SelectAlloy 309L-AP LHCr+6

Stainless Steel / Gas Shielded / Flux Cored

PRODUCT DATA SHEET

FEATURES

- Low C, < 0.04 wt%, minimizes carbide precipitation (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.

CONFORMANCES

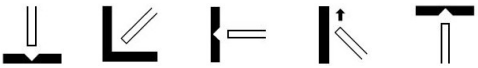
AWS A5.22

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

DIAMETERS (in [mm])

0.045 (1.2)

POSITIONS



SHIELDING GAS

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

POLARITY

Direct Current Electrode Positive (DCEP)

TYPICAL WELD DEPOSIT CHEMISTRY (WT%)

Shielding Gas	Bi	C	Cr	Cu	Mn	Mo	Ni	P	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	-

Revision: 1/17/2025

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RECOMMENDED WELDING PARAMETERS **

Diameter in (mm)	Shielding Gas	Position	WFS* in/min (m/min)	Amps	Volts	CTWD* in (mm)
0.045 (1.2 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)
		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*
***The parameters listed are recommended starting points of operation and the ranges for amperage, wfs, and voltage could be extended based on fitness for application. For products with "all-position" capability, as determined and listed in classification, the position recommendation can be determined based on operator skill and material thickness and isn't limited to the listing.*

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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