

FLUX CORED

Oxford Alloy® 309LT1-1/4

AWS E309LT1-1/T1-4 • Stainless Steel

Key Features

- ❖ Designed for all-position welding
- ❖ For welding dissimilar metals – stainless, mild steel, or low alloy.
- ❖ Hermetically sealed packaging to ensure freshness.

Conformances

AWS/ASME SFA 5.22
E309LT1-1/T1-4
UNS W30935
ABS Approved



Chemical Composition - As required per AWS 5.22

C	Mn	Si	Cr	Ni	Mo	P
0.04 max	0.5-2.5	1.0 max	22.0-25.0	12.0-14.0	0.75 max	0.04 max
S	Cu					
0.03 max	0.75 max					

Mechanical Properties - As required by AWS 5.22

	Tensile Strength MPa (ksi)	Yield Strength MPa (ksi)	Elongation %	Charpy V-Notch J (ft-lbf) @ 20 °C (68°F)
AWS Requirements	520 (75) min	Not Specified	30 min	Not Specified
Typical Results - As welded	580 (84)	450 (65)	37	49 (36)

Recommended Shielding Gas

100% CO₂
75% Argon / 25% CO₂

Typical Welding Parameters

Diameter	.045 (1.14mm)				1/16" (1.6mm)			
	130	165	190	220	170	210	250	300
Amperage	130	165	190	220	170	210	250	300
Voltage	25	26	28	30	25	27	28	29
Wire Feed speed (in/min)	227	341	445	567	154	193	243	321
Deposition rate (lbs/hr)	4.25	6.14	8.08	8.08	5.34	6.89	8.57	11.43
% Efficiency	84.0	83.0	84.0	84.0	83.0	82.5	83.0	83.0

The ESO (Electrical Stick Out) is 1/2" - 1". DCEP (electrode positive) is specified. When using 75% Argon / 25% CO₂ mixture, decrease voltage by as much as 2 volts.

Diameters & Packaging

Oxford Alloys USA			Oxford Alloys Asia Pacific		
Diameter (in)	Spool Dimension (in)	Spool Weight (lbs)	Diameter (mm)	Spool Dimension (mm)	Spool Weight (kgs)
.045	12	33 lb spool	1.2	300	15 kg spool
1/16	12	33 lb spool	1.6	300	15 kg spool

Actual test results may vary. Refer test result disclaimer on page 160.