SelectAlloy 308L-AP

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 austenitic alloys of similar composition, 301, 302, 304, 304L, 308, and 308L. These alloys are commonly found in chemical, paper, textile, food service equipment, and pharmaceutical industries.

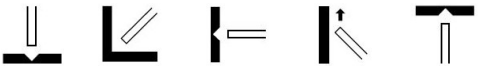
CONFORMANCES

AWS A5.22	E308LT1-1
	E308LT1-4
	E308T1-1
	E308T1-4
ASME SFA 5.22	E308LT1-1
	E308LT1-4
	E308T1-1
	E308T1-4

DIAMETERS (in [mm])

0.035 (0.9), 0.045 (1.2), 0.052 (1.3), 1/16 (1.6)

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	0.04	19.30	0.15	1.45	0.07	9.80	0.02	<0.01	0.54	6
75%Ar / 25%CO2	>0.002	0.04	19.50	0.14	1.59	0.07	10.20	0.02	0.01	0.70	7

TYPICAL MECHANICAL PROPERTIES

Shielding Gas	Tensile Strength ksi (MPa)	Yield Strength ksi (MPa)	Elongation (%)	Weld Condition	PWHT Temp
100%CO2	81 (559)	57 (393)	43	As-Welded	-
75%Ar / 25%CO2	84 (579)	58 (400)	45	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.

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RECOMMENDED WELDING PARAMETERS **

Diameter in (mm)	Shielding Gas	Position	WFS* in/min (m/min)	Amps	Volts	CTWD* in (mm)
0.035 (0.9 mm)	75% Ar/25% CO2	All Positions	325 (8.3)	110	23	1/2 (13)
		All Positions	400 (10.2)	120	24.5	1/2 (13)
		All Positions	470 (11.9)	130	26	1/2 (13)
		Flat & Horizontal	565 (14.4)	145	27.5	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	660 (16.8)	160	29	1/2 - 5/8 (13 - 16)
0.045 (1.2 mm)	75% Ar/25% CO2	All Positions	215 (5.5)	130	23	1/2 - 5/8 (13 - 16)
		All Positions	260 (6.6)	145	24.5	1/2 - 5/8 (13 - 16)
		All Positions	310 (7.9)	160	26	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	385 (9.8)	180	27.5	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	450 (11.4)	200	29	5/8 - 3/4 (16 - 19)
0.052 (1.3 mm)	75% Ar/25% CO2	All-Position	215 (5.5)	160	23	5/8 - 3/4 (16 - 19)
		All-Position	235 (6.0)	195	24.5	5/8 - 3/4 (16 - 19)
		All-Position	280 (7.1)	210	26	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	340 (8.6)	225	27.5	3/4 - 1 (19 - 25)
		Flat & Horizontal	395 (10.0)	245	29	3/4 - 1 (19 - 25)
1/16 (1.6 mm)	75% Ar/25% CO2	All Positions	135 (3.4)	160	23	5/8 - 3/4 (16 - 19)
		All Positions	190 (4.8)	195	24.5	5/8 - 3/4 (16 - 19)
		All Positions	225 (5.7)	210	26	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	255 (6.5)	225	27.5	3/4 - 1 (19 - 25)
		Flat & Horizontal	290 (7.4)	245	29	3/4 - 1 (19 - 25)

** 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.

APPROVALS

Agency	Approval	Shielding Gas	Diameter(s) in (mm)
ABS	E308LT1-1	C1 (100%CO2)	0.045 (1.2) - 1/16 (1.6)
	E308LT1-4	M21 (75%Ar / 25%CO2)	0.045 (1.2) - 1/16 (1.6)
CWB CSA W48-23	E308LT1-1	C1 (100%CO2)	0.035 (0.9) - 1/16 (1.6)
	E308LT1-4	M21 (75%Ar / 25%CO2)	0.035 (0.9) - 1/16 (1.6)
DNV	VL 308 L	C1 (100%CO2)	0.035 (0.9) - 1/16 (1.6)

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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