

TFW-309LT

AWS A5.22 E309LT0-1
EN ISO 17633-A-T 23 12 L R C1 3
JIS Z 3323 TS309L-F C 0

Characteristics and Applications:

TFW-309LT is designed for Flat position welding by gas shield of CO₂. The weld metal contains 24% Cr and 13% Ni. It is commonly used for welding similar alloys in wrought or cast forms, also used in welding dissimilar metals, such as joining Type 304 to mild steel.

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 100% CO₂ 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 |
|---------------|--------|---------|-------|---------|---------|-----------|-----------|
| AWS | ≤ 0.04 | 0.5-2.5 | ≤ 1.0 | ≤ 0.04 | ≤ 0.03 | 22.0-25.0 | 12.0-14.0 |
| EN ISO | ≤ 0.04 | ≤ 2.5 | ≤ 1.2 | ≤ 0.030 | ≤ 0.025 | 22.0-25.0 | 11.0-14.0 |
| Typical value | 0.024 | 1.62 | 0.62 | 0.022 | 0.009 | 24.07 | 12.33 |

Typical mechanical properties of weld metal:

| | Tensile strength MPa(ksi) | Elongation % |
|---------------|------------------------------|-----------------|
| AWS | ≥ 520(75) | ≥ 30 |
| EN ISO | ≥ 510(74) | ≥ 25 |
| Typical value | 580(84) | 34 |

Welding position:



Sizes and recommended parameter range (DC <+>):

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

| Position | Diameter (mm) | 1.2 | 1.6 |
|----------|---------------|-----|-------------------|
| | F, HF | | 130A-220A/24V-33V |

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