

SF-65A

AWS A5.29 E91T1-K2M-H4

EN ISO 18276-A: T 55 4 ZMn1.5Ni P M21 2 H5

EN ISO 9606-1: FM2



Flux cored wire for welding high tensile steels.

General description:

SF-65A is a seamless rutile all position flux-cored wire developed for welding high tensile steel such as s550 and similar high tensile strength steel.

The wire is to be used with a M21 Argon/CO₂ mixed shielding gas, which ensuring a user friendly and stable arc with minimum spatter and good transition to the parent material.

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 with exact diameter and perfect roundness ensures a stable and even wire feeding as well as easy handling and storage procedures.

The stick out should be between 15-20mm depending upon welding parameters.

Volts should be app'x 10% of the Amperage, this is about 1-3 volts lower than a conventional folded flux cored wire.

Welding positions:



Welding current:

DC+

Type of gas / flow:

M21 (80%Ar+20% CO₂)

20-25 l/min.

Chemical composition of all-weld-metal:

C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V
0,02-0,09	0,30-0,70	1,00-1,50	Max. 0,030	Max. 0,030	Max. 0,40	1,00-2,00	Max. 0,15	Max. 0,35	Max. 0,05

Diffusible hydrogen content (ml/100g):

≤5 ml/100g (2,8 ml/100g typical)

Mechanical properties of all-weld-metal (ISO):

Yield and Tensile Strengths			Charpy Impact Test
Yield Mpa	Tensile Mpa	Elongation %	Charpy V (J) -40 °C
≥550	640 - 840	≥18	≥47

Guidance - Ampere (DC+):

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

Packaging information:

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

Approvals:

DNV-GL, PRS, CE

Reference / date:

SF-65A, English, 20.04.2026.