

E81T1-Ni2C/M

HIGH TENSILE ALLOY STEEL
FLUX CORED WIRES, DUAL USE



TYPICAL APPLICATIONS

1. Shipbuilding
2. Offshore structure
3. Structural Fabrication

SIZE AMPS

1.2mm 100-300A

1.6mm 180-450A

CHARACTERISTICS

1. Excellent mechanical properties including low temperature toughness at -60 C
2. Premium arc performance and bead appearance.
3. All positional welding capability

CLASSIFICATION

AWS A5.29 E81T1-Ni2C/M
AWS A5.29 E81T1-M21A4-Ni1-H4
EN ISO17632-A-T 46 6 2Ni P C1 H4

WELDING POSITIONS (ISO/ASME)



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

C	Mn	Si	S	P	Ni
0.04	1.21	0.29	0.012	0.015	2.20

AVAILABLE SIZES (DIA.)

1.2mm/1.6mm

PACKAGING DETAILS

15kg Spools, Vacuum pack

CURRENT TYPE

DC+

EQUIVALENT TO

Lincoln UltraCore 81Ni2 Hyndai SC-81Ni2M
Esab Tubrod 15.11 Kiswel K-82T
Indura 81Ni2-V

MECHANICAL PROPERTIES, ALL WELD METAL, TYPICAL

Condition	Shielding Gas	Yield Strength (Mpa)	Tensile Strength (Mpa)	Elongation(%)	Charpy V notch (J)	
AW	100% CO ₂	580	625	25	-40 C 105	-60 C 85
	80% Ar+20% CO ₂	585	635	25	-40 C 108	-60 C 90

Note:

- ① Shielding gas: 100% CO₂ or 80% Ar+20% CO₂; Gas speed 15-25L/Min.
- ② Wire extension length 15-25mm.