SelectAlloy 316L-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.
- The addition of Mo improves resistance to pitting and crevice corrosion compared to type 308 stainless steel.
- 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 in the pulp and paper industry, chemical and textile processing equipment, furnace parts and in parts exposed to marine environments. Alloy types for welding include 316 stainless and similar alloys, such as A743 and A744 as well as CF-3M and CF-8M.
- This product has been specially formulated to reduce hexavlent chromium in the fume compared to standard cored and coated stainless electrodes.

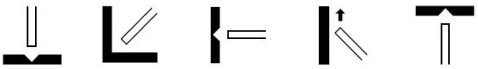
CONFORMANCES

AWS A5.22 E316LT1-1, E316LT1-4, E316T1-1, E316T1-4

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	C	Cr	Cu	Mn	Mo	Ni	P	S	Si	WRC-1992 Ferrite
100%CO2	>0.002	0.04	18.60	0.33	1.25	2.32	11.60	0.03	0.01	0.70	7
75%Ar / 25%CO2	>0.002	0.04	18.70	0.30	1.31	2.35	11.80	0.02	0.01	0.75	7

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TYPICAL MECHANICAL PROPERTIES

Shielding Gas	Tensile Strength ksi (MPa)	Yield Strength ksi (MPa)	Elongation (%)	Weld Condition	PWHT Temp
100%CO2	82 (566)	59 (407)	40	As-Welded	-
75%Ar / 25%CO2	86 (593)	61 (421)	40	As-Welded	-

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*

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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