

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	130-220A / 23~33V	200A-300A / 27V-35V
HF	140-220A / 23~33V	200A-300A / 27V-35V	
V-UP	120-200A / 24~30V	160A-200A / 24V-27V	
OH	150-180A / 25-29V	-	

* The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and TienTai Electrode Co., Ltd. expressly disclaims any liability incurred from any reliance thereon. Typical data is obtained when welded and tested in accordance with AWS specification. Other tests and procedures may produce different results. No data is to be construed as recommendation for any welding condition or technique not controlled by TienTai Electrode Co., Ltd.