

COATED ELECTRODES

Oxford Alloy® 309LMo-16

AWS E309LMo-16 • Stainless Steel

Key Features

- ❖ This electrode is designed for applications requiring molybdenum with a standard 309L analysis.
- ❖ Primarily for welding type 316L and 316 clad steels, or welding molybdenum containing austenitic stainless steel to carbon steel.

Conformances

AWS/ASME SFA 5.4
E309LMo-16
UNS W30923



Chemical Composition - As required per AWS 5.4						
C	Cr	Ni	Mn	Si	Mo	P
0.04 max	22.0-25.0	12.0-14.0	0.5-2.5	1.0 max	2.0-3.0	0.04 max
S	Cu					
0.03 max	0.75 max					

Mechanical Properties - As required by AWS 5.4			
	Tensile Strength MPa (kst)	Yield Strength MPa (kst)	Elongation %
AWS Requirements	520 (75) min	Not specified	30 min
Typical Results - As welded	620 (90)	440 (64)	40

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.