2703

## **Barnes Welding Alloys**

**Our Alloys are Specially Designed to Conquer** Maintenance & Repair Weldina **Problems Under Less Than** Ideal Conditions!



#### Savings:

- Less metal cleaning and preparation
- Virtually no need for pre-heating
- Faster welding
- Easier out-of-position welding • Fast and easy slag removal
- Less spatter clean-up
- No peening because undercutting is eliminated
- Minimizes rework

#### **Improved Quality:**

- Better appearing welds
- Extra strength for longer lasting repairs
- Lower amperage welding reduces deterioration of surrounding metal
- No undercutting and porosity eliminates hidden flaws
- Less susceptible to contaminants

#### **Economical**:

- Burn 100% of each rod
- · Moisture resistant coating eliminates waste and storage problems
- Flexible coating eliminates cracking and chipping Fewer types of rods are needed to meet your needs reduces
- inventory

#### Most alloys are packaged in this impact resistant plastic blue bolt container.

- Designed for protection from moisture and from accidental impact
- Label contains complete technical information • Hex head shape prevents tube from rolling off shelf or work
- surface Racks available for easy-access storage

## Bowmaweld® Series No. 25110

#### **General-Purpose, Mild Steel** Electrode

(70,000 psi Tensile Strength)

#### **Ideal for Maintenance and Fabrication** Work on a Variety of Mild Steel **Applications**

#### **General Applications**

#### **Features & Benefits**

2693

- General purpose maintenance and fabrication work on a variety of mild, low carbon steel applications.
- Low-spatter, sodium and sulphur free flux safe and easy to use, especially for continuous fabricating welding.
- AC/DC engineering, reverse polarity.
- Easy removing slag formula light chipping removes a clean, non-cracking, highly machinable weld. Flux color — brown.

#### **Technical Specifications**

Part No.	Dia. (In.)	Rec. Amp Range	Approx. Rods/Lb.	Unit	
25114	1/8	60-120	14	30 lbs.	
NOTE: Packaged in a heavy-duty cardboard bulk container.					

## Bowmaweld® Series No. 25120

**General Purpose Added** Strength, Mild Steel Electrode

(80,000 psi Tensile Strength)

#### Ideal for Maintenance and Fabrication Work on a Variety of Low Carbon Steel **Applications**

#### **General Applications**

- Joining and filling operations, especially where poor fit-up exists.
- Continuous fabrication welding.
- Thin or dissimilar gauge steel and galvanized iron.
- Every mild steel maintenance and repair application where added strength is required — sheets, plates, angle beams and channels
- Closest AWS Spec E6013 7014.

#### **Features & Benefits**

- General purpose maintenance and fabrication work; gives added strength; works on a variety of low carbon steel applications.
- Easy start flux chemistry easy start and restart without flux deterioration; entire rod can be used safely.
- AC/DC engineered, straight or reversed polarity. • Self-releasing, easy removing slag formula — saves clean-up
- time.
- Smooth bead formation eliminates the need for stress-relief peening.
- Flux color tan and gray.
- Excellent machinability.
- Elongation: 25% (in 2").

2695

#### **Technical Specifications**

Part No.	Dia. (In.)	Rec. Amp Range	Approx. Rods/Lb.	Unit
25122	5/64	20-70	52	10 lbs.
25123	3/32	25-80	25	10 lbs.
25124	1/8	60-140	15	10 lbs.
-25124-2	1/8	60-140	15	2 lbs.
25125	5/32	90-175	10	10 lbs.
25126	3/16	110-200	7	10 lbs.

## Bowmaweld<sup>®</sup> Series No. 25130

#### All Position, Ultra-Strength, **Mild Steel Electrode**

(97,000 psi Tensile Strength)

#### **Designed Especially for Vertical Up &** Overhead Welding Requiring High **Tensile Strength**

#### **General Applications**

- Joining various shapes and forms of mild steel used in maintenance
- Repairing and fabricating mild and common steel machine equipment
- All types of maintenance and repair welding of mild steels
- All vertical applications except high carbon steel
- Closest AWS Spec Exceeds 9013

2702

#### **Features & Benefits**

- All-position, fast-freeze formula work piece may be left in place during repair; saves time
- AC/DC engineering, straight or reverse polarity
- Self-releasing slag formula saves clean-up time
- · Easily corrects poor fit-up and out-of-position welds
- Allows for excellent machinability
- Flux color purple
- Elonation: 17% (in 2")

#### **Technical Specifications**

Part No.	Dia. (In.)	Rec. Amp Range	Approx. Rods/Lb.	Unit	
25133	3/32	50-100	25	10 lbs.	ī
25134	1/8	70-126	16	10 lbs.	-
25135	5/32	90-160	10	10 lbs.	

## Bowmaweld® Series No. 25140

#### **All-Position, Mild Steel** Electrode

#### (88,000 psi Tensile Strength)

#### Welds through Grease, Oil, Dirt and **Surface Contamination**

#### **General Applications**

- Metals of dissimilar thickness, perforated and expanded metals
- Low and mild carbon steels
- · Aluminum and iron oxide coated metals
- Root passes on pipes, flanges and other parts where complete slag removal is difficult
- Fills deep holes without slag interference
- Closest AWS Spec E6010, 6011, 6012

Continued on next page

2704

- Welding Joining and filling operations. • Continuous fabrication welding. • Small diameters recommended for thin gauge mild steels. Works on rusty and grease-contaminated metal. • Closest AWS Spec - E7014. ¤Vendor Stocked Page H-1 Page K-1 Page M-1 Page N-1 Page 0-1 Page G-1 Page I-1 Page J-1 Page L-1 MATERIAL HANDLING/ TOOLS & ABRASIVES TECHNICAL DATA SECURITY ALPHA INDEX PART NO. ELECTRICAL VEHICI E WEI DING HARDWARE/RUBBER PRODUCTS
  - INDEX

#### Continued from previous page **Features & Benefits**

- AC/DC engineering, straight or reverse polarity
- All position fast freeze formula work piece may be left in place during repair; saves time
- Easy slag removal formula leaves a thin, metallic-free slag coating that is easily removed or can be welded over without danger of slag entrapment, passing X-ray inspection
- Easily corrects poor fit-up and out-of-position welds
- Allows for excellent machinability
- Flux color Dark brown
- Elongation 22% (in 2")

#### **Technical Specifications**

Part No.	Dia. (In.)	Rec. Amp Range	Approx. Rods/Lb.	Unit
25143	3/32	50-90	31	10 lbs.
25144	1/8	70-130	18	10 lbs.
-25144-2	1/8	70-130	18	2 lbs.
25145	5/32	85-165	11	10 lbs.
25146	3/16	90-200	8	10 lbs.

## **Bowmaweld® Series No.** 25160

#### Low Hydrogen, All-Position, Low & Medium Carbon Steel Electrode

#### (80,000 psi Tensile Strength)

#### **Recommended for Low and Medium Carbon Steels**

#### $\overline{2}$

- **General Applications**
- Free machining steels, expecially those with relatively high sulfur or phosphorous content.
- Weathering steels and steels designed for outdoor service.
- Steels subject to high pressure service. Overlay work on worn parts where very high weld-metal density
- is required. Closest AWS Spec — E7018

#### **Features & Benefits**

- Low-hydrogen formula recommended for welding low (.05%-.3%) and medium (.3%-.45%) carbon steels.
- High strength, ductile deposits that repair and strengthen base material
- AC/DC engineering, reverse polarity.
- Easy slag removing formula saves clean up time.
- Flux color Light Gray.
- Elongation 35% (in 2")

#### **Technical Specifications**

Part No.	Dia. (In.)	Rec. Amp Range	Approx. Rods/Lb.	Unit
25163	3/32	75-100	21	10 lbs.
25164	1/8	95-150	12	10 lbs.
25165	5/32	130-175	8	10 lbs.

## Bowmaweld® Series No. 25170

#### **High-Strength Steel Electrode** (120,000 psi Tensile Strength)

#### Ideal for High-Strength Application Repairs

#### **General Applications**

- All carbon steels; low, medium, high; in all thicknesses • All alloy steels; low, medium, high; even in dissimilar
- combinations Manganese steel to carbon or to alloy steels
- Tool steel
- All specialty steels, including free-machining varieties
- Excellent padding layer for hard surface alloys Closest AWS Spec — E312-16

#### **Features & Benefits**

- Special all-steel alloy formula may be used on any steel grade and any thickness; versatile; one rod for many jobs; saves time and inventory costs
- AC/DC engineered, reverse polarity
- All position formula work piece may be left in place during repair; saves time
- Ferro-magnetic chemistry won't work harden in service; ideal for repairing parts that are subjected to movement or vibration
- Self-releasing slag formula saves clean-up time
- 30-35% elongation, 245 Brinell hardness
  Flux color Light Gray

2706

#### **Technical Specifications**

Part No.	Dia. (In.)	Rec. Amp Range	Approx. Rods/Lb.	Unit
25174	1/8	80-130	14	10 lbs.

### Bowmaweld<sup>®</sup> Series No. 25180

#### **Maximum-Strength Steel** Electrode

#### (128,000 psi Tensile Strength)

Ideal for Repairing Parts that Are Subjected to Movement or Vibration

#### **General Applications**

- All carbon steel: low, medium, high; in all thicknesses • All alloy steels: low, medium, high; even in dissimilar
- combinations
- Manganese steel to carbon or to alloy steels
- Tool steel
- Cast steel

Page B-1

FASTENERS

- All specialty steels, including free-machining varieties
- Closest AWS Spec E312-16

Page C-1

FITTINGS & HOSE

#### **Features & Benefits**

- Critical applications where maximum strength repairs are demanded
- Extremely ductile will work harden in service. Ideal for repairing parts that are subjected to movement or vibration
- Special alloy formula to weld all steels may be used on any grade and any thickness; versatile, one rod for many jobs; saves time and inventory costs
- AC/DC engineered, reverse polarity
- All position formula work piece may be left in place during repair; saves time
- Self-releasing slag formula saves clean-up time
- Excellent elevated temperature resistance
- Better corrosion resistance than most stainless steels
- 22-35% (in 2") elongation, 250 Brinell hardness
- Flux color Blue

#### **Technical Specifications**

Part No.	Dia. (In.)	Rec. Amp Range	Approx. Rods/Lb.	Unit
25183	3/32	40-80	33	5 lbs.
25184	1/8	70-120	14	5 lbs.
-25184-1	1/8	70-120	14	1 lb.
25185	5/32	90-160	9	5 lbs.
25186	3/16	130-180	7	5 lbs.

## Bowmaweld® Series No. 25190

6864

Page F-1

SAFETY SUPPLIES

#### **Super Gold Mild Steel**

(88,000 psi Tensile Strength)

#### Universal, All-Position, Mild Steel **Electrode with Exceptional Vertical** Welding CHARACTERISTICS

#### **General Applications**

The most versatile electrode in the maintenance department for welding all mild and common steels. It simplifies all position welding tremendously and produces quality weld deposits with superb bead appearance.

#### **Features & Benefits**

- Special, fast freeze flux makes vertical welding easy
- Flux coating can be bent to access difficult areas
- Moisture-cured coating doubles shelf-life
- Closest AWS Spec exceeds E6013

#### **Physical Characteristics**

- Tensile strength: 88,000 psi
  Yield strength: 78,000 psi
- Elongation: 25%

2708

Page D-1

CHEMICALS

- Hardness: RB89-90
- Machinability: Excellent
- Crack resistance: Excellent
- Flux color: Gold
- Current: DC straight (-), Reverse (+) or AC

Page E-1

MAINTENANCE & SHOP SUPPLIES

Part No.	Dia. (In.)	Recommended Amp Range	Approx. Rods/Lb.	Unit
25194	1/8	70-110	15	15



Page A-1 ASSORTMENTS & CABINETRY

2711

### Bowmaweld® Series No. 25210

#### **Cool Cast Tri-Metal**

#### Cool Cast Tri-Metal (77,000 psi Tensile Strength)



#### Unique Copper Clad Core Wire Electrode for Cast Irons Totally Eliminates Overheating.

#### **General Applications**

For repair and fabrication of all gray and alloyed cast irons. This premium electrode produces welds which are high strength, crack resistant, porosity free and are machinable when applied to a wide variety of cast irons. The special tri-metal core wire has a high current carrying capacity and the specially designed coating converts the impurities of the base metal into slag instead of being trapped in the deposit.

#### **Features & Benefits**

- High efficiency weld metal transfer totally eliminates electrode overheating
- Proprietary copper-nickel-iron deposit chemistry yields the ultimate combination of softness, ductility and tensile strength
- Special non-overheating core wire allows high deposition techniques which speed up large repairs
- 15% elongation
- Rockwell B82-84 hardness
- Excellent machinability and crack resistance
- DC Reverse (+), or AC
- Flux Color Black

#### **Technical Specifications**

Part No.	Dia. (In.)	Recommended Amp Range	Approx. Rods/Lb.	Unit (Lbs.)
25214	1/8	70-100	14	5

### Bowmaweld® Series No. 25220

#### Vertical Down Stainless (80,000 psi Tensile Strength) Special Vertical Position Stainless Steel Electrode

#### **General Applications**

Especially suited for vertical down and up welding of thin to medium gauge molybdenum bearing stainless steel. Excellent for circumferential pipe welds.

#### **Features & Benefits**

- Special, "fast freeze" coating simplifies vertical down and up welding
- Ideal for poor fit joints in all positions
- Controlled weld puddle allows for filling holes on stainless steel
   Easy slag removal eliminates slag entrapment on subsequent
- welds
- Closest AWS Spec E316L-17
- 42% elongation
  B96 Rockwell hardness

4068

- Excellent machinability and crack resistance
- Excellent machinability and crack resistance
   Flux color tan / gray
- Plox color Idit / gr
  DC Reverse (+), or AC

#### **Technical Specifications**

Part No.	Dia. (In.)	Recommended Amp Range	Approx. Rods/Lb.	Unit (Lbs.)
25223	3/32	60-80	30	10
25224	1/8	90-110	16	10

## Bowmaweld® Series No. 25250

#### Machinable, Cast Iron Electrode

#### (69,000 psi Tensile Strength)

#### 60% Nickel for Strong, Crack-Resistant, Machinable Deposits

#### **General Applications**

- All gray cast irons, especially those with high phosphorous content (over 0.5%)
- Meehanite, ni-resist, ductile and malleable irons
- Alloy cast irons containing nickel and copper
- Wrought iron
- Joining steel to cast iron

#### **Features & Benefits**

- Thermal-guard flux formula permits dense, porosity-free bead at extremely high deposit rates
- All position formula work piece may be left in place during repair; saves time
- AC/DC engineering , reverse polarity
- Easy slag removal saves clean-up time
- 170 Brinell hardness
- Excellent machinability and crack resistance
   Flux color Black

#### **Technical Specifications**

Part No.	Dia. (In.)	Rec. Amp Range	Approx. Rods/Lb.	Unit
25254	1/8	75-120	14	5 lbs.
25255	5/32	110-150	9	5 lbs.

## Bowmaweld® Series No. 25270

#### Highly Machinable, Cast Iron Electrode

(65,000 psi Tensile Strength)

#### Nonconductive Flux Coating—Ideal for Oil & Grease Contaminated Cast Iron

#### **General Applications**

- All gray cast irons, alloy cast irons, ductile and malleable iron
- Oil and grease contaminated cast irons
- White cast irons

2709

- Deep hole applications, intricate parts, limited accessibility areas
- Thin sections of castings and areas to be drilled, tapped, broached or milled

#### **Features & Benefits**

- Permits working in close quarters without dangerous and damaging flux side arcing
- Contains 99% nickel produces soft, highly machinable deposits, cuts through contamination; crack resistant
- High ductility formula weld withstands the expansion and contraction of contaminated cast iron and steel; preheating not required
- Thermal-guard, non-conductive flux coating permits dense, porosity-free bead at extremely high deposit rates
- All position formula work piece may be left in place during repair; saves time
- Easy slag removal saves clean up time
- AC/DC engineered, reverse polarity
- 160 Brinell hardness
- Flux color Black

#### **Technical Specifications**

Part No.	Dia. (In.)	Rec. Amp Range	Approx. Rods/Lb.	Unit
25274	1/8	85-120	14	5 lbs.

## Bowmaweld® Series No. 25310

#### Cutting & Grooving Electrode

Removes More Metal per Pound than Any Other

#### **General Applications**

Bowmaweld® Series No. 25310 may be used to cut, groove, pierce, chamfer and gouge all metals, including:

- Aluminum
- Brass, bronze
- Cast iron, malleable iron
- High carbon steels
- Stainless steel
- Nickel alloys
- Copper base alloys
- Titanium
- Removes more metal per pound than any other comparable metal-removing electrode on the market

ontinued on next page

Welding

Page G-1 MATERIAL HANDLING/ HARDWARE/RUBBER Page H-1 TOOLS & ABBASIVES Page J-1

Page I-1

ELECTRICAL

SECURITY

Page K-1

WELDING

Page L-1

Page M-1 TECHNICAL

Page N-1 ALPHA INDEX

Page 0-1 PART NO. INDEX

¤Vendor Stocked

tal-removing	electrode	e on	the	market	
					6

#### Continued from previous page

#### Features & Benefits

- Special proprietary formula one electrode will cut, groove, pierce and chamfer without the use of oxyacetylene or carbon arc-air rod; one rod for many jobs
- Volcanic-action chemistry blasts through all metals, including welded steel beads; burns back approximately 5/16" inside the flux to deliver 20-25 pounds of pressure through the end of the rod
- High electro-responsive properties easy for welder to control; removes as much or as little metal as required; chamfers without removing excess metal
- Excellent restrike characteristics eliminates need for edae startina a cut
- Low smoke and fume formula safe for welders to use; performs under vehicles where a torch cannot be used because of over-blow from the flame
- Thermal-guard flux coating — produces temperature-resistant barrier around the arc, so that high amperage settings create an intense, localized blasting action
- AC/DC engineering, straight polarity; excellent for use on low open circuit voltage machines where ordinary rods experience problems
- Flux color Dark Green

#### **Technical Specifications**

Part No.	Dia. (In.)	Rec. Amp Range	Approx. Rods/Lb.	Unit
25314	1/8	150-300	12	5 lbs.

## Bowmaweld® Series No. 25330

#### **Hard Surfacing Electrode**

**Resists Abrasion & Impact; Recommended for Covering Large Area** of All Steels

#### **General Applications**

- Covers large areas
- Combined impact and abrasion resistance
- All position welding
- For steels requiring general purpose impact and abrasion resistance

#### **Features & Benefits**

- Extrusion coated, all position formula work piece may be left in place during repair; saves time
- Hard as-welded deposits no heat treatment required • Easy deposit chemistry — produces smooth, ripple-free welds
- that resist abrasion and impact
- Hardness RC 55; martensitic structure • AC or DC, reverse polarity
- Flux color Tan

#### **Technical Specifications**

Part No.	Dia. (In.)	Rec. Amp Range	Approx. Rods/Lb.	Unit
25335	5/32	125-180	5	10 lbs.

## Bowmaweld® Series No. 25340

#### **High Speed Nickel Manganese Electrode for Welding & Hard** Facing

#### (100,000 psi Tensile Strength)

#### For Extra Impact Resistance, Outwears Ordinary Hard Facing Deposits 10 to 1!

#### **General Applications**

- · For high impact resistance applications
- Manganese steels
- Manganese to carbon steels
- Low carbon steels
- High carbon steel

#### **Features & Benefits**

- Strong, impact resistant, non-magnetic welds
- Shock-absorbing properties weld can be used as an interface cushion between the parent metal and another hard-surfacing electrode
- · Work hardens in service to increase longevity
- Non-cracking chemistry deposit may be built up to desired thickness without cracking or cleavage
- Specially formulated thermal-guard iron powder coating permits the use of low amperages to limit heat input and penetration
- Deposits can be cut with a cutting electrode and oxyacetylene torch
- Work hardness 50 RC; austenitic structure; 35-40% (in 2") elongation
- Will work on any constant current AC transformer or DC generator-rectifier, providing minimum 55 volts open circuit
- Flux color Dark Gray

#### **Technical Specifications**

2710

Part No.	Dia. (In.)	Rec. Amp Range	Approx. Rods/Lb.	Unit
25346	3/16	150-260	4	10 lbs.

## Bowmaweld® Series No. 25350

#### **High-Hardness, Abrasion-Resistant Overlay Electrode**

For Greatest Resistance to the Severest Types of Abrasion, Even at Elevated **Temperatures** 

#### **General Applications**

- For high abrasion resistance
- Carbon and alloy steels
- Cast iron
- Manganese steels

#### **Features & Benefits**

- Wear-resistant formula resists severest types of abrasion, even at elevated temperatures
- Easy deposit chemistry produces smooth, ripple-free welds that will not spall, crack or chip
- Uniform steel matrix reduces susceptibility to cracking or cleavage
- Microfine weld surface polishes with use, increasing efficiency of equipment used to dig, crush or convey abrasive materials
- Moderate impact resistance can be increased by interface layer of Bowmaweld No. 25180 or 25370
- Hardness 57-60 RC
- AC / DC engineering; reverse polarity
- Flux color Medium Gray

#### **Technical Specifications**

Part No.	Dia. (In.)	Rec. Amp Range	Approx. Rods/Lb.	Unit
25354	1/8	100-150	9	5 lbs.
25355	5/32	125-170	6	5 lbs.

## Bowmaweld® Series No. 25360

2715

#### **All-Position, Aluminum** Electrode

#### (34,000 psi Tensile Strength)

#### **Ideal for Aluminum Welding**

#### **General Applications**

- Wrought aluminum
- Cast aluminum Extruded aluminum
- Aluminum magnesium alloys
- Brass or copper to aluminum, such as brass fittings and copper
- tubing in aluminum tanks Ideally suited for welding outdoors when shielding gases are unstable due to wind
- Where Tig welding is impractical

#### **Features & Benefits**

- Chemically pure aluminum core wire produces a fully machinable, corrosion-resistant, electrically conductive deposit
- Contains silicon provides extra strength
- DC (reverse polarity) engineering for use with DC welding equipment only
- Can also be used as a flux-coated brazing rod
- Flux color White

2714

#### **Technical Specifications**

Part No.	Dia. (In.)	Rec. Amp Range	Approx. Rods/Lb.	Unit
25363	3/32	50-80	12	5 lbs.
25364	1/8	70-110	16	5 lbs.



Page B-1 FASTENERS

FITTINGS & HOSE

Page C-1

Page D-1 CHEMICALS

MAINTENANCE & SHOP SUPPLIES

Page E-1

Page F-1

### Bowmaweld® Series No. 25370

#### All-Position, Stainless Steel Electrode

#### (95,000 psi Tensile Strength)

#### For Austenitic, Ferritic and Martensitic Stainless Steel

#### **General Applications**

- All grades of austenitic, ferritic and martensitic stainless steel, even in dissimilar combinations
- Stainless steel to carbon steels
- Stainless steel of unknown analysis
- Resistant to sulfur gases and impact
- Closest AWS Spec: E310-16

#### **Features & Benefits**

- Chromium-nickel formula produces a corrosion-resistant, austenitic, non-magnetic weld on a variety of stainless steels
- Contains molybdenum increases corrosion resistance to chemicals; combats pitting corrosion.
- Contains manganese adds strength and ductility
- AC/DC engineering; reverse polarity
- 197 Brinell hardness, 45% (in 2") elongation
- Ability to withstand temperatures of up to 2150°F
- Will not promote carbide precipitation
- Low amperage settings minimize distortion and heat warpage
- Flux color Gray & White

#### **Technical Specifications**

Part No.	Dia. (In.)	Rec. Amp Range	Approx. Rods/Lb.	Unit
25373	3/32	50-80	35	5 lbs.
25374	1/8	60-110	13	5 lbs.
25375	5/32	80-130	9	5 lbs.

## Bowmabraze® Brazing Alloy

#### **Bowmabraze® Brazing Alloys**

#### Bowmabraze General and Special Purpose Brazing Alloys are Custom Formulated for Maintenance & Repair Brazing Operations

#### Only Bowmabraze delivers all these benefits to your brazing operation:

- High quality formula professional results
- Low fuming reduces toxic fumes
- High tensile strength strong, unbreakable joints
- Low working temperature prevents warping of base material
- Corrosion cutting action brazes through rust and dirt; saves time

Page H-1

TOOLS & ABRASIVES Page I-1

ELECTRICAL

• Long shelf life — economical to stock

Page G-1

MATERIAL HANDLING/

HARDWARE/RUBBER

## Choose the Bowmabraze alloy that suits your brazing needs:

## Series No. Description

25000	Premium quality, no alare brazina alloy; general	

- purpose, flux coated.
- 875 General purpose flux coated silver brazing alloy.
- 877 Premium flux coated silver brazing alloy.
- 900 Flux coated, all purpose brazing alloy.
- 908 Flux coated, nickel silver, abrasion-resistant
- 914 brazing alloy. 914 Flux coated, high-strength brazing alloy.
- **965** Soldering alloy for white metals.
- 074 Flux cored aluminum alloy.
- 974 Bead forming aluminum alloy.
- **977** Thin flowing aluminum alloy.

#### Bowmabraze® 25000 Premium Quality Brazing Alloy

#### (Exceeds 70,000 psi Tensile Strength)

No Harsh Sodium Glare, Less Toxic Fumes

#### **General Applications**

Bowmabraze Series No. 25000 is recommended for ferrous and non-ferrous metals, including:

Cast irons

2723

2717

- Brass and bronze
- Galvanized steel

#### **Features & Benefits**

- Special flux coating eliminates sodium glare, the annoying, bright orange glare common in bronze brazing operations; no additional flux required. OSHA approved.
- High quality core wire chemistry special flux minimizes dangerous toxic fumes
- Cool temperature flow design reduces heat distortion
   Rapid solidification allows rod to be used for out-of-position work
- Can be used as bead forming or thin flowing alloy
- Leaves smooth finish with excellent machinability
- 70,000 psi tensile strength, 1350°-1550°F working temperature
- Long shelf life consistent quality and full value as pack is used
- Excellent machinability for fine finishing

#### **Technical Specifications**

Part No.	Dia. (In.)	Unit
25003	3/32	5 lbs.
25004	1/8	5 lbs.
NOTE: Use Bowmahraze	Flux No. 24900 on oil-so	naked narts

#### Bowmabraze<sup>®</sup> 875 General-Purpose, Flux-Coated, Silver Brazing Alloy

(69,000 psi Tensile Strength) For General Repairs Especially Where Poor Fit-Up Exists

#### **General Applications**

- All ferrous and non-ferrous metals except white metals
- Bowmabraze 875 may be used to join thick to thin metals

Page K-1

SECURITY

PRODUCTS

- Filling holes with a bridging technique
- Repairing parts that have a poor fit-up
- Brazing joints in a vertical or overhead position
- Repairing open meshes or screens

Page J-1

VEHICI E

#### **Features & Benefits**

- No harmful fumes
- Versatile alloy can be heat controlled to either bridge gaps or thin flow

**Welding Supplies** 

- Excellent tensile strength of up to 69,000 psi
- FDA acceptable does not contain cadmium
- Low melting temperature range of 1190°F to 1380°F
- Excellent electrical conductivity
- 45% silver content

#### **Technical Specifications**

Part No.	Dia. (In.)	Length (In.)	Unit
24876	3/32	18	one 6 ft. pouch

2718

#### Bowmabraze® 877 Premium, Flux-Coated, Silver Brazing Alloy

#### (76,000 psi Tensile Strength)

#### For Precise Thin Flow Joining

#### **General Applications**

- Bowmabraze 877 may be used on all ferrous and non-ferrous metals, except aluminum and magnesium
- Color matching stainless steel and nickel
- Carbide tipping/high speed cutting tool repair
- Create strong bonds with dissimilar metals at low working
- temperatures (e.g. copper, bronze, stainless steel, nickel, etc.)
- Join high carbon steels
- Precision instruments
- Aluminum bronze
- Beryllium copper

#### **Features & Benefits**

Excellent electrical conductivity

**Technical Specifications** 

Dia. (In.)

3/22

56% silver content

Part No.

24877

24878

Alloy

metals • Steel

• Brass

Page L-1

WEI DING

BronzeCast iron

• Sheet metal

Low Fuming

**General Applications** 

ferrous metals except white metals.

Page M-1

TECHNICAL DATA

2716

 Exclusive FAST-FLO flux coating cleans even the most oxidized stainless steel surfaces to promote rapid wetting action
 FAST-FLO flux coating is bendable and chip resistant

• Extra low working temperature of 1120°F to 1185°F

• Totally safe — does not contain cadmium, lead or zinc

Economical — 1/16" diameter x 1/8" long piece can make a 3" linear T joint. (1 ft. can make a 24 ft. linear T joint.)
 Super strong — tensile strength up to 76,000 psi

Length (In.)

Flux Coated, All-Purpose Brazing Alloy,

Bowmabraze 900 may be used on all ferrous and non-

Brazes over dirty, greasy, oil-soaked or heat-affected base

18

18

Bowmabraze<sup>®</sup> 900 Brazina

(60,000 psi Tensile Strength)

Unit

one 12 ft. pouch

one 6 ft. pouch

Continued on next page ¤Vendor Stocked

Page N-1

ALPHA INDEX Page 0-1

INDEX

PART NO.

2721

Welding

#### Continued from previous page **Features & Benefits**

- Specially formulated flux coating reduces unpleasant toxic
- fumes common to ordinary brazing rods and fluxes All purpose formula — use on all ferrous and non-ferrous
- metals except white metals
- Wide working temperature allows its uses to be bead forming or that of a thin flowing alloy
- Eliminates warpage and distortion
- Excellent machinability
- 60,000 psi tensile strength; working temperature: 1400°F -1650°F

#### **Technical Specifications**

Part No.	Dia. (In.)	Length (In.)	Unit
24902	3/32	18	5 lbs.
24905	1/8	18	5 lbs.
NOTE: Use Bo	wmabraze Flux	No. 24900 on oil-soo	aked parts

### Bowmabraze<sup>®</sup> 908 Nickel **Silver Brazing Alloy**

(85,000 psi Tensile Strength)

#### For Strong, Abrasion Resistant Build-Up of Ferrous and Non-Ferrous Metals

#### **General Applications**

Bowmabraze 908 may be used on all ferrous and nonferrous metals, except white metals.

- Joining and fast build-up of metals
- Filling holes in steel and cast iron
- Aluminum bronze

#### **Features & Benefits**

- Contains nickel silver for strength and exceptional resistance to abrasion caused by friction
- Rapid build-up formula provides highly machinable deposits that work harden to 200 Brinell
- Flux coating no additional flux needed
- 85,000 psi tensile strength; 1400°F 1600°F working temperature

#### **Technical Specifications**

Part No.	Dia. (In.)	Unit
24910	1/8	5 lbs.

#### Bowmabraze® 074 Flux Cored Aluminum Brazing Alloy (35,000 psi Tensile Strength)

#### Simplifies Joining, Overlaying and **Filling Aluminum**

#### **General Applications**

- Join all brazable grades of aluminum sheet plate, tubing, piping, extrusions, rod and wire
- Repair all brazable aluminum castings
- Fill holes
- Build-up worn or missing sections
- Join thick to thin sections requiring a combination of brazewelding and brazing techniques
- Join cast to wrought parts
- Use for aluminum applications whenever inert gas welding or shielded metal arc welding is impractical

#### ¤Vendor Stocked

Page A-1 ASSORTMENTS & CABINETRY

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Page
FASTENERS
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#### **Features & Benefits**

- Fluxed cored, all purpose brazing/braze-welding alloy for oxyacetylene application to aluminum; simplifies aluminum brazing technique
- Alloy is virtually seamless thus protecting the active flux core from the atmosphere
- Joins all brazable grades of aluminum sheet plate, tubing, piping, extrusions, rod and wire
- Joins thick to thin sections requiring a combination of brazing/braze-welding techniques
- Tensile strength of 35,000 psi
- Low temperature range of 800°F to 1000°F, substantially reduces possibility of error and destruction of aluminum

#### **Technical Specifications**

Part No.	Dia. (In.)	Length (In.)	Unit
25074	1/8	32	2 lbs.

#### **Mig Welding Wire**

2719

The Bowmaweld mild steel mig wire contains high levels of manganese and silicon to produce high quality welds when used on dirty, oily, or rusty steel. The high silicon content increases the fluidity of the weld pool, thus creating a smoother bead appearance and resulting in minimal post-weld grinding. This wire is engineered to provide porosity — free, x-ray quality welds at the highest tensile strength (as welded) of all the plain carbon steel wires.

Welding Current: DCEP (Electrode Positive, Reverse Polarity) Operating Range: .030 AMPS 50-100 .035 AMPS 100-150 AWS Specification: AWS A5.18 AWS Classification: ER70S6

Part No.	Description	Dia.	Unit
25201	Mild Steel -2 lb. Roll	.030	1
25202	Mild Steel - 11 lb. Roll	.030	1
25203	Mild Steel - 33 lb. Roll	.030	1
25204	Mild Steel - 2 lb. Roll	.035	1
25205	Mild Steel - 11 lb. Roll	.035	1
25206	Mild Steel - 33 lb. Roll	.035	1

Bowmaweld aluminum is a general purpose type welding mig wire. It contains silicone additives, which results in improved fluidity (wetting action) of the weld pool and also produces a weld less sensitie to cracking. Its bright weld finish makes it a popular choice of the welders. It can be used to weld various grades of aluminum.

Welding Current: DCEP (Electrode Positive) Operating Range: .030 AMPS 100-160 AWS Specification: AWS A5.10 AWS Classification: ER4043

Part No.	Description	Dia.	Unit
25209	Aluminum 1 lb. Roll	.035	1
25210	Aluminum 3 lb. Roll	.035	1

The Bowmaweld stainless steel wire is primarily used for welding stainless steels to mild steels. It can also be used for welding high strength steels. It has a maximum carbon content of .03% to reduce the possibility of formation of intergranular carbide precipitation. This low carbon alloy is not as strong as 316 at elevated temperatures

#### Welding Current: DCEP (Electrode Positive) Operating Range: AMPS 100-150 AWS Classification: AWS A5.9

Part No.	Description	Dia.	Unit
25207	Stainless Steel -2lb. Roll	.035	1

#### Durabraze 8200

#### **Economical Repair Alloy For Copper** Tubing

Economical brazing rod for copper tubing. Thin flowing alloy penetrates into seams and cracks as small as one-thousandth inch in width. Seal fractures and pinholes in pressurized lines for leakproof results. Excellent electrical conductivity provides new life to worn, burned and pitted electrical controls and switches. Can be used in any torch capable of 1350° F or greater heat levels. Used for self fluxing on all copper alloys including tubing, sheets, angles, fittings, and electrical terminals.

Tensile Strength: 90,000 psi Elongation in 2 in.: 20% Brazing Temperature: 1350°F to 1500°F AWS Classification: A-5-8-697 Federal Classification:QQB-650L Military Classification:MIL15395 A, A1T Grade 111 per MIL C20158

Part No.	Size	Unit
C8200	.050 x ¼ x 18	1 lbs

## **Soldering Supplies**

#### Bowman Solder® 960

16255



#### Flux-Cored, Low Temperature, Silver **Bearing Solder**

- · Contains no lead, zinc, cadmium or antimony
- Complies with pure food laws
- Excellent color match on stainless steel
- Joins all ferrous and non-ferrous metals (except white metals)
- Completely safe non-toxic
- High electrical conductivity (25% higher than tin/lead solders)

#### 960 Series

Acid Core 96.5% Tin, 3.5% Silver alloy; a lead-free solder with acid flux core

Application: Plumbing, auto radiators, copper tubing, tools, gutters, flatware, refrigeration, stainless steel, dairy equipment, evaporators

Use on; Galvanized iron, copper, steel, nickel plate, nickel alloys, brass, tin plate, bronze, stainless steel Use with: Soldering iron or torch

Part No.	Melting Temp.	Dia. (In.)	Unit
24962	430°F	1/8	1 lb. spool
-24962-1	430°F	1/8	½ lb. spool
24962-2	430°F	1/8	1/4 lb. spool
24964	430°F	1/16	9 ft. in tube

#### 960-R Series

Silver Acid Core 96 / 4 Higher silver content solder with a fast-acting acid flux Very effective on chrome plating and stainless steels Tensile strength up to 24,000 psi

Part No.	Melting Temp.	Dia. (In.)	Unit
KP75003	430 F	.062	6
		C .: 1	

Continued on next page

B-1	

2736

Page C-1 FITTINGS & HOSE

Page D-1 CHEMICALS

Page E-1	Page
MAINTENANCE & SHOP SUPPLIES	SAFETY SUPPL

e F-1

IFS

31055

2727

Continued from previous page

Rosin Core 96.5% Tin, 3.5% Silver alloy; a lead-free solder with energized-rosin flux core; non-corrosive flux Application: Electrical and electronic applications. Stainless steel

food equipment

Use on; Copper, silver plate, tin plate, gold plate, stainless steel, sterling silver

Use with: Soldering iron

Part No.	Melting Temp.	Dia. (In.)	Unit
-24962-R	430°F	1/8	1 lb.
-24964-R	430°F	1/16	9 ft. in tube

#### **Bowman Solder**

#### Solid Wire, Flux Cored, Tin & Lead Solder



• Excellent wetting properties

• Easily worked by sweating or wiping

#### Flux core

50 / 50 Solid Wire 50% tin, 50% lead solder alloy; tensile strength 5,500 psi

Application: General purpose sheet metal applications; use with 24959 or 24961 solder flux

Use on: Brass, tin plate, galvanized iron, copper, steel, nickel plate Use with: Soldering iron or torch

Part No.	Melting Temp.	Diameter (In.)	Unit
21562	421°F	1/8	1 lb. spool
21562-1	421°F	1/8	½ <b>b</b> .

Lead Free Fast Flow solder alloy, silver bearing solid wire; tensile strength 6,400 psi

Application: Plumbing, refrigeration, water supply, meets Safe Drinking Water Act; use with 24959 or 24961 solder flux, replaces 95 / 5 solder

Use on: Copper or where lead exclusion is a must Use with: Soldering iron or torch

Part No.	Melting Temp.	Diameter (In.)	Unit
21574	430°F	1/8	1 lb. spool
-21574-1	430°F	1/8	½ lb.

50 / 50 Acid Core 50% tin, 50% lead solder alloy with acid flux core; tensile strength 5,500 psi Application: Auto radiators, copper tubing, tools, gutters Use on: Brass, tin plate, copper, galvanized iron, steel, nickel plate, nickel alloys

Use with: Soldering iron or torch

Part No.	Melting Temp.	Diameter (In.)	Unit
21576	421°F	1/8	1 lb. spool

50 / 50 Energized Rosin Core 50% tin, 50% lead solder alloy with rosin flux core: tensile strength 5,500 psi Application: Electrical applications Use on: Copper, silver plate, tin plate, gold plate

Use with: Soldering iron

Part No.	Melting Temp.	Diameter (In.)	Unit
21577	421°F	1/16	1 lb. spool
21578	421°F	1/8	1 lb. spool

40 / 60 Acid Core 40% tin, 60% lead solder alloy with acid flux core; tensile strength 4,900 psi Application: Plumbing, copper tubing, tools Use on: Copper, steel, tin Use with: Soldering iron or torch

Part No.	Melting Temp.	Diameter (In.)	Unit
21568	460°F	1/8	1 lb. spool

60 / 40 Rosin Core 60% tin, 40% lead solder alloy with rosin flux core; tensile strength 6,900 psi

Application: Low heat electrical applications; used in most electrical applications where higher strength and excellent flow characteristics are needed Use on: Copper, silver plate, tin plate, gold plate

Use with: Soldering iron or torch

2728

Part No.	Melting Temp.	Diameter (In.)	Unit
21561	360°F	1/16	1 lb. spool
-21561-1	360°F	1/16	1/2 lb. spool
21566	360 F	.050	3 Carded
21567	360 F	.032	3 Carded
Note: Part No	. 21567 is 63% lea	ıd / 37% tin	

#### **Silver Plus Solder**



#### High Strength, Low Melting Point, Cadmium & Lead Free

#### **Features & Benefits**

- Syringe applicator allows precise one-hand application of solder "paste"
- 20,000 psi tensile strength
- Low melting point 419°F melting point allows easy soldering with a match, lighter, torch or soldering iron
- Cadmium and lead free no poisonous contaminants • No flux required
- Universal metal rated works on all common metals except aluminum and magnesium
- Washable flux residue rinse away any excess flux; no harmful contamination leftover Good electrical conductivity

#### **Specific Applications**

Automotive Repairs **Beverage Equipment** Food Equipment General Maintenance

Part No.	Description	Unit
21572	Silver Plus Solder	1 oz. net wt. syringe applicator

## Welding Supplies

**Professional Heavy-Duty Soldering Iron** 





16562



- Heavy-duty, 100-watt for electrical wiring, equipment repairs and maintenance, light sheet metal soldering and production work
- Excellent handling balanced and lightweight for comfortable use, reducing fatigue and enabling good tip control
- Heat shield deflects and disperses heat away from handle for operator comfort
- Fast heating to achieve working temperatures quickly and provide fast recovery for continuous production
- Tips are easily changed and insert deeply into the element for optimum heat transfer and efficiency
- 1/4" tip included

2729

Part No.	Description	Unit
KP76412	Soldering Iron	1

#### **Fryflo 97 Solder**



- High strength lead-free
- 97% Tin-3% Copper
- Melting Temp. 441 degrees F.
- Bulk Tensile Strength 6,200 p.s.i. Works on any diameter fitting

Part No.	Dia. (In.)	Unit
21574-2	1/8"	1Lb. Spool

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ABR

Page J-1 VEHICI

Page I-1

ELECTRICAL

WELDING

Page L-1

Page M-1 TECHNICAL DATA

Page N-1

ALPHA INDEX

Page 0-1 PART NO. INDEX

¤Vendor Stocked

'	'
	SEC
E	PROI

Page K-1
ECURITY
RODUCTS

## Brazing & Soldering Flux & Putty

#### **Brazing Flux**



- White powder
- Recommended for use with Bowmabraze<sup>®</sup> 900 Brazing Alloy and Bowmabraze<sup>®</sup> 25000 Premium Quality Brazing Alloy
   Application:
- Highly active; very effective on rusty, greasy steel and malleable cast iron.

Part No.	Description	Unit
24900	Brazing Flux	1 lb. metal canister

#### Aluminum Brazing Flux



#### L 8

- White powder
- Built-in heat indicator
- Recommended for use with Bowmabraze® 974 and 977
- Application:
- Removes oxides. Serves as heat indicator, becoming liquid at time to apply aluminum brazing alloy.

Part No.	Description	Unit
24976	Aluminum Brazing Flux	6 oz. plastic container

## Welding Helmets

#### **Welding Helmet**

With Auto Darkening Filter (ADF)



- 2" x 4-1/4" variable shade lens (blue color)
- 1.25 lbs.

2767

2769

- ADF is a must for welders who face potential eye damage from the arc and from Cumulative Trauma Disorder associated with constantly "nodding" the hood down
- Fastest switching speed darkens in less than .025 milliseconds (1/25,000 of a second)
- Split-second switching means that work proceeds safely and rapidly; an ADF filter greatly increases productivity over the conventional fixed shade filter
- AutoSense Circuitry switches the filter in response to virtually any arc in any light condition, eliminating operator error
- Consistent performance; switching speed and shade will remain constant throughout the life of the power source
- Fixed delay setting ensures unit remains dark as the arc fluctuates during welding
- Active, independent light sensor ensures performance; the sensor will respond to the arc in microseconds
- Infinite shade selection options; offers continuously variable shade settings, allowing adjustment to the optimum darkness (from 9 to 12)
- "Low Battery Warning Light" signals battery change approximately 8 hours before the filter stops working
- Uses size "AAA" alkaline batteries; battery life is approximately 750 hours of continuous performance
- Manual "on" and "off" after 28 minutes without light activity

Part No.	Description	Unit
24283	Welding Helmet	1

#### **Welding Helmet**



- Stationary plate retainer
- Super slim design
- Ratchet headgear
- Rigid bib deflects spatter
- Greater overhead protection with extended crown
- Silver coating reflects heat 30% cooler
- Meets OSHA-ANSI Z87-1-1989
- Thermal-molded nylon material

Part No.	Color & Shade No.	Plate Size (In.)	Weight (Oz.)	Repl. Lens Part No.	Unit
24280	Gold 10	4½ x 5¼	36	24251 24263	1

#### **Welding Helmet**



- Light weight design molded of a thermo plastic resin
- Extended throat offers added protection from sparks, slag and fumes
- Shade 10

4067

- Color blue
- 4-1/2" x 5-1/4" viewing window

Part No.	Color & Shade No.	Unit
MS1119	Blue	1

#### Auto Darkening Welding Helmet



- A solar helmet from Jackson Specialty, solar powered lenses are dependable and flexible for all types of welding applications. The SOL-R is lightweight and has no batteries to change!
- Shade 10/11 with clear state of shade 4
- 2" x 4-1/4" lens holder
- Made in the U.S.A.
- One year warranty

2747

Part No.	Color & Shade No.	Unit
MS8319		1

#### Welding Helmet



14327

14328



- Lift front retainer
- Super slim design
- Ratchet headgear
- Rigid bib deflects spatter
- Greater overhead protection with extended crown
- Silver coating reflects heat 30% cooler

Page E-1

- Meets OSHA-ANSI Z87-1-1989 standards
- Thermal-molded nylon material

Part No.	Color & Shade No.	Plate Size (In.)	Weight (Oz.)	Repl. Lens Part No.	Unit
24281	Gold 10	2 x 4¼	38	24252 24252-M 24253 24258 24258 24262	1

¤Vendor Stocked

Velding

Page A-1 ASSORTMENTS & CABINETRY Page B-1

FITTINGS & HOSE

Page C-1

CHEMICALS

Page D-1

MAINTENANCE & SHOP SUPPLIES

SAFETY SUPPLIES

Page F-1

#### "Forty-Niner" Welding Helmet



- Lift front retainer
- Tough, thin, cool, flexible and compact
- Blue coating reflects heat
- Excellent for tight places and corners
- Ratchet adjustable headgear
- Meets OSHA-ANSI Z87-1-1989 standards
- Thermal-molded nylon material

Part No.	Color & Shade No.	Plate Size (In.)	Weight (Oz.)	Repl. Lens Part No.	Uni
24282	Green 10	4½ x 5¼	48	24251 24263	1

#### **Replacement Headgear**



- Plastic friction assembly
- Fits Bowman part nos. 24248, 24256, 24280, and 24281

Part No.	Description	Unit
-24256-1	Replacement Headgear	1

## Welding Lens Kits

#### **Lens Shade Guide**

Welding Operation	Suggested Shade No.
Shielded Metal-Arc Welding up to 5/32"	10
(4mm) electrodes	
Shielded Metal-Arc Welding up to 3/6" to	12
1/4" (4.8 to 6.4mm) electrodes	
Shielded Metal-Arc Welding over ¼"	14
(6.4mm) electrodes	
Gas Metal-Arc Welding (Non-ferrous)	11
Gas Metal-Arc Welding (Ferrous)	12
Gas Tungsten-Arc Welding	12
Atomic Hydrogen Welding	12
Carbon Arc Welding	14
Welding Operation	Suggested Shade No.
TICUI	0

iorch Soldering	7
Torch Brazing	3 or 4
Light Cutting up to 1" (25mm)	3 or 4
Medium Cutting 1 to 6" (25 to 150mm)	4 or 5
Heavy Cutting over 6" (150mm)	5 or 6
Gas Welding (Light) up to ¼" (3.2mm)	4 or 5
Gas Welding (Medium) ½ to ½"	5 or 6
(3.2 to 12.7mm)	
Gas Welding (Heavy) over ½" (12.7mm)	6 or 8

#### Welding Lens Kit

2749

2750

2771



- Abrasion-resistant, unbreakable lens
- Molded in gasket serves as buffer between lens and cover plate
- Meets ANSI Z87-1-1989 Standards
- Polycarbonate material
- Gold-coated lenses reduce heat and dramatically improve detail and color vision

Part No.	Lens Coating	Shade No.	Size (In.)	Cover Plates	Unit
24251	Gold	10	<b>4</b> ½ x 5¼	2	1 Kit

#### **Welding Lens Kit**



- Better visibility in weld puddle
- Reduces eye strain
- Meets ANSI Z87-1-1989 Standards
- Polycarbonate material
- Shields out infrared and ultraviolet rays
- Gold-coated lenses reduce heat and dramatically improve detail and color vision

Part No.	Lens Coating	Shade No.	Size (In.)	Cover Plates	Unit
24252	Gold	10	2 x 4¼	2	1 Kit

#### **Welding Lens Kit**



- With magnifier plate
- Two times magnification
- Ideal for close-up welding
- Meets ANSI Z87-1-1989 Standards
- Polycarbonate material
- Gold-coated lenses reduce heat and dramatically improve detail and color vision

Part No.	Lens Coating	Shade No.	Size (In.)	Cover Plates	Unit
-24252-M	Gold	10	<b>2 x 4</b> ¼	2	1 Kit



• Better visibility in weld puddle

**Welding Lens Kit** 

- Reduces eye strain
- Shields out infrared and ultraviolet rays
- Meets ANSI Z87-1-1989 Standards
- Polycarbonate material
- Gold-coated lenses reduce heat and dramatically improve detail and color vision

Part No.	Lens Coating	Shade No.	Size (In.)	Cover Plates	Unit
24253	Gold	12	2 x 4¼	2	1 Kit

6266

2731

#### 2772 Welding Lens Kit



- Clear cover plate, protects shaded lens from damage during
- welding; (not for use as a safety shield)
- 100% cast resin plastic lens

Part No.	Description	Lens Coating	Size (In.)	Unit	
24262	Welding helmet	Clear Clear	2 x 4 <sup>1</sup> / <sub>4</sub> 4 <sup>1</sup> / <sub>4</sub> x 5 <sup>1</sup> / <sub>4</sub>	10	L 9
14103	cover pluies	Cicui	T/2 A J/4	10	•

## Welding Glasses

#### Welding Goggles

2773



- 2" x 4-1/4" lens
- Soft vinyl face mask
- Fixed front formed
- Downward tilt of lens so the wearer can see more work with less head movement
- Six-way venting for extra cooling
- Will easily fit over prescription glasses
- Meets ANSI Z87-1-1989 Standards

Part No.	Lens Shade No.	Unit
24271	5	1

	Page	<i>u</i> -
IATERIAL HAI	NDLIN	IG/
HARDWARE/	RURB	EB

Page H-1 TOOLS & ABRASIVES Page J-1 VEHICLE

Page I-1

ELECTRICAL

Page K-1 SECURITY PRODUCTS Page L-1 Page M-1
TECHNICAL
WELDING DATA

CAL ATA Page 0-1 PART NO. INDEX

¤Vendor Stocked

Page N-1
ALPHA I
INDEX

#### **Welding Cover Goggles**



- 2" x 4-1/4" lens
- Polycarbonate lens
- Flip front with positive locking action in up or down position
- Soft contoured vinyl frame fits snugly and provides excellent comfort
- Meets ANSI Z87-1-1989 Standards

Part No.	Lens Shade No.	Unit
24275	5	1

## **Protective Gear**

#### **Leather Apron**





Quality tanned leather for protection against spatter and hot metal

- Made of the finest chrome tanned leather
- Careful tanning, plus the use of oil softeners, makes this a soft, tough quality apron that withstands heat and spatter
- Comfortable, one piece design
- Furnished with tie straps
- All leather aprons are furnished in autumn brown suede

Part No.	Size	Unit
KP75169	36" length	1
KP75170	42" length	1

2732 **Protective Leather Cape** Sleeves





• Stand up adjustable collar

20249

- Dull finish snaps prevent flash back
- Fully welted to protect all critical seams
- Elastic straps under arms hold garment to body
- All ending seams steel stitched for added strength
- Adjustable snaps at wrist
- Shown with available leather bib

Part No.	Size	Unit
KP76438	Medium	1
KP76439	Large	1
KP76440	X-Large	1

#### **Protective Leather Detachable** Bib





- Attaches easily to cape sleeves for added protection
- Tailored to fit
- Soft, heat-resistant, side split cowhide
- Shown with available cape sleeves

Part No.		Unit
KP76441	Detachable Bib	1



#### ¤Vendor Stocked Page A-1

ASSORTMENTS & CABINETRY

Page B-1 FASTENERS

**FITTINGS & HOSE** 

Page D-1 CHEMICALS

Page E-1 MAINTENANCE & SHOP SUPPLIES

20252 **Welding Pigskin Leather Coat** 



- 30" long sleeve coat
  Tan color, lightweight and durable
- 1/2 the weight of split cowhide
- Snapfront reinforced leather, Duralite® grain
- Scribe and inside pockets, wrist snaps, pockets, and waist take-
- up straps • Stitched with flame resistant Kevlar®

20250

Part No.	Size	Unit
KP151628	Large	1
KD151690	Y-Larao	1

#### **Protective Welding Shirt**

20253



- 30" long sleeve shirt
- Green 9 oz. flame-resistant cotton sateen fabric weave
- Home washable

20251

- Flame-resistant treatment good up to 40 home launderings
- Snap button front, large inside pocket and adjustable wrist

Part No.	Size	Unit
KP151630	Medium	1
KP151631	Large	1
KP151632	X-Large	1

SAFETY SUPPLIES

Page F-1

Page C-1

#### Welding Hybrid Coat



- 30" long sleeve coat
- 9 oz. flame-resistant cotton fabric
- Green with dark green leather sleeves
- Home washable
- Side split cowhide leather
- Perfect combination comfort without sacrificing protection or
- durability • Snap front reinforced

Part No.	Size	Unit
KP151633	Medium	1
KP151634	Large	1
KP151635	X-Large	1

#### **Professional Welding Gloves**



- Comfort cushioned glove lining
- Bright blue and gray color
- Durable high grade side split cowhide
- Natural wing thumb design, welted seams and palm and thumb area reinforcement
- Stitched with flame-resistant Kevlar<sup>®</sup>

Part No.	Size	Unit
KP151624	Medium	1
KP151625	Large	1
KP151626	X-Large	1

#### **BD Brand Welding Gloves**



- Offer protection from flame, heat and sparks
- For use in welding and high heat applications
- Available in both split and grain leather
- All have a 4" gauntlet style cuff
- BD6060 has full sock lining

Part No.	Size	Material	Unit	Part No.
BD6058	Large	Grain Deerskin	12 Pair	MEM4150
BD6059	Large	Grain Cowhide	12 Pair	
BD6060	Large	Split Cowhide	12 Pair	

54	<b>Premium Grade Russet</b>	
	Leather Welders	



- Industry Applications For use in welding and heat applications
- One piece leather back
- Sewn with kevlar, reinforced thumb and palm
- Full sock lining, in-sewn at all finger tips

#### • Russet color

20255

33641

202

Part No.	Size	Material	Unit
MEM4320	Large	Select shoulder russet leather	1 pair

#### **High Heat Welders Gloves**



- Industry Applications For use in welding and heat applications
- One piece leather back with shoulder patch palm
- Sewn with kevlar, reinforced thumb and palm
- Full sock lining, in-sewn at all finger tips
- Color blue

Part No.	Size	Material	Unit
MEM4500	Large	Blue select shoulder patch palm	12 pair

#### **Economy Grade Leather** Welders



• Industry Applications - For use in welding and heat applications

Material

Select shoulder leather

- One piece leather back
- Welted in high stress areas
- Full sock lining, in-sewn at all finger tips
- Gunn pattern

Size

Large

• Gray color

MIG/ IIG GOATSKIN W	<b>le</b>
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Industry Applications - For use in welding and heat applications

**Welding Supplies** 

ders

- that offer protection from heat, flame or spark
- High tensile strength goatskin
- 2" Length Band top cuff • White

1657

16575

16576

Unit

1 pair

Part No.	Size	Material	Unit
MEM4909	Large	Grain goat skin	1 pair

#### **Big Buck™ Premium Mig/Tig** 16578 Welders



- Industry Applications For use in welding and heat applications
- that offer protection from heat, flame or spark
- Premium grain deerskin, full leather back
- Unlined and sewn with Kevlar thread • 4-1/2" Length Split Deer safety cuff

	Tan	Color	
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Part No.	Size	Material	Unit
MEM4984L	Large	Split deer full leather back	1 pair

## **Propane Torch &** Accessories

**Propane Torch** 



- Fits standard propane tanks
- Orifice filter keeps out impurities from propane and MAPP gas — prevents the orifice from clogging
- The long brass base of the burn tube provides added stability to the burn tube assembly when placed in position on the cast body handle
- Ignites instantly by pressing "ON" button
- Burns hotter (over 3,500°F) hot enough to braze •
- Use wherever spot-heat is needed: soldering, brazing, paint
- removal, loosening "frozen" parts, sweating, thawing pipes • Will light 30,000 times on one replaceable ignitor
- Instant-on, instant-off feature saves fuel •
- Ruggedly built for years of trouble-free service •

Part No.	Description	Unit
24400	Propane Torch	1

								¤Vendor Stocked
Page G-1	Page H-1	Page I-1	Page J-1	Page K-1	Page L-1	Page M-1	Page N-1	Page 0-1
MATERIAL HANDLING/ HARDWARE/RUBBER	TOOLS & ABRASIVES	ELECTRICAL	VEHICLE	SECURITY PRODUCTS	WELDING	TECHNICAL DATA	ALPHA INDEX	PART NO. INDEX



2741



#### **Spark Lighter**

			,

- Specifically designed hood is larger and deeper to trap more gas for positive ignition
- Extra large round file is a full 3/8" diameter for a longer lasting sparking surface
- High tensile steel wire retains spring tension for fast and easy sparks
- Electro zinc plating protects against rust and corrosion

Part No.	Description	Unit
KP73806	Spark Lighter	1
KP74339	Replacement Flints	30

٠	Heavy-duty
•	For alactrodas t

21132

or electrodes through 1/4" diameter • 400 amps

Part No.	Cable Cap.	Weight (Oz.)	Unit
24405	3/0	22	1

#### **Hi-Amp Ground Clamp**



- Copper alloy
- Without key
- 300 amps
- Mechanical oval-point, screw-cable connection

Part No.	Cable Cap.	Weight (Oz.)	Unit
24407	—	26	1



- Large capacity adequate for cutting 12" steel
- UL listed

2755

- Manufactured to withstand 50,000 open-close cycles at 100 psi
- Equivalent to an estimated 60 months use • Quality-manufactured internal valve and valve spring made of
- stainless steel ensures long life
- Low open-close pressure 4 oz. pressure opens valves 10

Part No.	Usage	Unit
19026	For brazing torch end	1 Set
19027	For regulator end	1 Set



Page A-1 ASSORTMENTS & CABINETRY

Page B-1 FASTENERS

**FITTINGS & HOSE** 

Page C-1

MAINTENANCE & SHOP SUPPLIES

Page E-1

Page F-1

2756

Unit

2758

Unit

2759

Unit

2761

1

Part No.	I.D. (In.)	Lenç
24425N	1/4	25
94497	3/	25

#### **Reverse Flow Check Valve**



1

**Chipping Hammer** 

2762

2764

2765

16317



Cone and chisel-type chipping hammer with pinned head
Flex spring handle


Part No.	Туре	Unit
24854	Cone & Chisel Type	1

#### **Chipping Hammer**



• Chisel-type hammer with wire brush and wood handle

Part No.	Туре	Unit
24857	Chisel Type	1

#### **Tip Cleaning Kit**



- For brazing and cutting torch tips
- Contains 22 cleaners
- Combines standard and jumbo sizes
- Sizes 6 through 45, and file

Part No.	Description	Unit
24440	Tip Cleaning Kit	1

#### **Welding Cable**



• 4 gauge 1038 x 34, .450 O.D.

Page G-1

MATERIAL HANDLING/ HARDWARE/RUBBER

- Bright orange jacket resists oil, solvents, ozone and heat
  Remains flexible in cold
- 50 ft. roll

Part No.	Unit
C8889739	1

Page H-1		
TOOLS & ABRASIVES	EL	

Page J-1 VEHICLE

Page I-1

ELECTRICAL

Page K-1 SECURITY PRODUCTS

Page 0-1 PART NO. INDEX

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			F	2