

GM 316L

IDENTIFICATION

GM 316L, ER 316L

CLASSIFICATION

AWS/SFA 5.9 ER316L

BS 2901-90 316S92 DIN 8556-86

DESCRIPTION

A solid, smooth wire primarily intended for welding the low carbon, molybdenum alloyed, acid resistance 316L austenitic stainless steel of similar composition. Suitable for welding normal carbon 316 grade and Nb or Ti stabilized steel provided service temperatures are below 400°C. 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.

CHEMICAL ANALYSIS (RANGE) %

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

MECHANICAL PROPERTIES (RANGE)

TS (MPa)	EL (%) (L=4D)	CVN Impact Value	
		Temp	Joules
490 min	30 min	20°C	100 - 140
		-100°C	40 - 80

WELDING CURRENT : DC (+)

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

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.

PACKING PARAMETERS

Size (mm)	Weight / Spool (kg)
0.8	12.5
1	12.5
1.2	12.5
1.6	12.5