



GMM MIG 309LSi

Classification:

Class: AWS : A5.9- ER309LSi

EN 14343- A : G 23 12 LSi

Material Conforms to: AWS A5.9 & EN 14343-A

Weld Process Used: MIG (GMAW)

Description:

The alloy is also used for welding of buffer layers on C-Mn steels and welding of dissimilar joints. When using the wire for buffer layers and dissimilar joints it is necessary to control the dilution of the weld. The maximum carbon content of less than 0.03% preserves the intergranular corrosion resistant properties of the weld deposit and weld zone, Yielding x-ray quality welds. The higher silicon content improves the welding properties, such as wetting.

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	23.0-25.0	12.0-14.0	0.5 max	0.5 max	0.02 max	0.03 max
Average Typical composition								
0.024	1.57	0.82	23.27	12.11	0.08	0.28	0.011	0.027

Mechanical Properties:

Tensile Strength (Min)	Yield Strength (Min)	Elongation (Min)
600 MPa	400 MPa	30%

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:

<u>GMAW "MIG Process"</u>			<u>Reversed Polarity</u>			
	<u>Wire Diameter</u>	<u>Wire Feed</u>	<u>Amps</u>	<u>Volts</u>	<u>Shielding Gas</u>	<u>Gas CFH</u>
<u>Short Arc Welding</u>	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
<u>Spray Arc Welding</u>	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.