

Oxford Alloy® 308/308L-16

AWS E308/308L-16 • Stainless Steel



Key Features

- ❖ These electrodes provide a weld deposit, with reduced carbon levels (0.04% max), that offers increased resistance to inter-granular corrosion.
- ❖ Type 308L is ideal for welding Type 304L stainless steels.

Conformances

AWS/ASME SFA 5.4
E308/308L-16
UNS W30813
ABS Approved

Chemical Composition - As required per AWS 5.4

C	Cr	Ni	Mn	Si	P	Cu
0.04 max	18.0- 21.0	9.0- 11.0	0.5- 2.5	1.0 max	0.04 max	0.75 max
Mo	S					
0.75 max	0.03 max					

Mechanical Properties - As required by AWS 5.4

	Tensile Strength MPa (ksi)	Yield Strength MPa (ksi)	Elongation %
AWS Requirements	520 (75) min	Not specified	35 min
Typical Results - As welded	540 (78)	390 (57)	46

Typical Welding Parameters

Diameter		Process	Volt	Amps (flat)	Amps (V/OH)
in	(mm)				
3/32	(2.4)	SMAW	24-28	70-85	65-75
1/8	(3.2)	SMAW	26-30	85-110	80-90
5/32	(4.0)	SMAW	28-32	110-140	100-120
3/16	(4.8)	SMAW	28-32	120-160	110-130

Diameters & Packaging

Oxford Alloys USA			Oxford Alloys Asia Pacific		
Diameter (in)	Length (in)	Packaging (lbs)	Diameter (mm)	Length (mm)	Packaging (kgs)
3/32"	12	10 lb tube 30 lb carton	2.6	300	4 kg tube 12 kg carton
1/8"	14	10 lb tube 30 lb carton	3.2	350	5 kg tube 15 kg carton
5/32"	14	10 lb tube 30 lb carton	4.0	350	5 kg tube 15 kg carton
3/16"	14	10 lb tube 30 lb carton	5.0	350	5 kg tube 15 kg carton

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