# SelectAlloy 309L-AP LHCr+6

Stainless Steel / Gas Shielded / Flux Cored

## FEATURES

#### CONFORMANCES

•	Low C, < 0.04 wt%, minimizes carbide precipitation	AWS A5.22	
	(sensitization) which makes the weld metal more		
	resistant to intergranular corrosion.		

- Designed for welding in all positions where well washed beads can be achieved in both 100% CO2 or 75-80% Ar/balance CO2 shielding gas.
- Smooth arc transfer and self-releasing slag that peels easily to ensure that clean up time is minimized.
- Applications for this alloy type include welding dissimilar metal, such as type 304 SS to mild steel, cladding mild steel or type 304 base metals where corrosion requires to be enhanced, and welding of the stainless steel side of type 304 claddings.
- This product has been specially formulated to reduce hexavlent chromium in the fume compared to standard cored and coated stainless electrodes.

# DIAMETERS (in (mm))

0.045 (1.2)

#### POSITIONS



## SHIELDING GAS

75-80% Ar + Balance CO2, 100% CO2 Flow Rate: 40 - 50 CFM

#### POLARITY

Direct Current Electrode Positive (DCEP)

# **TYPICAL WELD DEPOSIT CHEMISTRY (WT%)**

Shielding Gas	Bi	с	Cr	Cu	Mn	Мо	Ni	Ρ	S	Si	WRC- 1992 Ferrite
100%CO2	>0.002	0.03	24.00	0.13	0.95	0.07	12.50	0.02	<0.01	0.59	13
75%Ar / 25%CO2	>0.002	0.03	23.90	0.12	1.11	0.06	12.60	0.02	<0.01	0.76	13

# **TYPICAL MECHANICAL PROPERTIES**

Shielding Gas	Tensile Strength ksi (MPa)	Yield Strength ksi (MPa)	Elongation (%)	Weld Condition	PWHT Temp
100%CO2	82 (566)	61 (421)	38	As-Welded	-
75%Ar / 25%CO2	88 (607)	64 (441)	37	As-Welded	-



Notice: Be sure to follow all your employers safety practices, policies and procedures when using this product. Refer to CSA W117.2 and ANSI Z49.1 Safety in Welding, Cutting and Allied Processes for further information and the manufactures SDS sheet. 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. An example of such conditions would be electrode size, plate chemistry, environment, weldment design, fabrication methods, welding procedure and service requirements. 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.

PRODUCT DATA SHEET

E309LT1-1 E309LT1-4 E309T1-1 E309T1-4

## **RECOMMENDED WELDING PARAMETERS**

Diameter in (mm)	Shielding Gas	Position	WFS* in/min (m/min)	Amps	Volts	CTWD* in (mm)
	75% Ar/25% CO2	All-Position	215 (5.5)	130	23	1/2 - 5/8 (13 - 16)
		All-Position	260 (6.6)	145	24.5	1/2 - 5/8 (13 - 16)
0.045 (1.2 mm)		All-Position	310 (7.9)	160	26	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	420 (10.7)	180	27.5	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	450 (11.4)	200	29	5/8 - 3/4 (16 - 19)

\* WFS = Wire Feed Speed, CTWD = Contact Tip To Work Distance

Parameters were established in 75% Ar/25% CO2. Raise by 1-1.5 volts when using 100% CO2.

# PACKAGING (lbs (kgs))

33 (15) Spools, 60 (27.2) Coils, 500 (226.8) Round Drum, 800 (362.9) Hex Drum, 900 (408.2) Hex Drum \*Some packaging options may not be available depending on diameter and product. Special package options may be available upon request.

#### **STORAGE AND HANDLING**

All products should be stored in original packaging, in dry conditions and handled with care. For more information refer to our website.



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