

TFW-316L

AWS A5.22 E316LT1-1
EN ISO 17633-B-TS 316L-F C1 1
JIS Z 3323 TS316L-F C 1

Characteristics and Applications:

TFW-316L is designed for 100% CO₂ gas shielding and all-position welding. It exhibits excellent slag release and almost spatter-free operating features. It can be used for joining types of 316,316L, CF-8M, and CF-3M stainless steels. It provides high inter-granular corrosion resistance to pressure vessel application due to the low carbon content.

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	Cu
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	≤ 0.75
Typical value	0.026	1.39	0.55	0.024	0.007	19.10	12.36	2.68	0.05

Typical mechanical properties of weld metal:

	Tensile strength MPa(ksi)	Elongation %
AWS	≥ 485(70)	≥ 30
Typical value	560(81)	42

Welding position:



Size and recommended parameter range (DC <+>)

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

Position	Diameter (mm)	1.2	1.6
	F	150-240A / 25~32V	180A-300A / 27V-35V
HF	150-240A / 25~32V	180A-300A / 27V-35V	
V-UP	130-200A / 24~30V	160A-200A / 24V-28V	
OH	150-180A / 25-28V	-	

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