

# HARRIS BRAZING AND SOLDERING CONSUMABLES RACK

## FOR HVAC AND PLUMBING



PART NUMBER	SIZE	PKG
45318LMPOP	Safety-Silv 45 1/16 x 5 stick tube	4
45F318MPPOP	Safety-Silv 45FC 1/16 x 3 stick tube	4
45KPOP	Safety-Silv 45 Brazing Kit w/flux	4
56318LMPOP	Safety Silv 56 1/16 x 5 stick tube	4
56F318MPPOP	Safety Silv 56FC 1/16 x 3 stick tube	4
1520FMPPOP	Stay-Silv 15 .050 x 1/8 x 8 stick tube	4
5620FMPPOP	Stay-Silv 5 .050 x 1/8 x 8 stick tube	4
95561/2POP	95/5 1/8 x 1/2# spool	4
SBSKPOP	Stay Brite Solder Kit w/flux	4
SSWF7POP	Stay Silv White Brazing Flux 6.5 oz	3
SCPF4POP	Stay Clean Paste Flux 4 oz	3

## KEY FEATURES

11 of the most popular items for HVAC and plumbing applications. These specialty electrodes have various coating types and base metals specifically engineered for a wide range of applications.

These alloys are ideally used for:

- » Copper
- » Brass

### Processes »

HVAC and plumbing

### Product Number »

Empty display rack - 970029

Display rack POP - 9700382



## E7018 MILD STEEL ELECTRODE

A high deposition electrode for low and medium carbon steels. It is an efficient, iron powder, low hydrogen electrode with excellent mechanical properties; crack resistance; and X-ray quality welds. This electrode offers a quiet, stable, low penetration, spatter-free arc. The moderately heavy slag is easy to remove, revealing a bead with distinct ripples. Operator appeal is a plus factor. Applications: Ship hull construction, pressure vessels, boilers, piping, heavy duty equipment, general maintenance or production fabrication.

### FEATURES:

- » Tensile strength - up to 79,900 psi
- » Yield strength - 67,700 psi
- » Elongation in 2" - 29.4% minimum
- » All position
- » Conforms to ANSI/AWS A5.1 & ASME SFA 5.1 E7018

### PROCEDURES:

- ??????



PART NUMBER	SIZE	PKG	CURRENT FLAT	CURRENT VERTICAL / OVERHEAD
7018500POP	3/32"	1 EA PKG	65-85	50-80
7018600POP	1/8"	1 EA PKG	90-130	85-120

## NIC-L-WELD 59 ELECTRODE (AC-DC)

Nickel-Iron electrode (AC-DC). A general purpose, nickel-iron electrode for production, salvage and repair of all cast irons. Suited to joining, filling and buildup of gray and alloyed cast irons. It can be used for fabrication and repair of pump housings, valves, castings, cast and malleable fittings, and for general repair of all cast irons. Deposits are machinable and have high strength

### FEATURES:

- » Conforms to ANSI A5.15, ENIFeCl
- » Close color match
- » Excellent machinability

### PROCEDURES:

- Use AC or DC reverse polarity
- V out cracks
- Preheat heavy castings to approximately 400° F for best results
- Direct the arc upon deposited metal with the electrode at a slight angle in the direction of travel
- Lightly peen between passes and use a skip or back-step welding technique. Allow casting to cool slowly



PART NUMBER	SIZE	PKG	CURRENT AMPS
NLW59500POP	3/32"	1 EA PKG	30-70
NLW56600POP	1/8"	1 EA PKG	70-110

## ALUMINUM 26 ELECTRODE

Alloy 26 features a precise combination of core wire and coating, providing high speed deposition of dense, machinable welds. Fabrication and repair of cast and wrought aluminum. Foundry defects, machining errors, and salvage work. It is widely used on sheets, tubes and extrusions. Also suited for torch applications.

### FEATURES:

- » Tensile strength - Up to 34,000 psi
- » Good electrical conductivity
- » Good color match
- » Machinable
- » Good corrosion resistance

### PROCEDURES:

- Clean weld area
- Bevel sections greater than 1/4"
- Preheat - 500° F is recommended on sections greater than 1/8"
- DC - reverse polarity
- Hold electrode in a vertical position
- Remove flux between passes
- Clean with hot water; add 10% sulfuric acid to water if additional cleaning is required



PART NUMBER	SIZE	PKG	CURRENT AMPS
00026500POP	3/32"	1 EA PKG	50-85
00026600POP	1/8"	1 EA PKG	80-135

## HARD SURFACE 180 ELECTRODE

A 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. This product can be used for carbon and manganese steel, dipper teeth and lips, roll crushers, hammermill parts, impactors, plow shares and cultivator shoes.

### FEATURES:

- » Hardness as deposited - RC 57 to 61
- » High deposition rate - Magnetic

### PROCEDURES:

- AC or DC reverse or straight polarity
- Run stringer beads or weave
- On manganese steels, use short stringer beads
- Deposit thickness, 1/4" max.



PART NUMBER	SIZE	PKG	CURRENT AMPS
J1	3/32"	1 EA PKG	120-155
00180600POP	1/8"	1 EA PKG	140-175

## SUPER MISSLEWELD (DISSIMILAR METALS)

The ultimate electrode for welding steels, highest strength and maximum ductility (AC/DC) Assures non-cracking welds on “problem” steels such as high carbon steels, tool steels, stainless steels, spring steels, manganese steels, and dissimilar steels.

### FEATURES:

- » Tensile strength - 120,000 psi
- » Yield strength - 85,000 psi
- » Reduction of area - 30%
- » Charp V notch - 75 ft / lbs @ room temperature
- » Rockwell B hardness - 93 - 102 HRB
- » Brinell hardness - 200 - 300 HB
- » Elongation - 22%
- » Frictional resistance - Excellent
- » Abrasive resistance - Mild

### PROCEDURES:

- Use either AC or DC reverse polarity
- Clean weld area
- Bevel heavy sections
- For high carbon steels, a preheat of 400° F is recommended
- Hold a short arc
- Run stringer beads
- Peening will help relieve stresses
- Let each pass cool and slag will peel off easily
- Will not respond to heat treatment



PART NUMBER	SIZE	PKG	CURRENT AMPS
00SMW500POP	3/32"	1 EA PKG	40-80
00SMW600POP	1/8"	1 EA PKG	70-110

## HARD SURFACE180 ELECTRODE

A 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. This product can be used for carbon and manganese steel, dipper teeth and lips, roll crushers, hammermill parts, impactors, plow shares and cultivator shoes.

### FEATURES:

- » Hardness as deposited - RC 57 to 61
- » High deposition rate - Magnetic

### PROCEDURES:

- AC or DC reverse or straight polarity
- Run stringer beads or weave
- On manganese steels, use short stringer beads
- Deposit thickness, 1/4" max.



PART NUMBER	SIZE	PKG	CURRENT AMPS
00180500POP	3/32"	1 EA PKG	120-155
00180600POP	1/8"	1 EA PKG	140-175

The operation of welding fume control equipment is affected by various factors including proper use and positioning of the equipment, maintenance of the equipment and the specific welding procedure and application involved. Worker exposure level should be checked upon installation and periodically thereafter to be certain it is within applicable OSHA PEL and ACGIH TLV limits.

Lincoln Electric Product Claim - Weld fume control products manufactured by The Lincoln Electric Company are designed to be utilized as an engineering safety control to aid in achieving adequate ventilation while conducting welding or it's allied processes. The operation of welding fume control equipment is affected by various factors including proper use and positioning of the equipment, and the specific welding procedure and application involved. When the equipment is used as designed - and when properly installed, operated and maintained - it can be a valuable and effective tool to help employers maintain adequate ventilation in the workplace. Lincoln Electric defines adequate ventilation as that which is required to maintain occupational exposure levels below the applicable exposure limits when sound work practices are utilized. Worker exposure level should be checked upon installation and periodically thereafter to be certain it is within applicable OSHA PEL and ACGIH TLV limits.

#### CUSTOMER ASSISTANCE POLICY

The business of The Lincoln Electric Company® is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

Subject to Change – This information is accurate to the best of our knowledge at the time of printing. Please refer to [www.lincolnelectric.com](http://www.lincolnelectric.com) for any updated information.

The Lincoln Electric Company  
22801 St. Clair Avenue · Cleveland, OH · 44117-1199 · U.S.A.  
[www.lincolnelectric.com](http://www.lincolnelectric.com)