

Inconel 112 (E Nicro 625)

CATEGORY SMAW Stick Electrodes

TYPE Latest generation clean quality (vacuum melted core wire) guarantees optimum metallurgical quality and attractive welder appeal.

APPLICATIONS Nicro 625 is developed for welding and cladding nickel-based alloys such as alloy 625 or similar materials. This alloy can also be used for welding dissimilar nickel-based alloys to each other, to alloyed steels, to stainless steels and for joining 9% Nickel steels.

PROPERTIES Very good resistance against pitting corrosion and crevice corrosion.
Very good against acid, neutral or alkaline media, with or without chlorides.
Very good resistance at high temperatures, especially against oxidation.

CLASSIFICATION

AWS	A 5.11: E NiCrMo-3
EN ISO	14172: E Ni 6625
DIN: W.Nr.	2.4321
DIN	1736: EL-NiCr20Mo9Nb

SUITABLE FOR This alloy can also be used for welding dissimilar nickel-based alloys to each other, to alloyed steels, to stainless steels and for joining 9% Nickel steels. X10NiCrAlTi, 32-20H, 32-21, X8 Ni9, ASTM A 533 Gr1, 800H, Sanicro 28, 254SMo, inconel 625, UNS : N08926, N08825, N06625, N08002. DIN : X8Ni9, X1NiCrMoCuN25 20 6, X1NiCrMoCuN25 20 5, NiCr21Mo, NiCr22Mo9Nb W.Nr.: 1.4876, 1.5656, 1.4529, 2.4858, 2.4856, 1.4539, 1.4547, 2.4660

APPROVALS CE approved

WELDING POSITIONS:



WELD METAL ANALYSIS %

Ni+Co	C	Mn	Fe	S	Si	Cu	Cr	Nb+Ta	Mo	P	Other
> 55.0	0.10	< 1.0	< 7.0	< 0.02	< 0.75	< 0.50	20.0-23.0	3.15+4.15	8.0-10.0	< 0.03	0.50

MECHANICAL PROPERTIES

Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HRc / HV
				20°C	-40°C	-196°C	
AW	> 450	> 760	> 30	> 75		> 45	

AW: as welded

WELDING PARAMETERS / PACKING

Welding Parameters			Packing		
D (mm)	Length (mm)	Current (A)	kg / can	kg / 6 pack	kg / 1000
2.4	229	40-60			16.12
3.2	356	75-100			35.71
4.0	356	90-130			

REDRYING TEMPERATURE 250-300°C/1hr