6	125.00
CURTAIN ONLY			
146-1280	36292	6 x 6	56.70
146-1340	36307	8 x 6	75.50
146-1510	36278	10 x 6	94.40

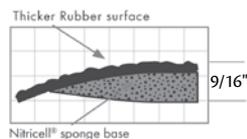
WELDSAFE® NO. 447

- Dramatically reduces fatigue while withstanding the challenges of welding environments
- Specially formulated to repel sparks and hot metal shards, the thick rubber surface has a melt point of over 500°F
- The super resilient Nitricell® sponge base is a nitrile rubber composite that offers unparalleled comfort
- All edges are safety bevelled
- 9/16" thick
- Green rating > 33% post industrial material
- Colour: Black

3-YEAR WARRANTY



Anti-fatigue mat specifically designed for welding!



WEARWELL

Model No.	Dimensions W' x L'	Price /Each
NG181	2 x 3	95.00
NG182	3 x 5	239.00

WELDING HELMETS & LENSES



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	7.30
NT647	Flip Front	8.95

Z1100 SERIES WELDING SAFETY GOGGLES

- Can be used over most prescription eyewear
- Wrap-around style provides excellent 180° panoramic vision
- Extremely flexible soft PVC goggle body for greater comfort
- Impact resistant polycarbonate lens
- Anti-fog lens is ideal for high humidity applications
- Indirect vent increases air flow and protects against dust, fumes and chemical splash
- Adjustable elastic headband
- Ventilation Type: Indirect
- Lens Coating: Anti-Fog
- Standard(s) Met: ANSI Z87+, CSA Z94.3



Model No.	Lens Tint	Price /Each
SGR808	3.0	15.25
SGR809	5.0	18.15

V-MAXX™ GOGGLES

- Sport wrap-around style
- Direct vent for impact resistance and indirect vent for chemical splash applications
- Peel-off goggle covers available to extend useful life of the lens
- OTG compatible
- 180° clear field of vision
- Lenses coated with Fog-ban® anti-fog coating
- Pivoting headband clips to adjust strap around hardhats or hearing protection
- Adjustable elastic or neoprene headband
- Certified to CSA standard Z94.3



Model No.	Mfg. No.	Description	Lens Tint	Price /Each
SAI907*	11250830	Indirect Vent, Black Frame and Headband	Shade 3.0	16.20
SAI908*	11250850	Indirect Vent, Black Frame and Headband	Shade 5.0	18.80
SAI905*	11250800	Direct Vent, Red Headband	Clear, Fog-ban®	7.33
SAI906	11250810	Indirect Vent, Black Neoprene Headband	Clear, Fog-ban®	8.51
SAI909	11250860	Goggle Covers, 10/pkg	-	8.80

* Elastic Headband

CUP GOGGLES

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



Model No.	Price /Each
NT648	6.85

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+ and compliant with CSA standard Z94.3



Model No.	Mfg. No.	Lens Tint	Price /Each
TTT946	20525	Clear Anti-Fog	18.30
TTT947	20526	Smoke Anti-Fog	18.03
TTT948	20527	Amber Anti-Fog	18.03
TTT949	20528	Shade 3.0 Anti-Fog	29.13
TTT950	20529	Shade 5.0 Anti-Fog	30.01

V90 SHIELD* GOGGLES

- Features the Monogoggle® 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
- Meets ANSI impact standard Z87.1+



Model No.	Mfg. No.	Lens Tint	Price /Each
TTT954	18629	Clear Anti-Fog	30.07
TTT955	18631	Shade 3.0 Anti-Fog	42.01
TTT956	18633	Shade 5.0 Anti-Fog	43.44

WELDING HELMETS & LENSES

WH30/WH40 ELEMENT* ADF WELDING HELMETS

- Lightweight shell weighs only 6 oz.
- Available in two different auto-darkening filters: ADF fixed shade 10 and ADF variable shade 9-13
- Two independent arc sensors
- Solar powered unit
- Meets ANSI standard Z87.1 and compliant with CSA standard Z94.3



SEA769

JACKSON
SAFETY HEAD

Model No.	Mfg. No.	Description	Price /Each
WH30 ELEMENT*			
SEA770	23286	Welding Helmet-Fixed Shade 10 ADF, 4.33" x 3.54"	92.60
SEA772	23440	Replacement Cover Lens Kit - Includes 5 Front and 2 Rear Safety Plates	8.35
SED982	23442	Replacement Headgear	14.60
WH40 ELEMENT*			
SEA769	23282	Welding Helmet-Variable ADF, 4.33" x 3.54"	139.00
SEA771	29127	Replacement Cover Lens Kit - Includes 5 Front and 2 Rear Safety Plates	8.02
SED982	23442	Replacement Headgear	14.60

WH40 SMARTIGER* BALDER* WELDING HELMETS

- Internal adjustable shade 9-13
- Internal adjustable sensitivity
- Aerodynamic shell designed for better fume deflection
- Solar-powered unit with two arc sensors
- Can be used for torch cutting
- Lightweight at 19.2 oz
- Auto-on ADF is always ready to weld
- Meets ANSI standard Z87.1 and compliant with CSA standard Z94.3
- 5-year warranty



SEH127

JACKSON
SAFETY HEAD

Model No.	Mfg. No.	Description	Price /Each
SEH126	37188	SmartIGer* Balder* Black	298.00
SEH127	37187	SmartIGer* Balder* Torch Dancer	327.00
SDL094	37247	External Safety Lens, 10/Pkg.	27.00
SDL095	37249	Internal Safety Lens, 10/Pkg.	13.50

WH10 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 and compliant with CSA standard Z94.3

JACKSON
SAFETY HEAD

Model No.	Mfg. No.	Description	Colour	Price /Each
PB193	14982	HSL-2 Helmet, 2" x 4 1/4", Flip Front	Black	66.50
SD617	14975	HSL-100 Helmet, 4 1/2" x 5 1/4", Fixed Front	Black	65.40

WH70 BH3* BALDER* WELDING HELMETS

- Superior angle of view
- Enhanced visibility and colour recognition
- Variable shade 9-13, adjustable sensitivity and opening time delays
- Solar-powered unit with two arc sensors
- Curved front cover plate offers reduced heat build-up, reflections and fogging
- Aerodynamic shell designed for better fume deflection
- Can be used for torch cutting
- Quick and easy replacement of safety plates
- Lightweight at 19.84 oz.
- Auto-on ADF is always ready to weld
- Meets ANSI standard Z87.1 and compliant with CSA standard Z94.3
- 5-year warranty



SEH125

JACKSON
SAFETY HEAD

Model No.	Mfg. No.	Description	Price /Each
SEH125	37191	BH3* Black	598.00
SDL094	37247	External Safety Lens, 10/Pkg.	27.00
SDL096	37248	Internal Safety Lens, 10/Pkg.	13.50

WH70 TRUESIGHT* II DIGITAL ADF WELDING HELMETS

DELIVERS BEST-IN-CLASS OPTICAL CLARITY BY INTRODUCING BALDER* TECHNOLOGY TO TRUESIGHT* II'S LARGE VIEWING AREA AND DIGITAL CONTROLS

- Optical classification 1/1/1/1 rating
- Variable shade from 5-8 and 9-13
- 3.25" x 4.00" viewing area
- Digital controls (Designed by welders for welders)
- Weld, grind and torch modes (3-N-1 welding helmet)
- Delay and sensitivity adjustments
- Four sensors and auto off
- Meets ANSI standard Z87.1 and compliant with CSA standard Z94.3
- DIN rating EN379



SEC603

JACKSON
SAFETY HEAD

Model No.	Mfg. No.	Description	Price /Each
SEC603	46159	HLX w/Truesight* II Digital ADF, Black	618.00
SEC604	30319	Truesight* II ADF Cartridge 4 1/2" x 5 1/4"	566.00
SEC605	30320	External Safety Lens	3.86
SEC606	30321	Internal Safety Lens	2.57



SD617



PB193

WELDING HELMETS & LENSES



WH40 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 standard Z87.1 and compliant with CSA standard Z94.3



SAS083

WH40 INSIGHT* VARIABLE ADF WELDING HELMETS

- Get the high-level elements of a high-performance welding lens without the high price
- Offers an ADF with digital and multi-function controls for any welding job
- Sensitivity and delay adjustments
- Four independent sensors
- Easy-to-use digital controls
- Torch, grind and weld modes
- Variable shade: 9-13
- Viewing area: 3.93" x 2.36"
- Meets ANSI standard Z87.1 and compliant with CSA standard



SDP562



Model No.	Mfg. No.	Description	Price /Each
SAS083	21931	Nitro* Blue w/Nitro* ADF	187.00
SAS084	21947	Nitro* ADF Cartridge, 4.33" x 3.54"	123.00
SEA270	20696	370 Series Headgear	28.90
SEA573	22603	Replacement Cover Lens Kit - Includes 5 Front and 2 Rear Safety Plates	8.40



Model No.	Mfg. No.	Description	Price /Each
SDP562	40710	HSL100 Black w/Insight* ADF	333.00
SDP563	40709	Insight* ADF Cartridge, 4.5" x 5.25"	285.00
SDP564	41594	Internal Lens, 10/Pkg.	19.50
SDP565	41589	Replacement Cover Lens Kit - 5 Front and 2 Rear Safety Plates	17.60

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
- Passive lens
- Material: Thermoplastic



NT645



NT687



Model No.	Description	Window Dimensions"	Price /Each
NT645	Flip Front	2 x 4 1/4	19.90
NT687	Fixed Front	4 1/2 x 5 1/4	29.15

WH20 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. 141-1120
Mfg. No. 14531
Price/Each \$148.00



370 SERIES REPLACEMENT HEADGEAR

- 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, Nitro*, Nexgen*, Master 3-N-1, Solera, Truesight*, Boss* 3-N-1 and Professional welding helmets

Model No. SEA270
Mfg. No. 20696
Price/Each \$28.90



WELDING HELMETS & LENSES

P550 WELDING HELMETS

- Optimized cover lens for perfect protection against spatters and fumes
- Enlarged LCD provides a comfortable viewing area
- True-Color optics; specially developed UV/IR filter allows a realistic perception of colors
- Shade level 4/9-13 with external control for quick adjustment
- Adjustable sensitivity and opening delay
- Power by solar cells and two lithium batteries
- Application range: All electric arc welding processes
- Prohibited for overhead welding and laser/gas welding
- Complies with CSA standard Z94.3
- 2-year warranty



HELMETS

Model No.	Mfg. No.	Description	Colour	Price /Each
SED542	1007.000	Neo Black/Black w/graphics	Black	409.00
SGC231	1007.011	Neo Black/Green w/graphics	Black/Green	409.00
SED546	5012.700	Replacement Auto-Darkening Filter	-	339.00

ACCESSORIES

Model No.	Mfg. No.	Description	Qty /Pkg.	Price /Each
COVER LENSES				
SAX006	5000.001	Inside Cover Lenses	5	15.10
SED552	5000.250	Front Cover Lenses	5	28.70
MAGNIFICATION LENSES				
SAX008	5000.050	1.00 Diopter	1	54.20
SAX009	5000.051	1.50 Diopter	1	54.20
SAX010	5000.052	2.00 Diopter	1	54.20
SAX011	5000.053	2.50 Diopter	1	54.20

PANORAMAXX WELDING HELMET

- Unique ADF profile expands view 6x compared to traditional helmets, yet remains lightweight
- Shade level 2.5/5-12; brightest view in light state and grind mode
- Autopilot detects arc intensity and adjusts shade level during welding, cutting and grinding
- True Color optics for best colour and detail perception
- Twilight opening delay restores light more naturally, presenting a smoother transition to the eye
- New rechargeable power-pack uses solar panels and USB
- Curved helmet design deflects smoke and debris, optimized for overhead welding
- Certification: CSA Z94.3



Model No.	Mfg. No.	Description	Price /Each
SGC191	1010.000	Panoramaxx Welding Helmet	869.00
SGC192	5000.270	Front Cover Lenses, 5/Pkg.	62.70
SGC193	5000.010	Inner Cover Lenses, 5/Pkg.	28.00
SGC194	5000.150	Magnification Lens, 1.00 Diopter	56.20
SGC195	5000.151	Magnification Lens, 1.50 Diopter	56.20
SGC196	5000.152	Magnification Lens, 2.00 Diopter	56.20
SGC197	5000.153	Magnification Lens, 2.50 Diopter	56.20

E684 WELDING HELMETS

- Adaptive shade autopilot automatically adjusts the shade level as one welds
- Third sensor detects changes in arc intensity and adjusts shade level accordingly
- Twilight ADF technology restores light more naturally, presenting a smoother transition to the eye
- High definition viewing
- True colour filter optimizes view of colours in true form
- Curved helmet optimized for overhead welding
- Shade Level : 4/5-13
- Complies with CSA standard Z94.3



Model No.	Mfg. No.	Description	Colour	Price /Each
SFI934	1006.500	e684 Helmet	Silver	869.00
SFU861	1006.501	e684 Helmet	Black	869.00
SFU862	1006.502	e684 Helmet	Dark Blue	869.00
SFI935	5012.480	Replacement Auto-Darkening Filter	-	759.00

ACCESSORIES

Model No.	Mfg. No.	Description	Qty /Pkg.	Price /Each
SAM897	5000.210	Front Cover Lenses	2	23.80
SAM898	5000.212	Front Cover Lenses	5	55.20
SAX006	5000.001	Inside Cover Lenses	5	15.10
SAX008	5000.050	Magnification Lens, 1.00 Diopter	1	54.20
SAX009	5000.051	Magnification Lens, 1.50 Diopter	1	54.20
SAX010	5000.052	Magnification Lens, 2.00 Diopter	1	54.20
SAX011	5000.053	Magnification Lens, 2.50 Diopter	1	54.20
616-1570	5003.250	Replacement Headgear	1	56.70

LITEFLIP AUTOPILOT WELDING HELMETS

- The first flip-up helmet with Autopilot shade selector
- Shade levels 1/4/5-14 with True-Color optics
- Adjustable sensitivity and opening delay
- Powered by solar cells and two lithium batteries
- Application range: all electric arc welding processes
- Prohibited for overhead welding and laser/gas welding
- Certification: ANSI Z87.1, complies with CSA Z94.3
- 2+1 year warranty



Model No.	Mfg. No.	Description	Price /Each
SGC188	1006.700	Liteflip Welding Helmet	759.00
SAX006	K6024	Inside Cover Lens, 5/Pkg.	15.10
SGC189	5000.390	Safety Grinding Lens, 5/Pkg.	27.60
SGC190	5000.391	Front Lens, 5/Pkg.	27.60

WELDING HELMETS & LENSES



CRYSTAL 2.0 AUTO DARKENING WELDING HELMET

- Crystal Lens Technology and Optrel Autopilot work together to assure a clear view with the right level of protection
- Features high-contrast, true colour vision
- Powered by solar cells and 2 lithium batteries (CR2032)
- Features a 'bright to dark' switching time of 0.100 ms at room temperature and 0.070 ms at 55°C
- Features a 'dark to bright' switching time of 0.1 s to 2.0 s
- Inactive Shade Level: 2
- Active Shade Levels: 4-12
- Weight: 460 g



Model No.	Mfg. No.	Description	Price /Each
SGP709	1006.900	Crystal 2.0 Auto-Darkening Helmet	989.00
SGP711	5001.690	Crystal 2.0 Welding Helmet Shell	209.00
SGP710	5012.900	Replacement Auto-Darkening Cartridge	799.00

VEGAVIEW 2.5 WELDING HELMETS

- Brightest view in light state and grind mode at shade level 2.5
- Shade level 2.5/8-12
- External infinite shade level adjustment enables welders to manually adjust their shade level from 8-12
- True colour filter optimizes view of colours in true form
- Sensitivity control prevents ADF from responding too soon or not at all to their arc flash
- Opening delay allows welders to adjust the time it takes to switch from dark to light
- Curved helmet optimized for overhead welding
- Meets CSA standard Z94.3
- 2-year warranty



Model No.	Mfg. No.	Description	Colour	Price /Each
SFI930	1006.600	vegaview2.5 Helmet	Black Unpainted	649.00
SFI931	5012.470	Replacement Auto-Darkening Filter	-	589.00

ACCESSORIES

Model No.	Mfg. No.	Description	Qty/Pkg.	Price/Each
SAM898	5000.212	Front Cover Lenses	5	55.20
SAM901	5000.300	Inside Cover Lenses	5	14.70

CRYSTAL 2.0 WELDING HELMET WITH E3000 PAPR SYSTEM

- Powered Air Purifying Respirator system (PAPR) alleviates harsh working conditions caused by smoke, dust and vapors
- PAPR system combined with Optrel auto-darkening welding helmet is a combination that provides maximum safety and comfort
- Provides continuous monitoring of airflow by integrated sensor during entire welding process
- Head Gear: Welding Helmet
- Battery Type: Lithium-Ion
- Colour: Dark Blue
- Power Source: Battery



Model No.	Mfg. No.	Description	Price /Each
SGP712	4550.105	Welding Helmet w/ E3000 PAPR System	3269.00

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.	Description	Price /Each
SAJ757	5012.238		289.00

WELDCAP®

- Combines the lightweight wear comfort of a baseball cap with full protection of an ADF welding helmet
- Lightweight, flame-retardant textile is soft where it must be comfortable, robust plastic is rigid where it must be tough
- Well-defined nose cut out places the lens closer to the eyes, enlarges the welder's line of sight by 2.7 times
- Weighs less than 14 ounces
- Sleek profile ideal for welder working in confined spaces
- Grind mode shade 3
- Shade level 3/9-12
- Meets Z87.1+ standard for impact resistance



Model No.	Mfg. No.	Description	Qty /Pkg.	Price /Each
SEK224	1008.000	Weldcap®	1	329.00
SEK225	5000.260	Front Cover Lens	5	44.50
SEK226	5000.040	Inside Cover Lens	5	17.50
SEK227	5002.700	Nose Clip	2	17.50
SEK228	5002.800	Replacement Textile Cap	1	139.00
SEK229	5002.720	Battery Cover	2	15.70
SEK230	5002.900	Parking Buddy Belt Clip	1	31.30

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 models
- Slip-on/off spring assembly for easy installation



Model No.	Mfg. No.	Description	Price /Each
SAN048	5011.180	Fits all non-slotted hard hats	64.40
SED541	5011.185	Fits all slotted hard hats	42.60

LEATHER NECK PROTECTORS

- Covers the entire lower neck and back regions of head
- Clips on to the rim of the helmet shell



Model No.	Mfg. No.	Description	Price /Each
SAN049	4028.016	Fits all Optrel® helmets	169.00

LEATHER CHEST PROTECTORS

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



Model No.	Mfg. No.	Description	Price /Each
SAN051	4028.015	Fits all Optrel® helmets	94.80

OTHER ACCESSORIES

- **Sweatbands** - For use with all Optrel® helmets
- **Helmet Back Pack** - Back-pack style

SGC236



SAN046



Model No.	Mfg. No.	Description	Qty /Pkg.	Price /Each
SAN046	5004.073	Front Sweatbands	2	13.50
SDP288	5004.020	Back Sweatbands	2	13.50
SGC236	6000.001	Helmet Back Pack	1	46.50

Canada's Best Value in Industrial Tools



*aurora*tools®



SPEEDGLAS™ 9002NC ADF WELDING HELMET



- Precision optics, which provide a view that appears lighter, brighter and more realistic, giving you better control of the weld puddle
- A more comfortable suspension for longer wear time
- Lighter weight, better for longer wearing, just 17 oz.
- Slim fit, better for tight spots
- Simplified UI, easy to operate and maintain
- ADF Shade Range: Variable 8-12
- DF Viewing Area (hwx): 2.13x4.09"
- Battery Life: 2000 hours
- Battery Type: ADF: CR2032
- Colour: Black/Silver



Model No.	Description	Price /Each
SGF164	Welding Helmet & Filter	397.83
SGF166	Welding Helmet Only	161.80
SGF165	Welding Filter Only	305.46

SPEEDGLAS™ 9100 WELDING HELMET & AUTO-DARKENING FILTER 9100XXI



- Grab and go with auto-on
- Two memory modes that allow you to set individual settings for dark shade
- Arc detection sensitivity is adjustable
- Delay function to set the dark-to-light opening time
- External grinding mode activation
- Adjustable head suspension increases comfort and stability
- Side windows help increase peripheral vision
- Welding cap, carry bag, and starter kit included
- Battery Life: Up to 1800 hours
- Meets ANSI Z87.1-2010



Model No.	Mfg. No.	Description	Price /Each
SGC239	06-0100-30ISW-CA	Speedglas™ 9100 Welding Helmet & Auto-Darkening Filter 9100XXI	710.79
SGC237	06-0000-30I-CA	Speedglas™ Auto Darkening Filter 9100XXI	678.97
SGC238	06-0000-30I-KIT-CA	Speedglas™ Auto Darkening Filter 9100XXI with Silver Front Panel	689.57

SPEEDGLAS™ 9100XX SERIES WELDING HELMETS

- Designed for optimal comfort and protection
- Head suspension changes not only how you wear the helmet, but also how you experience fit, stability and balance
- Smooth up-and-down pivot action that gently locks in the "up" position and the suspension keeps the helmet closer to user's head
- Light state shade 3 with five sensitivity levels
- Sensitivity adjustment allows for use with all Stick, MIG and TIG welding processes, with grinding and torch modes
- Feature a built-in mag plate holder and seven user selectable dark shades
- Available with shade 5 Side Windows to increase peripheral vision
- Filters available in different sizes, 9100V and 9100XX, 30% larger than any other Speedglas™
- Designed with the professional welder in mind
- Approved to CSA standard Z94.3

SEJ105



SEJ106



SEJ111



ACCESSORIES

Model No.	Mfg. No.	Description	Viewing Area"	Shade	Price /Each
SEJ104	06-0100-30	Helmet w/ADF Variable	2.8 x 4.2	5, 8 - 13	678.97
SEJ105	06-0100-30SW	Helmet w/Side Windows and ADF Variable	2.8 x 4.2	5, 8 - 13	678.97
SEJ106	06-0000-30	Cartridge Only, ADF Variable Shade	-	5, 8 - 13	647.14

Model No.	Mfg. No.	Description	Qty /Pkg.	For Use W/Helmets	Price /Each
SEJ108	06-0200-30	Inside Protection Plate	5	9100XX	22.65
SEJ109	06-0200-51	Outside Protection Plate	10	9100V, 9100XX	39.43
SEJ110	06-0014-00NR	Hard Hat Adapter	1	9100V, 9100XX	88.51
SEJ111	06-0400-51	Replacement Headgear	1	9100V, 9100XX	33.54

ADFLO™ HIGH-ALTITUDE PAPR SYSTEM WITH SPEEDGLAS™ WELDING HELMETS

- Large, clear protective visor is curved, providing excellent viewing angles up, down, and peripherally
- A slim profile makes the helmet lightweight and easy to utilize in tight welding spaces
- With the right type of filter and/or cartridge, the assembly effectively protects against both particles and gases
- Helmet lets you direct the airflow to either your face, visor, or somewhere in-between for more comfort control
- Model **SGT319** filter features Variable Color Technology that allows welders to select between 3 different colour options (clear, cool, or warm), improving their ability to see the weld puddle, joint and arc
- Includes: Speedglas™ heavy-duty welding helmet with auto-darkening filter, Adflo™ high-altitude PAPR system, Lithium-ion battery, Charger, High-efficiency particulate filter & prefilter, Spark arrestor, Wide leather belt, Self-adjusting breathing tube
- Sensitivity: 5 Level (TIG>1A and MIG/MAG, Stick)
- Battery Life: 7-9 Hrs.
- Standards/Approvals: ANSI Z87.1-2015, CSA Z94.3 and NIOSH Approved



3M

Model No.	Mfg. No.	Welding Helmet	Price /Each
SGT318*	46-1101-00	G5-01	2352.94
SGT319	46-1101-301VC-CA	G5-01VC	3285.02
SGT321	46-1101-301-CA	G5-01VC	3220.60

* Auto-darkening filter not included

POWERED AIR RESPIRATORS

- High efficiency particulate respiratory protection system for welders
- Welding helmet 9100-Air with auto-darkening filter offers the welder compact, lightweight respiratory protection and quality filter optics all-in-one
- SideWindows: Shade 5 side filters that increase peripheral vision
- Ergonomic, adjustable head suspension for increased comfort, helmet stability and weight distribution
- Selectable shades 5, 8-13 and Shade 3 light state; grinding and tack modes
- 5-position sensitivity control
- Adjustable recovery delay
- Solar panel
- Storage bag, do-rag and starter kit included
- Meets ANSI Z87.1 and approved to CSA Z94.3 for eye and face protection
- Approved for use in all stick, MIG and TIG applications
- Breathing tube is SG-30W
- Offers assigned protection factor (APF) of 25 when used as a NIOSH-approved system

3M



REPLACEMENT FILTERS & CARTRIDGES

Model No.	Mfg. No.	Description	Price /Each
SAN357	15-0009-99X02	2-pack Adflo™ Spark Arrestor	16.91
SAN358	15-0099-99X06	6-pack Adflo™ Prefilter	24.09
SAN359	15-0099-99X12	12-pack Adflo™ Prefilter	43.80
SAN361	15-0299-99X06	1-pack Adflo™ HE Particle Filter	78.40
SAN360	15-0299-99X02	2-pack Adflo™ HE Particle Filter	169.10
SAN362	15-0299-99X36	36-pack Adflo™ HE Particle Filter	2690.36
SAN363	15-0499-99X02	2-pack Adflo™ OV/SD/CL/HC Cartridge	255.29
SAN364	15-0499-99X06	6-pack Adflo™ OV/SD/CL/HC Cartridge	702.13

* Natural colour auto darkening filter

SPEEDGLAS™ ACCESSORIES

- **Protective bag** used to help protect the Speedglas™ helmets assembly when not in use
- **Full hood** for use with Speedglas™ welding helmets to provide additional protection to the user from welding spark and spatter on the top portion of the head, neck and shoulders
- Hood is made of 75% FR cotton and 25% Kevlar synthetic fiber

3M

Model No.	Mfg. No.	Description	Price /Each
SEJ119	06-0500-65	Protective Bag	41.86
SEE884	06-0700-83	Full Hood	165.66



SEJ119



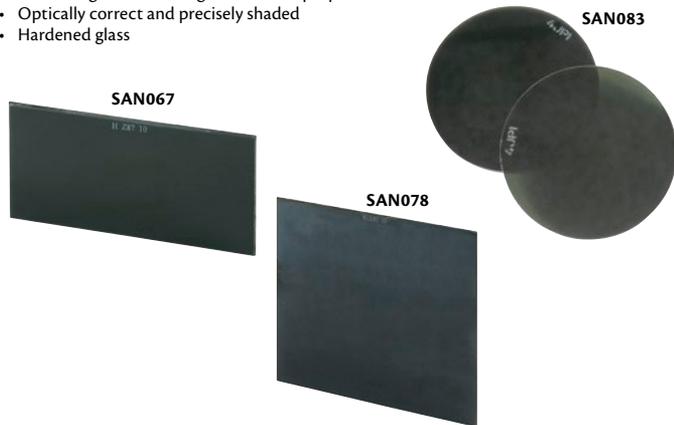
SEE884

WELDING HELMETS & LENSES



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	1.89
SAN062	FS-1H-5	5	1.78
SAN063	FS-1H-6	6	1.89
SAN064	FS-1H-7	7	1.89
SAN065	FS-1H-8	8	1.89
SAN066	FS-1H-9	9	1.78
SAN067	FS-1H-10	10	1.78
SAN068	FS-1H-11	11	1.78
SAN069	FS-1H-12	12	1.78
SAN070	FS-1H-13	13	1.89
SAN071	FS-1H-14	14	1.78

Model No.	Mfg. No.	Shade	Price /Each
4 1/2" x 5 1/4"			
SAN073	FS-5H-5	5	4.69
SAN074	FS-5H-6	6	4.99
SAN075	FS-5H-7	7	4.99
SAN076	FS-5H-8	8	4.69
SAN077	FS-5H-9	9	4.69
SAN078	FS-5H-10	10	4.69
SAN079	FS-5H-11	11	4.69
SAN080	FS-5H-12	12	4.69
SAN081	FS-5H-13	13	4.99
SAN082	FS-5H-14	14	4.69
50 MM			
SAN083	FL-5H-4	4	5.69
SAN084	FL-5H-5	5	5.69

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	6.20
NT653	1.00	6.20
NT654	1.25	6.20
NT905	1.50	6.45
NT655	1.75	6.20
NT656	2.00	6.20
NT657	2.25	6.20
NT658	2.50	6.20
NT659	3.00	6.20

Model No.	Diopter Strength	Price /Each
PLASTIC		
SAN095	1.00	13.20
SAN096	1.25	12.40
SAN097	1.50	12.40
SAN098	1.75	12.40
SAN099	2.00	12.40
SAN100	2.25	13.20
SAN101	2.50	12.40

CLEAR COVER LENSES

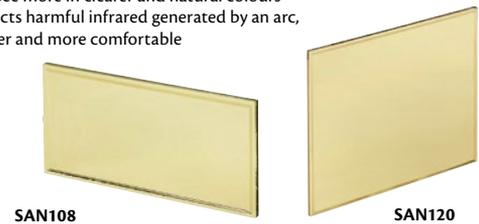
- Polycarbonate lenses are for eye protection against light impact such as sparks and small particles
- Cast resin lenses are also for eye protection and are more resistant to heat, scratching and pitting
- Clear glass lenses are not impact resistant and are only for use against spatter



Model No.	Mfg. No.	Size	Price /Each
POLYCARBONATE			
NT601		2" x 4 1/4"	0.76
NT602		4 1/2" x 5 1/4"	1.73
CAST RESIN			
SAN055	PP-2	2" x 4 1/4"	1.24
SAN056	PP-4	4 1/2" x 5 1/4"	3.29
SAN057	PL-5	50 mm	4.49
CLEAR GLASS			
SAN058	GP-2	2" x 4 1/4"	0.68
SAN059	GP-4	4 1/2" x 5 1/4"	1.18

OMNI-VIEW® GOLD FILTER PLATES

- Made of breakage resistant polycarbonate
- 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



Model No.	Mfg. No.	Shade	Price /Each
2" x 4 1/4"			
SAN106	FP2G-8	8	16.90
SAN107	FP2G-9	9	16.90
SAN108	FP2G-10	10	16.00
SAN109	FP2G-11	11	16.90
SAN110	FP2G-12	12	16.90
4 1/2" x 5 1/4"			
SAN117	FP4G-8	8	41.60
SAN118	FP4G-9	9	39.80
SAN119	FP4G-10	10	39.80
SAN120	FP4G-11	11	39.80
SAN121	FP4G-12	12	39.80

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



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	14.70
TTU324	770240	Outside	5	XL/Xli	18.80
TTU325	770241	Outside	5	Xlix	18.80
TTU326	216327	Inside	5	Elite/Digital Elite	14.60
TTU327	216326	Outside	5	Elite/Digital Elite	20.30
TTU328	231410	Inside	5	Pro-Hobby	14.90
TTU329	231411	Outside	5	Pro-Hobby	19.10
TTU330	231921	Outside	5	Performance	19.10

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WELDERS' DEERSKIN TIG 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
- Clute cut pattern with straight thumb style
- Sewn with DuPont® Kevlar® thread for higher seam strength and seam flame resistance



Case Qty: 120

Priced per Pair

Model No.	Size	Price /Each
SM597	Small	14.95
SM598	Medium	15.40
SM599	Large	15.70
SM600	X-Large	16.30
SAP293	2X-Large	17.30



WELDERS' PIGSKIN TIG 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
- Clute cut pattern with straight thumb style
- Sewn with DuPont® Kevlar® thread for higher seam strength and seam flame resistance



Case Qty: 120

Priced per Pair

Model No.	Size	Price /Each
SAN639	Small	9.85
SAN640	Medium	10.00
SAN641	Large	10.25
SAN642	X-Large	10.45



WELDERS' SOFTOUCH™ PIGSKIN TIG GLOVES

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



Case Qty: 72

Priced per Pair

Model No.	Size	Price /Each
610-2008M	Medium	19.50
610-2008	Large	19.80



WELDERS' STANDARD QUALITY GLOVES

- Rugged split cowhide leather construction
- Excellent abrasion resistance
- Thermal cotton palm lining provides added heat protection
- Weltd seams at all critical points
- Sewn with DuPont® Kevlar® thread for higher seam strength and seam flame resistance



Case Qty: 72

Priced per Pair

Model No.	Description	Style	Size	Price /Each
SAO130	Gloves	Gunn & Wing	Large	6.50
SAO131	One-Finger Mitt	Clute & Wing	Large	6.90



WELDING GLOVES



OUTSIDE DOUBLE PALM & THUMB WELDER'S GLOVES

- Top split cowhide leather construction
- Excellent abrasion resistance
- Outside double palm and thumb extend wear life
- Thermal cotton palm lining provides added heat protection
- Welled seams at all critical points
- Sewn with DuPont® Kevlar® thread for higher seam strength and seam flame resistance

Case Qty: 72

Model No.	Description	Style	Size	Price /Each
SAO128	Gloves	Gunn & Wing	Large	8.10
SAP352	Gloves	Gunn & Wing	X-Large	8.35
SAO129	One-Finger Mitt	Clute & Wing	Large	8.15



Priced per Pair



WELDERS' PREMIUM QUALITY GLOVES

- Premium split cowhide leather construction
- Excellent abrasion resistance
- Outside double palm and thumb extend wear life
- Thermal cotton palm lining provides added heat protection
- Welled seams at all critical points
- Gunn cut pattern with wing thumb style
- Sewn with DuPont® Kevlar® thread for higher seam strength and seam flame resistance

Case Qty: 72

Model No.	Size	Price /Each
SAN635	Large	9.50



Priced per Pair



WELDERS' PREMIUM QUALITY FOAM LINED GLOVES

- Premium split cowhide leather construction
- Excellent abrasion resistance
- Full reinforced thumb strap extends wear life
- Cotton covered foam lining provides superior heat protection
- Welled seams at all critical points
- Gunn cut pattern with wing thumb style
- Sewn with DuPont® Kevlar® thread for higher seam strength and seam flame resistance

Case Qty: 72

Model No.	Size	Price /Each
SAN277	Large	9.95



Priced per Pair



WELDERS' COMFOFLEX™ PREMIUM QUALITY GLOVES

- Heat and flame resistant shoulder split cowhide
- Fully sock lined for added comfort
- 13 1/2" long with reinforced thumb
- Gunn cut pattern with straight thumb style
- Fully welled DuPont® Kevlar® stitched seams for higher seam strength and flame resistance

Case Qty: 72

Model No.	Size	Price /Each
610-0328	Large	13.95



Priced per Pair



WELDERS' COMFOFLEX™ PREMIUM LINED GLOVES

- Flame retardant, air cushioned, sweat absorbent lining
- Provides incomparable comfort and extra insulation
- Buck tan, heat resistant side split cowhide
- Outside double palm and thumb extend wear life
- Gunn cut pattern with wing thumb style
- Sewn with DuPont® Kevlar® thread for higher seam strength and seam flame resistance

Case Qty: 72

Model No.	Description	Price /Each
610-2000	Welding Gloves	20.75
610-2178	One-Finger Mitts	21.25
610-2076	Pigskin Gloves	29.10



Priced per Pair



610-2000

WELDERS' PIPELINER 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
- Reinforced thumb extends wear life
- Gunn cut pattern with straight thumb style
- Sewn with DuPont® Kevlar® thread for higher seam strength and seam flame resistance

Case Qty: 72



Priced per Pair

Model No.	Size	Price /Each
SAV008	Large	14.25
SEB930	X-Large	15.70



WELDERS' PREMIUM COWHIDE TIG GLOVES

- Premium grain cowhide leather construction
- Unparalleled fit and dexterity with exceptional durability
- Weltd seams and straight thumb for expert control
- 4" gauntlet cuff provides superior protection
- Designed for precision welding applications
- Gunn cut pattern with straight thumb style
- Sewn with DuPont® Kevlar® thread for higher seam strength and seam flame resistance

Case Qty: 72



Priced per Pair

Model No.	Size	Price /Each
SDL992	Medium	12.25
SDL993	Large	12.45
SDL994	X-Large	12.95



WELDERS' HEAVY-DUTY GENERAL PURPOSE PREMIUM COWHIDE GLOVES

- Premium grain cowhide leather construction with split cowhide leather palm
- Unlined palm for increased comfort and dexterity
- 6" gauntlet cuff for increased protection
- Reinforced thumb extends wear life
- Gunn cut pattern with straight thumb style
- Fully welted DuPont® Kevlar® stitched seams for higher seam strength and flame resistance

Case Qty: 72



Priced per Pair

Model No.	Size	Price /Each
SDL995	Medium	10.75
SDL996	Large	10.95
SDL997	X-Large	11.55



WELDER'S COMFOFLEX® PEARL DEERSKIN GLOVES

- 14 1/2" incredibly soft, genuine North American deer hides
- Flame retardant, air cushioned, sweat absorbent lining
- Thick pliable layer of protection that easily molds to your hand for added comfort
- Gunn cut pattern with straight thumb style
- Sewn with DuPont® Kevlar® thread for higher seam strength and seam flame resistance

Case Qty: 40



Priced per Pair

Model No.	Size	Price /Each
610-2850	Large	47.95



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 Shield

Model No.	Description	Price /Each
SE549	Premium Hand Shield	12.95



WELDING CLOTHING



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
- Sewn with Kevlar thread
- Electrical insulated snaps
- Flame resistant lined collar



Model No.	Size	Chest Measurements	Price /Each
TTU398	Medium	40-42"	189.00
TTU399	Large	44-46"	189.00
TTU400	X-Large	48-50"	189.00
TTU401	2X-Large	52-54"	205.00
TTU402	3X-Large	56-58"	220.00
TTU403	5X-Large	64-66"	259.00

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
- Sewn with Kevlar thread
- Electrical insulated snaps
- Certification: EN ISO 11611:2015 Class 2/A1+A2



Model No.	Size	Price/Each
A. SLEEVE		
TTU389	23" L, Pair	70.30
B. CAPE SLEEVES		
TTU407	Small	125.00
TTU405	Medium	125.00
TTU406	Large	125.00
TTU408	X-Large	125.00
TTU409	2X-Large	135.00
TTU410	3X-Large	147.00
C. BIBS		
TTU411*	14" L	24.10
TTU412	20" L	33.10
D. SPLIT LEG APRONS & CHAPS		
TTU396*	42" L	94.00
TTU397	48" L	105.00
TTU404	Chaps	95.50
E. WAIST APRONS		
TTU392	24" L	43.95
F. BIB APRONS		
TTU393	36" L	67.10
TTU394	42" L	73.95
TTU395	48" L	86.90
G. SPATS		
TTU390	6" L, Pair	35.20
TTU391	14" L, Pair	79.00



PROBAN WELDING JACKETS

COOL PROTECTION, COOL LOOK!

- Superior flame, heat and abrasion-resistant, select cowhide sleeves for heavy-duty protection
- 30" length jacket made of black 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
TTV013	Medium	40-42"	82.95
TTV014	Large	44-46"	82.95
TTV015	X-Large	48-50"	82.95
TTV016	2X-Large	52-54"	89.40
TTV017	3X-Large	56-58"	99.10
TTV018	5X-Large	64-66"	115.00

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"	118.00
TTU385	Large	44-46"	118.00
TTU386	X-Large	48-50"	118.00
TTU387	2X-Large	52-54"	129.00
TTU388	3X-Large	56-58"	139.00

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) and conform to ASTM D6413-13b



Model No.	Size	Chest Measurements	Price /Each
JACKETS			
TTU998	Medium	40-42"	57.70
TTU999	Large	44-46"	57.70
TTV001	X-Large	48-50"	57.70
TTV002	2X-Large	52-54"	63.55
TTV003	3X-Large	56-58"	69.85
TTV004	5X-Large	64-66"	80.65
CAPE SLEEVES			
TTV005	Medium	40-42"	35.65
TTV006	Large	44-46"	35.65
TTV007	X-Large	48-50"	35.65
TTV008	2X-Large	52-54"	39.20
TTV009	3X-Large	56-58"	43.00
BIB & SLEEVES			
TTV010	20" Length Bib	-	12.35
TTV011	18" Long Sleeve, Pair	-	12.55
TTV012	23" Long Sleeve, Pair	-	15.70

WELDERS' CAPS

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

Assorted styles include:

Happy Hour, Paradise, Camo, and Wild



Camo

Happy Hour



Paradise



Camo



Wild



Model No.	Diameter	Qty /Pkg.	Price /Each
ASSORTED			
NT838	7 1/8"	12	75.55
NT839	7 1/4"	12	75.55
NT840	7 3/8"	12	75.55
NT841	7 1/2"	12	75.55
NT842	7 5/8"	12	75.55
CAMO			
NT843	7 1/8"	12	77.10
NT844	7 1/4"	12	77.10
NT845	7 3/8"	12	77.10
NT846	7 1/2"	12	77.10
NT847	7 5/8"	12	77.10

WELDERS' 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**



Camo



Wild

Happy Hour



Paradise



Camo



Wild



Model No.	Assorted Styles	Qty /Pkg.	Price /Each
NT835	Camo, Wild, Happy Hour	12	92.35
NT836	Happy Hour, Paradise, Wild	12	92.35
NT837	Camo, Wild	12	92.35

COTTON WELDERS' BEANIES

- 100% flame resistant cotton
- Added protection under welding helmet
- Two colours (black and white)
- One size fits all
- Imprint available with minimum quantity

Model No. SEE845

Price/Each \$1.30



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**



Suspender headgear



Sweatband



Non-suspender headgear

Model No.	Description	Price /Each
620-3200V	Suspender Pads For Use With Hard Hats	4.55
SAM548	Sweatbands	4.55
620-3100V	Non-Suspender Pads For Use With Welding Helmets	4.55

WELDING KNEE PADS

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

• **Sold per pair**
 Model No. SM777
 Mfg. No. 6991-01Q
 Price/Each \$83.00



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 resistant to heat and fire
- Ideal for welders or any construction application such as concrete work

• **Sold per pair**
 Model No. SAL218
 Mfg. No. 6991
 Price/Each \$46.10



ROD HOLDERS

- Double leather bottom and metal swivel clip
- 5-ply Kevlar® stitched with rivet reinforcement
- Electrode size: 15"

Model No. NP519
 Price/Each \$10.45

