

TFW-410NiMo

AWS A5.22 E410NiMoT1-1
EN ISO 17633-B-TS 410NiMo F C1 1

Characteristics and Applications:

TFW-410NiMo is a gas-shielded flux-cored wire with better control of hydrogen levels and excellent impact toughness at 0°C. It is generally used for welding of ASTM CA6NM castings, materials, with similar composition, and turbines of hydro plant.

Notes on usage:

1. Use 99.8% or higher purity of CO₂ as shielding gas.
2. Require pre-heat and inter-pass temperature at 150°C~260°C, and post weld heat treatment.
3. Keep the product dry, while it is stored or delivered.

Typical chemical composition of weld metal (wt%):

| | C | Si | P | S | Mo | Mn | Ni | Cr |
|---------------|--------|-------|--------|--------|-----------|-------|---------|-----------|
| AWS | ≤ 0.06 | ≤ 1.0 | ≤ 0.04 | ≤ 0.03 | 0.40-0.70 | ≤ 1.0 | 4.0-5.0 | 11.0-12.5 |
| EN ISO | 0.06 | ≤ 1.0 | ≤ 0.04 | ≤ 0.03 | 0.40-0.70 | ≤ 1.0 | 4.0-5.0 | 11.0-12.5 |
| Typical value | 0.047 | 0.45 | 0.015 | 0.008 | 0.54 | 0.40 | 4.10 | 12.18 |

Typical mechanical properties of weld metal:

| | Tensile strength MPa(ksi) | Elongation % | Charpy V-Notch J (ft-lbf) 0°C (32°F) | PWHT |
|---------------|------------------------------|-----------------|--|-----------------|
| AWS | 760(110) | 15 | - | 593-621°Cx 1hrs |
| EN ISO | 760(110) | 10 | - | 590-620°Cx 1hrs |
| Typical value | 875(127) | 19 | 40(30) | 610°Cx 1hrs |

Welding position:



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

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

| Position | Diameter (mm) | 1.2 |
|----------|---------------|-------------------|
| F, HF | | 130A-220A/24V-33V |
| H | | 140A-180A/25V-29V |
| V-UP | | 130A-180A/24V-28V |
| OH | | 150A-180A/25V-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.