



<h1>GMM TIG 347Si</h1>	Classification: Class: AWS : A5.9- ER347Si EN 14343- A : G 19 9 Nb Si
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Material Conforms to: AWS A5.9 & EN 14343-A

Weld Process Used: TIG (GTAW)

Description:

ER347Si is recommended for welding AISI 347 and 321. The weld metal has good resistance to general corrosion. The alloy is stabilized with Niobium to improve the resistance against intergranular corrosion of the weld metal. The higher silicon content improves the welding properties, such as wetting. Due to the niobium content this alloy is recommended for use at higher temperatures ER347Si is suitable for applications where welds are subjected to high temperatures (+ 750°F).

Chemical Composition of wire:

Standard Requirement									
C	Mn	Si	Cr	Ni	Mo	Cu	S	P	Nb
0.08 max	1.0-2.5	0.65-1.0	19.0-21.5	9.0-11.0	0.50 max	0.50 max	0.02 max	0.03 max	10 X C-1.00
Average Typical composition									
0.022	1.70	0.85	19.42	9.24	0.15	0.18	0.011	0.026	0.34

Mechanical Properties:

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

Available sizes:

- Diameter- 1.20 mm, 1.60 mm, 2.00 mm, 2.40 mm, 3.20 mm, 4.00 mm
- Length- 1000 mm & 36" Inch

Welding position:

- All position

Polarity:

- DCEN (DC-)

Recommended Welding Parameters:

<u>GTAW "TIG Process"</u>			
<u>Wire Diameter</u>	<u>Amps DC</u>	<u>Volts</u>	<u>Shielding Gas</u>
1.20	80-110	13-16	Argon 100%
1.60	90-130	14-16	Argon 100%
2.40	120-175	15-20	Argon 100%
3.20	140-200	17-22	Argon 100%
4.00	160-230	18-25	Argon 100%

Packing Details:

- 1 Kg/2lbs – Tube
- 5 Kg/10lbs – Tube
- 20Kg/40lbs - Box (4 Tubes)

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