# T-80SB2

For 1.25%Cr-0.5%Mo heat-resistant steel

## Classifications

| | | | |
|---|---|---|---|
| EN ISO 21952-B:2007 | : W 55 1CM | KS D 7140 | : YGT1CM |
| AWS A5.28-05 | : ER80S-B2 | JIS Z 3316 | : YGT1CM |

## Description

- For butt and filet welding of power plant, heat exchanger and oil refineries such as 1.25%Cr-0.5%Mo heat-resistant steel.
- Excellent mechanical and toughness properties after PWHT.
- Proper tungsten electrode extension from the tip of torch is 4~6mm in general.
- Preheat at 100℃ to 200℃ and post weld heat treatment at 620℃ to 720℃ is necessary according to the plate thickness, type of steels, shape of base metals or under high restricion.

## Typical chemical composition of rod (%)

| C | Si | Mn | P | S | Cr | Mo |
|---|---|---|---|---|---|---|
| 0.09 | 0.54 | 0.51 | 0.015 | 0.006 | 1.26 | 0.45 |

## Typical mechanical properties of all-weld-metal

| | Y.S (MPa) | T.S (MPa) | El. (%) | IV (J) 20℃ | Remarks |
|---|---|---|---|---|---|
| AWS A5.28 | min. 470 | min. 550 | min. 19 | – | PWHT, Ar |
| EN ISO 21952-B | min. 470 | min. 550 | min. 17 | – | PWHT |
| Example | 500 | 590 | 26 | 80(@0℃) | PWHT, Ar |

* PWHT : 620℃x1Hr

## Operating data

| Dia.(mm) | 2.4~3.2 |
|---|---|
| Current (Amp.) | 200 ~ 300 |

## Polarity and Shielding gas

- DCEN (DC-)
- Ar : 100%Ar (15~25ℓ/min)