TFW-2209P

AWS A5.22 E2209T1-4 EN ISO 17633-A-T 22 9 3 N L P M21 1

Characteristics and Applications:

TFW-2209P is suitable to duplex stainless steel such as UNS S31803 (Alloy 2205). The product features excellent pitting corrosion resistance, stress corrosion resistance and crack resistance. It is suitable for welding of heat exchanger, chemical equipments and pipes.

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 \sim 80% Argon and 25 \sim 20% CO₂).
- 3. Keep the product dry, while it is stored or delivered.

Typical chemical composition of weld metal (wt%):

| | С | Mn | Si | Р | S | Cr | Ni | Мо | N | Cu |
|---------------|-------|---------|------|--------|--------|-----------|----------|---------|-----------|-------|
| AWS | ≦0.04 | 0.5-2.0 | ≦1.0 | ≦0.04 | ≦0.03 | 21.0-24.0 | 7.5-10.0 | 2.5-4.0 | 0.08-0.20 | ≦0.75 |
| EN ISO | ≦0.04 | ≦2.5 | ≦1.2 | ≦0.030 | ≦0.025 | 21.0-24.0 | 7.5-10.5 | 2.5-4.0 | 0.08-0.20 | ≦0.5 |
| Typical value | 0.025 | 0.90 | 0.55 | 0.023 | 0.007 | 22.5 | 8.9 | 3.3 | 0.16 | 0.16 |

Typical mechanical properties of weld metal:

| | Yield strength MPa(ksi) | Tensile strength MPa(ksi) | Elongation (%) |
|---------------|----------------------------|------------------------------|-------------------|
| AWS | - | ≥690(100) | ≥20 |
| EN ISO | ≥450(65) | ≥550(80) | ≥20 |
| Typical value | 645(94) | 790(115) | 30 |

Welding position:











Sizes and recommended parameter range (DC<+>): Stick out:15-20(mm).flow rate:20-25(I/min):

| Diameter (mm) Position | 1.2 | | | | | |
|------------------------|-------------------|--|--|--|--|--|
| F | 150A-220A/24V-33V | | | | | |
| Н | 140A-180A/25V-29V | | | | | |
| V-UP | 130A-180A/24V-29V | | | | | |
| 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.

