ESAB 309LMo

An extra low carbon, basic stainless steel electrode depositing a 23 Cr, 13 Ni, 2.5 Mo type weldmetal

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Classification AWS A 5.4 : E 309MoL-15
IS 5206: E 23.12.2 L B 20
DIN 8556: E 22 12 3 L B 20

DESCRIPTION

ESAB 309LMo is an extra low carbon, basic coated all position stainless steel electrode giving an austenitic weld deposit of 23 Cr, 13 Ni, 2.5 Mo type. The weldmetal has excellent resistance to corrosion and oxidation at elevated temperatures of upto 1100°C in continuous service, coupled with good strength. ESAB 309LMo welds with a quiet, smooth and stable arc in all positions with a minimum spatter. The slag cover is easily detachable and the weldbead is shiny and smooth. The weldmetal is of radiographic quality.

WELDING CURRENT: DC +

TYPICAL APPLICATIONS

ESAB 309LMo is especially suitable for welding of stainless steels where better toughness is required compared to the rutile based electrodes of the same class. ESAB 309LMo is used for the welding of 316 type clad steels as well as for joining and as a buffer layer in welding of dissimilar metals e.g. mild steel to stainless steel, low alloy steel to stainless steel. Also suitable for surfacing and building up for wear resistance. Recommended for welding build-up layer of turbine, runners made of ferritic chromium stainless steels.

TYPICAL ALL WELDMETAL PROPERTIES

Chemical Composition (%)				Mechanical Properties	
C	0.028	Ni	13.0	UTS	620 N/mm^2
Mn	1.4	Si	0.40	YS	440 N/mm^2
Cr	22.50	Mo	2.50	EL (L=4d)	35%
S	0.018	P	0.018		

CURRENT RANGE & PACKING DATA

Size (mm)	Length (mm)	Current Range (Amps)	No. of Electrodes in a	
			Carton	Cardboard box
2.50	350	40-70	80	400
3.15	350	60-100	65	325
4.00	350	100-140	40	200
5.00	350	140-180	30	150

PACKING: Electrodes are packed in heat sealed plastic cartons and five of these cartons are shrink wrapped in a cardboard box.