



Ni-Cr Filler Metal

INCONEL® Filler Metal 82

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INCONEL Filler Metal 82 is used for gas-tungsten-arc, gas-metal-arc and submerged-arc welding of INCONEL alloys 600, 601 and 690, INCOLOY alloys 800 and 800HT, and INCOLOY alloy 330. It is also used for surfacing of steel. INCOFLUX NT100 is used for submerged arc groove welding with this wire. For submerged-arc surfacing INCOFLUX NT100 is suitable.

Weld metal deposited by INCONEL Filler Metal 82 has high strength and good corrosion resistance, including oxidation resistance and creep-rupture strength at elevated temperatures.

Dissimilar-welding applications include joining INCONEL alloys, INCOLOY alloys and INCOLOY alloy 330 to nickel, MONEL alloys, stainless steels, and carbon steels. It is also used to join stainless steels to nickel alloys and carbon steels.

Specifications

AWS A5.14 ERNiCr-3 (UNS N06082)

ASME II, Part C, SFA-5.14, ERNiCr-3 (UNS N06082)

ASME IX, F-No.43

*BS 2901 (NA35)

*DIN 1736 SG-NiCr20Nb (2.4806)

*(EN) ISO 18274 - S Ni6082 (NiCr20Mn3Nb)

*Supply to these specifications available upon request

For manufacture to ASME III (NCA3800, NB2400), MIL, Rolls Royce, AMS and other specifications please refer your inquiry to the Technical Department prior to order placement.

Approvals

Canadian Welding Bureau

VdTUV 2110.01; 2111.01; 2117.01; 2118.01

Other approvals may be applicable. Please confirm details of current scope of approvals with the Technical Department prior to order placement.

Limiting Chemical Composition (%)	Limiting Chemical Composition (%)		
	Ni+Co	67.0 min.	Si
C	0.10 max.	Cr	18.0-22.0
Mn	2.5-3.5	Ti	0.75 max.
Fe	3.0 max.	Nb+Ta	2.0-3.0
S	0.015 max.	P	0.030 max.
Cu	0.50 max.	Others	0.50 max.

Minimum Mechanical Properties	Minimum Mechanical Properties	
	Tensile Strength, psi	80,000
	MPa	552
Elongation, (4d) %	30	

Filler metals available on spool and in cut straight lengths in a variety of sizes selected from the following diameters:

Available Product Forms

mm in	0.8 0.030	0.9 0.035	1.0 0.040	1.14 0.045	1.2 0.047	1.6 0.062	2.4 0.093	3.2 0.125
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Straight Lengths - 915 mm (36 in.) or 1000 mm (39 in.)