

ST-80B6

Conformances

AWS A5.28/ ASME SFA5.28 ER80S-B6
EN ISO 21952-A W CrMo5Si

Applications

- It will find applications in chemical or petro-chemical industry and in the ammonia synthesis process
- It is also used for heat exchangers, boilers, piping and pressure vessels for temperature service up to 600°C

Features

- Low alloy copper-coated tig rod with 5% Cr and 0.5% Mo content to be used for the welding of creep resistant steel

Welding Position

Current

GTAW: DC-

Shielding Gas

Ar

Diameter / Packaging

| Diameter | Length mm(in) |
|------------|---------------|
| mm (in) | 5kg (11lbs) |
| 2.0 (5/64) | ✓ |
| 4.0 (5/32) | ✓ |
| 5.0 (3/16) | ✓ |

Typical Chemical Composition of the Wire (%)

| C | Si | Mn | S | P | Cu | Ni | Cr |
|-------|-------|-------|-------|-------|-------|----------|-------|
| 0.085 | 0.386 | 0.537 | 0.005 | 0.006 | 0.138 | 0.052 | 5.610 |
| Mo | V | Nb | Sb | Sn | As | X-Factor | |
| 0.558 | 0.010 | 0.003 | 0.002 | 0.004 | 0.002 | 8.81 ppm | |

Typical Mechanical Properties of All-Weld Metal

| YS Mpa(lbs/in ²) | TS Mpa(lbs/in ²) | EL (%) | Temp °C(°F) | CVN-Impact Value J (ft-lbs) | PWHT |
|---------------------------------|---------------------------------|-----------|----------------|--------------------------------|-------------|
| 594 (86,000) | 676 (98,000) | 23.9 | -20 (-4) | 257 (198) | 745°C × 1hr |

SMW

SAW

GMAW

GTAW

FCAW

Non-FERROUS

APPENDIX