

# E81T1-Ni1C/M

HIGH TENSILE ALLOY STEEL  
FLUX CORED WIRES, DUAL USE



## TYPICAL APPLICATIONS

1. Machinery
2. Structural Fabrication
3. Storage Tank
4. Bridge Building

SIZE	AMPS
1.2mm	100-300A
1.6mm	180-450A

## CHARACTERISTICS

1. Excellent mechanical properties including low temperature toughness at -40 C
2. Premium arc performance and bead appearance.
3. All positional welding capability

## CLASSIFICATION

AWS A5.29 E81T1-Ni1C/M  
AWS A5.36 E81T1-M21A4-Ni1-H4  
EN ISO17632-A-T 46 4 1Ni P C1 H4

## WELDING POSITIONS (ISO/ASME)



## CHEMICAL COMPOSITIONS (Wt%), ALL WELD METAL, TYPICAL

C	Mn	Si	S	P	Ni
0.03	1.27	0.32	0.012	0.015	0.95

## AVAILABLE SIZES (DIA.)

1.2mm/1.6mm

## PACKAGING DETAILS

15kg Spools, Vacuum pack

## CURRENT TYPE

DC+

## EQUIVALENT TO

Lincoln UltraCore 81Ni1C-H Plus  
Hyundai Supercored 81  
Indura 81T1-Ni1

Esab Tubrod 15.17  
Kiswel K-81T

## MECHANICAL PROPERTIES, ALL WELD METAL, TYPICAL

Condition	Shielding Gas	Yield Strength (Mpa)	Tensile Strength (Mpa)	Elongation(%)
AW	100% CO <sub>2</sub>	530	610	25
	80% Ar+20% CO <sub>2</sub>	550	625	26

Charpy V notch (J)

-40 C 98

-40 C 105

### Note:

- ① Shielding gas: 100% CO<sub>2</sub> or 80% Ar+20% CO<sub>2</sub>; Gas speed 15-25L/Min.
- ② Wire extension length 15-25mm.

