

Nicro 600

CATEGORY GMAW-GTAW Solid wires

TYPE Solid nickel base welding wire for GMAW welding.

APPLICATIONS Nicro 600 filler metal is used for welding nickel-chromium-iron (Inconel 600, 601 and 690) alloys to themselves, and for dissimilar welding between nickel-chromium-iron (Monel, Inconel and Incoloy) alloys and steels or stainless steels. The applications include surfacing as well as clad-side welding.

PROPERTIES High manganese of this weld deposit reduces the possibility of micro fissures. High manganese reduces creep strength, which limits its usage up to 900°F.

CLASSIFICATION
 AWS A 5.14: ER NiCr-3
 EN ISO 18274: S Ni 6082 (NiCr20Mn3Nb)
 DIN: W.Nr. 2.4806
 DIN 1736: SG NiCr20Nb

SUITABLE FOR Inconel 600, 2.4816, 1.4876, 2.4817, 2.4851, 1.6901, NiCr15Fe, X10NiCrAlTi 32 20, LC-NiCr15Fe, NiCr23Fe, X3CrNiN 18 10, alloy 600/B168, alloy 800 / 800H(T), N 10665, N 06601, kiln tyre, difficult to Weld steels, cock wheels

APPROVALS CE approved

WELDING POSITIONS:



WELD METAL ANALYSIS %

C	Mn	Si	Cr	S	Nb+Ta	Ti	Fe	Co	Cu	P	Ni
< 0.10	2.5-3.5	< 0.5	18-22	< 0.015	2.0-3.0	< 0.75	< 3.0	< 0.12	< 0.5	< 0.03	> 67

MECHANICAL PROPERTIES

Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A5 (%)	Impact Energy (J) ISO-V	
				+20°C	-196°C
AW	> 420	> 640	> 35	> 200	> 100

AW: as welded

WELDING PARAMETERS / PACKING

Welding Parameters			Packing (kg)	
D (mm)	Voltage (V)	Current (A) (DC+)	Spool type	kg / spool
0,8	16-26	80-180	S-300	15
1,0	16-29	100-250	S-300	15
1,2	18-29	125-290	S-300	15

REDRYING TEMPERATURE not required

GAS ACC. EN ISO 14175: I1, I3 (Ar-He)