

# TFW-316L

JIS Z 3323 TS316L-FC1  
AWS A5.22 E316LT1-1

## Characteristics and Applications:

TFW-316L is designed for 100% CO<sub>2</sub> gas shielding and all-position welding. It exhibits very 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, the base material should be cleaned from oil, rusty, moisture and the welding place should have the proper protection from the wind.
2. Use 99.8% purity or higher CO<sub>2</sub> shielding gas. Maintain the flow rate not less than 20L/min when wire diameter is 1.2 mm.
3. Trailer Shield is required to ensure the weld pool completely shielded until solidification is complete and no porosity problem.
4. Keep dry while in storage and delivery.

## Typical chemical composition of weld metal (wt%)

C	Si	P	S	Mo	Mn	Ni	Cr	Cu
0.027	0.69	0.025	0.010	2.68	1.55	12.63	19.03	0.08

## Typical mechanical properties of weld metal

TS (MPa) (kgf/mm <sup>2</sup> )	EL %	CVN -196°C J
560(57)	42	30

## Welding position



## Size and recommended current range (DC<+>)

Diameter (mm)	1.2	
Welding condition	A	V
F、HF	130-220	24-33
H	140-180	25-29
V-UP	130-160	24-28
OH	150-180	25-29

\*The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and Tien Tai 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 Tien Tai Electrode Co., Ltd.