

Stainless Steel Electrodes

Alloy: WW309LMo-16 Class: E309LMo-16

Conforms to Certification: AWS A5.4 ASME SFA A5.4

Alloy: E309LMo-16

Weld Process: Shielded Manual Metal Arc

AWS Chemical Composition Requirements

C = 0.04 max	Si = 1.00 max
Cr = 22.0 – 25.0	P = 0.04 max
Ni = 12.0 – 14.0	S = 0.03 max
Mo = 2.0 – 3.0	Cu = 0.75 max
Mn = 0.5 - 2.5	

Deposited All Weld Metal Properties %
(Typical) As-Welded

Yield Strength	88,000psi
Tensile Strength	61,000psi
Elongation	35%

Deposited Chemical Composition % (Typical)

C = 0.02	Si = 0.50
Cr = 23.00	P = 0.025
Ni = 13.00	S = 0.019
Mn = 1.50	Mo = 2.50

Deposited Charpy-V-Notch Impact Properties %

Not Applicable

Recommended Welding Parameters

<u>Diameter</u>	<u>Voltage</u>	<u>Amperage Flat Position</u>	<u>Amperage Vertical & Overhead</u>
3/32	24-28	70-85	65-75
1/8	26-30	85-110	80-90
5/32	28-32	110-140	100-120
3/16	28-32	120-160	110-130

Application

E309LMo-16 is designed for applications requiring molybdenum with a standard 309 analysis except for a lower carbon limit. It is used primarily for welding type 316 clad steels, or molybdenum containing austenitic stainless steel to carbon steel. Service temperature must be less than 600°F.

