



# 309LMo-16 Coated Electrode

U.S. ALLOY CO.  
dba Washington Alloy  
7010-G Reames Rd.  
Charlotte, NC 28216  
[www.weldingwire.com](http://www.weldingwire.com)



**American Welding Society**  
Sustaining Company Member



## ALLOY DESCRIPTION AND APPLICATION;

309LMo Low Carbon was developed for welding 22-27% Cr- 11-15% Mi – 2-3% Mo stainless steel, austenitic stainless steel containing molybdenum to mild or carbon steel and for welding ferritic steel plates clad with AISI 316 stainless steel. This electrode yields an austenitic ferritic, crack resistant weld deposit that will provide corrosion resistance against sulfuric acid, phosphoric acid, etc. 309LMo weld deposits have a tensile strength greater than that of USA 309 or USA 309L. It is typically used for overlaying carbon steel giving weld deposits analogous to 316 stainless steel.

### TYPICAL WELDING PROCEDURES; DCEP & AC

Diameter	Amps	Vertical/Overhead	Volts
3/32"	65-90	60-80	24-28
1/8"	80-115	75-95	26-30
5/32"	110-150	100-125	27-32

Procedures may vary with change in position, base metals, filler metals, equipment and other changes. When welding vertical reduce amperage 10-20%

### TYPICAL CHEMISTRY (%) & WELD METAL PROPERTIES

Carbon	0.04	Molybdenum	2.00-3.00
Manganese	0.50-2.5	Phosphorus	0.04
Silicon	1.00	Sulfur	0.03
Chromium	22.00-25.00		
Nickel	12.00-14.00	Copper	0.75
Charpy V-notch Impact Average at		70°F	37 ft·lbs
Elongation	38%	Hardness	HB 195
Yield Strength (psi)	74,000	Tensile Strength (psi)	110,000

Iron balance and all single values are maximum percentages

**AVAILABLE SIZES:** TF 309LMo-16 = ending in 01 for 3/32", 02 for 1/8", 03 for 5/32"  
Other sizes available – please inquire

**SPECIFICATIONS;** ANSI/AWS A5.4 E309LMo-16  
ASME SFA 5.4 E309LMo-16



**EAST COAST**  
7010-G Reames Rd  
Charlotte, NC 28216  
Tel (888) 522-8296  
Fax (704)598-6673

**GULF COAST**  
4855 Alpine Drive #100  
Stafford, TX 77477  
Tel (877) 711-9274  
Fax (281)313-6332

**WEST COAST**  
8535 Utica Ave  
Rancho Cucamonga, CA 91730  
Tel(800)830-9033  
Fax (909)291-4586

2019 DC

Warehouse Distribution Center – Dallas/Fort Worth, Portland, Oregon & Boston, Massachusetts

Head Office – Puyallup, Washington

Washington Alloy Company believes that all information and data given is correct. Use this information to assist in making your own evaluations or decisions and this information should not be mistaken as an expressed or implied warranty. U.S. ALLOY CO. assumes no liability for results or damages incurred from the use of any information contained herein, in whole or in part.