WELDING ENGINEERS
EFFICIENT WELDING SUPPLY SOLUTIONS

SF-3AM

AWS A5.29 E81T1-GM / AWS A5.36 E81T1-M21A8-N 1-H4
EN ISO 17632-A: T 46 4 ZMnlNi P M21 2 H5
EN ISO 17632-A: T 46 6 ZMnlNi 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 m1/100g) 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% CO_2
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			

DIFFUSABLE 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 Drum Ø51cm
1.4mm x 12.5kg D300
1.4mm x 250 kg Drum Ø51cm
1.6mm x 12.5kg D300

APPROVALS

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

REFERENCE/DATE

SF-3AM, English, 07.06.2019