

SF-50A

AWS A5.29 E91T1-K2M-H4

EN ISO 17632-A: T 50 4 ZMn1.5Ni P M21 2 H5

EN ISO 9606-1: FM1



Flux cored wire for welding high tensile steels such as Weldox 500.

General description:

SF-50A is a seamless rutile flux cored wire developed for welding high tensile steel such as i.e. Weldox 500. The wire uses an Argon/CO₂ mixed shielding gas, ensuring a user friendly and stable arc with minimum spatter and good transition to the parent material. SF-50A is CTOD tested with good results. Due to its seamless characteristic, the wire has an extremely low content of hydrogen (typical 3ml/100g weld metal), something which ensures low risk of cold cracks.

The wire is copper coated and has a clean surface which together with exact diameter and perfect roundness ensures a stable and even wire feeding. The stick out should be between 15-25mm depending upon welding parameters. Volts should be 10% of the Amperage, this 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			
0,05	0,48	1,22	0,012	0,005	0,31	1,55			

Diffusible hydrogen content (ml/100g):

≤5 ml/100g (2,8 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	
606	657	27	75	

Guidance - Ampere (DC+):

Wire diameter	1,2 mm		
Ampere / Volt	200-300A / 22-32V		

Packaging information:

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

Approvals:

DNV-GL, LR, ABS, CE

Reference / date:

SF-50A, English, 20.04.2026.