

GM 309Mo

IDENTIFICATION

GM 309MO, ER 309MO

CLASSIFICATION

AWS/SFA 5.9 : ER309Mo

DESCRIPTION

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.

CHEMICAL ANALYSIS (RANGE) %

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

MECHANICAL PROPERTIES (RANGE)

UTS (MPa)	EL (%) (L=4D)	CVN Impact Value	
		Temp	Joules
580 - 680	35 - 45	0°C	50 - 100

TYPICAL 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.

SHIELDING GAS : Argon 99.99% 6-12 l/min

WELDING CURRENT : DC (-)

CORROSION RESISTANCE

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

PACKING PARAMETERS

Size (mm)	Weight / Spool (kg)
0.8	12.5
1.2	12.5
1.6	12.5