

GMM MIG 307Si

Classification:

Class: DIN 8556- 1.4370

EN 14343- A : G 18 8 Mn

Material Conforms to: DIN 8556- 1.4370 & EN 14343-A

Weld Process Used: MIG (GMAW)

Description:

GMM MIG 307Si is a solid wire electrode for GMAW, intended for welding work-hardenable steels, Armor steel and austenitic stainless manganese steels. Also suitable for joining stainless chromium steels with chromium content up to 17% and overlay welding of mild steels and low-alloy steels. GMM MIG 307Si is similar to ER 307 type with increased manganese content ($\approx 6.0\%$), reducing the risk for hot cracking.

Chemical Composition of wire:

Standard Requirement								
C	Mn	Si	Cr	Ni	Mo	Cu	S	P
0.20 max	5.0 – 8.0	1.5 max	17.0-20.0	7.0-10.0	0.50 max	0.50 max	0.025 max	0.035 max
Average Typical composition								
0.09	6.35	0.70	17.52	7.15	0.35	0.38	0.008	0.031

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:

<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>
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.