

T-80SB2

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

Classifications

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

Description

- For butt and fillet 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 °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.



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) 0 °C	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	PWHT, Ar

*PWHT: 620 °C x 1Hr

Welding positions

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

Polarity & shielding gas

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