

SelectAlloy 317L

Description:

SelectAlloy 317L is a gas-shielded, flux cored, stainless steel electrode that offers a nominal weld metal composition of 19.5% chromium, 13% nickel, 3.5% molybdenum and a maximum carbon content of 0.04%. The higher level of molybdenum in **SelectAlloy 317L** improves resistance to pitting and provides increased creep resistance. Its low carbon content minimizes carbide precipitation and makes it more resistant to intergranular corrosion.

Classifications:

- E317LT0-1, E317LT0-4, per AWS A5.22 (Also meets E317T0-1, E317LT0-4 per AWS A5.22)

Characteristics:

SelectAlloy 317L provides improved pitting resistance and also increases creep resistance. **SelectAlloy 317L** produces a smooth arc transfer with minimal spatter Easy peeling slag reduces clean up time.

Applications:

SelectAlloy 317L delivers improved pitting resistance compared to 316L and is an excellent choice for applications involving solutions of sulfuric acid and sulfur bearing gases. Utilized to weld types 316 and 317 stainless, **Selectalloy 317L** finds wide application in the pulp and paper industry as well as in food and pharmaceutical processing equipment.

Typical Mechanical Properties (CO₂)*:

Ultimate Tensile Strength (psi)	89,000
Yield Strength (psi)	68,000
Percent Elongation	33

*Strength levels will be slightly higher w/Ar+20-25% CO₂

Typical Weld Deposit Chemistry (wt%)*:

Shielding Gas	C	Cr	Ni	Mn	Si	Mo	N	
100CO ₂	0.03	19.50	12.70	1.02	0.62	0.05	3.30	0.50

Ferrite Number (WRC, 1992) - 9

Typical Welding Parameters:

Diameter	WFS (ipm)	Amperage	Voltage	ESO	Dep. Rate (lbs/hr)
.035"	300	110	25	5/8"-3/4"	3.8
.035"	500	150	26	5/8"-3/4"	5.4
.035"	600	165	27	5/8"-3/4"	6.3
.035"	700	175	28	5/8"-3/4"	7.7
.045"	200	120	25	5/8"-3/4"	4.3
.045"	335	170	27	5/8"-3/4"	7.1
.045"	440	200	29	5/8"-3/4"	9.3
.045"	780	290	35	5/8"-3/4"	17.0
1/16"	150	150	24	3/4"-1"	5.0
1/16"	235	210	28	3/4"-1"	7.8
1/16"	345	270	31	3/4"-1"	11.3
1/16"	500	350	34	3/4"-1"	17.0

* Optimum conditions are in **boldface type**. Lower by 2 volts when using Ar+20-25% CO₂.

Select-Arc all position electrodes do not contain bismuth.

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Notice: The results reported are based upon testing of the product under controlled laboratory conditions in accordance with American Welding Society Standards. Actual use of the product may produce different results due to varying conditions. Thus the results are not guarantees for use in the field. The manufacturer disclaims any warranty of merchantability or fitness for any particular purpose with respect to its products.

