

# TFW-316LTM

AWS A5.22 E316LT0-4  
EN ISO 17633-A-T 19 12 3 L R M21 3  
JIS Z 3323 TS316L-F M 0

## Characteristics and Applications:

TFW-316LTM is designed for flat position welding by gas shield of mix gas (75~80% Argon and 25~20% CO<sub>2</sub>) An austenitic stainless steel deposited that can be used for joining Types 316,316L stainless steels. It provides high resistance to intergranular corrosion with low carbon weld deposit.

## 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 with mix gas (75~80% Argon and 25~20% CO<sub>2</sub>).
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 |
| EN ISO        | ≤ 0.04 | ≤ 2.0   | ≤ 1.2 | ≤ 0.030 | ≤ 0.025 | 17.0-20.0 | 10.0-13.0 | 2.5-3.0 | ≤ 0.5  |
| Typical value | 0.024  | 1.48    | 0.68  | 0.025   | 0.007   | 18.61     | 12.18     | 2.79    | 0.06   |

## Typical mechanical properties of weld metal:

|               | Yield strength<br>MPa(ksi) | Tensile strength<br>MPa(ksi) | Elongation<br>% |
|---------------|----------------------------|------------------------------|-----------------|
| AWS           | -                          | ≥ 485(70)                    | ≥ 30            |
| EN ISO        | ≥ 320(46)                  | ≥ 510(74)                    | ≥ 25            |
| Typical value | 455(66)                    | 576(84)                      | 37              |

## Welding position:



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

Stick out: 18-25 (mm), flow rate:20-25(l/min):

| Position | Diameter (mm) | 1.2               | 1.6                 |
|----------|---------------|-------------------|---------------------|
|          | F, HF         | 150-240A / 25~32V | 180A-300A / 27V-35V |

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