DURAMAX STAINLESS ELECTRODE DM309MoL-16 (309LMo-16)

Classification: **E309MoL-16 AWS A5.4 / ASME SFA 5.4 (E309LMo-16)**

Description, Characteristics & Applications:

DURAMAX E309MoL-16 (E309LMo-16) is designed for welding stainless steels to other types of steel, for dissimilar welds between stainless steels and mild or low alloys, and for depositing buffer layers when welding acid-resisting clad steels.
DM309MoL16 (309LMo-16) joins stainless Types 304L, 316L, and 410 to mild or low alloy steels, such as brackets and stiffeners. This electrode also welds hardenable steels and provides a buffer layer prior to hardsurfacing.

Re-Dry the electrode at 250 - 350°C for 30 - 60 minutes prior to use.

Typical Chemical Composition (%)

AWS Spec.	C	Cr	Ni	Mo	Mn	Si	P	S	Cu	
A5.4	0.04max	22.0-25.0	12.0-14.0	2.0 - 3.0	0.5 - 2.5	1.00 max	0.04 max	0.03 max	0.75 max	
Typical	0.033	24.20	12.35	2.54	1.02	0.80	0.026	0.010	0.05	

Typical Mechanical Properties as Welded

Tensile Strength (n/mm²)	Yield Strength (n/mm²)	Elongation (%)	Hardness	Ferrite WRC (FN)	CVN Impacts (J) @ +20 °C
550 Min	300 Min	30% Min	-------	8 - 20 FN	50-70 J

Typical Welding Parameters DCEP or AC

Diameter	Type of Current	Amperage Range		Voltage Range
		Flat	Out of Position	
3/32"	DCEP or AC	70 - 80	65 - 80	20 - 23
1/8"	DCEP or AC	80 - 110	75 - 95	21 - 24
5/32"	DCEP or AC	120 - 160	100 - 120	22 - 25
3/16"	DCEP or AC	170 - 190	Not recommended	23 - 25

NOTE: Maintaining a proper welding procedure, including pre-heat and interpass temperatures, may be critical depending on the type and thickness of material being welded.
POLARITY: DCEP or AC
DCEP = DC, Electrode Positive (reverse polarity) has the most weld penetration.
AC: medium weld penetration (can have more spatter)
WELDING POSITIONS: All Positions
USE LESS AMPS ON THIN METAL; MORE AMPS ON THICK METAL