

Superior Performance Welding Products Designed to Solve the Maintenance and Repair Welders Problems



- MAKES WELDING EASIER, EVEN ON INADEQUATE EQUIPMENT
- SAVES YOUR COMPANY MONEY
- ELIMINATES LARGE INVENTORIES
- QUALITY AND VERSATILITY THAT REDUCES DOWN-TIME

Auralloy helps improve the ability of the mechanic with limited welding experience, while enabling the highly skilled welder to do an even better job by:

- · Welding metals of unknown analysis.
- Welding through Paint, Rust, Grease and Oil when cleaning is normally required.
- Welding without pre-heat in most applications.
- Salvaging expensive parts that are now being scrapped.
- No guesswork, the right rod for the job everytime.

Our customers have benefitted from Auralloy's performance with:

- · Reduced Downtime
- Extended Repair Life
- Increased Performance
- · Ease of application
- · Decreased Costs

The
Auralloy Quality
Formula will put
Maintenance and Repair
Power into your Shop—

NOW!



THE SUREFIRE HEAVY DUTY SELF-IGNITING PROPANE OR MAPP TORCH

- DESIGNED FOR PROFESSIONAL USE*
- IGNITED AUTOMATICALLY AT THE PUSH OF A BUTTON
- 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

P/N 8866 PKG. OF 1



AURALLOY® WELDING PRODUCTS



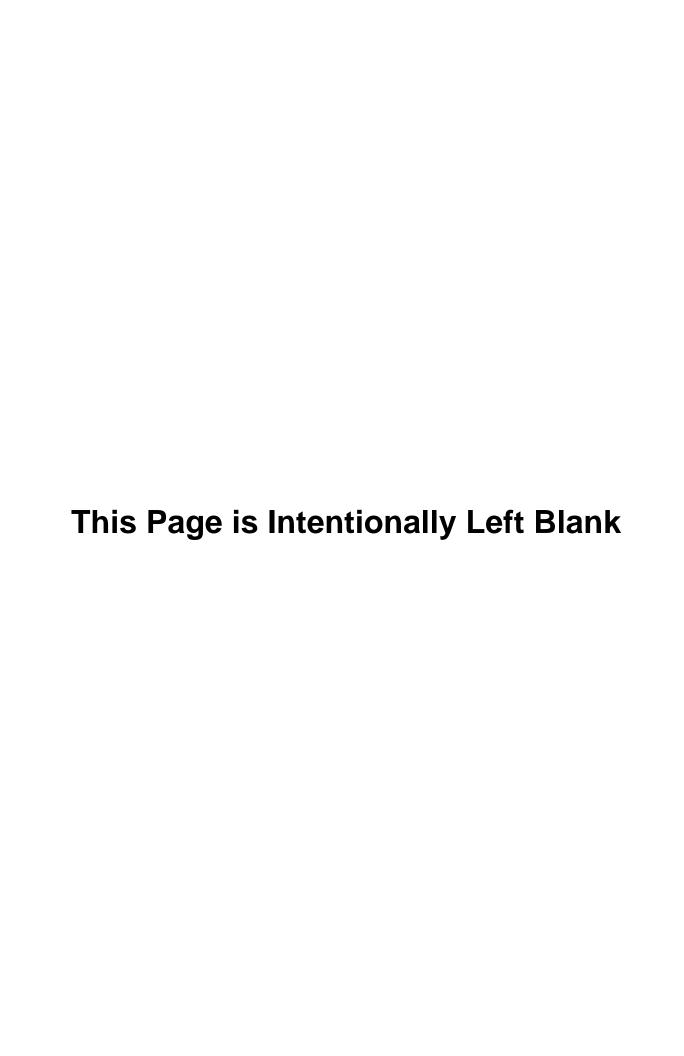
FEATURES:

- 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.





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

- Sheet Metal
- · Galvanized, Painted, Rusted and Dirty Steels
- 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



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, inclu-ding 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
- Pressure Tubing
- Boilers 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



HIGHEST STRENGTH UNIVERS STEEL ELECTRODE

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

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

URALLOY 225-MIG D) ESEARCH

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.

TYPICAL APPLICATIONS: • General shop applications with poor fit-up or rusty, oily plates

MILD STEEL WELDING WIRE **ALL POSITIONS**

· 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 (Flectrode Positive, Reverse Polarity)

ı	This product requires a sh	nielding gas: CO ₂ and/or CO ₂ mix.	Welding Current: DECP (Electrod	le Positive, Reverse Polarity)
	SPOOLED		.035	
1	AMPERAGE		100-150	
	PART	а	8727	



FEATURES:

Excellent heat, cracking and fatigue resistance and expansioncontraction 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
- · Oil and Gas Refineries
- Food/Beverage Processing Machinery Marine and Aircraft Repairs
- Chemical Mixing and Storage Equip.
- Joining Unknown Steels
- Construction Equipment Repairs
- · Research Laboratory Equipment

TECHNICAL DATA:

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

HIGH STRENGTH UNIVERSAL BARE STEEL ROD

FOR TORCH AND TIG WELDING

WELDING TECHNIQUES FOR TIG APPLICATIONS:

METAL		TUNGSTEN	ARGO	N FLOW	HELIUN	I FLOW	ALLOY
THICKNESS	AMPS	DIAMETER	CFH	PSI	CFH	PSI	DIA.
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, overlayed 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	i 8729	8730



VERTICAL STEEL **ELECTRODE**



· Shoval buckets

Spring leaves

Transmission

Truck frames

Valve seats

Wear plates

Wheels

Thrust bearings

Sprockets

shafts

Splines

Spokes

Tools

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

- Kevwavs Motor chocks
- Pinions
- Pins
- Pipes Propellars
- Pulleys
- Punches
- Pulverizers
- Reamers
- Rollers
- Rotor blades
- Shafts

- Shock
- Wobblers absorbers · Worm gears
- SIZE 3/32 1/8 35-70 60-110 **AMPERAGE** 8718 8719



ADVERSE CONDITIONS MILD STEEL ELECTROD



HIGH TENSILE STRENGTH WELDING OF ALL COMMON MILD STEELS

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	i 8852	i 8853



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

SIZE	1/8
AMPERAGE	90-150
PART	a 8713



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 crators and remove slag between passes.

UNIVERSAL STAINLESS STEEL ELECTRODE



HIGH HEAT AND CORROSION RESISTANT

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.

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



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.

UNIVERSAL STAINLESS STEEL BARE ROD



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

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



SPECIAL VERTICAL POSITION STAINLESS STEEL ELECTRODE



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 magic. 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.

SIZE	3/32	1/8
AMPERAGE	60-80	90-110
PART	8737	8738



FULLY MACHINABLE CAST IRON ELECTRODE



HIGHEST QUALITY ELECTRODE FOR JOINING ALL GRADES OF CAST IRON

FFATURES:

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



NON-CONDUCTIVE FLUX COATE

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

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	8746	8747



COPPER CLAD "TRI-METAL" CORED CAST IRON ELECTRODE



PROPRIETARY COPPER-NICKEL-IRON DEPOSIT CHEMISTRY

FFATURES:

Unique copper plated core wire provides unequaled cast iron welding performance. High efficiency weld metal transfer eliminates electrode overheating. Ultimate combination of software, 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

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

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	└ 8724	L 8725	L 8726



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.

TECHNICAL DATA:

Tensile Strength: 15,000 PSI

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

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

JRALLOY 600 "WHITE LIGHTNING" **ESEARCH**

ALL POSITION ALUMINUM ELECTRODE



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

FFATURES:

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 Loading ramps and docks
- Pipe railings, bannisters, stairs, diamond plate
- Irrigation piping
- Engine and motor blocks
- Traffic light bases, highway signs and supports
- 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
- Ladders
 - Utensiles Rails

• Tanks

Sheaves

- Beverage Cases Pulleys
- Vats

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

SIZE	1/8
PART	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
- Furniture Structural Parts Housings

WELDING TECHNIQUES:

Guard Rails

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.

SIZE	1/16	3/32	1/8
PART	8750	8751	8752

JRALLOY 630

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. Noncorrosive 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

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



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.

SIZE	1/16 x 18" PINK FLUX
PART	8786



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, wearresistant 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.

SIZE	3/32	1/8
PART	i 8755	8756



SELF-FLUXING, NON-FUMING STEEL WIRE

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

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.

TECHNICAL DATA:

Tensile Strength: 70,000 PSI

TYPICAL APPLICATIONS:

- Tanks
- Shafts
- Brackets
- Vats • Frames
- Machinery Guards Wire Mesh

- Hoods Sheet Metal

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.

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



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	i 8765	8766	ⁱ 8767



HIGH STRENGTH SILICON **BRONZE BRAZING ALLOY**

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

Joins copper, copper-silicon and copper-zinc based metals to themselves or to mild or galvanized steel. Highly corrosion reistant. Eliminates "burnthrough" 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
- Valves and Seats
- Castings
- Tubing Fittings
- Marine Repairs
- · Joints and overlays on steel, copper, brass, bronze, naval brass and galvanized sections

SIZE	1/16	3/32
PART	8770	8771



"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	i 8860	ⁱ 8861	i 8862



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.

SIZE	1/8	5/32
AMPERAGE	80-135	120-160
PART	i 8735	i 8736



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.

SIZE	1/4 x 18"
PART	j 8739



HOLD-IT[™] JIGGING / HEAT DAM PUTTY

HOLD-IT

- 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 jigging putty, treat each part to be held separately by placing in individual mounds of putty. Wipe off and clean with water.

SIZE	2 LB. CONTAINER			
PART	А 8800			



BRAZING/ SOLDERING FLUXES

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, mallable iron, copper, brass, bronze and steel. For use in applications not requiring specialized fluxes.

	500 FLUX 620 FL		700 FLUX	825 FLUX
SIZES	1 Pint Bottle	6 oz. Jar	1 lb. Jar	8 oz. Jar
PART	А 8787	А 8790	А 8796	а 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.	Α	8867
Vertical	10*	16 oz.	Α	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



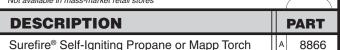


DESCRIPTION	PART	
Multi-Angle Clamping Welding Magnet	А	8869

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



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.	Α	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

	SECTION N. L. A.
DESCRIPTION	PART
SOLDER GUARD – 9" x 12"	A 66370

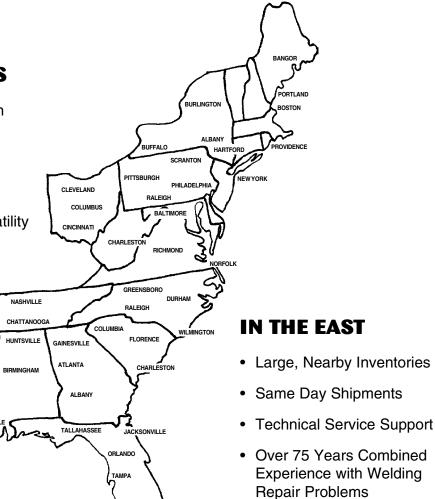




SUPERIOR PERFORMANCE WELDING PRODUCTS DESIGNED TO SOLVE THE MAINTENANCE AND REPAIR WELDERS PROBLEMS

AURALLOY PRODUCTS

- Make Welding Easier, Even on Inadequate Equipment
- Saves Your Company Money
- Eliminate Large Inventories
- Provide the Qualifty and Versatility to Reduce Down-Time
- Solves YOUR Problems



AURALLOY

QUALITY, SIMPLICITY AND SERVICE THAT WILL PUT MAINTENANCE AND REPAIR POWER BACK IN YOUR SHOP — NOW!

Auralloy improves the ability of mechanics with limited welding experience and enables the highly skilled welder to do an even better job by:

- Welding metals of unknown analysis
- Welding through Paint, Rust, Grease and Oil when cleaning is normally required
- Welding without Pre-Heat in most applications
- Salvaging expensive parts that are now being scrapped
- No Guesswork, the right rod for the job everytime

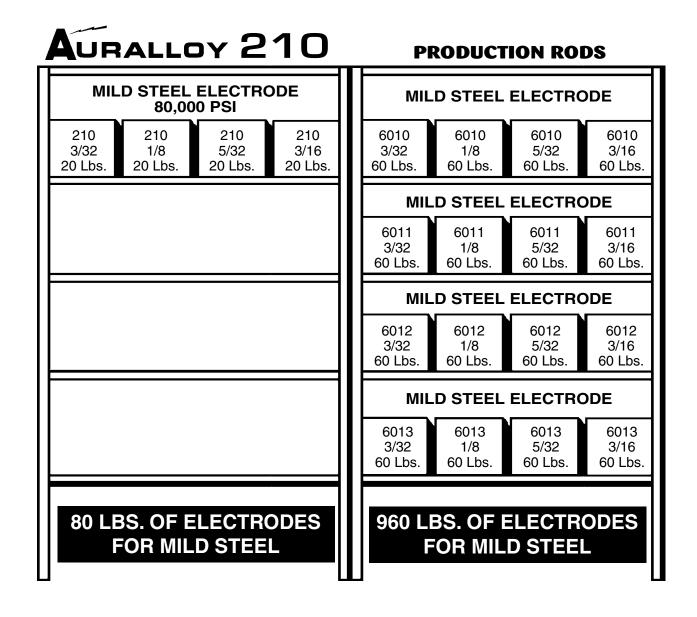
Our customers benefit from Auralloy's performance with:

- Reduced Downtime
- Extended Repair Life
- Increased Performance
- Ease of Application
- Decreased Costs, by eliminating duplication.

WHAT DO WE MEAN BY DUPLICATION?

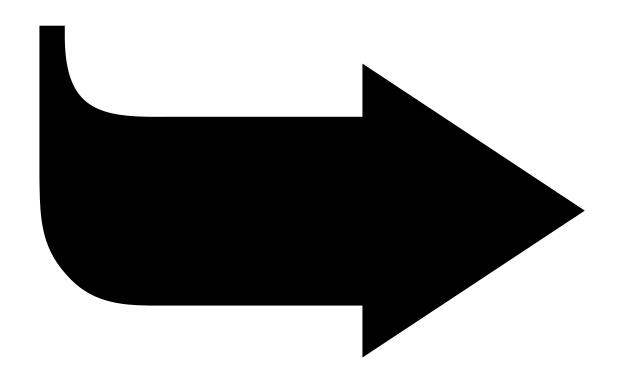
THE AURALLOY ADVANTAGE

When you compare the products offered by production welding rod manufacturers, you will find that they each offer up to four products, with different numbers or colors that are meant to do the same job. This is **DUPLICATION**, and results in overstock. Auralloy provides you with one product that replaces all four, eliminating the excessive dollar waste. To further illustrate our point, compare and save money.



NO MORE CONFUSION The Right Rod Every Time

Here are the products that will do the job for you . . .





WELDING ELECTRODES



The Finest Maintenance and Repair Electrodes Available

AURALLOY RESEARCH • 100 DaVINCI DRIVE, BOHEMIA, NY 11716



HIGH TENSILE STRENGTH ARC WELDING OF ALL COMMON MILD STEELS

- ➤ SUPERIOR ALL POSITION DESIGN —
 FOR WELDING VERTICAL, HORIZONTAL AND OVERHEAD APPLICATIONS.
- ➤ QUICK SOLIDIFICATION —

 MAKES THIS ELECTRODE IDEAL FOR BOTH POOR AND GOOD FIT UP WORK.
- ➤ INSTANT ARC AND NON-STICKING—
 PROVIDES FOR EASY APPLICATION AND WELL FORMED FILLETS.
- ➤ NO SPATTER AND EASILY REMOVED SLAG ASSURES A PROFESSIONAL QUALITY FINISH.
- ➤ WELDS THRU RUSTY, DIRTY, OILY & PAINTED SURFACES SAVING TIME, MONEY AND LABOR.

APPLICATIONS

- Joining angle iron, channel, "T", perforated steel sheet, expanded metal, sheet metal and all other shapes and forms of mild steel used in maintenance.
- Repairing and fabricating machine guards, covers, housings and ducts.
- Welding floor plate, diamond plate, black iron, bulkheads and partitions.

1	SPECIFICATIONS				
	SIZE	<u>P/N</u>	AMPERAGE	TENSILE STRENGTH: 80,000 psi	
l	3/32"	8700	50-100	ELONGATION: 29%	
l	1/8"	8701	70-126	CURRENT: AC or DC	
	5/32"	8702	90-160	POSITION: All	

For All Types of Maintenance and Repair Welding of Mild Steel



FEATURES

Ideal for all position welding including vertical and overhead applications. 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.

- Welds on any shape or thickness of mild steel
- Low heat eliminates burn through
- High strength welds with deep penetration
- Easy application, no sticking even at low amps
- Welds equally well on AC or DC, either polarity

WELDING TECHNIQUES

Use any constant current stick welding power source regardless of open circuit voltage, both AC or DC. Clean surface. Use any technique desirable — short, medium or long arc; stringer beads or weave beads — in all positions. Remove slage between passes.

WARNING

Protect yourself and others. Read and understand this label. FUMES and GASES can be dangerous to your health. ARC RAYS can injure eyes and burn skin. ELECTRIC SHOCK can kill.

- Read and understand the manufacturer's instructions and your employer's safety practices.
- Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- Wear correct eye, ear and body protection.
- · Do not touch live electrical parts.
- See American National Standard Z49.1. Safety in Welding and Cutting published by the American Welding Society, 550 North LeJeune Road, Miami, Florida, 33135: OSHA Safety and Health Standards, 29 CFR 1910, available from the U.S. Government Printing Office, Washington, D.C. 20402.

Superior Performance with Exceptional Versatility

100693



SUPERIOR STRENGTH WITH EXCELLENT MACHINABILITY

- ➤ ALL POSITION DESIGN —
 FOR WELDING PASS-ON-PASS IN ANY POSITION WITHOUT CHIPPING OF SLAG
- ➤ A UNIQUE COMBINATION OF STRENGTH AND DUCTILITY —
 FOR HIGH STRENGTH WELDS THAT WON'T CRACK
- ➤ RAPID DEPOSITION —
 FOR EASY WEAVE AND STRINGER TYPE WELDS
- ➤ HIGH MOISTURE RESISTANCE —
 ELIMINATES UNDERBEAD CRACKS AND PRE-HEATING OF WELD AREA
- ➤ EXCEPTIONAL MACHINEABILITY —
 SAVES MONEY IN MACHINING TIME
- ➤ NO SPATTER AND EASILY REMOVED SLAG —
 ASSURES A SUPERIOR QUALITY FINISH AND LESS CLEAN UP

HIGH STRENGTH APPLICATIONS

- Truck Body Liners
- Chutes
- Articulated Loaders
- Earth Moving Equipment
- Loading Platforms
- Crane Boom Tips
- Bucket and Boom Front Loader
- Fan Blades
- Wear Plates
- Shovel Boom
- Fork Lifts
- Shutter Car ChassisFifth Wheel Plates
- Dragline Buckets
- Drilling Barges
- Dilling barges
- Dipper Buckets
- Oil Rigs

- Bulldozers
- Liquid Gas Tanks
- Surge Bin Coal Diverter
- Crawler Frame
- Drilling Masts

SPECIFICATIONS

SIZE	<u>P/N</u>	AMPERAGE	TENSILE STRENGTH: 115,000 psi
3/32"	8705	80-110	ELONGATION: 28%
1/8"	8706	110-150	CURRENT: DC Reverse Polarity
5/32"	8707	140-210	POSITION: All
3/16"	8708	200-280	HARDNESS: B.H.N. 237

High Strength, Crack-Free Welds Every Time



FEATURES

A special electrode formulated and developed to provide non-cracking high physical properties for welding of low alloy high strength steels, including Corten, T-1, HY-80 and Mayarir. Welds pass-over-pass without chipping slag.

- Produces welds of x-ray quality
- One electrode covers a wide variety of steels
- Welds "tramp" steels normally considered unweldable
- · No spatter means less clean up time
- Flame-cuttable electrode
- Easy re-strike

- Can be used in all positions
- Dense deposits eliminates rework
- Slag is easily removed
- Excellent for build-up prior to hard facing

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.

WARNING

Protect yourself and others. Read and understand this label. FUMES and GASES can be dangerous to your health. ARC RAYS can injure eyes and burn skin. ELECTRIC SHOCK can kill.

- Read and understand the manufacturer's instructions and your employer's safety practices.
- Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- Wear correct eye, ear and body protection.
- · Do not touch live electrical parts.
- See American National Standard Z49.1. Safety in Welding and Cutting published by the American Welding Society, 550 North LeJeune Road, Miami, Florida, 33135: OSHA Safety and Health Standards, 29 CFR 1910, available from the U.S. Government Printing Office, Washington, D.C. 20402.

Superior Strength, Versatility and Ease of Application . . . The Best Choice for the Maintenance Welder



WELDS ALL TYPES AND GRADES OF SIMILAR AND DISSIMILAR STEELS

- ➤ WELDS ALL STEELS —
 REDUCING WELDING ROD INVENTORY AND ELIMINATING GUESSWORK.
- ➤ EXCEPTIONALLY HIGH TENSILE STRENGTH —
 FOR ADDED CONFIDENCE IN ALL HIGH STRENGTH APPLICATIONS.
- ➤ SUPERIOR FLOWING CHARACTERISTICS —
 PRODUCE SMOOTH FILLETS AND CRACK-FREE, NON-POROUS DEPOSITS.
- > SELF-LIFTING SLAG —
 FOR PROFESSIONAL FINISH WITH MINIMUM CLEAN UP.

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

SPECIFICATIONS				
SIZE	<u>P/N</u>	AMPERAGE	TENSILE STRENGTH: 128,000 psi	
1/16"	8709	30-40	ELONGATION: 36%	
3/32"	8710	40-90	CURRENT: AC or DC	
1/8"	8711	70-110	POSITION: All	
5/32"	8712	90-160		

The Ultimate Strength, Multi-Purpose Steel Welding Electrode



FEATURES

- Can run at lower amperage for steels prone to cracking
- Easily applied in all positions
- Eliminates undercutting
- Stronger than stainless rods
- High shock resistance
- · Minimum deposit with maximum weld strength
- Smooth, even fillets without spatter
- Welds any steel and any combination of dissimilar steels
- Retains elongation properties by not "work-hardening" significantly

WELDING TECHNIQUES

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

WARNING

Protect yourself and others. Read and understand this label. FUMES and GASES can be dangerous to your health. ARC RAYS can injure eyes and burn skin. ELECTRIC SHOCK can kill.

- Read and understand the manufacturer's instructions and your employer's safety practices.
- · Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- Wear correct eye, ear and body protection.
- Do not touch live electrical parts.
- See American National Standard Z49.1. Safety in Welding and Cutting published by the American Welding Society, 550 North LeJeune Road, Miami, Florida, 33135: OSHA Safety and Health Standards, 29 CFR 1910, available from the U.S. Government Printing Office, Washington, D.C. 20402.

A Superior Combination of Tensile Strength and Elongation



STEEL ELECTRODE FOR TORCH AND TIG WELDING

- ➤ WELDS ALL STEELS —
 REDUCING WELDING ROD INVENTORY AND ELIMINATING GUESSWORK
- ➤ EXCEPTIONALLY HIGH TENSILE STRENGTH —
 FOR ADDED CONFIDENCE IN ALL HIGH STRENGTH APPLICATIONS
- > SUPERIOR FLOWING CHARACTERISTICS PRODUCING A NON-POROUS, CRACK-FREE DEPOSIT
- ➤ EASILY JOINS DISSIMILAR STEELS —
 WHILE LOW TEMPERATURE APPLICATION ALLOWS THIN METAL JOINING, OVERLAYS
 OR REPAIRS

HIGH STRENGTH APPLICATIONS

- Hospital Equipment
- Food/Beverage Processing Machinery
- Chemical Mixing and Storage Equipment
- Construction Equipment Repairs

- Research Laboratory Equipment
- · Oil and Gas Refineries
- Marine and Aircraft Repairs
- Joining Unknown Steels

1	SPECIFICATIONS					
	SIZE	P/N	AMPERAGE	TENSILE STRENGTH: 128,000 psi		
	1/16"	8728	60-90	ELONGATION: 36%		
	3/32"	8729	150-210	CURRENT: DC straight polarity		
l	1/8"	8730	200-250			
'	(

Ultimate Strength, Multi-Purpose Torch or TIG Steel Welding Rod



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.

WELDING TECHNIQUES

For torch application, a small tip on an oxyacetylene torch is recommended. FLUX should be painted along the area to be joined, overlayed 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.

WARNING

Protect yourself and others. Read and understand this label. FUMES and GASES can be dangerous to your health. ARC RAYS can injure eyes and burn skin. ELECTRIC SHOCK can kill.

- Read and understand the manufacturer's instructions and your employer's safety practices.
- Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- Wear correct eye, ear and body protection.
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A Superior Combination of Tensile Strength and Elongation

MILD STEEL WELDING WIRE

- ➤ WELDS ALL STEELS THAT CONTAIN 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 STRENGTH (AS WELDED) OF ALL THE PLAIN
 CARBON STEEL WIRES.
- ➤ REQUIRES A SHIELDING GAS: CO₂ AND/OR CO₂ 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

SPECIFICATIONS

SPOOLED P/N AMPERAGE TENSILE STRENGTH: 95,000 psi .035 8727 100-150 **ELONGATION IN 2°:** 25%

WELDING CURRENT: DECP

(Electrode Positive, Reverse Polarity)

Requires a Shielding Gas: CO₂ and/or CO₂ Mix

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.
- 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: CO₂ and/or CO₂ mix.

WELDING TECHNIQUES

Always clean weld joint with a wire brush or grinding wheel. Always insure good fit up. Direct current electrode is used for all modes of metal transfer. Suited for spray or pulse spray general purpose welding using CO2 gas as a shielding medium. Recommended for single or multi-pass welds on low carbon steel plate, tubing, piping, structural members, steel castings, pressure vessels, etc.

WARNING

Protect yourself and others. Read and understand this label. FUMES and GASES can be dangerous to your health. ARC RAYS can injure eyes and burn skin. ELECTRIC SHOCK can kill.

- Read and understand the manufacturer's instructions and your employer's safety practices.
- Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- Wear correct eye, ear and body protection.
- Do not touch live electrical parts.
- See American National Standard Z49.1. Safety in Welding and Cutting published by the American Welding Society, 550 North LeJeune Road, Miami, Florida, 33135: OSHA Safety and Health Standards, 29 CFR 1910, available from the U.S. Government Printing Office, Washington, D.C. 20402.

All Positions



VERTICAL POSITION HIGH STRENGTH ELECTRODE FOR DISSIMILAR STEELS

- ➤ 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.

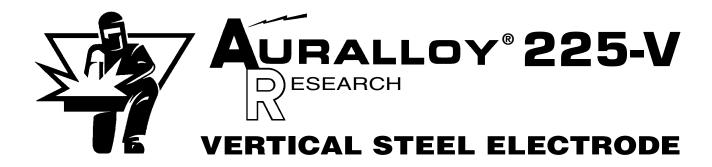
HIGH STRENGTH APPLICATIONS

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

SPECIFICATIONS

SIZE	P/N	AMPERAGE	TENSILE STRENGTH: 128,000 psi
3/32"	8718	35-70	ELONGATION: 32%
1/8"	8719	60-110	CURRENT: DC Reverse Polarity or AC
			POSITION: All

Ideal for Poor Fit Up Joints in All Positions



FEATURES

- Unique "fast-freeze" coating simplifies vertical down and up welding
- · Runs at lower amperage for steels prone to cracking
- Easily applied in all positions
- Eliminates undercutting
- Stronger than stainless rods
- High shock resistance
- · Minimum deposit with maximum weld strength
- · Smooth, even fillets without spatter
- Welds any steel and any combination of dissimilar steels
- · Retains elongation properties by not "work-hardening" significantly

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.

WARNING

Protect yourself and others. Read and understand this label. FUMES and GASES can be dangerous to your health. ARC RAYS can injure eyes and burn skin. ELECTRIC SHOCK can kill.

- Read and understand the manufacturer's instructions and your employer's safety practices.
- · Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- Wear correct eye, ear and body protection.
- · Do not touch live electrical parts.
- See American National Standard Z49.1. Safety in Welding and Cutting published by the American Welding Society, 550 North LeJeune Road, Miami, Florida, 33135: OSHA Safety and Health Standards, 29 CFR 1910, available from the U.S. Government Printing Office, Washington, D.C. 20402.

A Superior Combination of Tensile Strength and Elongation



HIGH TENSILE STRENGTH WELDING OF ALL COMMON MILD STEELS

- > SUPERIOR ALL POSITION DESIGN —
 FOR WELDING VERTICAL, HORIZONTAL AND OVERHEAD APPLICATIONS
- > WELDS THRU RUSTY, GREASY, POOR FITTING JOINTS IN ALL POSITIONS —

SAVING TIME, MONEY AND LABOR

- ➤ EXCEPTIONAL FLEXIBILITY —
 ELECTRODE CAN BE BENT WITHOUT FLUX CHIPPING
- ➤ FASTER AND EASIER TO USE —
 SLAG CAN BE WELDED OVER WITHOUT REMOVAL
- ➤ QUICK SOLIDIFICATION —
 WELDS THROUGH 1/2 INCH OF SURFACE CONTAMINATION WITHOUT POROSITY

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.

1	SPECIFICATIONS					
	SIZE	<u>P/N</u>	AMPERAGE	TENSILE STRENGTH: 88,000 psi		
	3/32"	8850	25-75	ELONGATION: 28%		
	1/8"	8851	35-125	CURRENT: DC Reverse, Straight or AC		
	5/32"	8852	50-160	POSITION: All		
	3/16"	8853	75-200			

Ideally Suited for Difficult Maintenance Repairs



MILD STEEL ELECTRODE

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 inch (12mm) of surface contamination without porosity
- Can bridge gaps as wide as 3/8 inch (9mm)
- Electrode can be bent without flux chipping
- 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.

WARNING

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- · Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- Wear correct eye, ear and body protection.
- · Do not touch live electrical parts.
- See American National Standard Z49.1. Safety in Welding and Cutting published by the American Welding Society, 550 North LeJeune Road, Miami, Florida, 33135: OSHA Safety and Health Standards, 29 CFR 1910, available from the U.S. Government Printing Office, Washington, D.C. 20402.

Superior Performance With Exceptional Versatility

HIGH HEAT AND CORROSION RESISTANCE

- > EXTRA HIGH STRENGTH WELDS THAT DO NOT SPALL
- OUTWEARS ORDINARY HARDFACING ALLOYS IN IMPACT CONDITIONS AS MUCH AS 10 TO 1

APPLICATIONS

• For joining and repairing steel and manganese steel parts used throughout the railroad, construction and related industries

SPECIFICATIONS

SIZE P/N AMPERAGE TENSILE STRENGTH: 119,000 psi 1/8" 8713

90-150 **ELONGATION:** 41%

CURRENT: AC or DC Reverse Polarity

HARDNESS: Brinell 200-520, Rockwell C10-C50

For Joining and Surfacing Steels

IMPACT RESISTANT ELECTRODE

FEATURES

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

WELDING TECHNIQUES

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

WARNING

Protect yourself and others. Read and understand this label. FUMES and GASES can be dangerous to your health. ARC RAYS can injure eyes and burn skin. ELECTRIC SHOCK can kill.

- Read and understand the manufacturer's instructions and your employer's safety practices.
- Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- Wear correct eye, ear and body protection.
- Do not touch live electrical parts.
- See American National Standard Z49.1. Safety in Welding and Cutting published by the American Welding Society, 550 North LeJeune Road, Miami, Florida, 33135: OSHA Safety and Health Standards, 29 CFR 1910, available from the U.S. Government Printing Office, Washington, D.C. 20402.

For Joining and Surfacing Steels



HIGH HEAT AND CORROSION RESISTANCE

> 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

APPLICATIONS

- Furnace Parts 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

SPECIFICATIONS						
SIZE	P/N	AMPERAGE	TENSILE STRENGTH: 95,000 psi			
1/16"	8714	30-60	ELONGATION: 45%			
3/32"	8715	60-90	CURRENT: AC or DC Reverse Polarity			
1/8"	8716	90-120	POSITION: All			
5/32"	8717	120-160				

For Maintenance and Repair Applications



UNIVERSAL STAINLESS STEEL ELECTRODE

FEATURES

- Corrosion and heat resistance superior to ordinary stainless steel electrodes
- Smooth deposits with minimum susceptibility to carbide precipitation and cracking
- Easy to use no spatter, fast deposition rate, easy slag removal
- · Used on most stainless steel applications assigned for maintenance and repair
- Excellent for joining or overlays on most grades of stainless steel, carbon and alloy steel and stainless steel of unknown analysis.

WELDING TECHNIQUES

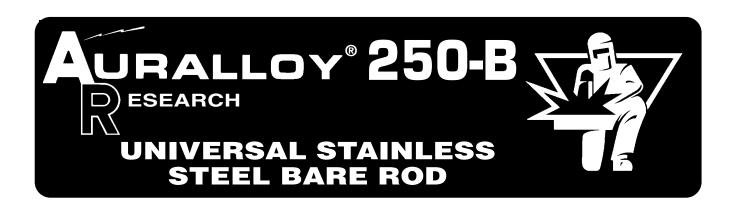
Deposit at low amperage, holding a close arc. Stringer beads are preferred, but electrode can be weaved up to 3 times if the application requires. For filleting, raise amperage 10% and drag the electrode, maintaining light pressure. Back-whip crators, removing slag between passes.

WARNING

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- Read and understand the manufacturer's instructions and your employer's safety practices.
- · Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- Wear correct eye, ear and body protection.
- · Do not touch live electrical parts.
- See American National Standard Z49.1. Safety in Welding and Cutting published by the American Welding Society, 550 North LeJeune Road, Miami, Florida, 33135: OSHA Safety and Health Standards, 29 CFR 1910, available from the U.S. Government Printing Office, Washington, D.C. 20402.

The Only Stainless Steel Electrode for the Maintenance and Repair Welder



STAINLESS STEEL ELECTRODE FOR TORCH AND TIG WELDING

- ➤ EASY TO WORK STAINLESS WIRE —
 PROVIDES SUPERIOR RESISTANCE TO CORROSION, HEAT AND ABRASION
- ➤ WELDS ALL TYPES OF STAINLESS STEEL —
 REDUCING WELDING ROD INVENTORY AND ELIMINATING GUESSWORK
- ➤ HIGH TENSILE STRENGTH —
 FOR ADDED CONFIDENCE IN ALL HIGH STRENGTH APPLICATIONS
- > SUPERIOR FLOWING CHARACTERISTICS PRODUCING A NON-POROUS, CRACK-FREE DEPOSIT

HIGH STRENGTH APPLICATIONS

- Chemical Mixing and Storage Equipment
- Construction Equipment Repairs
- Food and Beverage Processing Machinery
- Marine and Aircraft Repairs

- Research Laboratory Equipment
- · Oil and Gas Refineries
- Hospital Equipment

SPECIFICATIONS					
SIZE	P/N	TENSILE STRENGTH: 86,000 psi			
1/16"	8740				
3/32"	8741				
1/8"	8742				

Multi-Purpose Torch or TIG Stainless Steel Welding Rod



- 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.

WARNING

Protect yourself and others. Read and understand this label. FUMES and GASES can be dangerous to your health. ARC RAYS can injure eyes and burn skin. ELECTRIC SHOCK can kill.

- Read and understand the manufacturer's instructions and your employer's safety practices.
- · Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- Wear correct eye, ear and body protection.
- Do not touch live electrical parts.
- See American National Standard Z49.1. Safety in Welding and Cutting published by the American Welding Society, 550 North LeJeune Road, Miami, Florida, 33135: OSHA Safety and Health Standards, 29 CFR 1910, available from the U.S. Government Printing Office, Washington, D.C. 20402.

Universal Stainless Steel Electrode For Torch and TIG Welding



HIGH HEAT AND CORROSION RESISTANCE

> 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

APPLICATIONS

- Especially suited for vertical down and up welding of thin to medium gauge molybdenum bearing stainless steels
- Furnace Parts 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

SPECIFICATIONS						
SIZE	P/N	AMPERAGE	TENSILE STRENGTH: 80,000 psi			
3/32"	8737	60-80	ELONGATION: 42%			
1/8"	8738	90-110	CURRENT: DC Reverse Polarity or AC			
(POSITION: All			

For Maintenance and Repair Applications

- Unique "fast-freeze" coating simplifies vertical down and up welding.
- Ideal for poor fit up joints in all positions.
- Controlled weld puddle allows for filling holes on stainless steels.

WELDING TECHNIQUES

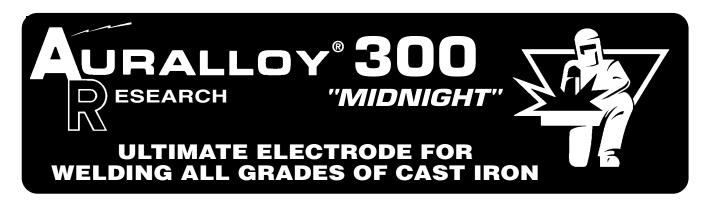
For vertical welding, set amperage at high end of the scale. Maintain a sharp angle with the electrode pointing upward. Whip the electrode quickly back and forth while moving up or down. Electrode may show a red color from the excess amperage which is normal.

WARNING

Protect yourself and others. Read and understand this label. FUMES and GASES can be dangerous to your health. ARC RAYS can injure eyes and burn skin. ELECTRIC SHOCK can kill.

- Read and understand the manufacturer's instructions and your employer's safety practices.
- · Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- Wear correct eye, ear and body protection.
- Do not touch live electrical parts.
- See American National Standard Z49.1. Safety in Welding and Cutting published by the American Welding Society, 550 North LeJeune Road, Miami, Florida, 33135: OSHA Safety and Health Standards, 29 CFR 1910, available from the U.S. Government Printing Office, Washington, D.C. 20402.

Vertical Position Stainless Steel Electrode for the Maintenance and Repair Welder



STRONG, RELIABLE REPAIRS OF HOUSINGS AND CASTINGS

- ➤ SUPERIOR ALL POSITION DESIGN —
 FOR WELDING PASS-ON-PASS, WITHOUT CHIPPING OF SLAG
- ➤ ULTIMATE TENSILE STRENGTH —
 ASSURES CRACK-FREE WELDS ON ALL CAST IRON
- ➤ OUTSTANDING ELONGATION —
 PROVIDES BUILT-IN STRESS RELIEF, REDUCING WELD FAILURES AND CRACKING
- ➤ NO PREHEATING REQUIRED —
 REDUCING TIME AND LABOR COSTS
- ➤ SUPER STRONG ARC DRIVE —
 FOR EASY PENETRATION OF CONTAMINATED CASTINGS
- ➤ UNIFORM, HIGH-LUSTER DEPOSITS —
 ASSURES A SUPERIOR QUALITY FINISH AND LESS CLEAN UP TIME

HIGH STRENGTH 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 and meehanite.
- Engine blocks, diesel heads, gear boxes, transmission housings, differentials, machine bases and presses.

SPECIFICATIONS						
SIZE	P/N	AMPERAGE	TENSILE STRENGTH: 70,000 psi			
3/32"	8720	50-80	ELONGATION: 40%			
1/8"	8721	70-110	CURRENT: AC or DC			
5/32"	8722	100-140	On DC use Reverse Polarity			
			POSITION: All			

Highest Quality, Fully Machinable Cast Iron Electrode . . . The Best Choice for the Maintenance Welder

- Exceptional machinability easily ground, filed or shaped
- Welds through paint, rust, grease and oil without porosity
- · High resistant to hydrostatic pressure

WELDING TECHNIQUES

Remove loosely adhering material in area to be welded (use Auralloy 400). Searing of the surface is highly recommended. Cracks should be beveled after piercing holes at either end to prevent propagation. Preheating is not required unless casting is unusually thick. Adjust the welding machine within the prescribed amperage range and deposit beads approximately 2" long. Skip and stagger to suit. Remove slag by lightly chipping and brushing. Linger momentarily over the final crater before extinguishing the arc.

WARNING

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- Read and understand the manufacturer's instructions and your employer's safety practices.
- · Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- Wear correct eye, ear and body protection.
- Do not touch live electrical parts.
- See American National Standard Z49.1. Safety in Welding and Cutting published by the American Welding Society, 550 North LeJeune Road, Miami, Florida, 33135: OSHA Safety and Health Standards, 29 CFR 1910, available from the U.S. Government Printing Office, Washington, D.C. 20402.

High Strength, Crack-Free Welding on All Cast Iron



STRONG, RELIABLE REPAIRS OF HOUSINGS AND CASTINGS

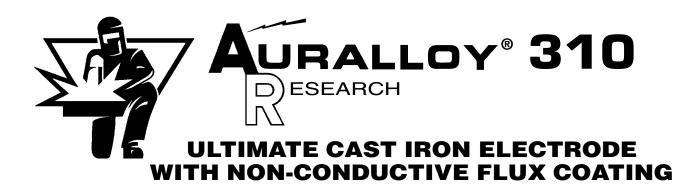
- ➤ UNIQUE, NON-CONDUCTIVE FLUX COATING —
 ALLOWS WELDING IN TIGHT SPOTS WITHOUT ARCING ON SIDE OF ROD
- > SUPERIOR ALL POSITION DESIGN —
 FOR WELDING PASS-ON-PASS, WITHOUT CHIPPING OF SLAG
- ➤ ULTIMATE TENSILE STRENGTH —
 ASSURES CRACK-FREE WELDS ON ALL CAST IRON
- ➤ OUTSTANDING ELONGATION —
 PROVIDES BUILT-IN STRESS RELIEF, REDUCING WELD FAILURES AND CRACKING
- ➤ NO PREHEATING REQUIRED —
 REDUCING TIME AND LABOR COSTS
- ➤ **SUPER STRONG ARC DRIVE** —
 FOR EASY PENETRATION OF CONTAMINATED CASTINGS
- ➤ UNIFORM, HIGH-LUSTER DEPOSITS —
 ASSURES A SUPERIOR QUALITY FINISH AND LESS CLEAN UP TIME

HIGH STRENGTH 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 and meehanite.
- Engine blocks, diesel heads, gear boxes, transmission housings, differentials, machine bases and presses.

SPECIFICATIONS						
<u>P/N</u>	AMPERAGE	TENSILE STRENGTH: 55,000 psi				
8746	60-90	CURRENT: AC or DC Reverse Polarity				
8747	85-120	POSITION: All				
	8746	P/N AMPERAGE 8746 60-90	P/N AMPERAGE TENSILE STRENGTH: 55,000 psi 8746 60-90 CURRENT: AC or DC Reverse Polarity			

Highest Quality Electrode for Joining All Grades of Cast Iron



- 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
- Will not arc on side of electrode when contacting metals
- Exceptional machinability easily ground, filed or shaped
- Welds through paint, rust, grease and oil without porosity
- High resistant to hydrostatic pressure

WELDING TECHNIQUES

Remove loosely adhering material in area to be welded (use Auralloy 400). Searing of the surface is highly recommended. Cracks should be beveled after piercing holes at either end to prevent propagation. Preheating is not required unless casting is unusually thick. Adjust the welding machine within the prescribed amperage range and deposit beads approximately 2" long. Skip and stagger to suit. Remove slag by lightly chipping and brushing. Linger momentarily over the final crater before extinguishing the arc.

WARNING

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- Read and understand the manufacturer's instructions and your employer's safety practices.
- · Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- Wear correct eye, ear and body protection.
- Do not touch live electrical parts.
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High Strength, Crack-Free Welding on All Cast Iron



PROPRIETARY COPPER-NICKEL-IRON DEPOSIT CHEMISTRY

- ➤ UNIQUE COPPER PLATED CORE WIRE —
 PROVIDES UNEQUALED CAST IRON WELDING PERFORMANCE
- ➤ HIGH EFFICIENCY WELD METAL TRANSFER ELIMINATES ELECTRODE OVERHEATING
- ➤ ULTIMATE COMBINATION OF SOFTWARE, DUCTILITY AND TENSILE STRENGTH —

FOR EASE OF USE AND MAXIMUM STRESS RELIEF

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 post weld machining.

SPECIFICATIONS						
SIZE	P/N	AMPERAGE	TENSILE STRENGTH: 77,000 psi			
3/32"	8855	50-70	ELONGATION: 15%			
1/8"	8856	70-100	CURRENT: DC Reverse (+) or AC			
5/32"	8857	100-130	POSITION: Flat, Vertical Up, Horizontal,			
			Overhead			

Ultimate Combination of Softness, Ductility and Tensile Strength

CORED CAST IRON ELECTRODE

- Unique core wire for ultimate cast iron performance.
- 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.

WELDING TECHNIQUES

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

WARNING

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- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- Wear correct eye, ear and body protection.
- Do not touch live electrical parts.
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Suitable for All Weldable Cast Irons that Require Post Weld Machining



FOR RAPID METAL REMOVAL

- > SUPERIOR ALL POSITION DESIGN —
 QUICKLY REMOVES UNWANTED METAL WITHOUT GRINDING OR MACHINING
- ➤ WORKS WITH STANDARD ARC WELDING MACHINES —
 NO ACCESSORIES OR ATTACHMENTS NECESSARY
- ➤ SAFER AND EASIER TO USE —

 CAN BE USED WHERE TORCH CUTTING IS DIFFICULT OR IMPOSSIBLE
- ➤ EXCELLENT FOR PRE-WELD PREPARATION —

 EASILY PREPARES CRACKED AND FATIGUED METAL FOR WELDING
- ➤ LEAVES A CLEAN, SCALE-FREE SURFACE —
 ASSURING A PROFESSIONAL QUALITY FINISH WITHOUT GRINDING TO REMOVE CARBON DEPOSITS

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.

1	SPECIFICATIONS							
	SIZE	<u>P/N</u>	AMPERAGE	CURRENT: AC or DC Straight Polarity				
	3/32"	8724	90-170					
	1/8"	8725	150-300					
	5/32"	8726	175-400					
	(

The Maintenance and Repair Welders "Third Hand"



- Quickly prepares cracks and fatigued metal for welding.
- · Metal removal where cutting by torch is either difficult or impossible
- · A clean, scale-free surface which rarely requires further finishing
- Use on your present arc welding machine no additional accessories or attachments necesary.
- 3/32" diameter works on same machine adjustments as 1/8" steel welding rod . . . no need to adjust.

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.

WARNING

Protect yourself and others. Read and understand this label. FUMES and GASES can be dangerous to your health. ARC RAYS can injure eyes and burn skin. ELECTRIC SHOCK can kill.

- Read and understand the manufacturer's instructions and your employer's safety practices.
- Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- Wear correct eye, ear and body protection.
- Do not touch live electrical parts.
- See American National Standard Z49.1. Safety in Welding and Cutting published by the American Welding Society, 550 North LeJeune Road, Miami, Florida, 33135: OSHA Safety and Health Standards, 29 CFR 1910, available from the U.S. Government Printing Office, Washington, D.C. 20402.

Fastest, Most Economical Method of Removing Unwanted Metal Using a Common Welding Machine

AURALLOY® 500 ESEARCH SUPER STRENGTH SELF-FLUXING SILVER SOLDER

95% TIN 5% SILVER FLUX-CORED SOLDER ALLOY

- ➤ MELTS AT A LOW 430°F —
 ELIMINATING DISTORTION AND WEAKENING OF BASE MELT
- ➤ FAST, EASY HIGH STRENGTH DEPOSITS WITH SOLDER GUN, IRON OR TORCH
- ➤ **SELF-FLUXING** FOR ONE-STEP APPLICATION
- ➤ CONTAINS NO LEAD, CADMIUM OR ZINC —
 FOR SAFE USE AND COMPLIANCE WITH ALL PURE FOOD LAWS

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

1	SPECIFICATIONS				
	SIZE	<u>P/N</u>	<u>WEIGHT</u>		
	1/32"	8781	.6 oz. Disp. Tube	TENSILE STRENGTH: 15,000 psi	
	1/16"	8780	1.0 oz. Disp. Tube	MELTING TEMP.: 430°F	
	1/16"	8776	1/2 lb. Spool		
	1/16"	8775	1 lb. Spool		
	1/8"	8779	1/2 lb. Spool		
	1/8"	8778	1 lb. Spool		

The Ideal Maintenance Solder



- 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 convenient pocket-size dispenser.

SOLDERING TECHNIQUES

Heat both surfaces to be joined with solder gun, iron or torch. Touch end of solder wire to joint allowing solder to flow evenly into joint.

WARNING

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- · Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- · Wear correct eye, ear and body protection.
- Do not touch live electrical parts.
- See American National Standard Z49.1. Safety in Welding and Cutting published by the American Welding Society, 550 North LeJeune Road, Miami, Florida, 33135: OSHA Safety and Health Standards, 29 CFR 1910, available from the U.S. Government Printing Office, Washington, D.C. 20402.

95% Tin 5% Silver Flux-Cored Solder Alloy with Outstanding Strength



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

- ➤ LOW MELT COATING —
 ALLOWS FOR USE AS A TORCH BRAZING ALLOY
- ➤ UNUSUALLY SMOOTH ARC TRANSFER —
 FOR MINIMAL SPATTER AND CONSISTENT DEPOSITIONS
- > STABILIZED AND DE-OXIDIZED CORE WIRE —
 PREVENTS POROSITY
- > SPECIAL, BAKED-ON COATING —
 CONTROLS ALUMINUM OXIDE FORMATION AND ASSURES LONG SHELF LIFE
- ➤ EXCELLENT WELDABILITY —
 FOR EASY APPLICATION IN ALL POSITIONS INCLUDING VERTICAL AND OVERHEAD
- ➤ **STABLE ARC** FOR SMOOTH APPLICATION WITH NO SPATTER
- ➤ **DENSE DEPOSITS** —
 ASSURE FLATTER BEADS WITH NO POROSITY

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

SPECIFICATIONS

SIZE	<u>P/N</u>	AMPERAGE	TENSILE STRENGTH: 34,000 psi
1/8"	8731	70-110	CURRENT: DC Reverse Polarity
5/32"	8732	100-150	POSITION: All

Superior Performance With Exceptional Versatility



UNIVERSAL ALUMINUM ALLOY ELECTRODE

FEATURES

- Universal electrode welds all cast, wrought and extruded aluminum and aluminum allovs.
- Smooth arc transfer
- Minimum spatter
- Can also be used as a torch brazing alloy

WELDING TECHNIQUES

Remove oil and grease with wire brush or sand/grind 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 the recommended amperage range and reduce amperage as welding progresses and base metal absorbs heat. Feed the electrode quickly and move fast. When picking up each bead, weld into the previous crater before continuing.

WARNING

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- · Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- Wear correct eye, ear and body protection.
- Do not touch live electrical parts.
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Arc Welding of All Aluminum and Aluminum Alloys



GENERAL PURPOSE TORCH BRAZING OF ALL WELDABLE ALUMINUM

- > SPECIALLY ENGINEERED ALLOY WITH FLUX CORE —
 FOR FASTER, EASIER JOINING OF ALL ALUMINUM AND ALUMINUM ALLOYS.
- > EXCELLENT FOR OUT OF POSITION BRAZING AND BUILD-UP DEPOSITS —

PROVIDING DEEP PENETRATION IN TIGHT JOINTS

➤ LOW MELT TEMPERATURE —
FOR EASIER, FASTER TORCH BRAZING

APPLICATIONS

- Motor Housings
- Ladders
- Beverage Cases
- Tools
- Utensils

- Pulleys
- Tanks
- Rails
- Sheaves
- Vats

SPECIFICATIONS

SIZE P/N TENSILE STRENGTH: 30,000 psi 1/8" 8745

High Strength Deposits on Sheet, Wrought or Cast Aluminum



- Flux-cored aluminum alloy for high strength deposits at low temperatures.
- Superior results on all types of aluminum.
- A specially engineered alloy with flux core center for faster, easier application.
- Provides deep penetration in tight joints.
- Excellent for out of position brazing and build-up deposits.

WELDING TECHNIQUES

Clean weld area, removing plating or anodized finish. Leave gap approximately 1/16". 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.

WARNING

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- Read and understand the manufacturer's instructions and your employer's safety practices.
- Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone
 and the general area.
- Wear correct eye, ear and body protection.
- Do not touch live electrical parts.
- See American National Standard Z49.1. Safety in Welding and Cutting published by the American Welding Society, 550 North LeJeune Road, Miami, Florida, 33135: OSHA Safety and Health Standards, 29 CFR 1910, available from the U.S. Government Printing Office, Washington, D.C. 20402.

Ultimate Aluminum Maintenance Rod



FOR TORCH OR TIG WELDING

- ➤ 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 —
 ALLOWS FOR APPLICATION IN TIGHT FITS

APPLICATIONS

- Poles
- Guard Rails
- Frames
- Furniture
- Bus Bars
- Structural Parts
- Sign Posts
- Housings
- Tools
- Ladders
- Utensils
- Tubing

- Vats
- Tanks
- Rails
- Patterns
- Fixtures
- Truck Bodies
- Evaporators
- Castings
- Marine Equipment
- Pipe

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SIZE	<u>P/N</u>	TENSILE STRENGTH: 35,000 psi
1/16"	8750	
3/32"	8751	
1/8"	8752	

High Strength Aluminum Alloy



- 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.
- Excellent color match.

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.

WARNING

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- · Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- Wear correct eye, ear and body protection.
- Do not touch live electrical parts.
- See American National Standard Z49.1. Safety in Welding and Cutting published by the American Welding Society, 550 North LeJeune Road, Miami, Florida, 33135: OSHA Safety and Health Standards, 29 CFR 1910, available from the U.S. Government Printing Office, Washington, D.C. 20402.



PROPRIETARY BRAZING ROD FOR HIGH STRENGTH ALUMINUM REPAIR

- SUPERIOR STRENGTH AND ADHESION PROVIDES PERMANENT SEAL AND STRENGTH WHEN SUBJECTED TO EXTREME **PRESSURE**
- JOINTS STRONGER THAN PARENT METAL FOR STRENGTH AND DURABILITY
- ➤ LOW HEAT REQUIREMENT (PROPANE TORCH APPLICATION) IS IDEAL FOR FIELD INSTALLATIONS AND REPAIRS
- **➤ NON-CORROSIVE JOINTS** WILL NOT DETERIORATE IN SALT WATER ENVIRONMENTS

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 • Lawn Mowers • Doors/Windows • Exercise Equipment • Bicycles • Fishing Rods • Antiques and Metal Work

SPECIFICATIONS

MELTING RANGE: 715°F - 730°F **IMPACT STRENGTH:** SIZE

(Charpy) 4 ft. lbs. to break 1/4" bar **DENSITY: 25** 1/2 x 18" THERMAL CONDUCTIVITY:

ELONGATION: 3%

TENSILE STRENGTH: 47,000 .24 cal/cu.cm P/N HARDNESS: (Brinell 100) **COMPRESSION STRENGTH:** 60-75.000

SHEAR STRENGTH: 34,000 **CORROSION PENETRATION:** 8733

ELECTRICAL CONDUCTIVITY: 300 x 10 in 11-R (includes s/s wire 24.9% of cu **DUCTILITY:** Good brush P/N 41340)

No Specialty Equipment - No Flux or Scale - No Lead or Cadmium



- Joints stronger than parent metal
- Easy machining of welded areas
- Non-corrosive joints
- Low heat requirement (propane torch application)
- No specialty equipment

- No flux or scale
- Contains no lead or cadmium
- Environmentally friendly

WELDING TECHNIQUES

Clean the surface with a stainless steel brush. With a propane torch, heat the parent metal surface, <u>NOT</u> the EZ-Weld Aluminum Alloy. Apply EZ-Weld to the heated surface. Keep flame in motion. Allow weld to air-cool naturally. Never plunge into water.

T-JOINTS: For maximum strength, tin both members. Again, heat the parts, <u>NOT</u> the EZ-Weld and flow into the intersection. Stir solid end of EZ-Weld stick through the molten EZ-Weld to remove any trapped oxide.

BUTT-JOINTS: Bevel both ends and bring together. Tin both beveled surfaces, then lay bead of EZ-Weld into groove.

LAP JOINTS: Parts can be tinned and slid together while EZ-Weld is molten, or a generous fillet of EZ-Weld can be applied around the edges of the lap joint. Make sure of tinning by running the stock through the molten E-Z Weld Aluminum Alloy.

WARNING

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- Do not touch live electrical parts.
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Alloy Brazing Rod for High Strength Aluminum Repair



FOR TORCH BRAZING

- ➤ 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

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

SPECIFICATIONS

SIZE P/N TENSILE STRENGTH: 71,000 psi

1/16" x 18" (Pink Flux) 8786 **ELONGATION:** 25%

CORROSION RESISTANCE: Excellent

MELTING TEMP.: 1120°F Solidus, 1200°F Liquidous

Precise Thin Flow Joining of All Ferrous and Most Non-Ferrous Metals



- · Cadmium, lead and zinc-free
- High 56% silver content
- Precise thin flowing formulation
- Low working temperature (1120°F to 1185°F)
- Fast-flowing action
- Cleans oxidized surfaces to promote rapid wetting action
- · Fast-flowing flux is bendable and chip resistant

WELDING TECHNIQUES

Joint must be clean. For maximum strength, joint clearance should not exceed .003". Maintain alignment by use of fixtures and jigs. Preheat parts broadly with a slightly carburizing flame to 350°F. Then heat joint area to 800°F. Melt off some flux and allow to flow throughout joint. Melt a small amount of alloy onto the joint. BASE METAL MUST NOT BE OVERHEATED. After the part has cooled slowly, remove flux residue with warm water.

WARNING

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Super Active Flux Coated Silver Brazing Alloy High 56% Silver Content



EXTREMELY VERSATILE AND ABRASION RESISTANT

- **► LOW MELT, OXYACETYLENE WELDING** FOR FASTER, EASIER APPLICATION
- > THIN FLOWING FOR TIGHT FIT UP WORK
- ➤ DENSE, TOUGH DEPOSITS **ENSURES STRONG, NON-POROUS AND DURABLE WELDS**
- > RAPIDLY BUILDS UP DEPOSITS FOR CLADDING OR REPLACING MISSING METAL
- ➤ HIGHLY MACHINABLE **SAVING TIME AND MONEY**

APPLICATIONS

- Truck Body Liners
 Shovel Boom
- Chutes
- Crane Boom Tips
- Fan Blades
- Wear Plates
- Fork Lifts
- Loading Platforms
 Fifth Wheel Plates
 Tool Steel
 - Dragline Buckets
 - Dipper Buckets
 - Oil Rigs

- Liquid Gas Tanks
- Hot or Cold Rolled Steel
- Stainless Steel
- High Carbon Steel
- Cast Iron

- Malleable Iron
- All Alloys of the Bronze. Copper and Nickel Family

SPECIFICATIONS

TENSILE STRENGTH: 100	<u>P/N</u>	<u>SIZE</u>
MELTING TEMP: 1,450°F	8755	3/32"
	8756	1/8"

The Perfect Rod for the Most Difficult Applications



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 to 200 BHN) for strong, non-porous, lasting welds. Highly machinable and minimum preparation for rusty, dirty parts. Joining and fast build-up of metals and filling holes in steel and cast iron. Ideal for drive shafts, friction plates and gear teeth.

WELDING TECHNIQUES

Heat the base metal until red hot and flux is liquid. Dip the rod into the base metal just behind the flame. Then back up the flame to "wet out" the deposit.

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The Most Versatile Brazing Alloy . . . The Best Choice for the Maintenance Welder



VERSATILE MILD STEEL BARE ROD FOR TORCH OR TIG BRAZING

- ➤ COPPER METALLIC COATING —
 INHIBITS RUST AND IMPROVES WELDABILITY
- ➤ UNIQUE SELF-FLUXING DESIGN —
 PROVIDES A SMOOTH, EVEN BEAD WITH NO WELD POROSITY
- ➤ DENSE, TOUGH DEPOSITS —
 ENSURES STRONG, NON-POROUS AND DURABLE WELDS
- ➤ CAN BE USED IN ALL POSITIONS FOR EASE OF MACHINING, FILING OR SANDING

APPLICATIONS

- Tanks
- Hoods
- Sheet Metal

- Shafts
- Brackets
- Vats

- Frames
- · Machinery Guards
- Wire Mesh

SPECIFICATIONS					
<u>SIZE</u>	<u>P/N</u>	TENSILE STRENGTH: 70,000 psi			
1/16"	8760				
3/32"	8761				
1/8"	8762				

High Quality, General Purpose Brazing Alloy



- General purpose joining of steel sheets, plates and pipe of low carbon analysis.
- · Versatile mild steel bare rod for torch 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 torch or tig brazing.

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. Flux is not required.

WARNING

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- · Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- Wear correct eye, ear and body protection.
- Do not touch live electrical parts.
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Versatility and Performance



EASY BRAZING OF COPPER, BRONZE, BRASS AND NICKEL ALLOYS

- ➤ SPECIAL FORMULATION —
 JOINS AND REPAIRS NON-FERROUS METALS
- ➤ PROVIDES DUCTILE DEPOSITS —
 FOR VIBRATION RESISTANCE
- > SELF-FLUXING ON COPPER TO COPPER APPLICATIONS ASSURES EASE OF USE

APPLICATIONS

- Refrigeration
- Copper Wire and Cable
- Bus Bars

- Electrical Contacts
- Piping
- Air Conditioning
- Plumbing
- Marine Equipment

SPECIFICATIONS				
SIZE	P/N	TENSILE STRENGTH: 46,000 psi		
1/16"	8765	WORKING TEMP.: 1300°F to 1460°F		
3/32"	8766			
1/8"	8767			

Superior Non-Ferrous Metal Brazing



- Ideal for joining and repairing thin sheet metal, tubing and fittings made 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.

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, flux is not 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.

WARNING

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- Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- Wear correct eye, ear and body protection.
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Easy Brazing of Copper, Bronze, Brass and Nickel Alloys



IDEAL FOR DISSIMILAR METAL APPLICATIONS

- ➤ HIGHLY CORROSION RESISTANT DEPOSITS —
 INHIBITS RUST AND IMPROVES WELDABILITY
- ➤ EXTREMELY VERSATILE —

 JOINS COPPER BASED METALS TO THEMSELVES OR GALVANIZED STEEL
- ➤ SUITABLE FOR THIN FLOW OR BEAD FORMING DEPOSITS ENSURING STRONG, NON-POROUS AND DURABLE WELDS

APPLICATIONS

- Galvanized Parts
- Castings
- Marine Repairs
- Valves and Seats
- Tubing
- Fittings

 Joints and overlays on steel, copper, brass, bronze, naval brass and galvanized sections

SPECIFICATIONS					
	SIZE	P/N	TENSILE STRENGTH: 64,000 psi		
	1/16"	8770	WORKING TEMP.: 1450°F to 1600°F		
	3/32"	8771			

High Strength, Versatility and Ease of Application



- 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.

WARNING

Protect yourself and others. Read and understand this label. FUMES and GASES can be dangerous to your health. ARC RAYS can injure eyes and burn skin. ELECTRIC SHOCK can kill.

- Read and understand the manufacturer's instructions and your employer's safety practices.
- Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- · Wear correct eye, ear and body protection.
- · Do not touch live electrical parts.
- See American National Standard Z49.1. Safety in Welding and Cutting published by the American Welding Society, 550 North LeJeune Road, Miami, Florida, 33135: OSHA Safety and Health Standards, 29 CFR 1910, available from the U.S. Government Printing Office, Washington, D.C. 20402.

Join or Repair Copper, Copper-Silicon and Copper-Zinc Based Metals



EASY BRAZING OF STEEL CAST IRON AND COPPER BASE ALLOYS

- ➤ 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 —
 EXCEPTIONAL ON DIRTY STEELS AND CAST IRONS
- ➤ CAN BRAZE COPPER BASE ALLOYS WITHOUT MELTING BASE
- ➤ NO CRACKING —
 TOTALLY FLEXIBLE COATING

APPLICATIONS

- Bearings
- Bushings
- Cams
- Cast Iron

1/8"

Carbide Tipping

8862

- Chain Saws
 - Drills

- Jig and Fixtures
- Levers
- Linkage
- Piping
- Racks
- Shaft Repair

SPECIFICATIONS

SIZE	P/N	TENSILE STRENGTH: 71,000 psi
1/16"	8860	WORKING TEMP.: 1595°F
3/32"	8861	

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.

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.

WARNING

Protect yourself and others. Read and understand this label. FUMES and GASES can be dangerous to your health. ARC RAYS can injure eyes and burn skin. ELECTRIC SHOCK can kill.

- Read and understand the manufacturer's instructions and your employer's safety practices.
- · Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- Wear correct eye, ear and body protection.
- Do not touch live electrical parts.
- See American National Standard Z49.1. Safety in Welding and Cutting published by the American Welding Society, 550 North LeJeune Road, Miami, Florida, 33135: OSHA Safety and Health Standards, 29 CFR 1910, available from the U.S. Government Printing Office, Washington, D.C. 20402.

Triple Deoxidized Bronze Brazing Alloy



SUPERIOR IMPACT AND ABRASION RESISTANCE

- ➤ EXCEPTIONAL HARD SURFACING ALLOY —
 PRODUCES OUTSTANDING IMPACT AND ABRASION RESISTANCE
- ➤ IDEAL ALLOY COMBINATION —
 PROVIDES SUPERIOR HARDNESS AND TOUGHNESS ON CARBON AND ALLOY
 STEELS, MANGANESE STEELS AND CAST IRON
- ➤ HIGH DEPOSITION RATE —
 FOR MAXIMUM WEAR RESISTANCE WITH LITTLE OR NO SPATTER
- ➤ PROLONGS SERVICE LIFE OF NEW AND WORN PARTS —
 AVOIDING EXPENSIVE REPLACEMENT COSTS

APPLICATIONS

- Agricultural, Construction, Industrial, Mining and Municipal Equipment of all types where wear is a problem
- Crusher Jaws; Hammers; Bucket Lips and Teeth
- · Wear plates; Pins; Axles; Shafts; Cams; Eccentrics

SP	EC	П	CAT	-10	Ne
	1	_		7	

<u>SIZE</u>	<u>P/N</u>	<u>AMPERAGE</u>	HARDNESS: RC 56-60
1/8"	8735	80-135	CURRENT: AC or DC
5/32"	8736	120-160	On DC use reverse polarity
			POSITION: All

For All Hard Surfacing Applications



FEATURES

- A truly unique electrode combining unsurpassed weldability plus superior impact and abrasion resistance and high hardness.
- The ideal alloy combination where hardness and toughness are required on carbon and alloy steels, manganese steels and cast iron.

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 before continuing. Remove slag between passes.

WARNING

Protect yourself and others. Read and understand this label. FUMES and GASES can be dangerous to your health. ARC RAYS can injure eyes and burn skin. ELECTRIC SHOCK can kill.

- Read and understand the manufacturer's instructions and your employer's safety practices.
- · Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- Wear correct eye, ear and body protection.
- Do not touch live electrical parts.
- See American National Standard Z49.1. Safety in Welding and Cutting published by the American Welding Society, 550 North LeJeune Road, Miami, Florida, 33135: OSHA Safety and Health Standards, 29 CFR 1910, available from the U.S. Government Printing Office, Washington, D.C. 20402.

Superior Hardness and Protection Against Wear



SUPERIOR IMPACT AND ABRASION RESISTANCE

- ➤ 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
 TOLS 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

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.

SPECIFICATIONS

SIZE P/N HARDNESS: RC 55-60

1/4 x 18" 8739 **CURRENT:** AC or DC Welding Power Sources

POSITION: All

For Applications Subject to High Abrasion, Compressive Impact Loads and Erosion

HARD FACING CHROMIUM CARBIDE TUBULAR ELECTRODE

FEATURES

- For manual applications 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.

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 before continuing. Remove slag between passes.

WARNING

Protect yourself and others. Read and understand this label. FUMES and GASES can be dangerous to your health. ARC RAYS can injure eyes and burn skin. ELECTRIC SHOCK can kill.

- Read and understand the manufacturer's instructions and your employer's safety practices.
- Keep your head out of the fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases away from your breathing zone and the general area.
- Wear correct eye, ear and body protection.
- · Do not touch live electrical parts.
- See American National Standard Z49.1. Safety in Welding and Cutting published by the American Welding Society, 550 North LeJeune Road, Miami, Florida, 33135: OSHA Safety and Health Standards, 29 CFR 1910, available from the U.S. Government Printing Office, Washington, D.C. 20402.

For Applications Subject to High Abrasion, Compressive Impact Loads and Erosion

IDENTIFICATION OF METALS

TEST		ME	ΓAL	
11-61	Manganese Steel	Stainless Steel	Cast Iron	Wrought Iron
Appearance	DULL CAST SURFACE	BRIGHT, SILVERY SMOOTH	DULL GREY EVIDENCE OF SAND MOLD	LIGHT GREY SMOOTH
Magnetic	NON-MAGNETIC	DEPENDS ON EXACT ANALYSIS	STRONGLY MAGNETIC	STRONGLY MAGNETIC
Chisel	EXTREMELY HARD TO CHISEL	CONTINUOUS CHIP SMOOTH BRIGHT COLOR	SMALL CHIPS ABOUT 1/8 INCH. NOT EASY TO CHIP, BRITTLE	CONTINUOUS CHIP SMOOTH EDGES SOFT AND EASILY CUT AND CHIPPED
Fracture	COARSE GRAINED	DEPENDS ON TYPE BRIGHT	BRITTLE	BRIGHT GREY FIBROUS APPEARANCE
Flame	MELTS FAST BECOMES BRIGHT RED BEFORE MELTING	MELTS FAST BECOMES BRIGHT RED BEFORE MELTING	MELTS SLOWLY BECOMES DULL RED BEFORE MELTING	MELTS FAST BECOMES BRIGHT RED BEFORE MELTING
*For best results, use at least 5,000 surface feet per minute on grinding equipment. (Cir. x R.P.M. = S.F. per Min.)	Bright White Fan-Shaped Burst	Nickel-Black Shape close to wheel. 2. Moly-Short Arrow Shape Tongue (only). 3. Vanadium-Long Spearpoint Tongue (only).	Red Carrier Lines (Very little carbon exists)	Long Straw Color Lines (Practically free of bursts or sprigs)

TEST	METAL					
11-51	Low Carbon Steel	Medium Carbon Steel	High Carbon Steel	High Sulphur Steel		
Appearance	DARK GREY	DARK GREY	DARK GREY	DARK GREY		
Magnetic Magnetic	STRONGLY MAGNETIC	STRONGLY MAGNETIC	STRONGLY MAGNETIC	STRONGLY MAGNETIC		
Chisel Chisel	CONTINUOUS CHIP SMOOTH EDGES CHIPS EASILY	CONTINUOUS CHIP SMOOTH EDGES CHIPS EASILY	HARD TO CHIP CAN BE CONTINUOUS	CONTINUOUS CHIP SMOOTH EDGES CHIPS EASILY		
Fracture	BRIGHT GREY	VERY LIGHT GREY	VERY LIGHT GREY	BRIGHT GREY FINE GRAIN		
Flame	MELTS FAST BECOMES BRIGHT RED BEFORE MELTING					
Spark *For best results, use at least 5,000 surface feet per minute on grind-						



Long Yellow Carrier Lines (Approx. .20% carbon or below)

100 DaVINCI DRIVE • BOHEMIA, NEW YORK 11716 516-567-2200 • FAX: 516-567-2418

Yellow Lines Bright Burst Very Clear Numerous Star Burst (Approx. .45% carbon and above)

ing equipment. (Cir. x R.P.M. = S.F. per Min.)

Yellow Lines Sprigs Very Plain Now (Approx. .20% to .45% carbon) Swelling Carrier Lines Cigar Shape

AURALLOY CROSS REFERENCE TABLE

AURALLOY Product	TS ALLOYS	PART #	DIAMETER	DESCRIPTION	TENSILE STRENGTH	BOWMAN	CERTANIUM	CRONATRON	EUTECTIC	X-ERGON
210	Blue Velvet	8700, 8701, 8702	3/32, 1/8, 5/32	General Purpose Steel Electrode Welding all mild steels. Flux coated.	85,000 psi 29% elongation	25120	702, 704	338	Beautyweld 666, 3001, 6000	106
220	-	8705, 8706, 8707, 8708	3/32, 1/8, 5/32, 3/16	Superior Strength Steel Electrode Welding low alloy, carbon and cast steels. Flux coated.	120,000 psi 28% elongation	_	705	375	110	102
225	Thunder- bolt	8709, 8710, 8711, 8712	1/16, 3/32, 1/8, 5/32	High Tensile Strength Steel Electrode Welding all types and grades of similar and dissimilar steels. Flux coated.	128,000 psi 36% elongation	25180	707, 770 MOX	333	Fantastec 680, 3026, 680 CGS	100XL, 171B, Unique 100, 1000 HPM
225-B	-	8728, 8729, 8730	1/16, 3/32 1/8	High Tensile Strength Bare Steel Rod Welding all steels.	128,000 psi	_	76SL	388 TIG	Tigtectic BMO	122 TIG 1000 HPM
225-V	-	8718 8719	3/32 1/8	Vertical Position Steel Electrode Special vertical position high strength electrode for dissimilar steels.	128,000 psi 32% elongation	25180	707, 770 MOX	333	Fantastec 680, 3026, 680 CGS	100XL, 171B, Unique 100
250	Sterling	8714, 8715, 8716, 8717	1/16, 3/32 1/8, 5/32	Universal Stainless Steel Electrode Welding most grades of stainless steels, carbon steels, alloy steels and stainless steels of unknown analysis. Flux coated.	95,000 psi 45% elongation	25370	709	377	Staintrode D, 57, 670	1
250-B	-	8740, 8741, 8742	1/16, 3/32 1/8	Universal Stainless Steel Bare Rod Welding all types of stainless steels.	86,000 psi 45% elongation	_	707 TIG	333 TIG	Tigtectic 680 57, 670	Xinect 100XL
255	Cascade	8737, 8738	3/32, 1/8	Vertical Position Stainless Steel Electrode Vertical down/up welding of stainless steels. Flux coated.	80,000 psi 42% elongation	_	_	_	_	_
300	Midnight	8720, 8721, 8722, 8723	3/32, 1/8 5/32, 3/16	Ductile Cast Iron Electrode Welding all grades of cast iron and alloyed cast iron. Flux coated.	70,000 psi 40% elongation	25250	889	211	223, 225, 232, 2233, 3055, 2255	131
310	-	8746, 8747	3/32, 1/8	Machinable Cast Iron Electrode Welding all grades of cast iron and alloyed cast iron. Flux coated.	55,000 psi	25270	887	222	224, 244, 240, 2240, 3099	_
400	Turbo	8724, 8725, 8726	3/32, 1/8 5/32	Cutting and Chamfering Electrode Rapid metal removal on cast iron, stainless steel, inconel, manganese and aluminum. Flux coated.	_	25310	100	110	Chamfertrode, Cuttrode, Exotrode	161
500	-	8775, 8776, 8778, 8779, 8780	1/16 - 1/2 & 1 lb. 1/8 - 1/2 & 1 lb. 1.0 oz. tube	Super Strength Self-Fluxing Silver Solder Soldering all steels, including stainless and chrome plated, copper and nickel alloys and dissimilar combinations of these metals. No white metals. (Use Auralloy 500 Flux)	15,000 psi	_	_	_	_	_
600	White Lightning	8731, 8732	1/8, 5/32	Aluminum Arc Welding / Brazing Rod Welding all types and grades of aluminum.	34,000 psi	25360	608	510	2101, 3021, 2109	141
610	-	8745	1/8	High Strength Flux-Cored Aluminum Brazing Alloy Torch brazing of all weldable aluminum.	30,000 psi	877	_	54C	21FC-E	_
620	-	8750, 8751, 8752	1/16, 3/32, 1/8	Easy Flow Aluminum Alloy Wire Welding most grades of aluminum. (Use Auralloy 620 Flux)	35,000 psi	24970	65/66	55	190	241
710	Pink Cadillac	8786	1/16 Pink Flux	Premium Flux Coated Silver Brazing Alloy Brazing alloy for use on all ferrous and most non-ferrous metals, except aluminum and magnesium. (Use Auralloy 700 Flux)	71,000 psi	24870	54	43F, 40F	1030FC, 1020FC, 1020XFC, 1801FC	261, 262
800	Ruby	8755, 8756	3/32, 1/8	High Tensile Strength Brazing Rod Brazing hot or cold rolled steels, tool steels, stainless and high carbon steels, cast iron, malleable iron, all alloys of bronze, copper and nickel and dissimilar metals. (Use Auralloy 825 Flux)	100,000 psi	908, 914	87F, 70F	30F	185FC, 185XFC, 16, 16FC, 16XFC	201
810	-	8760, 8761, 8762	1/16, 3/32, 1/8	Self-Fluxing, Non-Fuming Steel Wire Brazing steel sheets, plates and pipe of low carbon analysis. (Use 825 Flux)	70,000 psi	_	_	_	_	_
820	Sapphire	8765, 8766, 8767	1/16, 3/32 1/8	High Strength Bronze Brazing Alloy Brazing copper, copper alloys, bronze, brass and nickel. (Use 825 Flux)	46,000 psi	_	50	44	180	263
830	-	8770, 8771	1/16, 3/32	High Strength Silicon Bronze Brazing Alloy Brazing copper based metals, galvanized steel and dissimilar metals. (Use Auralloy 825 Flux)	64,000 psi	25000	71F, 83F	21, 23F	18FC, 146FC, 18FXC, 146XFC, 145FC, 3046XFC	205, 207
900	Granite	8735, 8736	1/8, 5/32	Abrasion Resistant Hard Surfacing Electrode Welding carbon and alloy steels, manganese steels & cast iron. Flux coated.	Rockwell "C" Hardness 56-60	25350	250	_	3005, N5005, N6006 N6712, N6715	174, 176, 178

AURALLOY PRODUCT APPLICATIONS

AURALLOY PRODUCT #	TYPE OF ACCOUNTS	TYPICAL APPLICATIONS
210	 Airlines • Asphalt/Cement Plants • Contractors • Farms, Golf Courses, Parks, Cemeteries Fleets, Bus Lines • Food Processing • Garages/Body Shops • Hospitals, Hotels, Schools Mines, Quarries • Plant Maintenance • Welding Repair Shops 	Brackets • Ducts • Floor Plates • Frames • Galvanized Iron • Guards • Piping Scaffolding • Shelving • Tanks • Trucks
220	 Airlines • Asphalt/Cement Plants • Contractors • Farms, Golf Courses, Parks, Cemeteries Fleets, Bus Lines • Food Processing • Garages/Body Shops • Hospitals, Hotels, Schools Mines, Quarries • Plant Maintenance • Welding Repair Shops 	Axles • Bearings • Blades • Brackets • Bumpers • Chain • Conveyors Fork Lift Tines • Floor Plates • Gears • Hoppers • Levers • Rails • Scaffolding Shafts • Shelves • Tanks • Tow Bars • Wheels
225 225-B 225-V	 Airlines • Asphalt/Cement Plants • Contractors • Farms, Golf Courses, Parks, Cemeteries Fleets, Bus Lines • Food Processing • Garages/Body Shops • Hospitals, Hotels, Schools Mines, Quarries • Plant Maintenance • Welding Repair Shops 	Arms • Asphalt Mixer Paddles • Augers • Axles • Bars • Bearings • Blades Bucket Teeth • Bumpers • Cases • Chain • Chisels • Conveyors • Crane Booms Drills • Fork Lift Tines • Frames • Hoppers • Housings • Impellers • Levers Lift Truck Tines • Mowers • Pneumatic Bits • Rails • Rams • Shafts • Skids Snow Plows • Springs • Tools • Tow Bars/Hooks • Wheels
250 250-B 255	 Farms, Golf Courses, Parks, Cemeteries Food Processing Hospitals, Hotels, Schools Welding Repair Shops 	Agitator Blades
300 310	 Airlines • Asphalt/Cement Plants • Contractors • Farms, Golf Courses, Parks, Cemeteries Fleets, Bus Lines • Food Processing • Garages/Body Shops • Hospitals, Hotels, Schools Mines, Quarries • Plant Maintenance • Welding Repair Shops 	Arms • Bell Housings • Bosses • Cylinder Heads • Dollies • Engine Blocks Exhaust Manifolds • Farm Implements • Flywheels • Gears • Housings • Landing Gear Levers • Machine Bases • Molds • Mowers • Oil Pans • Ornamental Iron Work Pulleys • Pumps • Valves • Water Jackets • Wheels
400	Contractors • Electronic/Electrical Repair Shops • Farms, Golf Courses, Parks, Cemeteries Fleets, Bus Lines • Garages/Body Shops • Mines, Quarries • Plant Maintenance Welding Repair Shops	Cutting • Grooving • Gouging • Piercing • Bolt Removal • Sheet Cutting Fabrication
500	Airlines Contractors Farms, Golf Courses, Parks, Cemeteries Fleets, Bus Lines Garages/Body Shops Mines, Quarries Plant Maintenance Welding Repair Shops Electronic / Electrical Repair Shops	Air Conditioning and Refrigeration
600 610 620	 Farms, Golf Courses, Parks, Cemeteries Fleets, Bus Lines Food Processing Garages/Body Shops Plant Maintenance Welding Repair Shops 	Blocks • Cafeteria Equipment • Cases • Cylinder Heads • Housings • Mixers Paddles • Piping • Structural Members • Tanks • Truck & Trailer Bodies • Vats
710	Airlines • Farms, Golf Courses, Parks, Cemeteries • Fleets, Bus Lines Food Processing • Garages/Body Shops • Hospitals, Hotels, Schools Plant Maintenance • Welding Repair Shops	Manufacturing and Repairing Food and Beverage Equipment
800 810 820 830	Airlines Farms, Golf Courses, Parks, Cemeteries Fleets, Bus Lines Garages/Body Shops Hospitals, Hotels, Schools Plant Maintenance Welding Repair Shops	 Arms • Bearings • Brackets • Cams • Cast Legs • Chain • Coils • Cylinder Heads • Drill Bit Extensions • Drill Tangs • Elgonated Holes • Faucets • Floor Plates • Furniture • Gears • Guards • Guides • Hand Rails • Housings • Hubs • Impellers • Keyways • Levers • Lugs • Machining Errors • Manifolds • Mild Steel Piping • Missing Sections • Mufflers • Oil Pans • Piping • Pulleys • Pumps • Shafts • Sheet Repair • Tail Pipes • Tools • Trucks • Tubes • Valves
900	Asphalt/Cement Plants	Augers • Blades • Buckets • Chutes • Concrete Cutter Wheels • Crusher Concaves Feeder Sprockets • Hammers • Hoppers • Impellers • Jaws



TRIAL PACKS

WELDING ELECTRODES

AURALLOY 210				
SIZE	PART			
3/32 x 12"	E 8936			
1/8 x 14"	E 8937			
5/32 x 14"	E 8938			

AURALLOY 220				
SIZE		PART		
3/32 x 12"	В	8940		
1/8 x 14"	В	8941		
5/32 x 14"	В	8942		
3/16 x 14"	В	8943		

AURALLOY 225 & 225MIG					
SIZE	PART				
3/32 x 10"	E 8945				
1/8 x 14"	E 8946				
5/32 x 14"	E 8947				
.035 (1 lb.)	A 98727				

AURALLOY 225-V				
SIZE	PART			
3/32 x 10"	В 8944			
1/8 x 14"	B 8948			

AURALLOY 230					
SIZE	PART				
3/32 x 14"	B 8953				
1/8 x 14"	^B 98851				
5/32 x 14"	B 98852				
3/16 x 14"	В 8957				

AURALLOY 240				
SIZE	PART			
1/8 x 14"	A 8939			

AURALLOY 250		
SIZE	PART	
1/16 x 9-1/2"	A 8949	
3/32 x 12"	B 8950	
1/8 x 14"	B 8951	
5/32 x 14"	В 8952	

AURALLOY 255		
SIZE	PART	
3/32 x 14"	B 98737	
1/8 x 14"	B 98738	

AURALLOY 300		
SIZE	PART	
3/32 x 14"	в 8954	
1/8 x 14"	B 8955	
5/32 x 14"	B 8956	

AURALLOY 310		
SIZE	PART	
3/32 x 10"	B 8998	
1/8 x 14"	B 8999	

AURALLOY 320		
SIZE	PART	
3/32 x 14"	В 98855	
1/8 x 14"	В 98856	
5/32 x 14"	В 98857	

AURALLOY 400		
SIZE	PART	
1/8 x 14"	В	8959
5/32 x 14"	В	8960
3/32 x 14"	В	8958

AURALLOY 600		
SIZE	PART	
1/8 x 14"	В 8962	
5/32 x 14"	В 8963	

AURALLOY 900		
SIZE	PART	
1/8 x 14"	В 8965	
5/32 x 14"	В 8966	

AURALLOY 910		
SIZE	PART	
1/4 x 18"	A 8961	

BRAZING/SOLDER/TIG ALLOYS

AURALLOY 225-B		
SIZE	PART	
1/16 x 36"	В	8995
3/32 x 36"	В	8996
1/8 x 36"	В	8997

AURALLOY 250-B		
SIZE	PART	
1/16 x 36"	B 8968	
3/32 x 36"	B 8969	
1/8 x 36"	B 8970	

AURALLOY 810		
SIZE	PART	
1/16 x 36"	Ε	8984
3/32 x 36"	Ε	8985
1/8 x 36"	Ε	8986

AURALLOY 620		
SIZE	PART	
1/16 x 36"	B 8974	
3/32 x 36"	В 8975	
1/8 x 36"	B 8976	

AURALLOY 710		
SIZE	PART	
1/16 x 18" (Pink Flux)	F 8980	

AURALLOY 800		
SIZE	PART	
3/32 x 18"	B 8981	
1/8 x 18"	B 8982	

AURALLOY 610		
SIZE	PART	
1/8 x 32"	B 8972	

AURALLOY 820		
SIZE	PART	
1/16 x 36"	В 8988	
3/32 x 36"	B 8989	
1/8 x 36"	В 8990	

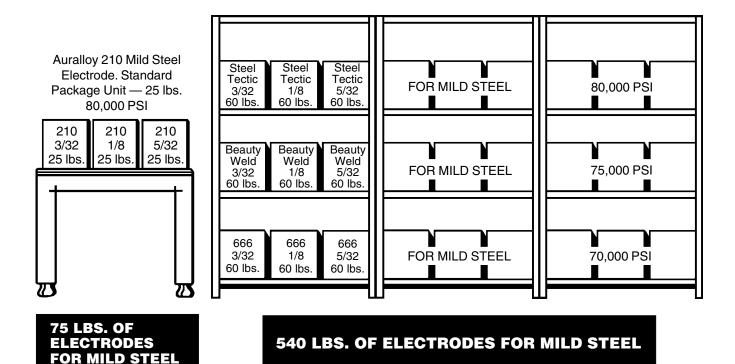
AURALLOY 830		
SIZE	PART	
1/16 x 36"	B 8992	
3/32 x 36"	B 8993	

AURALLOY 840			
SIZE	PART		
1/16 x 36"	В	98860	
3/32 x 36"	В	98861	
1/8 x 36"	В	98862	

030105



When you compare the products offered by Eutectic, Certanium, Cronatron and Nassau, you will find that they each offer up to 3 or more products with different numbers or colors that are meant to do the same job. This is **Duplication**, and results in overstock. Auralloy will supply you with only one product to avoid duplication and eliminate the excessive dollar waste. To further illustrate our point, compare and save dollars.



With Auralloy — No More Confusion — The Right Rod Every Time

AURALLOY OFFERS:

- The Best Materials for the Best Results.
- The Right Tool for the Right Job.
- Quality Alloys Researched and Developed Strictly for the Maintenance and Repair Welder . . . See For Yourself.

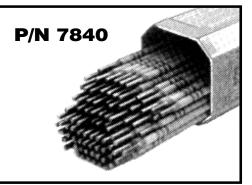


MAINTENANCE WELDING ROD STARTER **ASSORTMENT**

Five Of Our Most Popular Maintenance Welding Rods **Used By Our Customers**



- A TOTAL OF 13 LBS. OF ROD
- LABELED CABINET
- EASY IDENTIFICATION



AURALLOY 210 General Purpose Steel Electrode 1/8" - 85,000 PSI Welding all mild steels. Flux coated.

AURALLOY 220

Superior Strength Steel Electrode 1/8" - 120,000 PSI Welding low alloy, carbon and cast steels. Flux coated.

AURALLOY 225 High Tensile Strength Steel Electrode

Welding all types and grades of similar and dissimilar 1/8" - 128,000 PSI steels. Flux coated.

AURALLOY 300 Ductile Cast Iron Electrode

1/8" Welding all grades of cast iron and alloyed cast iron.

40% ELONGATION Flux coated.

High Tensile Strength Brazing Rod 3/32" - 100,000 PSI Brazing hot or cold rolled steels, tool steels, stainless and high carbon steels, cast iron, malleable iron, all alloys of bronze, copper and nickel and dissimilar

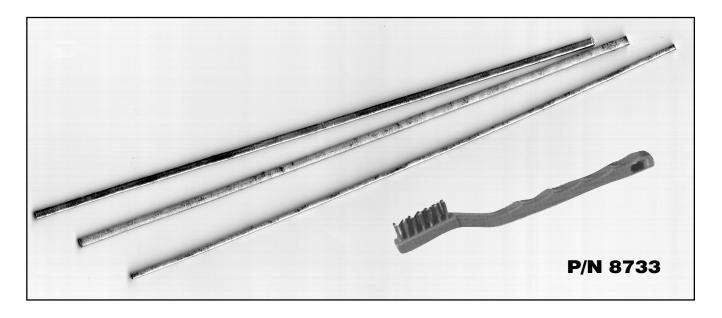
metals. (Use Auralloy 825 Flux)

AURALLOY 800



EZ-WELD ALUMINUM ALLOY KIT

Now You Can Weld Aluminum "Easily" with a Common Propane Torch!



- A TOTAL OF 1/2 LB OF AURALLOY 630 (P/N 8734) –
 Approximately ten (10) 18" sticks of proprietary brazing rod formulated for high strength fabrication and aluminum repair.
- STAINLESS STEEL WIRE BRUSH (P/N 41340)
 Constructed of heavy gauge wire embedded in a plastic handle.
 7-7/8" overall length
- PACKAGED IN A PROTECTIVE PLASTIC TUBE