INCONEL® Welding Electrode 117

INCONEL Welding Electrode 117 is used for shielded-metal-arc welding of INCONEL alloy 617. The weld metal has high strength, good metallurgical stability and excellent resistance to corrosion and high-temperature oxidation. INCONEL Welding Electrode 117 also gives good results in welding many dissimilar materials, especially for high-temperature applications. Examples are INCONEL alloys 600 and 601, INCOLOY alloys 800HT and 802, and cast alloys such as HK-40, HP and HP-45 Modified.

INCONEL Welding Electrode 117 can be operated in all welding positions. Power supply: direct current, electrode positive.

Specifications

AWS A5.11, ENiCrCoMo-1
ASME II, SFA 5.11, ENiCrCoMo-1
UNS W86117
ASME IX, F-No. 43
DIN 1736 ENiCr21Co12Mo
Werkstoff Nr. 2.4628
ISO ENi6617
Europe ENiCr22Co12Mo

Limiting Chemical Composition

Ni	Remainder	Nb+Ta	1.0 max.
C	21.0-26.0	S	0.015 max.
Co	9.0-15.0	Si	0.75 max.
Mo	8.0-10.0	Cu	0.50 max.
C	0.05-0.15	P	0.03 max.
Fe	5.0 max.	Others	0.50 max.
Mn	0.30-2.5		

Minimum Mechanical Properties

Tensile Strength, psi	90,000
MPa	620
Elongation, (4d) %	25

Available Product Forms

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	**A**	40-60	75-100	90-130	125-150