KC-80SB2

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

Classifications

EN ISO 21952-B:2007	: G 55 1CM
AWS A5.28-05	: ER80S-B2
KS D 7120	: YG1CM-G
JIS Z 3317	: G 55-1CM

Description

- For butt and fillet welding of power stations, heat exchanger and oil refineries such as 1.25%Cr-0.5%Mo heat-resistant steel
- Excellent property of heat-resistant due to alloying Cr and Mo
- Superior tensile strength and impact values after PWHT
- Beautiful weld appearance due to low spatter with mixture gas

Typical chemical composition of wire (%)

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+2% O_2
EN ISO 21952-B	min. 470	min. 550	min. 17		PWHT
Example	500	580	25	80(@0℃)	PWHT, Ar+2% O_2

* PWHT : 620℃x1Hr

Operating data

Dia.(mm)		1.2	1.4
Current (Amp.)	Flat (PA/1G)	120 ~ 350	150 ~ 400
	Vertical (PF/3G)	80 ~ 180	100 ~ 250
	Overhead (PE/4G)	80 ~ 180	100 ~ 250

Polarity and Shielding gas

- DCEP (DC+)
- Ar+2% O_2 (15~25ℓ/min)