# T-80SNi1

For low temperature service steel(1.0%Ni)

## Classifications

| | |
|---|---|
| AWS A5.28-05 | : ER80S-Ni1 |
| EN ISO 636-A : 2008 | : W 46 6 W2Ni1 |
| EN ISO 636-B : 2008 | : W 55A 5 W2Ni1 |

## Description

- It is designed for welding of 550MPa high tensile steel for low temperature service of below -45℃.
- 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
- GTAW rod for welding of low temperature equiment and structure

## Typical chemical composition of rod (%)

| 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℃ | Remarks |
|---|---|---|---|---|---|
| AWS A5.28 | min. 470 | min. 550 | 24 | 27 | - |
| Example | 592 | 678 | 35 | 162(@-45℃)<br>133(@-60℃) | As Weld |

## Operating data

| Dia.(mm) | Voltage | Ampere |
|---|---|---|
| 0.9 | 10~12 | 50~70 |
| 1.2 | 10~12 | 70~100 |
| 1.6 | 12~15 | 100~125 |
| 2.4 | 15~20 | 125~175 |
| 3.2 | 15~20 | 175~200 |

## Polarity and Shielding gas

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