

GM 316



SPECIFICATION : AWS/SFA 5.9 ER316 BS 2901-90 316S92 DIN 8556-86

CHARACTERISTICS :

A solid, smooth wire primarily intended for welding the low carbon, molybdenum alloyed, acid resistance 316 austenitic stainless steel of similar composition. Suitable for welding normal carbon 316 grade and Nb or Ti stabilized steel provided service temperatures are below 4000C. Widely used for chemical process plants. Deposits weld metal has improved resistance to general corrosion and pitting resistance in marine and industrial environments. The deposited weld metal is of radiographic quality

Weld METAL COMPOSITION (%):

C	Mn	Si	Cr	Ni	Cu	Mo	S	P
0.08 max	1.0-2.5	0.30-0.65	18-20	11-14	0.50 max	2.0-3.0	0.025	0.030 max

MECHANICAL PROPERTIES OF THE WELD METAL (RANGE) :

Tensile Strength MPa	Charpy V-notch impact strength in joules	
480 min	Temp	Joule
	20°C	100-140

SHIELDING GAS : Ar + 2 % O₂, 16-21 l/min

WELDING CURRENT : DC (-)

CORROSION RESISTANCE:

Good resistance to general and intergranular corrosion in the more severe environments e.g hot dilute acids.Good resistance to chlorise pitting corrosion.

FERRITE : Ferrite no.of undiluted weld metal is in the range 3 to 10

RECOMMENDED CURRENT AND PACKING DATA :

SIZE (mm)	Wt.of the spool (Dia.of spool : 300mm layer to layer winding) KG (approx)
0.80	12.50
1.00	12.50
1.20	12.50
1.60	12.50