



GMM TIG NiCrMo-3

Classification:

Class: AWS : A5.14- ER NiCrMo-3

Material Conforms to: AWS A5.14

Weld Process Used: TIG (GTAW)

Description:

ER NiCrMo-3 is used primarily for gas tungsten and gas metal arc and matching composition base metals. It is also used for welding Inconel 601 and Incoloy 800. It can be used to weld dissimilar metal combinations such as steel, stainless steel, Inconel and Incoloy alloys. Weld deposit exhibits high strength, exceptional corrosion resistance including resistance to pitting and crevice corrosion over a broad temperature range from cryogenic up to 1800°F.

Chemical Composition of wire:

Standard Requirement												
C	Mn	Si	Cr	Ni	Mo	Cu	S	P	Nb	Al	Ti	Fe
0.10 max	0.50 max	0.50 max	20.0-23.0	58.0 min	8.0-10.0	0.5 max	0.015 max	0.02 max	3.15-4.15	0.40 max	0.40 max	5.0 max
Average Typical composition												
0.029	0.07	0.20	21.52	61.42	8.45	0.03	0.003	0.004	3.51	0.27	0.32	4.1

Mechanical Properties:

Tensile Strength (Min)	Yield Strength (Min)	Elongation (Min)
750 MPa	450 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.