# **NSSW SF-3AM**

AWS: A5-29 E81T1-G

EN ISO 17632-A: T 46 4 Z P M 2 H5



# Flux cored wire for low-alloyed steel, offshore applications, piping etc.

# **General description:**

NSSW (Nittetsu) SF-3AM is a seamless rutile flux cored wire for welding using  $Argon/CO_2$  mixed shielding gas.

This ensures a stable welding arc with less spatter, excellent visual bead shape and smooth transition to the base material.

SF-3AM has acceptable charpy impact values down to -60  $^{\circ}\text{C}.$ 

The flux cored wire is CTOD-tested with good results. Due to the seamless design the wire has an extremely low diffusible hydrogen content (typical 3 ml/100g) which greatly eliminates the risk of hydrogen cracks.

SF-3AM has low visible welding fume and has excellent weldability in all welding positions. The wire has a clean copper coated surface which together with exact diameter and roundness ensures stable and even wire feeding.

Wire stick out should be between 15-25 mm depending upon welding parameters.

Voltage should be about 10% of the Ampere, which is about 1-3 Volts lower than that of which conventional folded flux cored wires require.

## Welding positions:











#### Welding current:

DC+

#### Type of gas / flow:

Ar+18-25% CO2

18-25 l/min.

# Typical chemical composition of all-weld-metal:

С	Si	Mn	Р	S	Cu	Ni		
0,06	0,30	1,27	0,011	0,005	0,26	0,95		

### Diffusible hydrogen content (ml/100g):

≤5 ml/100g (3,0 ml/100g typical).

# Typical mechanical properties of all-weld-metal:

Yield and Tensile Strengths			Charpy Impact Test		
Yield Mpa	Tensile Mpa	Elongation %	Charpy V (J) -40 °C	Charpy V (J) -60 °C	
550	590	29	128	92	

#### Guidance - Ampere (DC+):

	Wire diameter	1,2 mm	1,4 mm	1,6 mm
Г	Ampere / Volt	180-300A / 22-32V	250-350A / 25-35V	280-380A / 25-35V

#### Packaging information:

1,2mm x 5,0kg D200

1,2mm x 12,5kg D300

1,2mm x 200kg DrumØ51cm

1,4mm x 12,5kg D300

1,4mm x 200 kg DrumØ51cm

1,6mm x 12,5kg D300

#### Approvals:

DnV, LR, DB, ABS, CWB, CE,

### Reference / date:

NSSW SF-3AM, English, 06.01.2014.

Perfect Welding

www.nst.no