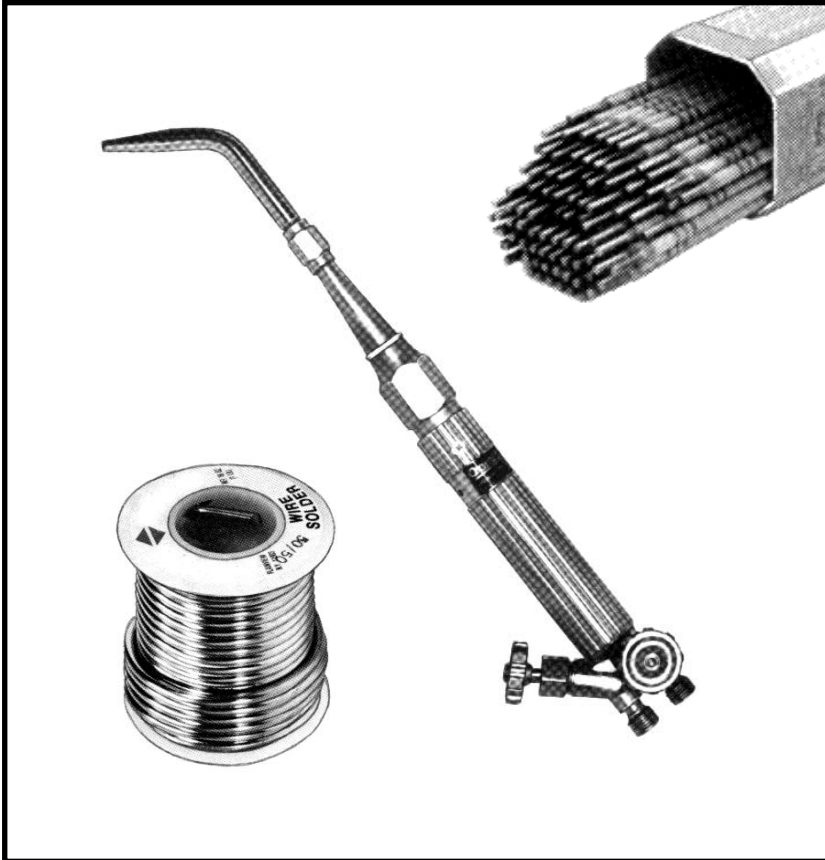


# AURALLOY® WELDING PRODUCTS



## **FEATURES:**

- **High Quality, High Purity Welding, Brazing and Soldering Supplies**
- **Engineered Specifically For the Maintenance and Repair Welder**
- **Superior Strength**
- **Full Compliment of Alloys For Most Every Common Maintenance Application**
- **Unmatched Performance and Reliability**

**AURALLOY WELDING, BRAZING AND SOLDERING PRODUCTS ARE DESIGNED FOR THE MAINTENANCE WELDER WHO GENERALLY PERFORMS REPAIRS IN LESS THAN IDEAL CONDITIONS.** Overcoming the problems of welding on equipment in place or on oily, greasy or corroded materials – Auralloy products outperform the rest. Always use Auralloy to make tough repairs easy.



**CHROMATE INDUSTRIAL CORP.**

*EXCEPTIONAL PRODUCTS, SERVICE AND INNOVATIVE SOLUTIONS*

*FOR MORE INFORMATION ON OUR PRODUCTS OR SYSTEMS, CALL 1-800-BUY-BOLT*



# 210 "BLUE VELVET"

## HIGH SPEED WELDING FOR MILD STEELS



SUPERIOR STRENGTH, VERSATILITY AND EASE OF APPLICATION

**FEATURES:** Ideal for all position welding including vertical and overhead applications. Added iron powder in the coating gives this electrode increased deposition. Excellent penetration and quick solidification makes this electrode excellent for poor as well as good fit up work. Features excellent restrike characteristics, easy slag removal and excellent bead appearance.

**TECHNICAL DATA:**

Tensile Strength: 81,000 PSI Elongation: 26%  
AC-DC either polarity. All positions.

**TYPICAL APPLICATIONS:**

- Angles and Beams
- Galvanized, Painted, Rusted and Dirty Steels
- Sheet Metal
- Filling Holes

**WELDING TECHNIQUES:**

While special preparation of the base metal is not necessary, in many cases best results are obtained by first cleaning the weld area of grease, oxides or rust. Maintain a short arc. Use stringer or weave beads. When making stringer beads, a drag type technique may be used.

SIZE	3/32	1/8	5/32
AMPERAGE	80-125	110-150	140-190
PART	e 8700	e 8701	e 8702



# 220

## HIGH STRENGTH STEEL ELECTRODE



ALL POSITION ELECTRODE FOR LOW & MEDIUM CARBON STEELS & LOW ALLOY STEELS

**FEATURES:** Formulated and developed to provide non-cracking high physical properties for welding of low alloy high strength steels, including T-1, HY-80 and others. Welds pass-over-pass without chipping slag.

**TECHNICAL DATA:**

Tensile Strength: 110,000 PSI  
Elongation: 28% Hardness: B.H.N. 237  
AC or DC constant current. On DC use reverse polarity.

**TYPICAL APPLICATIONS:**

- Tanks
- Boilers
- Pressure Tubing
- Structural Steels

**WELDING TECHNIQUES:** Clean weld area. Set amperage within recommended range for electrode size. Hold a close arc and use either stringer or weave technique. Pause momentarily over each crater before extinguishing arc.

SIZE	3/32	1/8	5/32	3/16
AMPERAGE	80-100	110-150	140-210	200-280
PART	i 8705	i 8706	i 8707	i 8708



# 225 "THUNDERBOLT"

## HIGHEST STRENGTH UNIVERSAL STEEL ELECTRODE



WELDS ALL TYPES & GRADES OF SIMILAR & DISSIMILAR STEELS INCLUDING STAINLESS

**FEATURES:**

The ultimate, multi-purpose steel welding electrode providing a superior combination of tensile strength and elongation.

**WELDING TECHNIQUES:**

Wire brush away loosely adhering metal, oxides, dirt and contaminants. Set amperage within the range prescribed for the electrode size and initiate arc. Vary amperage and arc gap up or down to suit. Use any technique from stringer bead to wide weave. Electrode lead angle is not critical — vary to suit. Self-releasing slag should be brushed away between passes.

**TYPICAL APPLICATIONS:**

- Horizontal fillet welds on all grades of construction steels.
- Welding every known grade of tool steel, including prehardened.
- Joining abrasion, heat and corrosion resistant steels.
- Welding specialized iron-base castings with high carbon content.
- Welding Tools and dies of all types.

**TECHNICAL DATA:**

Tensile Strength: 128,000 PSI Elongation: 36%  
AC or DC constant current. On DC use reverse polarity.

SIZE	1/16	3/32	1/8	5/32
AMPERAGE	30-40	40-90	70-110	90-160
PART	i 8709	i 8710	i 8711	i 8712



# 225-MIG

## MILD STEEL WELDING WIRE ALL POSITIONS

**FEATURES:** Mild steel welding wire that contains higher levels of manganese and silicon than other standard grades of MIG wire 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. This product requires a shielding gas: CO<sub>2</sub> and/or CO<sub>2</sub> mix.

**TYPICAL APPLICATIONS:**

- General shop applications with poor fit-up or rusty, oily plates
- Steel castings or forging salvage
- Home projects, tanks, sheet metal and construction work

**TECHNICAL DATA:**

Tensile Strength: 95,000 PSI % Elongation in 2": 25  
Welding Current: DECP (Electrode Positive, Reverse Polarity)

SPOOLED	.035
AMPERAGE	100-150
PART	a 8727

# AURALLOY 225-B

RESEARCH

## HIGH STRENGTH UNIVERSAL BARE STEEL ROD FOR TORCH AND TIG WELDING

### FEATURES:

Excellent heat, cracking and fatigue resistance and expansion-contraction properties. Easily joins dissimilar steels while low temperature application allows thin metal joining, overlays or repairs. Produces a non-porous, crack-free deposit.

### TYPICAL APPLICATIONS:

- Hospital Equipment
- Food/Beverage Processing Machinery
- Chemical Mixing and Storage Equip.
- Construction Equipment Repairs
- Research Laboratory Equipment
- Oil and Gas Refineries
- Marine and Aircraft Repairs
- Joining Unknown Steels

### TECHNICAL DATA:

Tensile Strength: 128,000 PSI Elongation: 36% DC straight polarity

### WELDING TECHNIQUES FOR TIG APPLICATIONS:

METAL THICKNESS	AMPS	TUNGSTEN DIAMETER	ARGON FLOW		HELIUM FLOW		ALLOY DIA.
			CFH	PSI	CFH	PSI	
1/8"	DC 60-90	1/16"	17	20	—	—	1/16" / 3/32"
3/16"	DC 150-180	3/32"	21	20	—	—	3/32"
1/4"	DC 170-210	1/8"	25	25	—	—	3/32"
1/2"	DC 200-250	1/8"	—	—	—	—	3/32" / 1/8"

For torch application, a small tip on an oxyacetylene torch is recommended. FLUX should be painted along the area to be joined, overlaid or repaired. Adjust flame to a near neutral stage but slightly more acetylene for best results. Hold torch close and apply drop by drop always allowing deposit to solidify under the flame to prevent oxidation. Always keep the rod under the flame so the rod end will not oxidize. Remove excess flux with water and clean with stainless steel brush.

SIZE	1/16	3/32	1/8
AMPERAGE	60-90	150-210	200-250
PART	8728	8729	8730

# AURALLOY 225-V

RESEARCH

## VERTICAL STEEL ELECTRODE

### VERTICAL POSITION HIGH STRENGTH ELECTRODE FOR DISSIMILAR STEELS

### FEATURES:

Unique "fast-freeze" coating simplifies vertical down and up welding. Welds all steels, reducing welding rod inventory and eliminating guesswork. Exceptionally high tensile strength for added confidence in all high strength applications. Controlled weld puddle allows for filling holes and joining dissimilar steels.

### TECHNICAL DATA:

Tensile Strength: 128,000 PSI  
Elongation: 32% Use DC Reverse Polarity or AC

### WELDING TECHNIQUES:

The area in which the weld is to be made should be free of rust, grease, paint and other materials which cause weld contamination. A 90° vee joint should be used when joining heavy sections. Maintain a short arc length and use stringer beads.

### TYPICAL APPLICATIONS:

- Agitators
- Air tool chucks and jaws
- Armor plates
- Augers
- Axles
- Barker drum staves
- Brake drums, shoes
- Bucket teeth
- Bulldozer frames
- Camshafts
- Castings
- Chipper knives
- Clutch plates
- Coil springs
- Collars
- Crane booms
- Crane rails
- Dies
- Draw bars
- Drills
- Forks
- Foundry racks
- Hole diggers
- Hooks
- Hubs
- Journal bearings
- Journal boxes
- Keyways
- Motor chocks
- Pinions
- Pins
- Pipes
- Propellers
- Pulleys
- Punches
- Pulverizers
- Reamers
- Rollers
- Rotor blades
- Shafts
- Shock absorbers
- Shovel buckets
- Splines
- Spokes
- Spring leaves
- Sprockets
- Thrust bearings
- Tools
- Transmission shafts
- Truck frames
- Valve seats
- Wear plates
- Wheels
- Wobblers
- Worm gears

SIZE	3/32	1/8
AMPERAGE	35-70	60-110
PART	8718	8719

# AURALLOY 230

RESEARCH

## "DIRT DEVIL"

## ADVERSE CONDITIONS MILD STEEL ELECTRODE

### HIGH TENSILE STRENGTH WELDING OF ALL COMMON MILD STEELS

### FEATURES:

Superior all position design for welding vertical, horizontal and overhead applications. Excels on rusty, greasy poor fitting joints in all positions. Can weld through 1/2" (12mm) of surface contamination without porosity. Can bridge gaps as wide as 3/8" (9mm). Exceptional flexibility – electrode can be bent without flux chipping. Faster and easier to use – Slag can be welded over without removal.

### WELDING TECHNIQUES:

Weld with a short-medium arc length at low amperage. When surface preparation is impractical, use a medium-long arc and favor high amperages. Multi-pass welds can be made without intermittent slag removal. Use any welding technique from stringer bead to wide weave.

### TECHNICAL DATA:

Tensile Strength: 88,000 PSI Elongation: 28%  
DC reverse, straight or AC. All position

### TYPICAL APPLICATIONS:

Ideally suited for difficult maintenance repairs. Easily welds steels that have been galvanized, painted, rusted or otherwise contaminated in service. Misaligned parts or difficult to access areas are also easily remedied with this electrode.

SIZE	3/32	1/8	5/32	3/16
AMPERAGE	25-75	35-125	50-160	75-200
PART	8850	8851	8852	8853

# AURALLOY 240

RESEARCH "HAMMER"

## IMPACT RESISTANT ELECTRODE

FOR JOINING AND SURFACING STEELS



**FEATURES:** Extra high strength welds that do not spall. Outwears ordinary hardfacing alloys in impact conditions as much as 10 to 1.

**TECHNICAL DATA:** Tensile Strength: 119,000 PSI  
Elongation: 41%  
Hardness: Brinell 200-520, Rockwell C10-C50  
Use DC Reverse Polarity or AC

**WELDING TECHNIQUES:** Do not pre-heat. Use the lowest possible amperage and move the electrode as quickly as feasible. Allow to cool slowly.

**TYPICAL APPLICATIONS:** For joining and repairing steel and manganese steel parts used throughout the railroad, construction and related industries.

<b>SIZE</b>	<b>1/8</b>
<b>AMPERAGE</b>	90-150
<b>PART</b>	a 8713

# AURALLOY 250

RESEARCH "STERLING"

## UNIVERSAL STAINLESS STEEL ELECTRODE

HIGH HEAT AND CORROSION RESISTANT



**FEATURES:** Provides the best combination of AC/DC weldability and deposit chemistry.

**WELDING TECHNIQUES:** Deposit at low amperage, holding a close arc. Stringer beads are preferred, but the electrode can be weaved up to three times, if the application requires. For filleting, raise amperage 10% and drag electrode, maintaining light pressure. Backwhip craters and remove slag between passes.

**TECHNICAL DATA:** Tensile Strength: 95,000 PSI  
Elongation: 45% AC-DC reverse polarity

**TYPICAL APPLICATIONS:** Furnace parts including baffle plates, chain links and guides, woven belts and associated hardware. All types of stainless castings, both non-magnetic and magnetic. Crucible tongs, plating baskets and hooks, retorts, vats and other chemical processing components.

<b>SIZE</b>	<b>1/16</b>	<b>3/32</b>	<b>1/8</b>	<b>5/32</b>
<b>AMPERAGE</b>	30-60	60-90	90-120	120-160
<b>PART</b>	a 8714	g 8715	i 8716	i 8717

# AURALLOY 250-B

RESEARCH

## UNIVERSAL STAINLESS STEEL BARE ROD

FOR TORCH AND TIG WELDING



**FEATURES:** Easy to work stainless steel wire with superior corrosion resistant deposits. Excellent strength, impact and abrasion-resistant qualities.

**WELDING TECHNIQUES:** For torch application, clean area of grease and dirt. Apply Flux to repair area. Use slightly excess flame. Keep torch in motion to uniformly heat area. As flux liquifies, hold torch close. Add alloy to joint drop by drop.

**TECHNICAL DATA:** Tensile Strength: 86,000 PSI

**TYPICAL APPLICATIONS:**

- Chemical Mixing and Storage Equipment
- Food and Beverage Processing Machinery
- Marine and Aircraft Repairs
- Research Laboratory Equipment
- Oil and Gas Refineries
- Hospital Equipment

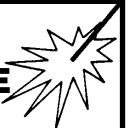
<b>SIZE</b>	<b>1/16</b>	<b>3/32</b>	<b>1/8</b>
<b>PART</b>	i 8740	i 8741	i 8742

# AURALLOY 255

RESEARCH "CASCADE"

## SPECIAL VERTICAL POSITION STAINLESS STEEL ELECTRODE

HIGH HEAT AND CORROSION RESISTANCE



**FEATURES:** Superior combination of AC/DC weldability and deposit chemistry provides smoother deposits with minimum susceptibility to carbide precipitation and cracking. Faster and easier to use with fast deposition rate, no spatter and easy slag removal.

**TYPICAL APPLICATIONS:** Especially suited for vertical down and up welding of thin to medium gauge molybdenum bearing stainless steels. Furnace parts including baffle plates, chain links and guides, woven belts and associated hardware. All types of stainless castings, both non-magnetic and magnetic. Crucible tongs, plating baskets and hooks, retorts, tanks, pipe, tubing, vats and other chemical processing components. Pumps, valves and fittings. Heat exchangers and heat treating boxes.

**TECHNICAL DATA:** Tensile Strength: 80,000 PSI  
Elongation: 42%  
Use DC Reverse Polarity or AC

**WELDING TECHNIQUES:** For vertical welding, set amperage at high end of the scale. Maintain a sharp angle with the electrode pointing upward. Whip the electrode quickly back and forth while moving up or down. Electrode may show a red color from the excess amperage which is normal.

<b>SIZE</b>	<b>3/32</b>	<b>1/8</b>
<b>AMPERAGE</b>	60-80	90-110
<b>PART</b>	i 8737	i 8738

# AURALLOY 300

RESEARCH "MIDNIGHT"

## FULLY MACHINABLE CAST IRON ELECTRODE



HIGHEST QUALITY ELECTRODE FOR JOINING ALL GRADES OF CAST IRON

**FEATURES:**

State-of-the-art coated electrode for welding every known grade of cast iron, heavy or thin, and for joining these to steel.

**TYPICAL APPLICATIONS:**

All grades 30, 40 and 50 gray cast irons in all thicknesses and all positions. All alloy cast irons — ductile, nodular (spheroidal graphitic iron), malleable, meehanite. Engine blocks, diesel heads, gear boxes, transmission housings, differentials, machine bases and presses.

**TECHNICAL DATA:**

Tensile Strength: 70,000 PSI Elongation: 40%  
Use AC or DC. On DC use reverse polarity.

**WELDING TECHNIQUES:**

Remove loosely adhering material. Searing of surface is highly recommended. Cracks should be beveled after piercing holes at either end to prevent propagation. Preheat is not required unless casting is unusually thick. Adjust amperage and deposit beads approximately 2" long. Skip and stagger to suit. Remove slag between passes. Linger momentarily over final crater before extinguishing the arc.

SIZE	3/32	1/8	5/32
AMPERAGE	50-80	70-110	100-140
PART	i 8720	i 8721	i 8722

# AURALLOY 310

RESEARCH

## NON-CONDUCTIVE FLUX COATED CAST IRON ELECTRODE



HIGHEST QUALITY ELECTRODE FOR JOINING ALL GRADES OF CAST IRON

**FEATURES:**

State-of-the-art non-conductive flux coated electrode for welding every known grade of cast iron, heavy or thin, and for joining these to steel.

**TYPICAL APPLICATIONS:**

All grades 30, 40 and 50 gray cast irons in all thicknesses and all positions. All alloy cast irons — ductile, nodular (spheroidal graphitic iron), malleable, meehanite. Engine blocks, diesel heads, gear boxes, transmission housings, differentials, machine bases and presses.

**TECHNICAL DATA:**

Tensile Strength: 55,000 PSI Use AC or DC. Reverse polarity.

**WELDING TECHNIQUES:**

Remove loosely adhering material. Searing of surface is highly recommended. Cracks should be beveled after piercing holes at either end to prevent propagation. Preheat is not required unless casting is unusually thick. Adjust amperage and deposit beads approximately 2" long. Skip and stagger to suit. Remove slag between passes. Linger momentarily over final crater before extinguishing the arc.

SIZE	3/32	1/8
AMPERAGE	60-90	85-120
PART	i 8746	i 8747

# AURALLOY 320

RESEARCH "BLACK BEAUTY"

## COPPER CLAD "TRI-METAL" CORED CAST IRON ELECTRODE



PROPRIETARY COPPER-NICKEL-IRON DEPOSIT CHEMISTRY

**FEATURES:**

Unique copper plated core wire provides unequalled cast iron welding performance. High efficiency weld metal transfer eliminates electrode overheating. Ultimate combination of softness, ductility and tensile strength for ease of use and maximum stress relief.

**TYPICAL APPLICATIONS:**

The high deposition rate of this electrode creates an extremely narrow heat affected zone. This feature is suitable for all weldable cast irons that require posts weld machining.

**TECHNICAL DATA:**

Tensile Strength: 77,000 PSI Elongation: 15%  
DC Reverse (+) or AC. Flat, Vertical Up, Horizontal, Overhead

**WELDING TECHNIQUES:**

Guide the electrode at a steep angle keeping the arc length short. Use short staggered beads when welding restrained parts.

SIZE	3/32	1/8	5/32
AMPERAGE	50-70	70-100	100-130
PART	e 8855	e 8856	e 8857



# "TURBO"

**NEW IMPROVED**  
25% stronger blast  
than any other  
chamfering/cutting  
electrode

## CUTTING, GROOVING AND CHAMFERING ELECTRODE

**FOR RAPID METAL REMOVAL ON CAST IRON, STAINLESS, INCONEL, MANGANESE AND ALUMINUM**

**FEATURES:**

The fastest, most economical method of removing unwanted metal. Uses a common welding machine to save hours of grinding and machining time. Extra deep cut, easy restrike and 20% less smoke.

**TYPICAL APPLICATIONS:**

Dismantling welded structures such as towers, sign supports, and pipe piles. Use for blowing out rivets and for removing old weld overlays on railroad frogs, cross-overs and switches. Ideal for preparing work hardened or heat-treated dies for welding.

**TECHNICAL DATA:**

AC-DC straight polarity

**WELDING TECHNIQUES:**

Point electrode in direction of travel and initiate arc. For a shallow chamfer, move electrode quickly along line of cut. A slower or weaving motion provides deeper groove. The molten metal is pushed ahead as the chamfer is made. For deeper grooves, repeat until the required depth is achieved.

SIZE	3/32	1/8	5/32
AMPERAGE	130-200	160-300	180-400
PART	L 8724	L 8725	L 8726



# 500

## SUPER STRENGTH SELF-FLUXING SILVER SOLDER

**95% TIN 5% SILVER FLUX-CORED SOLDER ALLOY WITH OUTSTANDING STRENGTH**

**FEATURES:**

Fast, easy high strength deposits with solder gun, iron or torch. Melts at a low 430°F, eliminating distortion and weakening of base melt. Conductivity 25% greater than ordinary solders. Contains no lead, cadmium or zinc for safe use and compliance with all pure food laws. Available in 1/2 lb and 1 lb spools or in convenient, pocket-size dispenser.

**TYPICAL APPLICATIONS:**

- Food and Beverage Containers
- Toilet Fixtures
- Sanitary Equipment
- A/C and Refrigeration
- Auto Radiators
- Evaporators
- Regulators and Meters
- Machine Guides
- Chrome Plated Fittings
- Electrical Connections
- Toy and Hobby Repair

**TECHNICAL DATA:**

Tensile Strength: 15,000 PSI

SIZE	1/32	1/16	1/16	1/16	1/8	1/8
WEIGHT	.6 oz. Disp. Tube	1.0 oz. Disp. Tube	1/2 lb. Spool	1 lb. Spool	1/2 lb. Spool	1 lb. Spool
PART	F 8781	F 8780	A 8776	A 8775	A 8779	A 8778



# "WHITE LIGHTNING"

## ALL POSITION ALUMINUM ELECTRODE

**FOR JOINING AND METAL BUILD-UP OF ALL WELDABLE GRADES OF ALUMINUM**

**FEATURES:**

Universal electrode for welding all cast, wrought and extruded aluminum and aluminum alloys.

**WELDING TECHNIQUES:**

Remove oil and grease and sand immediate weld area. Chamfer edges of plates to be joined and open up cracks. Make holes to be filled wider at the top. Preheat heavy sections broadly. In thick-to-thin joining, preheat heavier member. Use any conventional DC coated electrode power source-rectifier type of motor or engine driven generator. Adjust for upper end of recommended amperage range and reduce as welding progresses.

**TECHNICAL DATA:**

Tensile Strength: 34,000 PSI Use DC current. Reverse polarity.

**TYPICAL APPLICATIONS:**

- Truck beds, bodies and frames
- Pipe railings, bannisters, stairs, diamond plate
- Irrigation piping
- Engine and motor blocks
- Traffic light bases, highway signs and supports
- Loading ramps and docks
- Door/window frames
- Transmission housings and gear boxes
- Machine bases and supports
- Bus bars, electrical switch boxes and mounts

SIZE	1/8	5/32
AMPERAGE	70-110	100-150
PART	e 8731	e 8732



## HIGH STRENGTH FLUX-CORED ALUMINUM BRAZING ALLOY

### GENERAL PURPOSE TORCH BRAZING OF ALL WELDABLE ALUMINUM

**FEATURES:**

A specially engineered alloy with flux core center for faster, easier joining of all aluminum and aluminum alloys. Provides deep penetration in tight joints. Excellent for out of position brazing and build-up deposits.

**TYPICAL APPLICATIONS:**

- Motor Housings
- Tools
- Tanks
- Vats
- Ladders
- Utensils
- Rails
- Beverage Cases
- Pulleys
- Sheaves

**TECHNICAL DATA:**

Tensile Strength: 30,000 PSI

**WELDING TECHNIQUES:**

Clean weld area, removing plating or anodized finish. Leave gap approximately 1/6". For thicker parts, cracks or butt joints, bevel a 60° to 70° vee. Use a carburizing flame (excess acetylene with oxygen) and heat work with flame 1" to 3" from surface. Touch rod to weld area depositing small amounts of alloy and allow to flow out and bond to base metal.

<b>SIZE</b>	<b>1/8</b>
<b>PART</b>	e 8745



## EASY-FLOW ALUMINUM ALLOY WIRE

### FOR JOINING, FABRICATING AND REPAIRING OF MOST ALUMINUM GRADES

**FEATURES:**

Provides exceptional strength and ductility for general purpose joining, fabricating and repairing of most aluminum grades. Minimum preparation and low melt (950° - 1010° F) for ease of application. Thin flowing for tight fits. Perfect color match.

**TECHNICAL DATA:**

Tensile Strength: 35,000 PSI  
For torch or tig welding.

**TYPICAL APPLICATIONS:**

- Poles
- Frames
- Bus Bars
- Sign Posts
- Guard Rails
- Furniture
- Structural Parts
- Housings

**WELDING TECHNIQUES:**

Clean joint with wire brush removing grease and oxides. Apply Auralloy 620 Flux. Using excess acetylene (carburizing) flame, keep torch in constant motion to uniformly heat area. When flux turns to clear liquid, start adding alloy to the joint.

<b>SIZE</b>	<b>1/16</b>	<b>3/32</b>	<b>1/8</b>
<b>PART</b>	i 8750	i 8751	i 8752



## EZ-WELD ALUMINUM ALLOY

### BRAZING ROD FORMULATED FOR HIGH STRENGTH FABRICATION AND ALUMINUM REPAIR

**FEATURES:** Joints stronger than parent metal. Easy machining of welded areas. Non-corrosive joints. Low heat requirement (propane torch application). Superior strength and adhesion provides permanent seal and strength when subjected to extreme pressure. Contains no lead or cadmium.

**TYPICAL APPLICATIONS:** AUTOMOTIVE: Radiators, manifolds, transmission housings, pump housings, carburetors, motorcycles, running boards, mobile homes, recreational vehicles. TRADES: Plumbing, heating and A/C, power tools, farm equipment, storm shutters, screen enclosures, satellite dishes, sign companies, aluminum awnings, gutters and down spouts. MARINE: Hulls, leaking rivets, props, brass & bronze fittings, engine parts. HOUSEHOLD: Lawn furniture, doors/windows, bicycles, fishing rods, antiques.

**WELDING TECHNIQUES:** Clean the surface with a stainless steel brush. Heat the parent metal surface, NOT the E-Z Weld Aluminum Alloy. Apply the E-Z Weld to the heated surface. Keep flame in motion. Allow weld to air-cool naturally. Never plunge into water.

**TECHNICAL DATA:**

Tensile Strength (lbs./sq. inch): 47,000 PSI  
Melting Range: 715°F - 730°F  
Density: 25  
Elongation: 3%  
Compression Strength (lbs./sq. inch): 60-75,000  
Shear Strength (lbs./sq. inch): 34,000  
Electrical Conductivity: 24.9% of cu  
Impact Strength: (Charpy) 4 ft. lbs. to break 1/4" bar  
Thermal Conductivity: .24 cal/cu.cm  
Hardness: (Brinell 100)  
Corrosion Penetration: 300 x 10 in 11-R  
Ductility: Good

<b>SIZE</b>	<b>1/8</b>
<b>PART</b>	e 8733 (includes stainless steel wire brush P/N 41340)

# AURALLOY 710

RESEARCH "PINK CADILLAC"

## PREMIUM FLUX COATED SILVER BRAZING ALLOY



**PRECISE THIN FLOW JOINING OF ALL FERROUS AND MOST NON-FERROUS METALS**

**FEATURES:**

High 56% silver, cadmium-free formulation provides the ultimate strength for joining all ferrous and most non-ferrous metals. Low working temperature (1120°F to 1185°F) for excellent flowing action and adhesion. Super active, fast-flowing flux coating provides twice the base metal cleansing action of conventional silver flux coatings. Cleans the most oxidized stainless steel surfaces to promote rapid wetting action. Superior performance flux coating is totally flexible and chip resistant.

**TECHNICAL DATA:**

Tensile Strength: 71,000 PSI  
Elongation: 25%  
Melting Temperature: 1120°F Solidus, 1200°F Liquidous

**TYPICAL APPLICATIONS:**

All ferrous and non-ferrous metals, except aluminum and magnesium. Manufacturing and repairing of all food and beverage equipment. Thin flow joints on aerospace and aircraft applications. Color matching on stainless steel and nickel. Carbide tipping. Joining medical tools and instruments. Hospital carts and equipment.

<b>SIZE</b>	<b>1/16 x 18" PINK FLUX</b>		
<b>PART</b>	j		8786

# AURALLOY 800

RESEARCH "RUBY"

## FLUX-COATED NICKEL SILVER ALLOY



**HIGH STRENGTH ABRASION-RESISTANT BUILD-UP OF FERROUS AND NON-FERROUS METALS**

**FEATURES:**

For oxyacetylene welding of hot or cold rolled steel, tool steel, stainless steel, high carbon steel, cast iron, malleable iron, all alloys of the bronze, copper and nickel family and dissimilar metals (not white metals). Extremely versatile brazing rod with low melt (bonds at approximately 1450°F) and thin flowing for tight fits. Excellent for rapid build-up deposits for cladding or replacing missing metal. Tough, wear-resistant deposits (150-200 BHN) for strong, non-porous, lasting welds. Highly machinable with minimum preparation for rusty, dirty parts.

**TECHNICAL DATA:**

Tensile Strength: 100,000 PSI

**TYPICAL APPLICATIONS:**

Joining and fast build-up of metals and filling holes in steel and cast iron.  
Ideal for drive shafts, friction plates and gear teeth.

<b>SIZE</b>	<b>3/32</b>	<b>1/8</b>
<b>PART</b>	i 8755	i 8756

# AURALLOY 810

RESEARCH

## SELF-FLUXING, NON-FUMING STEEL WIRE



**GENERAL PURPOSE JOINING OF STEEL SHEETS, PLATES AND PIPE OF LOW CARBON ANALYSIS**

**FEATURES:**

A versatile mild steel bare rod for gas or tig brazing. Copper metallic coating inhibits rust and improves weldability. Provides a dense, smooth, even bead with no weld porosity. Can be used in all positions and is easily machined, filed or sanded. No flux is required for tig or gas brazing.

**TYPICAL APPLICATIONS:**

- Tanks
- Shafts
- Vats
- Machinery Guards
- Hoods
- Brackets
- Frames
- Wire Mesh
- Sheet Metal

**TECHNICAL DATA:**

Tensile Strength: 70,000 PSI

**WELDING TECHNIQUES:**

Clean joint area to remove grease, paint, rust, dirt or moisture. Keep neutral flame in constant motion on the repair area. Add alloy to joint insuring weld bead has complete penetration of the joint. No flux is required.

<b>SIZE</b>	<b>1/16</b>	<b>3/32</b>	<b>1/8</b>
<b>PART</b>	i 8760	i 8761	i 8762

# AURALLOY 820

RESEARCH

## HIGH STRENGTH THIN FLOWING BRONZE BRAZING ALLOY

FOR EASY BRAZING OF COPPER, COPPER ALLOYS, BRONZE, BRASS AND NICKEL ALLOYS

**FEATURES:**

Ideal for joining and repairing thin sheet metal, tubing and fittings of non-ferrous metals. Self-fluxing on copper to copper applications. Ductile deposits withstand vibration. High electrical and heat conductivity. Easily machined. Strong corrosion and wear properties.

**TYPICAL APPLICATIONS:**

- Refrigeration
- Copper Wire and Cable
- Bus Bars
- Electrical Contacts
- Piping
- Air Conditioning
- Plumbing
- Marine Equipment

**TECHNICAL DATA:**

Tensile Strength: 46,000 PSI  
Working Temperature: 1300°F to 1460°F

**WELDING TECHNIQUES:**

Clean joint area to remove grease and dirt. Use a slightly oxidizing flame and keep flame as low as possible to obtain a free-flowing bead. On copper to copper welds, no flux is required. Use Auralloy 825 Flux for other materials. All joints should be tight fitting. As flux liquifies, melt off a small amount of alloy and continue heating until bonding is complete. Do not overheat. Remove excess flux with water and a clean brush.

SIZE	1/16	3/32	1/8
PART	8765	8766	8767

# AURALLOY 830

RESEARCH

## HIGH STRENGTH SILICON BRONZE BRAZING ALLOY

ALL POSITION JOINING OF COPPER, COPPER-SILICON AND COPPER-ZINC BASED METALS

**FEATURES:**

Joins copper, copper-silicon and copper-zinc based metals to themselves or to mild or galvanized steel. Highly corrosion resistant. Eliminates "burn-through" on galvanized coatings. Ideal for dissimilar metal applications. Suitable for thin flow or bead forming deposits. Non-fuming.

**WELDING TECHNIQUES:**

Clean joint area to remove grease and dirt. Use Auralloy 825 Flux. With a slightly oxidizing flame, heat work until flux liquifies. Keep weld puddle small to assure rapid solidification and to avoid contraction strains. Remove flux residue with hot water and a clean stiff brush.

**TECHNICAL DATA:**

Tensile Strength: 64,000 PSI  
Working Temperature: 1450°F to 1600°F

**TYPICAL APPLICATIONS:**

- Galvanized Parts
- Castings
- Marine Repairs
- Joints and overlays on steel, copper, brass, bronze, naval brass and galvanized sections
- Valves and Seats
- Tubing
- Fittings

SIZE	1/16	3/32
PART	8770	8771

# AURALLOY 840

RESEARCH

## "SAPPHIRE"

## "SAFE VUE" MOISTURE SEALED FLUX COATED TRIPLE DEOXIDIZED BRONZE BRAZING ALLOY

FOR EASY BRAZING OF STEEL CAST IRON AND COPPER BASE ALLOYS

**FEATURES:**

Unique "Safe Vue" flux coating eliminates harsh chemical odors and the bright orange visibility blocking glare of conventional sodium type flux coatings. Slick, smooth moisture sealed flux has triple the shelf life of similar products. Flux cleansing action is exceptional on dirty steels and cast irons. Can braze copper base alloys without melting base. No cracking – totally flexible coating.

**TYPICAL APPLICATIONS:**

Bearings, bushings, cams, cast iron, carbide tipping, chain saws, drills, jig and fixtures, levers, linkage, piping, racks and shaft repair.

**TECHNICAL DATA:**

Tensile Strength: 71,000 PSI  
Working Temperature: 1595°F

**WELDING TECHNIQUES:**

Clean joint area to remove grease and dirt. Pre-heat general area to 700°F (400°C) and then specific area to 1200°F (650°C). Melt off flux and apply alloy.

SIZE	1/16	3/32	1/8
PART	8860	8861	8862

# AURALLOY 900

RESEARCH "GRANITE"

## HARD SURFACING ELECTRODE



### SUPERIOR IMPACT AND ABRASION RESISTANCE

**FEATURES:** A truly unique electrode combining unsurpassed weldability plus super impact and abrasion resistance and high hardness. It is the ideal alloy combination where hardness and toughness are required on carbon and alloy steels, manganese steels and cast iron.

**TECHNICAL DATA:**

Hardness: RC 56-60  
Use any AC or DC coated electrode power sources.  
On DC use reverse polarity.

**TYPICAL APPLICATIONS:**

Crusher jaws, hammers, bucket lips and teeth. Wear plates, pins, axles, shafts, cams, eccentrics.

**WELDING TECHNIQUES:** Prepare weld surface by chamfering to remove old overlays and loosely adhering metal. Use a cushion, if required. Deposit the electrode using any technique applicable such as stringer beading or weaving up to 4X. Allow each layer to cool somewhat before continuing. Remove slag between passes.

<b>SIZE</b>	<b>1/8</b>	<b>5/32</b>
<b>AMPERAGE</b>	80-135	120-160
<b>PART</b>	8735	8736

# AURALLOY 910

RESEARCH

## HARD FACING CHROMIUM CARBIDE TUBULAR ELECTRODE



### FOR APPLICATIONS SUBJECT TO HIGH ABRASION, COMPRESSIVE IMPACT LOADS AND EROSION

**FEATURES:** For manual application to large parts where deposition rate and job completion times are paramount. Easy to use and offers the greatest range of carbide bearing alloys to overcome a great variety of wear caused by abrasion, erosion, impact and heat. Designed for all position welding and can be used at low amperature to hardface thin edges on tillage tools and similar parts. A proprietary coating formulation is completely moisture-resistant and will survive storage in damp conditions for years. Can be applied to cast iron, manganese steel and mild steel without preheat; high carbon and alloy steels may require preheat.

**TECHNICAL DATA:**

Hardness: RC 55-60  
Use with either AC or DC welding power sources.  
Amperage: 70-125

**TYPICAL APPLICATIONS:** Ideal for hardfacing parts made from austenitic manganese steel. Dredge bucket lips, crusher jaws, crusher mantles and liners, manganese steel swing hammers, quarry screen plates, grizzly bars and feeder spots, and shovel buckets.

<b>SIZE</b>	<b>1/4 x 18"</b>
<b>PART</b>	8739

# AURALLOY HOLD-IT™

RESEARCH JIGGING / HEAT DAM PUTTY

- HOLDS PARTS FIRMLY IN PLACE FOR "HANDS FREE" WELDING, BRAZING AND SOLDERING
- PROTECTS MATERIAL SURFACES FROM HEAT
- ELIMINATES HEAT DAMAGE SUCH AS BUCKLING, WARPING, DISTORTION AND DISCOLORATION
- WITHSTANDS TEMPERATURES OF 3,000°F
- MAINTAINS SHAPE WHEN HEATED
- USE ON ANY HORIZONTAL, VERTICAL OR OVERHEAD SURFACE



**DIRECTIONS:** Apply a thin layer of Hold-It™ putty, covering the entire area to be protected. In extreme heat, use a thicker covering. If surface is affected by moisture, use a sheet of impervious plastic as a barrier and then apply Hold-It™ putty. When using as a jiggling putty, treat each part to be held separately by placing in individual mounds of putty. Wipe off and clean with water.

<b>SIZE</b>	<b>2 LB. CONTAINER</b>
<b>PART</b>	A 8800

# AURALLOY BRAZING/ SOLDERING FLUXES

RESEARCH

**500 FLUX: LIQUID SOLDERING** – For difficult soldering applications. Especially active for use on stainless related alloys. Non-fuming. Completely water soluble. Use with Auralloy 500 Silver Solder when additional flux is required.

**620 FLUX: ALUMINUM BRAZING (POWDER)** – Becomes active well below the melting temperature of the aluminum and produces maximum flow of the brazing alloy. Easy to use as a powder or paste with Auralloy 620 aluminum brazing rods.

**700 FLUX: SILVER BRAZING (LIQUID)** – Dissolves surface oxides and protects joint area to improve bonding and wetting action of all silver brazing wires. Particularly useful when joining stainless steel and high alloy steels. When additional power is required use with Auralloy 700 silver brazing rods.

**825 FLUX: GENERAL PURPOSE (LIQUID PASTE)** – "Wide Range" brazing flux designed to improve results when joining cast iron, malleable iron, copper, brass, bronze and steel. For use in applications not requiring specialized fluxes.

	<b>500 FLUX</b>	<b>620 FLUX</b>	<b>700 FLUX</b>	<b>825 FLUX</b>
<b>SIZES</b>	1 Pint Bottle	6 oz. Jar	1 lb. Jar	8 oz. Jar
<b>PART</b>	A 8787	A 8790	A 8796	A 8798

# AURALLOY ACCESSORIES

## WELDER'S CHIPPING HAMMER

- SOLID STEEL
- SHARP 1" BLADE ON ONE END, TAPERS TO A POINT ON THE OTHER END
- COIL SPRING HANDLE FOR SHOCK AND HEAT DISSIPATION
- RUST RESISTANT, BLACK OXIDE FINISH



BLADE	LENGTH	HEAD WEIGHT	PART
Horizontal	10*	16 oz.	A 8867
Vertical	10*	16 oz.	A 8868

## WELDING MAGNET

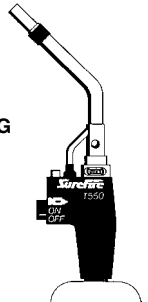
- MULTIPLE ANGLES: 30°, 45°, 60°, 75° and 90°
- IDEAL WELDING AID
- SPECIAL POWDER COATING FINISH TO RESIST WELD SPATTER
- OVERALL DIMENSIONS: 3-3/4 X 2-1/2



DESCRIPTION	PART
Multi-Angle Clamping Welding Magnet	A 8869

## SUREFIRE® PROPANE TORCH

- DESIGNED FOR PROFESSIONAL USE\*
- IGNITES AUTOMATICALLY
- INSTANT ON – INSTANT OFF!
- NO MATCHES!
- VARIABLE FLAME ADJUSTMENT
- TRIGGER LOCK PROVIDES CONTINUOUS BURNING
- IGNITES AND BURNS UPSIDE DOWN
- 3400°F AT TIP – BRAZE AND SOLDER COPPER PIPE, LIGHT STEEL AND SHEET METAL
- PRESSURE REGULATOR PROVIDES EVEN FLOW OF GAS IN ALL POSITIONS
- SAFE AND EASY TO USE



\*Not available in mass-market retail stores

DESCRIPTION	PART
Surefire® Self-Igniting Propane or Mapp Torch	A 8866

## MAP-PRO™ GAS CYLINDER

- FOR BRAZING, WELDING OR SOLDERING – BURNS HOTTER THAN PROPANE
- CYLINDER HAS 1" - 20 THREADED FUEL OUTLET VALVE THAT FITS ALL STANDARD PROPANE TORCHES
- NON-REFILLABLE CYLINDER MEETS DOT 39 SPECIFICATIONS
- 14.1 OZ.



DESCRIPTION	PART
MAP-Pro™ Gas Cylinder, 14.1 oz.	A 8874

## SOLDER PRO 180™

- EQUIVALENT TO A 185-WATT SOLDERING IRON AND 2500°F TORCH
- POWERED BY PATENTED REFILLABLE LIQUID ENERGY CELL (LEC)
- COMES WITH 3.4MM CHISEL SOLDERING TIP AND BLOW TORCH HEAD, 2 LECs
- SAFELY TRAVELS ANYWHERE WITHOUT HAZARD
- CORDLESS, SIMPLE AND SAFE TO OPERATE IN ALMOST ANY CONDITION
- READY TO USE IN 30 SECONDS AFTER IGNITION
- TIPS CHANGE IN SECONDS FOR SOLDERING GUN, TORCH OR HOT AIR BLOWER
- REMOVABLE LEC™ CONTAINS POWER FOR UP TO 120 MINUTES
- RECHARGE FROM BUTANE FUEL AVAILABLE ALMOST ANYWHERE
- FREE STANDING – DOES NOT REQUIRE SEPARATE STAND

### SPECIFICATIONS:

Length w/soldering tip ... 203mm (8in)  
 Weight (with LEC™) ..... 560 g  
 Approximate temp. .... 250-550°C  
     soldering tip                      (480-1000°F)  
 Torch ..... 1300°C (2500°F)  
 Gas container capacity . 40 ml  
 Operating Time ..... 100 min @  
     (one gas filling)                      mid setting



DESCRIPTION	PART	TIP STYLE	PART	TIP STYLE	PART
Solder Pro 180™ with LEC™ Power Technology	A 8842	Heat Blower	A 8842PS70	Deflector	A 8842PS80

# AURALLOY ACCESSORIES

## EXCALIBER BUTANE SOLDER / TORCH KIT

- BUTANE POWERED, SELF-IGNITING, PORTABLE, MULTI-FUNCTION HEAT TOOL
- 30W TO 100W POWER RANGE
- AUTOMATIC PIEZO IGNITION
- COMPLETE PORTABILITY
- COMFORTABLE GRIP
- RAPID TIP HEAT-UP
- COMPLETE WITH:  
5 TIPS – CONICAL, HOT KNIFE, HEAT BLOWER, REFLECTOR,  
PLUS 2 SPECIALTY SOLDER TIPS, 17 GRAM TUBE 60/40 SOLDER,  
COOLING/CLEANING SPONGE AND HEAVY DUTY ULTRA-BOX

### SPECIFICATIONS:

Approximate Temperatures:	
Soldering Tip .....	250-500°C (480-950°F)
Torch.....	1300°C (2400°F)
Hot Knife.....	200-350°C (400-660°F)
Heat Blower.....	250-500°C (480-950°F)
Gas Container Capacity .....	15 grams
Operating Time (one gas filling).....	70 min at mid-setting



P/N 8843

DESCRIPTION	PART
EXCALIBER BUTANE SOLDER / TORCH KIT	A 8843

## SOLDER GUARD - DESIGNED FOR SOLDERING & BRAZING USING PROPANE & MAPP GAS

### Features

- Protects wood, painted, or metal surfaces from the heat and flame of a torch
- You can't buy a more durable or longer lasting, flexible heat & flame protective product
- Belongs on every service truck, in every tool box, and at every work bench

### Benefits

- Don't burn – always use the Solder Guard
- Non-asbestos
- No smoke & no odor
- Reusable over and over again
- Recommended for use with today's new higher temperature, lead-free solders

### Applications

- Plumbing
- Heating
- Maintenance
- Air conditioning
- Refrigeration
- Fire sprinkler
- Commercial, Industrial, Residential, Institutional



DESCRIPTION	PART
SOLDER GUARD – 9" x 12"	A 66370

