GM 309MoL

CLASSIFICATION :AWS/SFA 5.9 ER309LMo

CHARACTERISTICS :

Solid wire deposits a 24 % Cr / 13 % Ni/ 2.5 % Mo austenitic stainless steel weld metal with a ferrite content about FN 16. The high alloy level and high ferrite content enables the weld metal to tolerate dilution from carbon and low alloy steels without hot cracking.

APPLICATIONS :

Buffer layer on mild steel or low alloy steels. Joining of clad steels and dissimilar joints between stainless and mild or low alloy steels. Joining of ferrite–martensitic stainless steels. Welding of similar composition, 309Mo type stainless steel. Joining type 304/304L, 347, 321, 316/316L and duplex stainless steel to mild and low alloy steels.

COMPOSITION OF THE WIRE (RANGE) %:

C	Mn	Si	Cr	Cu	Ni	S	P	Mo
0.03 max	1.0-2.50	0.30-0.65	23.0 – 25.0	0.50 max	12 – 14	0.03 max	0.03 max	2.0-3.0

MECHANICAL PROPERTIES (RANGE) :

Tensile Strength MPa	Yield Stress MPa	Elongation(%)(L=4D)	**Charpy V-notch impact strength (joules)**	
580–680	410-510	35–45	0°C	50-100

SHIELDING GAS: 98% Argon + 1-2% Oxygen.

WELDING CURRENT: DC (-)

CORROSION RESISTANCE:

Good resistance to general and intergranular corrosion. Also good resistance to oxidising acids and cold reducing acids.

PACKING DATA :

SIZE (mm)	WEIGHT OF SPOOL (Kg).
0.8	12.5
1.2	12.5
1.6	12.5