

## 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.	2.4621
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 <sub>p0,2</sub> (N/mm <sup>2</sup> )	R <sub>m</sub> (N/mm <sup>2</sup> )	A <sub>5</sub> (%)	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**

D (mm)	Welding Parameters			Packing	
	Length (mm)	Current (A)	kg / can	kg / 6 pack	
2.4	229	40-65	2.27	13.62	
3.2	356	65-90	2.27	13.62	
4.0	356	90-125	2.27	13.62	

**REDRYING TEMPERATURE** 260°/2hr