

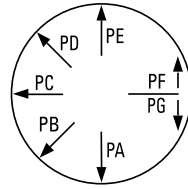
SMT-904L

20%Cr-25%Ni-4.5%Mo-1.5%Cu STS

Conformances

AWS A5.9/ ASME SFA5.9 ER385
 JIS Z3321 YS385
 EN ISO 14343-A G(W) 20 25 5 Cu L

Welding Position



Applications

- Offshore structure & FPSO, chemical and petrochemical plants

Current

GMAW: DC + / GTAW: DC -

Features

- Good general corrosion resistance
- Preferably keep Heat input below 1.5KJ/mm

Shielding Gas

Ar / Ar+ O₂

Diameter / Packaging

Diameter	Spool			Pac			
	mm (in)	12.5kg (28lbs)	15kg (33 lbs)	20kg (44lbs)	150kg (330lbs)	200kg (440lbs)	250kg (551lbs)
0.8 (0.033)		✓					
0.9 (0.035)		✓					
1.0 (0.040)		✓					
1.2 (0.045)		✓					
1.4 (0.052)							
1.6 (1/16)		✓					

Diameter	5kg*1000							
	mm (in)	1.0 (0.039)	1.2 (0.045)	1.6 (1/16)	2.0 (5/64)	2.4 (3/32)	2.6 (0.10)	3.2 (1/8)
				✓	✓	✓	✓	✓

Typical Chemical Composition of the Wire(%)

C	Si	Mn	P	S	Cr	Ni	Mo	Cu
0.013	0.31	1.89	0.013	0.001	20.52	24.96	4.32	1.42

Typical Mechanical Properties of All-Weld Metal

YS MPa(lbs/in ²)	TS MPa(lbs/in ²)	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft.-lbs)
490 (71,000)	650 (94,300)	35.0	20 (68)	110 (81)
			-196 (-321)	70 (52)

Typical Welding Parameters

Diameter, Polarity Shielding Gas	CTWD mm(in)	Wire Feed Speed m/min (in/min)	Amp. (A)	Volt. (V)	Deposition Rate kg/hr (lb/hr)
1.0mm (0.040 in), DC +					
100% Ar Gas	15~20 (0.59~0.78)	6.0 (236)	140	24	2.1 (4.6)
		7.1 (280)	160	24	2.5 (5.5)
		9.2 (362)	190	24	3.2 (7.1)
Mixed Gas (Ar + 2% O ₂)	15~20 (0.59~0.78)	5.2 (204)	160	26	1.8 (4.0)
		7.0 (276)	190	26	2.4 (5.3)
		8.3 (327)	220	26	2.9 (6.4)
1.2mm (0.045 in), DC +					
100% Ar Gas	15~20 (0.59~0.78)	9.2 (362)	190	27	4.6 (10.1)
		11.9 (469)	220	27	6.0 (13.2)
		15.5 (610)	260	27	7.8 (17.2)
Mixed Gas (Ar + 2% O ₂)	15~20 (0.59~0.78)	7.7 (303)	200	28	3.9 (8.6)
		8.6 (339)	230	28	4.3 (9.5)
		10.1 (398)	260	28	5.1 (11.2)

SMAW

SAW

GMAW

GTAW

FCAW

Non-FERROUS

APPENDIX