



GMM MIG NiCrMo-3

Classification:

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

Material Conforms to: AWS A5.14

Weld Process Used: MIG (GMAW)

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:

- 0.80 mm, 0.90 mm, 1.00 mm, 1.20 mm, 1.60 mm

Welding position:

- All position

Polarity:

- DCEP (DC+)

Recommended Welding Parameters:

<u>GMAW "MIG Process"</u>			<u>Reversed Polarity</u>			
	<u>Wire Diameter</u>	<u>Wire Feed</u>	<u>Amps</u>	<u>Volts</u>	<u>Shielding Gas</u>	<u>Gas CFH</u>
<u>Short Arc Welding</u>	0.80	13-26	40-120	16-20	98% Argon+2% O2	25
	0.90/1.00	13-26	60-140	16-22	98% Argon+2% O2	25
<u>Spray Arc Welding</u>	0.90/1.00	20-39	140-220	24-29	98% Argon+2% O2	38
	1.20	16-30	160-260	25-30	98% Argon+2% O2	38
	1.60	10-16	230-350	27-31	98% Argon+2% O2	38

Packing Details:

- 1 Kg/2lbs – SD100
- 5 Kg/10lbs – SD200
- 15Kg/25lbs/33lbs - SD300/BS300
- 100 Kg – Drum Pack
- 250 Kg – Drum Pack

Note: Other shielding Gases may be used for MIG welding. Shielding gases are chosen taking Quality, Cost, and Operability into consideration.