

E Nicro HLS

CATEGORY	SMAW Stick Electrodes	
TYPE	Basic coated electrode for joining and cladding. Excelent for similiary and dissimilar materials and for difficult to weld steels.	
APPLICATIONS	Maintanance and new welding applications in chemical, apparatus and heavy industry. First choice electrode for dissimilar welding of steel to Nickel alloys or repairing high carbon steels and white cast irons.	
PROPERTIES	Extreme crack resistant weld deposit due to the special basic coating and his alloy nature. Suitable for working temperatures between -196°C and +650°C. Recovery 150% with excellent arc stability and easy slag removal.	
CLASSIFICATION	AWS	A 5.11: E NiCrFe3
	EN ISO	14172: E Ni6082
	DIN: W.Nr.	2.4648
	DIN	1736: EL-NiCr19Nb

SUITABLE FOR	Disimilar welding, inconel, hasteloy, nimonic, stainless steel, steel difficult to Weld, kiln tyre repair, unknown steel, cock wheels, chain, Alloy type : Incoloy 800, DS - Inconel 600, 601, UNS Nr (unified numbering system) : K 81340, N06600, N 06601, N 08800, N 08810. DIN design : X8Ni9 - 12Ni19 - 10Ni 14 - NiCr15Fe - NiCr23Fe - X10NiCrAlTi3220 - X10CrNiMoNb18.12 - NiCr20Ti. Mat n° : 1.5662 - 1.5680 - 1.5637 - 1.6582 - 1.4876 - 1.4583 - 2.4816 - 2.4851 - 2.4951, 2.4806, Alloy 82, 1.4816, 600L, 800H, AISI 4340, 4130, 8630
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WELDING POSITIONS:



WELD DEPOSIT WEIGHT %

C	Mn	Fe	Cr	Ni	Nb
0.03-0.06	4.0-6.0	3.0-5.0	18-21	Rem	2.0-2.8

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	>390	>640	>37	>95		>70	

AW: as welded

WELDING PARAMETERS / PACKING

Welding Parameters			Packing		
D (mm)	Length (mm)	Current (A) DC+/~	kg / can	kg / 6 pack	kg / 1000
2.5	350	60-90	2.8	16.8	
3.2	350	80-120	3	18	
4.0	350	110-160	3	18	
5.0	450	150-190	3.6	21.6	

REDRYING TEMPERATURE 300°C/2hr