

Ni-Cr-Fe Welding Electrode

INCO-WELD® A Welding Electrode

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INCO-WELD A Welding Electrode is used for shielded-metal-arc welding of INCOLOY alloys 800 and 800HT, INCONEL alloys 600 and 601, and nickel steels. The weld metal has excellent strength and oxidation resistance at high temperatures and retains impact resistance at cryogenic temperatures. The electrode is an exceptionally versatile product for dissimilar welding. It can be used on a variety of austenitic and ferritic steels and nickel alloys. Examples are combinations of stainless steels, carbon steels, INCONEL alloys, INCOLOY alloys, MONEL alloys, and copper-nickel alloys. Because of its versatility, INCO-WELD A Welding Electrode is especially useful for general maintenance welding of equipment exposed to strenuous service conditions.

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-2 (UNS W86133)
 ASME II, Part C, SFA-5.11, ENiCrFe-2 (UNS W86133)
 ASME IX, F-No.43
 *DIN 1736 EL-NiCr15FeNb (2.4805)
 *(EN) ISO 14172 – ENi6092 (NiCr16Fe9NbMo)
 *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

VdTUV 2104.00
 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..... 62.0 min. | | Cu..... 0.50 max. | |
|-------------------------------------|----------------------|--------------|-------------------|-----------|
| | C | 0.10 max. | Cr | 13.0-17.0 |
| Mn..... | 1.0-3.5 | Nb+Ta | 0.5-3.0 | |
| Fe..... | 12.0 max. | Mo..... | 0.5-2.5 | |
| S | 0.02 max. | P | 0.03 max. | |
| Si | 0.75 max. | Others | 0.50 max. | |

| Minimum Mechanical Properties | Tensile Strength, psi | | 80,000 |
|-------------------------------------|-----------------------|--|--------|
| | | | MPa |
| | 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 | 45-70 | 65-95 | 95-130 | 125-165 |