GMM TIG 410

Classification:

Class: AWS : A5.9- ER410

Material Conforms to: AWS A5.9

Weld Process Used: TIG (GTAW)

Description:

410 is an air-hardening 12% chromium stainless steel for welding types 403, 405, 410, 414, and 416. Also an overlay on carbon steels for corrosion, erosion and abrasion resistance. Weld deposits exhibit good strength and ductility as well as corrosion and oxidation resistance at high temperatures. Preheating and an inter-pass temperature of not less than 200°C is recommended to achieve adequate ductility.

Chemical Composition of wire:

Standard Requirement								
C	**Mn**	**Si**	**Cr**	**Ni**	**Mo**	**Cu**	**S**	**P**
0.03 max	1.0-2.5	0.50 max	11.5-13.5	0.60 max	0.75 max	0.75 max	0.03 max	0.03 max
Average Typical composition								
0.026	1.54	0.38	11.84	0.35	0.25	0.08	0.010	0.027

Mechanical Properties:

Tensile Strength (Min)	Yield Strength (Min)	Elongation (Min)
550 MPa	500 MPa	22%

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:

GTAW "TIG Process"			
Wire Diameter	**Amps DC**	**Volts**	**Shielding Gas**
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.