CEWELD®

Nicro 600 Tig

CATEGORY	GMAW-GTAW Solid wires
TYPE	Solid nickel base welding wire for gas tungsten arc welding (GTAW).
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)	Rm (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)	Current (A) (DC-)	single	master
1.6 x 1000	50-80	5	25
2.0 x 1000	70-110	5	25
2.4 x 1000	110-180	5	25
3.2 x 1000	150-250	5	25

REDRYING TEMPERATURE	not required
GAS ACC. EN ISO 14175:	I1, R1 (Ar-H2)