INCONEL® Welding Electrode 112

INCONEL Welding Electrode 112 is used for shielded-metal-arc welding of INCONEL alloy 625, INCOLOY alloy 825, INCOLOY alloy 25-6MO, and other molybdenum-containing stainless steels. It is also used for surfacing of steel and for welding various corrosion-resistant alloys such as alloy 20. The weld metal has high strength at room and elevated temperatures and has exceptional corrosion resistance, including resistance to pitting, crevice corrosion, and polythionic acid stress-corrosion cracking. INCONEL Welding Electrode 112 is useful for many dissimilar joints involving INCONEL alloys, INCOLOY alloys, stainless steels, low-alloy steels, and 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 ENiCrMo-3 (UNS W86112)
ASME II C SFA-5.11, ENiCrMo-3 (UNS W86112)
ASME IX, F-No.43
*DIN 1736 EL-NiCr20Mo9Nb (2.4621)
*(EN) ISO 14172 – ENi6625 (NiCr22Mo9Nb)
*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 4450.00
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	55.0 min.	Si	0.75 max.
C	0.10 max.	Cr	20.0-23.0
Mn	1.0 max.	Nb+Ta	3.15-4.15
Fe	7.0 max.	Mo	8.0-10.0
S	0.02 max.	P	0.03 max.
Cu	0.50 max.	Others	0.50 max.

Minimum Mechanical Properties

Tensile Strength, psi		110,000
	MPa	758
Elongation, (4d) %		30

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

Diameter	**mm** **in**	2.4 3/32	3.2 1/8	4.0 5/32	4.8 3/16
Length	**mm** **in**	229 9	356 14	356 14	356 14
Current (DC+)	**A**	40-65	65-90	90-125	125-160