


**FCAW LOW ALLOY STEEL (Low Temperature)**
**AUTOMIG FC 81T1-Ni1**

LOW ALLOY STEEL FCAW WIRE FOR 1%Ni STEEL


**CLASSIFICATION :** AWS A/SFA 5.29 EN ISO 17632-A

E81T1-Ni1 C T 46 3 1Ni R C 2

**KEY FEATURES :**

- Rutile type gas shielded FCW wire
- Typical 1%Ni weld deposit
- Stable and smooth arc
- Low fumes, Minimal spatters
- Easy slag removal, smooth weld bead
- Excellent fracture toughness at -30°C
- Radiographic quality weld

**WELDING POSITION :** **DCEP**

Shielding Gas	Gas Flow Rate, LPM	Stickout, mm
CO <sub>2</sub>	10-20	10-20

**TYPICAL APPLICATIONS :**

- Welding of high tensile steel 1% Ni steel and equivalent materials
- Storage tanks for low temperature
- Offshore application, Bridges
- Refineries, power plants e.g. pressure vessels and heat exchangers, machinery

**STORAGE / HANDLING :**

Keep dry and follow handling instructions mentioned on the box

**CHEMICAL COMPOSITION OF UNDILUTED WELD METAL, Wt% :**

	C	Mn	Si	Ni	Mo	S	P
Specification	0.12 max	1.50 max	0.80 max	0.80-1.10	0.35 max	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 -30°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	22 – 30	130 - 300	15
1.6	24 – 32	200 - 380	15

**EQUIVALENT :**

 SMAW Electrode: **Tenalloy 70C**

 GMAW Wire: **Automig 80S-Ni1**

 GTAW filler: **Tigfil 80S-Ni1**