GMM MIG 310

Classification:

Class: AWS : A5.9- ER310

Material Conforms to: AWS A5.9

Weld Process Used: MIG (GMAW)

Description:

ER 310 is used for welding types AISI 310, 304 clad stainless steel, ferritic and martensitic chromium steels, and for stainless steel overlay work on mild and carbon steels. 310 welding wire produces weld deposits of high strength and high resistance to scaling at elevated temperatures. Scaling resistant ferritic chromium steels, provided that corrosion attack by reducing sulphur-bearing combustion gases is not be expected. Weld metal exhibits good toughness down to -196°C and non-scaling up to 1200°C.

Chemical Composition of wire:

Standard Requirement								
C	**Mn**	**Si**	**Cr**	**Ni**	**Mo**	**Cu**	**S**	**P**
0.08-0.15	1.0-2.5	0.30-0.65	25.0-28.0	20.0-22.5	0.75 max	0.75 max	0.03 max	0.03 max
Average Typical composition								
0.92	1.57	0.43	26.47	20.31	0.035	0.15	0.004	0.022

Mechanical Properties:

Tensile Strength (Min)	Yield Strength (Min)	Elongation (Min)
650 MPa	420 MPa	30%

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.