

# 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

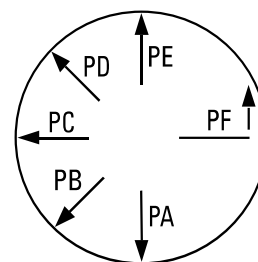
## Applications

- 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% CO<sub>2</sub>

Ar + 20~25% CO<sub>2</sub>

## Diameter / Packaging

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

**Typical Chemical Composition of All-Weld Metal (%)**

	C	Si	Mn	P	S	Cr	Ni	Mo
100% CO <sub>2</sub>	0.018	0.77	1.51	0.015	0.009	17.24	12.23	2.2
80% Ar + 20% CO <sub>2</sub>	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 <sup>2</sup> )	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft-lbs)
100% CO <sub>2</sub>	535 (77,575)	47	-196 (-321)	32 (23.6)
80% Ar + 20% CO <sub>2</sub>	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)
<b>1.2mm (0.045 in) DC+</b>					
100% CO <sub>2</sub>	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 <sub>2</sub>	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)