

Nittetsu SF-3A

AWS: A5-20 E71T-12M

EN-758: T42 4 P M 1 H5

For mild steel and 490N/mm² High Tensile Strength Steel for shipbuilding grade E.

General description:

Nittetsu SF-3A is a rutile type seamless flux cored welding wire for use with mixed Ar- CO₂ shielding gas. It assures excellent usability with minimal spatter and high quality bead appearance, coupled with acceptable impact toughness in all welding positions. The diffusible hydrogen content is extremely low (typically 2,8 ml/100g) due to the seamless manufacturing process, and produces welds which have excellent crack resistance. Welding fume emission is very low, and all positional welding is easily performed with almost the same current. Excellent feedability, due to copper coated, smooth surface, exact diameter and roundness. Stick out should be between 15-25 mm. Voltage should be app'x 10% of the Amp. setting or 1-3 Volts lower than that of conventional folded flux cored wires.

Welding positions:



Welding current:

DC+

Gas flow:

18 – 25 l/min

Typical chemical composition in weld metal

C	Mn	Si	P	S	Cu	Ni
0,04	1,19	0,39	0,010	0,007	0,20	0,41

Diffusible hydrogen content measured by gas chromatography (ml/100g)

2,8 ml/100g (typical)

Typical mechanical properties of all-weld-metal

Tensile test			Impact test	
Yield point (N/mm ²)	Tensile strength (N/mm ²)	Elongation (%)	Charpy (J) -40°C	Charpy (J) -20°C
507	571	29,6	90	123

Recommended welding current Amp. range (DC+)

Wire diameter	Horizontal	Vertical up	Vertical down	Over head
1,2 mm	180 – 300	180 – 280	240 – 280	180 - 250

Approvals:

DnV: IV Y42MS

DS: T 42 4 P M 1 H5

Rina: SG 56 4

CWB

LR: 3S 4Y40S

GL: 3YS

ABS: 3A, 3YA

MoD

Packing information:

1,2 mm: 5,0 kg and 12,5 kg spools + paypacks of 200 kg