



FCAW LOW ALLOY STEEL (Low Temperature)
AUTOMIG FC 81T1-Ni2

LOW ALLOY STEEL FCAW WIRE FOR 2%Ni STEEL



CLASSIFICATION : AWS A/SFA 5.29

E81T1-Ni2C

KEY FEATURES :

- Rutile type gas shielded FCW wire
- Typical 2%Ni weld deposit
- Stable and smooth arc
- Low fumes, Minimal spatters
- Easy slag removal, smooth weld bead
- Excellent combination of strength and toughness at -40°C
- Radiographic quality weld

WELDING POSITION :   **DCEP**

Shielding Gas	Gas Flow Rate, LPM	Stickout, mm
CO ₂	10-20	10-20

TYPICAL APPLICATIONS :

- Welding of high tensile steel 2% Ni steel and equivalent materials
- Offshore platform construction, Ship building
- Earthmoving and mining machinery
- Suitable for ASTM A572, A575, A734 steels

STORAGE / HANDLING :

Keep dry and follow handling instructions mentioned on the box

CHEMICAL COMPOSITION OF UNDILUTED WELD METAL, Wt% :

	C	Mn	Si	Ni	S	P
Specification	0.12 max	1.50 max	0.80 max	1.75-2.75	0.025 max	0.025 max

MECHANICAL PROPERTIES OF ALL WELD METAL :

	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%	CVN Impact at -40°C, J
Specification	As Welded	550-690	470 min	19 min	27 min

PARAMETERS - PACKING DATA :

Ø, mm	Voltage, V	Amperage, A	Kg/Spool
1.2	24 – 32	140 - 320	15
1.6	25 – 34	180 - 350	15

EQUIVALENT :

SMAW Electrode: **Tenalloy 70A**

GMAW Wire: **Automig 80S-Ni2**

GTAW filler: **Tigfil 80S-Ni2**