

SW-316LT

Type : Rutile

Conformances

AWS A5.22/ ASME SFA5.22 E316LT1-1/-4

JIS Z3323 TS316L-FB1

EN ISO 17633-A-T 19 12 3 L P M21/C1 2

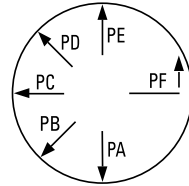
Applications

- Cryogenic service such as LNG storage tank
- 18% Cr-12%Ni-2%Mo stainless steels

Features

- Good impact value at cryogenic temperature
- Good performance in all position

Welding Position



Current

DC +

Shielding Gas

100% CO₂

Ar + 20~25% CO₂

Diameter / Packaging

Diameter	Spool			Pac		
	5kg (11lbs)	12.5kg (27.6lbs)	15kg (33lbs)	250kg (551lbs)	300kg (661lbs)	350kg (771lbs)
mm (in)						
1.2 (0.045)	√	√	√			

Typical Chemical Composition of All-Weld Metal (%)

	C	Si	Mn	P	S	Cr	Ni	Mo
100% CO ₂	0.018	0.77	1.51	0.015	0.009	17.24	12.23	2.2
80% Ar + 20% CO ₂	0.018	0.77	1.51	0.015	0.009	17.24	12.23	2.2

Typical Mechanical Properties of All-Weld Metal

	TS MPa(lbs/in ²)	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft.-lbs)
100% CO ₂	535 (77,575)	47	-196 (-321)	32 (23.6)
80% Ar + 20% CO ₂	542 (78,590)	46	-196 (-321)	33 (24.3)

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)
1.2mm (0.045 in) DC+					
100% CO ₂	20 (4/5)	6.0 (236)	140	23-26	2.6 (5.7)
		9.1 (358)	180	27-30	3.5 (7.7)
		12.2 (480)	210	28-31	4.6 (10.1)
80% Ar + 20% CO ₂	20 (4/5)	6.0 (236)	140	23-26	2.6 (5.7)
		9.0 (354)	180	27-30	3.6 (7.9)
		12.0 (472)	210	27-30	4.6 (10.1)

SWAW

SAW

GMAW

GTAW

FCAW

Non-FERROUS

APPENDIX