

SF-3AM

AWS A5.29 E81T1-Ni1M-H4 / AWS A5.36 E81T1-M21A8-Ni1-H4
EN ISO 17632-A: T 46 4 ZMn1Ni P M21 2 H5
EN ISO 17632-A: T 46 6 ZMn1Ni P M21 2 H5
EN ISO 9606-1: FM1



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

General description:

SF-3AM is a seamless rutile flux cored wire for welding using Argon/CO₂ 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 °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:

C	Si	Mn	P	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
Ampere / Volt	180-300A / 22-32V	250-350A / 25-35V	280-380A / 25-35V

Packaging information:

1,0mm x 5,0kg D200
1,2mm x 5,0kg D200
1,2mm x 12,5kg D300
1,2mm x 250kg DrumØ51cm
1,4mm x 12,5kg D300
1,4mm x 250 kg DrumØ51cm
1,6mm x 12,5kg D300

Approvals:

DNV-GL, LR, DB, ABS, CWB, PRS, CE

Reference / date:

SF-3AM, English, 06.07.2023.