

# SF-3AMSR

AWS A5.29 E71T1-GM-H4

EN ISO 17632-A: T 42 4 ZMnNi P M21 2 H5

EN ISO 9606-1: FM1



## Flux cored wire for piping and constructions with PWHT requirements.

### General description:

SF-3AMSR is a seamless rutile flux cored wire for welding using Argon/CO<sub>2</sub> 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 excellent Charpy impact values down to -46°C.

Due to seamless design the wire has an extremely low diffusible hydrogen content (typical 3 ml/100g), which greatly eliminates the risk of hydrogen cracks.

SF-3AMSR has low welding fume and excellent operations in all welding positions.

Like all other Nittetsu seamless wires the wire has a clean copper coated surface.

This combined with exact diameter and roundness ensures a stable and even wire feeding.

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 what conventional folded flux cored wires requires.

### Welding positions:



### Welding current:

DC+

### Type of gas / flow:

Ar+18-25% CO<sub>2</sub>

18-25 l/min.

### Typical chemical composition of all-weld-metal:

C	Si	Mn	P	S	Cu	Ni			
0,05	0,28	1,25	0,009	0,005	0,27	0,80			

### 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 (AW)	Charpy V (J) -40 °C (PWHT)
AW 528 / PWHT 512	AW 563/ PWHT 565	AW 30 / PWHT 32	125	118

### Guidance - Ampere (DC+):

Wire diameter	1,2 mm		
Ampere / Volt	180-300A / 22-32V		

### Packaging information:

1,2mm x 5,0kg Spool  
1,2mm x 12,5kg Spool

### Approvals:

DNV-GL(PWHT), LR, CE

### Reference / date:

SF-3AMSR, English, 20.04.2026.