Maintenance and Repair Welding Products

Super Missleweld Steel Electrode

Assures dense, non-cracking welds on "problem" steels such as high carbon tool steels; stainless steels; spring steels; manganese steels; and dissimilar steels. **Features:** 120,000 psi tensile strength, 85,000 psi yield strength, 35% elongation, 200 to 300 Brinell hardness, work hardens, excellent impact resistance, high heat resistance, excellent frictional resistance, mild abrasive resistance, will not respond to heat treatment

Applications: Super Missileweld is particularly advantageous when the alloy content of the steel to be welded is unknown. This unique electrode is so versatile that its applications are virtually too multiple in number to specify. It has been a maintenance and repair "stand-by" in every industry throughout the world

Procedure: Use either AC or DC. Clean weld area. Bevel heavy sections. For high carbon steels, a preheat of 400°F. is recommended. Hold a short arc. Run stringer beads. Peening will help relieve stresses. Let each pass cool and slag will peel off easily.

3/32" dia. Electrode **\$165.50 / 5# Tube** 1/8" dia. Electrode **\$326.50 / 10# Tube** 5/32" dia. Electrode **\$326.50 / 10# Tube**

#26 Aluminum Electrode

An aluminum electrode featuring a unique extruded coating.

Features: 34,000 psi tensile strength, good color match and resists corrosion Applications: This electrode features a precise combination of core wire and coating, providing high speed deposition of dense, machinable welds. It is recommended for fabrication and repair of cast and wrought aluminum. It is excellent for foundry defects, machining errors and all types of salvage work. It is widely used on sheets, tubes and extrusions of 1/8" thick or more. Well-suited to torch applications. Procedures: Use DC-reverse polarity. Clean weld area. Bevel heavy sections. Preheat heavier sections to approximately 500°F. The electrode should be held in a vertical position. Remove slag between passes. Clean with hot water; add 10% sulphuric acid to water if additional cleaning is required.

 3/32" dia. Electrode
 \$118.75 / 5# Tube

 1/8" dia. Electrode
 \$114.00 / 5# Tube

 5/32" dia. Electrode
 \$114.00 / 5# Tube



#59 Nic-L-Weld Cast Iron Electrode

A general purpose, nickel-iron electrode for production, repair of all cast irons. **Features:** Conforms to AWS A5.15, ENiFeCI; 70,000 psi tensile strength; close color match, good machinability **Applications:** This electrode is suited to joining, filling and buildup of gray and alloyed cast irons. It can be used for fabrication and repair of all cast irons pump housings, valves, castings, cast and malleable fittings. Deposits are machinable and have high strength. **Procedure:** Use either AC or DC reverse polarity. Preheat heavy castings to approximately 400°F for best results. Direct

proximately 400°F for best results. Direct the arc upon deposited metal with the electrode at a slight angle in the direction of travel. Lightly peen between passes and use a skip or back-step welding technique. Allow casting to cool slowly.

3/32" dia. Electrode **\$329.50 / 10# Tube** 1/8" dia. Electrode **\$329.50 / 10# Tube** 5/32" dia. Electrode **\$329.50 / 10# Tube**



#99 Nic-L-Weld Cast Iron Electrode A general purpose, high nickel electrode for production, and repair of cast iron. Features: Conforms to AWS A5.15, ENiCl; 50,000 psi tensile strength; close color match, excellent machinability Applications: This electrode is for building up, joining, filling holes, breaks and cracks in all types of cast iron. It has very good out-of-position welding characteristics. Repair parts without dismantling. Procedure: Use either AC or DC. Clean the weld area. Bevel breaks and cracks deep enough so the first pass ties in the bottom of the crack. Heavy sections should be preheated to approximately 400°F. Use a short arc. Stringer beads are recommended. Skip or back-step weld and peen to relieve stresses. Allow casting to cool slowly.

3/32" dia. Electrode \$438.00 / 10# Tube

1/8" dia. Electrode \$438.00 / 10# Tube

5/32" dia. Electrode \$438.00 / 10# Tube

Cut Rod Electrode

For cutting and piercing any metal. Use with regular arc welding equipment.

Features: The special core wire in this electrode has a heat resistant coating which is non-conductive. This enables you to operate the electrode at higher amps. It creates a blasting action with faster cutting.

Applications: Cuts all metals and alloys including stainless steel, cast iron, aluminum, copper, brass and bronze. It is used for piercing holes, enlarging openings, trimming metalsand removing frozen bolts.

Procedure: Use AC or DC reverse polarity. For cutting, strike an arc and maintain the electrode in contact with the work. Use a continuous up and down "saw like" motion with no arc gap. To pierce holes, strike an arc and push the electrode through the metal. Rapidly remove the electrode once the hole is pierced. To enlarge the hole, move the electrode in a circular motion.

1/8" dia. Electrode \$132.50 / 25# Ctn

5/32" dia. Electrode \$132.50 / 25# Ctn

3/16" dia. Electrode \$132.50 / 25# Ctn

Tungsten Electrodes

2% Thoriated Tungsten Electrodes

A thoriated tungsten electrode increases the current-carrying capacity, reduces the electrode tip temperature, and provides greater resistance to contamination. Arc starting is easier, and more stable than with pure tungsten or zirconiated tungsten electrodes for DC welding. Designed for direct current electrode negative (DCEN) or straight polarity applications. Maintains a sharpened tip for the welding of steels, nickel alloys, and most alloys other than aluminum or magnesium.

2% Thoriated, Grou 1/16" dia. x 7" long	
3/32" dia. x 7" long	\$42.10 / Pkg of 10
1/8" dia. x 7" long	\$74.85 / Pkg of 10

Pure Tungsten Electrodes

Pure tungsten electrodes contain a minimum of 99.5% tungsten used mainly with alternating current (AC) for welding of aluminum and magnesium alloys. The tip of this electrode forms a clean, balled end, which provides good arc stability.

Pure-ground (Color 1/16" dia. x 7" long	
3/32" dia. x 7" long	\$42.55 / Pkg of 10
1/8" dia. x 7" long	\$75.30 / Pkg of 10

Aluminum Welding Wire

4043 Aluminum Wire

This aluminum wire is for silicon-aluminum types for welding of 5052 and 6063 types; in some cases, other aluminums are also welded with this type. Brazing of 1100 and 3003 can be accomplished with free flowing 4043 composition.

1/16" dia. x 36" long	\$75.50 / 10# Tube
3/32" dia. x 36" long	\$59.50 / 10# Tube
1/8" dia. x 36" long	\$56.00 / 10# Tube
5/32" dia. x 36" long	\$56.00 / 10# Tube
3/16" dia. x 36" long	\$56.00 / 10# Tube
.025" dia. Wire	\$19.35 / 1# Spl
.030" dia. Wire	\$10.80 / 1# Spl
.035" dia. Wire	\$8.50 / 1# Spl
1/16" dia. Wire	\$9.35 / 1# Spl
.035" dia. Wire	\$100.65 / 16# Spl
3/64" dia. Wire	\$86.55 / 16# Spl
1/16" dia. Wire	\$97.95 / 16# Spl

5356 Aluminum Wire

Used mainly for welding aluminum of like composition. This type is also useful if color match is important after anodizing, if higher weld strengths are required or when extra ductility is helpful.

1/16" dia. x 36" long 3/32" dia. x 36" long 1/8" dia. x 36" long 5/32" dia. x 36" long	\$61.00 / 10# Tube \$57.00 / 10# Tube
.030" dia. Wire	\$11.50 / 1# Spl

.030° dia. Wire	\$11.50 / 1# Spi
.035" dia. Wire	\$11.10 / 1# Spl
3/64" dia. Wire	\$8.25 / 1# Spl
1/16" dia. Wire	\$9.95 / 1# Spl
035" dia Wire	\$108 80 / 16# Spl
3/64" dia. Wire	\$97.95 / 16# Spl
1/16" dia. Wire	\$96.60 / 16# Spl
.035" dia. Wire 3/64" dia. Wire 1/16" dia. Wire	\$108.80 / 16# Spl \$97.95 / 16# Spl \$96.60 / 16# Spl

Bronze Rod

Low Fuming Bronze Rod

Features: 65,000 psi tensile strength; 1670° to 1750°F brazing range; good machinability; color matches yellow brass.

Applications: For use on steel, copper, copper alloys, nickel and nickel alloys. Flux coating on flux coated rod provides excellent wetting action with no objectionable fuming. Porosity-free deposits yield excellent color match to the yellow brass.

Procedures: The joint area should be clean and free of rust, oil and grease for maximum results. Heavy sections should be beveled and the alloy applied by a brazing technique with a neutral flame. Use a neutral flame when applying bare rod with Welco 600 Flux. Flux residue can be removed by wire brushing with water.

Bare Bronze Rod

1/16" dia. x 36" long	\$11.75/Lb
3/32" dia. x 36" long	\$11.05 / Lb
1/8" dia. x 36" long	\$10.95 / Lb
3/16" dia. x 36" long	\$10.95/Lb

Flux Coated Bronze Rod

1/16" dia. x 18" long	\$20.60/Lb
3/32" dia. x 36" long	\$12.55 / Lb
1/8" dia. x 36" long	\$12.35 / Lb
3/16" dia. x 36" long	\$12.35 / Lb



Welco 600 Bronze Brazing Flux

This general purpose brazing flux can be used with low fuming bronze and nickel bronze brazing alloys. This highly active powder flux has applications in brazing steel, cast



irons, and copper-base alloys. It is active in a heat range between 1400°F to 2200°F.

1 lb. can

\$9.80 / Ea

Mild and Low Alloy Steel

E6011 Steel Electrode

Typical Mechanical Properties: 72,000 psi tensile strength; 66,100 psi yield strength; 29.6% elongation

Characteristics: E6011 offers excellent mechanical properties in the welding of mild steels, galvanized, and low alloy steels. The coating produces a forceful, spray-type arc, resulting in deeply penetrating welds in all positions. The removable slag is thin and friable.

Applications: Structurals; ship building and repair; rail cars; piping; pressure vessel fittings; boilers; galvanized steel; and general fabrication.

3/32" Electrode	\$36.00 / 10# Tube
1/8" Electrode	\$36.00 / 10# Tube
5/32" Electrode	\$36.00 / 10# Tube

E6013 Steel Electrode

Typical Mechanical Properties: 67,700 psi tensile strength; 59,700 psi yield strength; 25.6% elongation

Characteristics: E6013 establishes a smooth, quiet, medium penetrating arc that is readily maintained with minimal spatter loss. The slag lifts easily, revealing a finely rippled bead contour. This quick freezing slag gives optimum performance in vertical-down welding. E6013 is ideally suited for general purpose welding, even with small AC power sources. **Applications:** Various types of vehicles; ship building and repair, sheet metal; build-up of over-machined and worn mild steel surfaces; and general light fabrication.

3/32" Electrode	\$34.00 / 10# Tube
1/8" Electrode	\$34.00 / 10# Tube
5/32" Electrode	\$35.00 / 10# Tube

E7014 Steel Electrode

Typical Mechanical Properties: 79,900 psi tensile strength; 67,700 psi yield strength; 29.4% elongation Characteristics: E7014 has an iron powder covering. The iron powder content yields a high deposition rate in all positions. The welds reflect smooth beads with fine ripples. E7014 is particularly advantageous when poor fit-up exists. The self-lifting slag is easily removed. Applications: Heavy sheet metal,

frames, shelves, maintenance, fabrication.

3/32" Electrode	\$36.00 / 10# Tube
1/8" Electrode	\$34.00 / 10# Tube
5/32" Electrode	\$35.00 / 10# Tube

E7018 Steel Electrode

Typical Mechanical Properties: 81,000 psi tensile strength; 71,100 psi yield strength; 30% elongation

Characteristics: E7018 is an efficient, all position, iron powder, low hydrogen type electrode which exhibits excellent mechanical properties; crack resistance; and X-ray quality welds. This electrode offers a quiet, stable, low penetration, spatter-free arc. The moderately heavy slag is remarkably easy to remove, revealing a bead with distinct ripples.

Applications: Ship hull constructions; pressure vessels; boilers; piping; heavy duty equipment; and general maintenance or production fabrication.

3/32" Electrode	\$34.00 / 10# Tube
1/8" Electrode	\$34.00 / 10# Tube
5/32" Electrode	\$34.00 / 10# Tube

Mild Steel Gas Welding Rod RG 45

Characteristics: A general purpose, copper coated, low carbon steel rod which is widely used on mild steel. It offers good ductility and machinability.

Procedures: Generally a neutral flame may be used, but a very slight excess of acetylene assures the absence of an oxidizing flame which adversely influences weld quality. Flux is not needed but "puddling" of the molten weld metal will bring any scale or impurities to the surface.

1/16" dia. x 36" long	\$3.45 / Lb
3/32" dia. x 36" long	\$3.35 / Lb
1/8" dia. x 36" long	\$3.25 / Lb

Mig Welding Wire

ER70S-2 Steel Wire

A premium, multiple deoxidized, wire. Produces high quality welds in most grades of carbon steels.

.035" dia. x 36" long	\$62.50/10#Tube
.045" dia. x 36" long	\$54.50 / 10# Tube
1/16" dia. x 36" long	\$45.50 / 10# Tube
3/32" dia. x 36" long	\$44.00 / 10# Tube
1/8" dia. x 36" long	\$42.00 / 10# Tube

ER70S-3 Steel Wire

A general purpose wire for many applications. (Mild and low alloy steels) Silicon and manganese serve as deoxidizers. Good for out-of-position welding using short circuiting transfer with Ar-2%O2 or CO2 shielding gases. Good performance over mill scale and rust using CO2.

.030" dia. Wire	\$95.30 / 33# Spl
.035" dia. Wire	\$98.85 / 33# Spl
.045" dia. Wire	\$87.15 / 33# Spl

ER70S-6 Steel Wire

Highest combination of manganese and silicon deoxidizers, permitting high current welding with CO2 gas shielding. Can also be applied with AR-CO2. Excellent wetting. Good for out-of-position welding using short circuiting transfer.

.035" dia. x 36" long	\$56.25 / 10# Tube
.045" dia. x 36" long	\$48.75 / 10# Tube
1/16" dia. x 36" long	\$30.00 / 10# Tube
3/32" dia. x 36" long	\$27.50 / 10# Tube
1/8" dia. x 36" long	\$26.00 / 10# Tube
.023" dia. Wire	\$10.45 / 2# Spl
.030" dia. Wire	\$9.75 / 2# Spl
.035" dia. Wire	\$9.00 / 2# Spl
.045" dia. Wire	\$12.25 / 2# Spl
.023" dia. Wire	\$40.40 / 11# Spl
.030" dia. Wire	\$26.40 / 11# Spl
.035" dia. Wire	\$25.75 / 11# Spl
.045" dia. Wire	\$22.65 / 11# Spl
.023" dia. Wire	\$95.95 / 33# Spl
.030" dia. Wire	\$59.50 / 33# Spl
.035" dia. Wire	\$55.60 / 33# Spl
.045" dia. Wire	\$54.45 / 33# Spl

Stainless Steel Electrodes

E308L-16 Stainless Steel Electrode

The composition of the weld metal is the same as E308, except for the restricted carbon content. The 0.04 percent max carbon content of weld metal deposited by these electrodes increases the resistance to intergranular corrosion without the use of stabilizers. Use AC or DC.

1/16" dia. Electrode	\$104.25 / 5# Tube
3/32" dia. Electrode	\$92.00 / 10# Tube
1/8" dia. Electrode	\$89.50 / 10# Tube
5/32" dia. Electrode	\$89.50 / 10# Tube

E310-16 Stainless Steel Electrode

The nominal composition of this weld metal is 26.5% Cr, 21% Ni. This electrode is most often used to weld base metals of similar composition. Good corrosion heat restance and ductility. Use AC or DC.

3/32" dia. Electrode	\$157.50 / 10# Tube
1/8" dia. Electrode	\$155.50 / 10# Tube

E312-16 Stainless Steel Electrode

The nominal composition of this weld metal is 30% Cr, 9% Ni. These electrodes were originally designed to weld cast alloys of similar composition. They have been found to be valuable in welding dissimilar metals, especially if one of them is a stainless steel, high in nickel. This alloy gives a twophase weld deposit with substantial amounts of ferrite in an austenitic matrix. The microstructure remains two-phase and thus highly resistant to weld metal cracks and fissures. Applications should be limited to service temperature below 800°F (420°C) to avoid formation of secondary brittle phases. Use AC or DC.

3/32" dia. Electrode\$137.00 / 10# Tube1/8" dia. Electrode\$135.50 / 10# Tube5/32" dia. Electrode\$135.50 / 10# Tube

WELDING, SOLDER, & FOUNDRY

E316L-16 Stainless Steel Electrode Used principally for welding molybdenumbearing austenitic alloys containing 0.03% maximum carbon. Use AC or DC.

3/32" dia. Electrode \$108.50 / 10# Tube 1/8" dia. Electrode \$106.50 / 10# Tube

Stainless Steel Welding Wire

These wires conform to the requirements of AWS A5.9. They are subjected to rigid quality control with particular attention given to cleanliness, concentriity and helix of finished product.

ER 308L Stainless Steel Wire

Most frequently used for base metals of similar composition. Contains 0.03% maximum carbon content which increases resistance to intergranular corrosion.

.030" x 36" long	\$162.00 / 10# Tube
.035" x 36" long	\$118.00 / 10# Tube
.045" x 36" long	\$111.00 / 10# Tube
1/16" x 36" long	\$101.50 / 10# Tube
3/32" x 36" long	\$99.50 / 10# Tube
1/8" x 36" long	\$98.00 / 10# Tube
5/32" x 36" long	\$98.00 / 10# Tube
3/16" x 36" long	\$136.00 / 10# Tube

ER 308LSi Stainless Steel Wire

Similar usage as E308L, but the 0.65-1.00% silicon content improves wash and wetting behavior giving a smooth bead. Weld requires little or no finishing work.

.025" dia. Wire	\$27.35 / 2# Spl
.030" dia. Wire	\$22.65 / 2# Spl
.035" dia. Wire	\$22.10 / 2# Spl
.025" dia. Wire	\$244.40 / 25# Spl
.030" dia. Wire	\$235.90 / 25# Spl
.035" dia. Wire	\$225.25 / 25# Spl
.045" dia. Wire	\$221.00 / 25# Spl

ER 309L Stainless Steel Wire
Used for welding similar alloys in wrought or cast form; used for welding 18-8 base
metals when severe corrosion conditions
exist; used for welding dissimilar steels. Contains 0.03% maximum carbon con-
tent which increases resistance to inter-
granular corrosion.

1/16" x 36" long	\$135.50 / 10# Tube
3/32" x 36" long	\$149.00 / 10# Tube
1/8" x 36" long	\$127.00 / 10# Tube
.035" dia. Wire	\$276.25 / 25# Spl
.045" dia. Wire	\$252.90 / 25# Spl

ER 316L Stainless Steel Wire

Used principally for welding molybdenum-bearing austenitic alloys containing 0.03% maximum carbon.

ong s	218.00 / 10# Tube 135.00 / 10# Tube 133.00 / 10# Tube 131.50 / 10# Tube
re	\$28.25 / 2# Spl
re	\$282.50 / 25# Spl

E309LT-1 Flux Cored Stainless Wire

Used for welding similar alloys in wrought or cast form; welding type 304 base metals when severe corrosion conditons exist; welding dissimilar steels.

.035" dia. Wire	\$709.35 / 25# Spl
.045" dia. Wire	\$401.65 / 25# Spl
1/16" dia. Wire	\$397.40 / 25# Spl

E316LT-1 Flux Cored Stainless Wire

Used for welding similar alloys for high temperature service applications, molybdenum provides increased creep resistance at elevated temperatures.

.035" dia. Wire	\$646.00 / 25# Spl
.045" dia. Wire	\$575.90 / 25# Spl

Solder



Acid Core Solder-One lb 40/60, 1/8" dia. 50/50, 1/8" dia. 60/40, 1/8" dia.	. spools \$24.80/Lb \$25.40/Lb \$27.70/Lb
Rosin Core Solder -One I 40/60, 1/8" dia. 50/50, 1/8" dia. 60/40, 3/32" (.093) 60/40, 1/16" (.062) 60/40, 1/32" (.032)	b. spools \$24.80/Lb \$25.40/Lb \$29.10/Lb \$30.40/Lb \$35.00/Lb
Solid Wire Solder -One lb This is the most popular I for use in radiator repair. I tin and 60% lead. Propert 460°F; 5,400 psi tensile s	eaded solder t contains 40% ies: melt point
40/60 , 1/8" dia.	\$26.50/Lb
This economical solder ca joining lead came when me is not critical. Propertie 421°F; 6,000 psi tensile s	elt temperature s: Melt point
50/50 , 1/8" dia.	\$23.20/Lb
This is the most popular leastained glass work. It's lo and high strength are idea lead came joints. Propert 374°F; 7,600 psi tensile s	w temperature al for soldering ies: melt point
60/40 , 1/8" dia.	\$25.90/Lb
Lead-Free Solder -One lb 95/5	. spools \$33.25 / Lb
Bar Solder-One lb. bars 50/50	\$19.90 / Lb
Soldering Paste Flux This flux is for soldering bra pipe fittings. The zinc of soldering paste forms a bond and metal. It cleans as it flux results on all common of aluminum.	chloride based Ibetween solder xes to give best
1.7 oz.	\$2.75 / Ea

Acid Brush

Great for engine and motor repair. Small acid brushes are excellent for applying acid, paste, glue and solder in difficult to reach areas. Horsehair fibres are attached securely to rolled hollow tin handle.

No. 1 , 3/8" Wide **\$.12 / Ea \$1.38 / Dozen \$15.84 / Gross**

Plumbing Solders and Flux

WaterFlow 2000 Soluble Paste Flux This water soluble flux washes away easily with water eliminating the possibility of internal pipe corrosion. Its unique blend of organic acid activators and wetting agents are ideal for the most difficult to solder situations. Oxides, dirt, and oils are easily removed, leaving a clean surface for soldering. This very active flux contains no zinc chloride, no grit, and is non-corrosive on stainless steel. Use with AquaClean Fry Silver and FryFlo 97 solders. Meets ASTM B-813 and CDA STM 1.0 specifications.



Lead Came

This lead came contains specific amounts of trace elements to provide ultimate flexibility. It shapes like wax, stretches with uniformity, cuts clean and sharp. Its fine quality develops a uniform velvety patina to last for years. Each package contains 10 pieces 6 foot long.

#FF2	Face Width	Channel Width .135"	Heart Thick .025"	Leg Thick	60'-Pkg Price \$10.25/Pkg
	.LLO	.100	.020	.020	¢10120/1113
#20	.179"	.176"	.037"	.057"	\$17.80/Pkg

Classic Evershield Protectant

Classic evershield protects newly exposed lead by forming an immediate and uniform patina. This clear barrier shields the solder and lead came from the formation of lead carbonate eliminating discoloration.

4 oz. bottle

\$8.90 / Ea

\$5.65/Ea

16 oz.



#1370 Kit

\$55.00/Ea



Leather Welding Spats

5" Leather Shoe Spats 6" Leather Shoe Spats



\$13.95/Pr

\$14.75/Pr

Leather 14" Legging and shoe cover spats \$43.15/Pr





Leather Cape Sleeve with Collar



40" Leather Chaps Large



\$32.80/Ea \$32.80/Ea \$38.65/Ea

Flame Resistant Cotton Sleeves Green 18" Sleeve

X-Large

XX-Large



Elastic Cuff \$10.35/Ea

Elastic Cuff, Both Ends

\$6.15/Ea

Flame Resistant Cotton Jackets Green 30"



1/16" dia. x 1# spool

Stay-Clean Paste Flux

Welding Tools

Curved, Long Handle Style Wire Brush

Designed for cleaning all rough surfaces on a variety of materials and preparing surfaces for painting. Curved handle for easy reach. 3x19 rows of wire staple set in a poly block with hanging hole; 14" Long x 1-1/8".

Tempered Steel	\$2.50 / Ea
Tempered Steel w/scraper	\$3.15 / Ea
Stainless Steel	\$5.00 / Ea

Shoe Handle Style Wire Brush

The shoe handle style features a contoured finger grip for strong and constant use. 4 x 16 rows of fill material staple set in a poly block with hanging hole; 10" Long x 1-1/8".



Tempered Steel \$2.50 / Ea Tempered Steel w/scraper \$3.30 / Ea Stainless Steel \$5.05 / Ea

Anti-Spatter "Tip-Dip" Gel

Dip hot nozzles and contact tips into jar. Tip-Dip Anti-Spatter Gel provides a thin film adhesive that helps prevent objectionable spatter build-up.

1# can

\$7.10 / Ea

Anti-Spatter Shield Aerosol

Simply spray on tips and nozzles as well as working surfaces to protect from spatter build-up.



16 oz aerosol can

\$6.20 / Ea

4-In-1 Torch Cutting Attachment

The Thermo 4 in 1 cutting attachment converts any standard torch into a convenient, multi-use tool that makes it possible to accurately bevel and cut circles, odd shapes and straight edges. Cuts perfect circles up to 25" in diameter; Beveling guide angle can be set up to 30°; Straight Edges-makes precision straight edge and end cuts; Odd Shapes-guide provides a steady base to accurately follow irregular lines.

\$26.90/Ea

Jaw-Type Electrode Holders

The upper level is fully insulated with a fiberglass compound, and the low profile design of the upper lever fits your hand. Powerful spring holds the electrode securely in place and prevents slippage. Durable tip insulators are made from a molded fiberglass compound and will not burn, break or carbon char.



TW-200 (200 to 250 amp) TW-300 (300 to 350 amp)

\$19.75/Ea \$26.45/Ea

Ground Clamps

Ideal for shop work. Excellent for grasping various sizes of metal.



\$23.45/Ea 300 amp 500 amp \$30.95/Ea

Chipping Hammer

Wire spring handle. Drop forged, heat-treated heads. Welded-on heads.

Chisel & Pick (16 oz)



\$5.20/Ea

Tip Cleaner Standard deluxe size #49 thru 75. Exclusive spiral file design.



Single Flint Striker

Flat file provides sharp cutting surface. Hood and file secured with patented interlock design. Ideal for plumbers, mechanics and the do-it-yourselfers.





Striker Flints

Just on tip can make as many as 2,000 ignitions.



\$1.20/Set

Twin Welding Hoses

A premiumneoprene twin welding hose designed to provide maximum service under all weather conditions. Provided with B-B fittings. USA made. Meets or exceeds IAA & RMA-CGA specifications for grade "R". 250 psi working pressure welding hose.

3/16" ID x 12-1/2' long	\$13.25/Ea
3/16" ID x 25' long	\$18.25/Ea
1/4" ID x 25' long	\$34.10 / Ea
1/4" ID x 50' long	\$52.90 / Ea

#2121B Torch/Brazing Set

Welds up to 3/16" and cuts up to 1/2". Will weld up to 1" and cut up to 4" with larger tips. Set contains torch handle, cutting attachment, regulators, cutting tip, welding elbows, (sizes 0, 2, 4) 10 ft hose, goggles, and striker.

\$244.90/Set

#2520B Torch/Brazing Set

Welds up to 1/4" and cuts up to 1/2". Will weld up to 1 1/4" and cut up to 6" with larger tips. Set contains torch handle, cutting attachment, better regulators, cutting tip, welding



elbows, (sizes 0, 2, 4) 15 ft hose, goggles, and striker.

\$333.75/Set

#4120 Torch/Brazing Set

Welds up to 1/4" and cuts up to 1/2". Will weld up to 1 1/4" and cut up to 6" with larger tips. Set contains torch handle, cutting attachment, regulators, cutting tip, welding elbows, (sizes 3, 5, 7) heating elbows, (size 2), 15 ft hose, goggles, striker. \$352.95/Set



Magnetic Holders

Strong magnetism adheres to /
any ferrous metal objects for:
welding, soldering, assembly (
and marking at angles of 45°,
90° and 135°.

Medium 3-1/4" h x 4-3/4" w	\$8.55/Ea
Large 4" h x 6-1/4" w	\$15.00/Ea

Soapstone

Flat style 1/2" x 5"	\$2.05 / Dozen
	\$20.15 / Gross

Soapstone Holder

Fits flat style soapstone

\$2.10 / Ea



Paintpen

Permanently marks on metal, plastic, wood, cardboard, glass and other surfaces, even wet or oily. Waterproof, permanent, quick-drying waterborne acrylic paint. Tip can be easily removed and washed out with warm water when needed to prevent clogging.



Black Paintpen, 12/box \$40.20/Box Red Paintpen, 12/box \$40.20/Box White Paintpen, 12/box \$40.20/Box Yellow Paintpen, 12/box \$40.20/Box

Locking "C" Clamp

This 11" industrial quality locking "C"clamp quickly adjusts to the right size. It locks to the work piece with one hand and unlocks with easy release lever. Ideal for welding, sheet metal work and auto body repair.



#11R, 11" locking clamp \$22.50 / Ea

"Eight Way" Welders Pliers

This single tool performes all functions needed when welding with a wire feed unit. It removes spatter from all parts of the nozzle and assists in removal/installation. The design makes tip and insulation bushing removal/installation easy. It has a wire pull out, wire cutter, and features a hammering section. This tool is a "must" for welding operations.



Welding Gloves

Leather Welding Gloves

Generous sizing, 13" length. Gunn cut, wing thumb pattern. Fully welted seams, one-piece leather back and full-pocket lining of soft jersey material.

Sewn with heavy heat-resistant thread heavy shoulder leather. Pearl grey color.

\$4.60/Pair

Deluxe Welding Glove

Unlined form-fitting tig welding glove. Made from soft, top grain pigskin. It has a seamless index finger, reinforcing thumb strap and 4-1/2" leather cuff for added protection. Sewn outseamed on the back for greater comfort, this glove also features 100% Kevlar thread.

Large Size

\$11.25 / Pair

Deluxe Tiawelding Glove

Generous sizing, 13" length. Gunn cut, wing thumb pattern. Fully welted seams, one-piece leather back and full-pocket lining of soft jersey material. Silver Knight offers the tough protection and performance of heavy side split leather and features a full reinforcing thumb/palm patch, and 100% Kevlar thread.

\$9.60 / Pair

Welding Goggles

Lift Front Welding Goggle

Hooded vents provide greater air flow. Includes 2" x 4-1/4" shade 5 lens. Hooded vents that are baffled for improved vision by



eliminating glaring light rays. Soft, contoured vinyl frame fits snugly for greater comfort. Meets ANSI Standard Z87.1 and are SEI approved.

#85550

\$10.30 / Ea

Fixed Front Welding Goggle

Same ventilation systemasthe#85550. Includes 2" x 4-1/4" shade 5 lens. Meets ANSI Standard Z87.1 and are SEI approved.



#85450

\$8.55 / Ea

Welding Helmets-Sellstrom

Fixed Front Helmet Super tuff thermal black molded helmet with 2" x 4-1/4" fixed front retainer. Ratchetheadgear.



\$40.25 / Ea

Flip Front Helmet Super tuff thermal black molded helmet with 2" x 4-1/4" lift front retainer. Ratchetheadgear.



#28301

#28501

\$56.70 / Ea

Super Slim, Flip Front Helmet

Super slim, super tuff black thermal molded helmet with 2" x 4-1/4" lift front retainer. Ratchet headgear.



Large Fixed Front Helmet Super tuff thermal black molded helmet with 4-1/2" x 5-1/4" fixed front retainer. Ratchet headgear.

#28901

#29301

\$42.75 / Ea

NOTE: Shaded lenses and cover plates are not included. Please purchase separately.

Auto-Darkening Welding Helmets-Sellstrom

Heat Reflective. Lighter than fiberglass. extended crown provides greater overhead protection.

#29501-600 29501 Helmet with a 27600 Impluse Fixed Shade 10 Auto-Dark Filter



#29901-601 29901 Helmet with a 27601 Impluse XVA Fixed Shade 10 Auto-Dark Filter



#29901-620 29901 Helmet with a 27620 Impluse Ultra Touch Variable Shade 9-12 Auto-Dark Filter



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\$168.50 / Ea

Shaded Welding Lens

Precision made and inspected to offer protection against impact and harmful ultra-violet and infra-red radiation. Manufactured in accordance with ANSI Z.87 and are S.E.I. approved.

2 x 4 1/4" Shade 5 2 x 4 1/4" Shade 10 4 1/2 x 5 1/4" Shade 5 4 1/2 x 5 1/4" Shade 10

\$.95 / Ea \$.95 / Ea \$2.40 / Ea \$2.40 / Ea

Clear Cover Plates

Long Life CR-39 Cover Plates

Recommended for durability against spatter, heat and scratching. Lasts up to 6 times longer than polycarbonate lenses.

2 x 4 1/4" Acrylic Cover Plate **\$1.00 / Ea** 4 1/2 x 5 1/4" Acrylic Cover **\$2.45 / Ea**

Economy Plastic Cover Plates

2 x 4 1/4" Plastic Cover Plate **\$.60 / Ea** 4 1/2 x 5 1/4" Plastic Cover **\$1.30 / Ea**

Glass Cover Plates

2 x 4 1/4" Glass Cover Plate **\$.50 / Ea** 4 1/2 x 5 1/4" Glass Cover **\$.70 / Ea**

Supervisor Series Welding Curtains

Flame retardant Vinyl 14 mil colored transparent curtains allow observation of welding activities. Includes curtain, hooks and ties, brass grommets on all four sides with 12" centers.

Must specify color when ordering: Orange-Offers better visability Yellow-Offers best visibility

Sizes available:

Add 10% width to allow for p	roper draping.
4' H x 5' W	\$39.30 / Ea
4' H x 6' W	\$49.15 / Ea
4' H x 8' W	\$65.15 / Ea
4' H x 10' W	\$81.70 / Ea
5' H x 5' W	\$51.45 / Ea
5' H x 6' W	\$61.90 / Ea
5' H x 8' W	\$83.30 / Ea
5' H x 10' W	\$99.85 / Ea
6' H x 4' W	\$46.75 / Ea
6' H x 6' W	\$66.25 / Ea
6' H x 8' W	\$98.75 / Ea
6' H x 10' W	\$111.40 / Ea
6' H x 12' W	\$142.70 / Ea

Foundry Ingot



Aluminum Ingot

Approximately 20 lb size notched bars. 10 lb ingot pieces can be broken off easily and melted in smaller crucibles.

Alloy #319	\$3.95 / Lb
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Aluminum Melting Pellets

Granulated fast melting pellets.

50 lb bag	\$315.00 / Ba
50 lb bag	\$315.00 / Ba

Zamac Ingot (Zinc Casting Slush Metal)

10 lb notched bars. 5 lb ingot pieces can be broken off easilyand melted in smaller crucibles. Low elting Point. Contains 90% zinc, 10% aluminum.



Lead Ingot 20 lb bars

\$2.95 / Lb

NOTE: Lead fumes are emitted when lead ingot is melted. Proper respiratory protection must be worn when working with molten lead.

Brass Ingot

13 lb notched bars

\$12.10/Lb

Pewter Ingot

Small 5 lb. size. Contains 91.75%tin, 8% antimony, .25% copper. Ideal for casting figurines. #OR-8

\$24.00 / Lb

Foundry Molding Sand



Petro Bond Sand Substitute

A fine oil-mixed foundry sand for precision castings with non-ferrous metals. Produces less gas than water-based foundry sand. Already contains Airdry J82 catalyst and can be rejuvenated simply by mulling with additional petrobond oil.

\$67.50 / 50#

Helpful Hint: Smoke can be significantly reduced when casting with an oil-mixed sand such as petrobond by adding loose petrobond sand over the sprew and riser holes after pouring. This technique acts as a condenser reclaiming most of the oil that is burned-off during a pour.

Petrobond Oil

A non-detergent oil without anti-foam additives or chemical inhibitors. Recommended for use in mixing and rejuvenating oilbased foundry sand.



\$26.70 / Gal

Albany Sand

Natural water-base molding sand. Does not require use of muller but may be difficult to establish and maintaincorrect temper with water.

\$40.00 / 50#

Raw Core Sand

Must add binder and catalyst to set-up for casting.

\$35.00 / 50#

Core Sand Binder-Tetrasil #720

An economical one-part binder for core sand with CO2 shrowd catalyst process. Has excellent flowability, gassesfast and will not pick-up moisture. Recommended mix 3-5% by weight and should be mulled in. \$31.25 / Gal

For welding, brazing, and cutting 8-1/4"L x 4"W x 2-1/2"H **\$2.50 / Ea**

