

NiCro 718

CATEGORY GMAW-GTAW Solid wires

TYPE Solid wire for Nickel base high strength alloy 718

APPLICATIONS NiCro 718 is used in a wide range of applications such as components for liquid fueled rockets, rings, casings and various formed sheet metal parts for aircraft and land-based gas turbine engines, and cryogenic tankage. It is also used for fasteners and instrumentation parts. 718 filler metal can be also used for cladding and overlay of parts in the oil and gas industry.

PROPERTIES Special alloy with age hardenable deposit and similar mechanical properties as the base metal.
Age hardened condition: 720°C for 8 Hours, furnace Cool 55°C/ hour to 620°C, than Air Cool for 8 hours.

CLASSIFICATION

AWS	A 5.14: ER NiFeCr-2 UNS N07718
EN ISO	18274: S Ni 7718 (NiFe19Cr19Nb5Mo3)
DIN: W.Nr.	2.4667
DIN	1736: SG-NiCr19NbMoTi

SUITABLE FOR NiCro 718 is used for welding Inconel 718(2.4668), 706 and X-750 (X750)

APPROVALS CE approved

WELDING POSITIONS:



WELD DEPOSIT WEIGHT % (TYPICAL)

C	Mn	Si	S	P	Cr	Ni	Mo	Al	Ti	Co	Cu	Nb+Ta	B	Fe
0.07	0.1	0.15	0.001	0.008	17.5	52	3	0.4	0.9	0.05	0.05	5	0.005	Rem

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	-60°C	
As welded	580	860	28				

WELDING PARAMETERS PACKING

D (mm)	Welding Parameters		Packing
	Current (A)		kg
0.9	150-190		13.6
1.2	180-220		13.6
1.6	200-250		13.6

GAS ACC. EN ISO 14175: B (75% Ar- 25% He)