

SW-316LT

TYPE : Rutile

AWS A5.22 / ASME SFA5.22 E316LT1-1/-4
JIS Z3323 TS316L-FB1
EN ISO 17633-A-T 19 12 3 L P M/C 2

Applications

SW-316LT is designed for welding of extra-low carbon 18%Cr-12%Ni-2%Mo stainless steels for cryogenic applications.

Characteristics on Usage

SW-316LT is a titania type flux cored wire for all position welding with CO₂ & Argon+CO₂ mixed shielding gas. This wire is designed for cryogenic applications, 316L austenitic stainless steels.

SW-316LT is also available to order as a variant with a controlled composition and low ferrite content, designed for cryogenic service.

This is particularly relevant to attack by chloride solutions and sulphurous acid.

Notes on Usage

- ① Both 100% CO₂ and mixed (Ar+20~25% CO₂) gas are useful.
- ② Welders for solid wire can be used but as wire is softer than solid wire, pay full attention to adjust feeding roller and do not tighten them excessively.
- ③ Use the wind-screen against wind.
- ④ Where possible, preferred storage conditions of opened packs are 60% RH maximum, 18°C minimum.

Welding Position



1G (PA) 2F (PB) 3G (PF) 4G (PE)

Current

DC +

Shielding Gas

CO₂/Ar+20~25% CO₂

Typical Chemical Composition of All-Weld Metal (%) (Shielding Gas: 100% CO₂)

C	Si	Mn	P	S	Cr	Ni	Mo
0.024	0.71	1.72	0.022	0.012	18.2	12.4	2.1

Typical Mechanical Properties of All-Weld Metal (Shielding Gas: 100% CO₂)

TS MPa(lbs/in ²)	EL (%)	Temp. °C (°F)	CVN-Impact Value J (ft · lbs)
540 (78,300)	44	-196 (-321)	35 (26)

Approval

I Packing(Including Ball Pac)

Dia. (mm) 1.2
(in) .045

Spool(kg) 15
(lbs) 33

Sizes Available and Recommended Currents (Amp.)

Size mm (in)	1.2 (.045)
F & HF	180 ~ 220
V-up, OH	120 ~ 160