Ni-Cr-Fe Welding Electrode

INCONEL® Welding Electrode 182

INCONEL Welding Electrode 182 is used for shielded-metal-arc welding of INCONEL alloys 600 and 601. The weld metal has excellent high-temperature strength and oxidation resistance and can meet stringent radiographic requirements.

Dissimilar welds for which the electrode are used include INCONEL alloys and INCOLOY alloys joined to carbon steels, stainless steels, nickel and MONEL alloys, MONEL alloys joined to carbon steels; nickel joined to stainless steels; and stainless steels joined to carbon steels.

The electrodes provide excellent operability for groove and fillet welding in the downhand position and the smaller diameter electrodes are also suitable for all position welding. Power supply: direct current, electrode positive.

Specifications

AWS A5.11 ENiCrFe-3 (UNS W86182)
ASME II, Part C, SFA-5.11, ENiCrFe-3 (UNS W86182)
ASME IX, F-No.43
*DIN 1736 EL-NiCr15FeMn (2.4807)
*(EN) ISO 14172 – ENi6182 (NiCr15Fe6Mn)
*Supply to these specifications available upon request
For manufacture to ASME III (NCA3800, NB2400), MIL, and other specifications please refer your inquiry to the Technical Department prior to order placement.

Approvals

Canadian Welding Bureau
VdTUV 2105.01
Other approvals may be applicable. Please confirm details of current scope of approvals with the Technical Department prior to order placement.

Limiting Chemical Composition

Ni+Co	59.0 min.	Cu	0.50 max.
C	0.10 max.	Cr	13.0-17.0
Mn	5.0-9.5	Ti	1.0 max.
Fe	10.0 max.	Nb+Ta	1.0-2.5
S	0.015 max.	P	0.030 max.
Si	1.0 max.	Others	0.50 max.

Minimum Mechanical Properties

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

Available Product Forms – Supplied in 10lbs (4.54kg) hermetically sealed containers

Diameter	**mm**	2.4	3.2	4.0	
Length	**mm**	229	356	356	
Current (DC+)	**A**	40-65	65-95	95-125	

Rod Diam.	4.54 kg Pack
2.4mm	SME18224
3.2mm	SME18232
4.0mm	SME18240

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