GMM MIG 316LSi

Classification:

Class: AWS : A5.9- ER316LSi

Material Conforms to: AWS A5.9

Weld Process Used: MIG (GMAW)

Description:

ER316L filler metal is primarily used for welding low carbon molybdenum-bearing austenitic alloys. Good resistance to general and, owing to low C content, intergranular corrosion. Higher Si % provide good weld beads. The Mo content gives good resistance also to pitting. The 2% molybdenum content of 316L gives the weld deposit excellent corrosion resistance at elevated temperatures against "pitting" that may be caused by sulfuric, phosphoric and acetic acids.

Chemical Composition of wire:

Standard Requirement								
C	**Mn**	**Si**	**Cr**	**Ni**	**Mo**	**Cu**	**S**	**P**
0.03 max	1.0-2.5	0.65-1.0	18.0-20.0	11.0-14.0	2.0-3.0	0.75 max	0.03 max	0.03 max
Average Typical composition								
0.022	1.75	0.88	18.21	11.14	2.10	0.12	0.009	0.027

Mechanical Properties:

Tensile Strength (Min)	Yield Strength (Min)	Elongation (Min)
600 MPa	400 MPa	35%

Available sizes:

- 0.60 mm, 0.80 mm, 0.90 mm, 1.00 mm, 1.20 mm, 1.60 mm

Welding position:

- All position

Polarity:

- DCEP (DC+)

Recommended Welding Parameters:

GMAW "MIG Process"			Reversed Polarity			
	Wire Diameter	Wire Feed	Amps	Volts	Shielding Gas	Gas CFH
Short Arc Welding	0.80	13-26	40-120	16-20	98% Argon+2% O2	25
	0.90/1.00	13-26	60-140	16-22	98% Argon+2% O2	25
Spray Arc Welding	0.90/1.00	20-39	140-220	24-29	98% Argon+2% O2	38
	1.20	16-30	160-260	25-30	98% Argon+2% O2	38
	1.60	10-16	230-350	27-31	98% Argon+2% O2	38

Packing Details:

- 1 Kg/2lbs – SD100
- 5 Kg/10lbs – SD200
- 15Kg/25lbs/33lbs - SD300/BS300
- 100 Kg – Drum Pack
- 250 Kg – Drum Pack

Note: Other shielding Gases may be used for MIG welding. Shielding gases are chosen taking Quality, Cost, and Operability into consideration.