

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°C.
- Suited for welding 1%Ni steel and other low temperature pressure vessel, tank and pipe.
- Very good weldability in out of position work
- GTAW rod for welding of low temperature equipment 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) | EI. (%) | IV (J) -45°C | Remarks |
|-----------|--------------|--------------|------------|-------------------|---------|
| AWS A5.28 | min. 470 | min. 550 | 24 | 27 162(@-45°C) | - |
| Example | 592 | 678 | 35 | 133(@-60°C) | 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)