GMM MIG 2209

Classification:

Class: AWS : A5.9- ER2209

Material Conforms to: AWS A5.9

Weld Process Used: MIG (GMAW)

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:

- 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:

GMAW "MIG Process"			Reversed Polarity			
	Wire Diameter	Wire Feed	Amps	Volts	Shielding Gas	Gas CFH
Short Arc Welding	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
Spray Arc Welding	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.