GMM TIG 385

Classification:

Class: AWS : A5.9- ER385 (904L)

Material Conforms to: AWS A5.9

Weld Process Used: TIG (GTAW)

Description:

A high alloy "super austenitic" stainless steel originally called 904L and containing extra low residual elements of carbon, silicon, phosphorus and Sulphur – which reduces weld metal hot cracking and fissuring while maintaining corrosion resistance of the deposit. ER385 filler metal may also be used to join Type 317L material where improved corrosion resistance in specific media is needed. The resistance and crevice corrosion is better than for ordinary 18% Cr, 8% Ni, Mo steels.

Chemical Composition of wire:

Standard Requirement								
C	**Mn**	**Si**	**Cr**	**Ni**	**Mo**	**Cu**	**S**	**P**
0.025 max	1.0-2.5	0.50 max	19.5-21.5	24.0-26.0	4.2-5.2	1.2-2.0	0.03 max	0.02 max
Average Typical composition								
0.017	1.73	0.38	19.84	24.25	4.32	0.08	0.010	0.016

Mechanical Properties:

Tensile Strength (Min)	Yield Strength (Min)	Elongation (Min)
550 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:

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.