

# KC-80SNi1

For 550MPa low temperature service steel(1.0%Ni)

## Classifications

AWS A5.28-05 : ER80S-Ni1  
 EN 14341-A : G 46 5 M G3Ni1

## Description

- It is designed for welding of 550MPa high tensile steel for low temperature service of below -45°C
- suited for welding 1%Ni steel and other low temperature for low temperature pressure vessel, tank and pipe.
- Very good weldability in out of position work

## Typical chemical composition of wire (%)

C	Si	Mn	P	S	Ni
0.09	0.63	1.11	0.009	0.008	0.83

## Typical mechanical properties of all-weld metal

	Y.S (MPa)	T.S (MPa)	El. (%)	IV (J) -45°C	Remarks
AWS A5.28	min. 470	min. 550	24	27	-
Example	576	675	34	124(@-45°C) 92(@-60°C)	As Weld

## Operating data

Current (Amp.)	Dia.(mm)	1.2		1.4
		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+)
- Mix : Ar+2%O<sub>2</sub> (15~25ℓ/min)