



STAINLESS STEEL AND NICKEL BASE ALLOY
WELDING WIRE AND FLUX FOR SAW

XUN-620 Agglomerated Flux for S.A. Welding

Specification: EN760
Classification: SA AF 2 DC

Characteristics: XUN-620 is an agglomerated aluminate-fluoride-basic type flux for submerged arc welding.
Metallurgical behavior: The flux provides minimizing burn-off of alloying elements.
Grain size: 10 - 60 mesh.
Basicity: 2.2 (BIIW).
Minimum silicon transfer from the flux to the welding metal, thereby there is minimizing the risk of hot cracking when welding with nickel-based alloys.
Damp flux has to be redried at 300-350℃ for 2 hours.

Main Constituents (%)

SiO ₂ +TiO ₂	Al ₂ O ₃ +MnO	CaF ₂
5	35	55

Mechanical properties of deposited metal

Wire	Yield Stress (MPa)	Tensile strength (MPa)	Elongation (%)	Charpy V notch impact strength (J)
				-196℃
GLNICKEL-S625	≥450	≥680	≥40	≥40
GLNICKEL-S82	≥360	≥600	≥40	≥40

Chemical composition of deposited metal (%)

wire	C	Mn	Si	Cr	Ni	Mo
GLNICKEL-S625	≤0.03	≤0.5	≤0.5	20.0-23.0	bal	8.0-10.0
GLNICKEL-S82	≤0.03	2.5-3.5	≤0.5	18.0-22.0	bal	Nb+Ta 2-3

Applications: For butt welding INCONEL alloy 600 and INCOLOY alloy 800 to themselves, to other nickel-base-alloy and ferritic materials.
Overlay carbon steel with the corrosion and oxidation resistant GLNICKEL-S625 and GLNICKEL-S82 filler metal.

Welding recommendation: The flux should be welded with DCEP.
All dust, oil and rust should be removed.