

GMM TIG 2209

Classification:

Class: AWS : A5.9- ER2209

Material Conforms to: AWS A5.9

Weld Process Used: TIG (GTAW)

Description:

ER2209 is intended to weld duplex stainless steels. It exhibits high tensile strength and resistance to stress and corrosion cracking. Exhibits a low ferrite. Weld deposit has an austenite and ferrite microstructure which classifies 2209 as a “duplex stainless”. In media containing chloride and hydrogen sulphide the alloy has a high resistance to intergranular, pitting and especially to stress corrosion.

Chemical Composition of wire:

Standard Requirement									
C	Mn	Si	Cr	Ni	Mo	Cu	S	P	N
0.03 max	0.5 - 2.00	0.90 max	21.5-23.5	7.5 - 9.5	2.5 - 3.5	0.75 max	0.03 max	0.03 max	0.0800- 0.2000
Average Typical composition									
0.018	1.64	0.52	23.05	8.60	3.10	0.06	0.008	0.021	0.1450

Mechanical Properties:

Tensile Strength (Min)	Yield Strength (Min)	Elongation (Min)
730 MPa	550 MPa	25%

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.