

TFW-316LB

AWS A5.22 E316LT1-1
EN ISO 17633-B-TS-316L-F C1 1
JIS Z 3323 TS 316L-F C 1 1

Characteristics and Applications:

TFW-316LB is a gas shielded flux cored wire suitable for ultra-low temperature applications. The weld metal has low carbon content and contains a proper amount of ferrite in the austenitic structure, it has superior welding performance with good crack resistance and prevents intergranular corrosion. It is often used in pressure vessels where excellent corrosion resistance is required. It is suitable for welding stainless steel materials, such as 316, 316L, CF-8M and CF-3M.

Notes on usage:

1. Before welding, oil, rusty and moisture should be cleaned off the base material that should have the proper protection from the wind in welding site.
2. Use 99.8% purity or higher CO₂ shielding gas.
3. Keep the product dry, while it is stored or delivered.

Typical chemical composition of weld metal (wt%):

	C	Mn	Si	P	S	Cr	Ni	Mo
AWS	≤0.04	0.5-2.5	≤1.0	≤0.04	≤0.03	17.0-20.0	11.0-14.0	2.0-3.0
EN ISO	≤0.04	0.5-2.5	≤1.0	≤0.04	≤0.03	17.0-20.0	11.0-14.0	2.0-3.0
Typical value	0.026	1.39	0.55	0.024	0.007	19.10	12.36	2.22

Typical mechanical properties of weld metal:

	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-lbf) -196°C(-320°F)
AWS	≥520(75)	≥30	-
EN ISO	≥485(70)	≥25	-
Typical value	560(81)	42	38(28)

Welding position:



Size and recommended operating range (DC<+>)

Stick out:15-20(mm), flow rate:15-25(l/ min):

Position	Diameter (mm)	1.2	1.6
	F		150-220A / 25~33V
HF		150-220A / 25~33V	200A-300A / 27V-35V
V-UP		130-200A / 24~30V	160A-200A / 24V-27V
OH		150-180A / 25-29V	-

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