

# T-80SB2

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

## Classifications

EN ISO 21952-B:2012	: W 55 I1 1CM
AWS A5.28:2005	: ER80S-B2
KS D 7140:2005	: YGT1CM
JIS Z 3317:2011	: W 55-1CM

## Description

- For butt and fillet welding of power plant, heat exchanger and oil refineries such as 125%Cr-05%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 °C – 200 °C and PWHT at 620 °C – 720 °C is necessary according to the plate thickness, type of steel, shape of base metals or under high restriction

## Operating data

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

## Polarity & shielding gas

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

## 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

	Yield Strength	Tensile Strength	Elongation	Impact Value (J)	Remarks
	(MPa)	(MPa)	(%)	0 °C	
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	PWHT, Ar

\*PWHT: 620 °C x 1Hr