

GMM TIG 2594

Classification:

Class: AWS : A5.9- ER2594

Material Conforms to: AWS A5.9

Weld Process Used: TIG (GTAW)

Description:

A super-duplex grade provide the optimum ferrite/austenite ratio in the finished weld resulting in high tensile and yield strength and superior resistance to stress corrosion, cracking (SCC) and pitting corrosion. Pitting Resistance Equivalent Number (PREN) above 40 indicates superior pitting corrosion resistance in aqueous chloride containing service conditions as well as good resistance against stress corrosion cracking.

Chemical Composition of wire:

Standard Requirement									
C	Mn	Si	Cr	Ni	Mo	Cu	S	P	N
0.03 max	2.5 max	1.00 max	24.0-27.0	08.0-10.5	2.5-4.5	1.50 max	0.02 max	0.03 max	0.2000- 0.3000
Average Typical composition									
0.020	1.52	0.41	25.02	9.02	2.98	0.08	0.007	0.018	0.2502

Mechanical Properties:

Tensile Strength (Min)	Yield Strength (Min)	Elongation (Min)
800 MPa	600 MPa	20%

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.