

NST FCW A625

AWS A5.34 / A5.34M: 2007 ENiCrMo3 T1-4



Flux cored wire for pipe and plate welding of Inconel 625 and 6Mo material.

General description:

NST FCW A625 is a flux cored wire for the joining of 6Mo alloys (254 SMO and Inconel 625). This wire can also be used for Cladding applications. The slag system allows you to weld in all positions with good control of the weld bead. The wire is to be used with M21 mix gas. "Purity" is the keyword when welding high alloyed materials. Impurities in the weld, will cause porosity. Welding of pipes requires the use of purge gas in order to ensure a perfect root.

Interpass temperature should not exceed 150 °C, and heat input should not exceed 1,5 kJ/mm. Hot cracking is a well-known challenge in this type of welding.

For more details contact NST.

Welding positions:



Welding current:

DC+

Gas flow:

16-20 l/min.

Chemical composition of all-weld-metal:

C	P	S	Ni	Cr	Mo	Cu	Fe	Nb+Ta	
Max 0.10	Max 0.02	Max 0.015	Min 58.0	20-23	8-10	Max 0.50	Max.5.0	3.15-4.15	

Shielding gas:

Ar/CO₂: Typ. 18%CO₂+82%Ar (Class M21).

Typical mechanical properties of all-weld-metal:

Yield and Tensile Strengths			Charpy Impact Test	
Yield Mpa(Rp0.2)	Tensile Mpa(Rm)	Elongation %	Charpy V (J) +0 °C	Charpy V (J) -196 °C
470	770(>690)	≥34	53	48

Guidance - Ampere (DC+):

Electrode diameter	1,2 mm PF	1,2 mm PA/PB	
Ampere / Volt	135-160 A / 24-26 V	190-210 A / 30-31 V	

Packaging information:

1.2mm x 12.5kg D300

Approvals:

Reference / date:

NST FCW A625,
English, 19.11.2013