ENiCrFe-3 Welding Electrode

For Welding Alloys 600 / 601

ENiCrFe-3 provides high-strength weld metal for nickel-chromium-iron alloys like Alloy 600 and 601, meeting stringent radiographic quality requirements. Its excellent high-temperature performance ensures durability in demanding industrial applications.

The electrode is suitable for joining nickel alloys to stainless steels, low-alloy steels, carbon steels, and MONEL® alloys. Its adaptability to dissimilar metals makes it ideal for chemical, power, and marine industry repairs.

Specification

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)
Custom specifications available upon request.
For information regarding certifications and industry approvals, please contact our Technical Department.

Limiting Chemical Composition

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

Minimum Mechanical Properties

Property	Value
Tensile Strength, psi	80,000
MPa	552
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 12	356 14	356 14	356 14
Current (DC+)	A	40-65	65-95	95-125	125-165