

# SFC-81Ni1

AWS A5.29 E81T1-Ni1C  
JIS Z3313 T 55 3 T1-1 C A-N2  
EN ISO 17632-A T46 3 1Ni P C 1 H5

## FLUX CORED WIRES FOR LOW TEMPERATURE-SERVICE LOW-ALLOY STEEL

### DESCRIPTION :

SFC-81Ni1 is an all-positional flux cored wire designed for 100%CO<sub>2</sub> shielding gas. It can provide excellent weldability involved good bead appearance, less spatter, stable arc and easy slag removal, but also qualified impact value down to -30°C.

### APPLICATIONS :

It is suitable for welding of 590N/mm<sup>2</sup> high tensile strength steel on bridge structure, storage tanks and construction machinery.

### NOTE ON USAGE :

1. Use 100%CO<sub>2</sub>.
2. Proper heat input can obtain required impact value

### WELDING POSITION:



### TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%) :(Shielding Gas: 100% CO<sub>2</sub>)

Weld Metal Analysis :

Carbon (C)	0.053
Manganese (Mn)	1.26
Silicon (Si)	0.45
Phosphorus (P)	0.018
Sulphur (S)	0.012
Nickel (Ni)	0.93

### TYPICAL MECHANICAL PROPERTIES OF WELD METAL:(Shielding Gas: 100% CO<sub>2</sub>)

YP N/mm <sup>2</sup>	534
TS N/mm <sup>2</sup>	618
EL%	25

### TYPICAL IMPACT VALUES :

IV -30°C J	85
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### APPROVALS :

DNV · GL

### SUGGESTED WELDING PARAMETERS (DC <=>)

Parameters	1.2mm		1.4mm		1.6mm	
	F, HF	V-UP, OH	F, HF	V-UP, OH	F, HF	V-UP, OH
Welding Position	F, HF	V-UP, OH	F, HF	V-UP, OH	F, HF	V-UP, OH
Voltage (Volt)	25 ~ 35	24 ~ 30	28 ~ 38	25 ~ 30	30 ~ 42	25 ~ 30
Current (Amp)	250 ~ 330	150 ~ 220	270 ~ 360	170 ~ 220	300 ~ 400	170 ~ 220