

<h1>GMM MIG 385</h1>	<p><b>Classification:</b> Class: AWS : A5.9- ER385 (904L)</p>
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**Material Conforms to:** AWS A5.9

**Weld Process Used:** MIG (GMAW)

**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:**

- 0.60 mm, 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>
<b><u>Short Arc Welding</u></b>	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
<b><u>Spray Arc Welding</u></b>	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.