ESAB 309Mo

A basic stainless steel electrode depositing a 23 Cr, 12 Ni, 2 Mo type weldmetal

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Classification AWS A 5.4: E 309Mo-15
IS 5206: E 23.12 2 B 20
DIN 8556: E 22 12 3 B 20

DESCRIPTION

ESAB 309Mo is a basic coated all position stainless steel electrodes giving an austenitic weld deposit of 23 Cr, 13 Ni, 2.5 Mo type. The addition of Mo to the normal AISI 309-type steel improves its tensile strength and corrosion resistance. The weldmetal has excellent resistance to corrosion and oxidation at elevated temperature upto 1100°C in continuous service. ESAB 309Mo welds with a quiet, smooth and stable arc in all positions with minimum spatter. The slag cover is easily detachable and the weldbead is shiny and smooth. The weldmetal is of radiographic quality.

APPROVALS: NPC

WELDING CURRENT: DC +

TYPICAL APPLICATIONS

ESAB 309Mo 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 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	0.07	Ni	13.00	UTS	640 N/mm^2
Mn	0.90	Si	0.40	YS	460 N/mm^2
Cr	22.50	Mo	2.5	EL (L=4d)	35%
S	0.015	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	40-60	80	400
3.15	350	60-90	65	325
4.00	350	85-130	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.