

1.6mm Hyundai SC-81BF 81Ni H4 F/C Mig Wire 15kg Spool

Flux cored arc welding consumable for welding of 550MPa class high tensile steel

SC-81BF is an all position flux cored wire designed for 100% CO₂ shielding gas or Ar-20-25% CO₂ shielding gas. You can get smooth arc, and low spatter, good weldability. The weld metal impact values at -40°C (-40°F) are excellent, it has good bead appearance, slag covering is uniform and easy to remove.



APPLICATIONS

- All position welding of:
 - Ship hulls
 - Vehicles
 - Bridges
 - Chemical plant machinery and other metal fabrication

CLASSIFICATION

- AWS A5.36: E81T1-C1A4-Ni1 H4
- AWS A5.36: E81T1-M21A4-Ni1 H4
- EN ISO 17632-A: T 46 4 1Ni P C1 1 H5
- EN ISO 17632-A: T 46 4 1Ni P M21 1 H5

TYPICAL DIFFUSIBLE HYDROGEN

HYDROGEN EQUIPMENT	100% CO ₂	Ar+20% CO ₂
Gas Chromatography	3.2ml/100g	3.8ml/100g

OPERATIONAL DATA

SHIELD GAS	WELDING POSITION	CURRENT RANGE
100% CO ₂ AR+20%CO ₂	Flat	180 - 350 Amp
100% CO ₂ AR+20%CO ₂	V-up Overhead	180 - 310 Amp
100% CO ₂ AR+20%CO ₂	V-down	180 - 350 Amp

TYPICAL CHEMICAL ANALYSIS (WT%) - ALL WELD METAL

SHIELD GAS	C	Si	Mn	P	S	Ni
100% CO ₂	0.040	0.40	1.00	0.007	0.005	0.86
AR+20%CO ₂	0.045	0.51	1.16	0.007	0.005	0.85
AWS A5.36:						
E81T1-C1 (M21)A4-Ni1 H4	≤0.12	≤0.80	≤1.75	≤0.03	≤0.03	0.8 - 1.1

TYPICAL MECHANICAL ANALYSIS - ALL WELD METAL

SHIELD GAS	YIELD STRENGTH MPa (lbs/in ²)	TENSILE STRENGTH MPa (lbs/in ²)	ELONGATION (%)	CVN IMPACT TEST J(ft.lbs) @ -40°C (-40°F)
100% CO ₂	510 (74,000)	570 (83,000)	30.0	90(66)
AR+20%CO ₂	590 (86,000)	650 (94,000)	27.5	100(74)
AWS A5.36: E81T1-C1 (M21)A4-Ni1 H4	≥470 (68,200)	550 - 690 (79,800 - 100,000)	≥19	≥27(20)