

Nickel Welding Electrode 141

Nickel Welding Electrode 141 is used for shielded-metal-arc welding of Nickel 200 and Nickel 201, welding the clad side of nickel-clad steel, and surfacing of steel. The reaction of titanium with carbon in the weld metal holds free carbon to a low level so that the electrode can be used with low-carbon nickel (Nickel 201). The weld metal has good corrosion resistance, especially in alkalis. The electrode is also used for dissimilar welding, including joints between Nickel 200 or 201 and various iron-base and nickel-base alloys. Nickel Welding Electrode 141 can be operated in all welding positions.

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 A.5.11 ENi-1 (UNS W82141)
 ASME II C SFA-5.11, ENi-1 (UNS W82141)
 ASME IX, F-No.41
 *DIN 1736 EL-NiTi3 (2.4156)
 *(EN) ISO 14172 - ENi2061 (NiTi3)
 *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 1286.02
 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 | 92.0 min. | Cu | 0.25 max. |
| C | 0.10 max. | Al | 1.0 max. |
| Mn | 0.75 max. | Ti | 1.0-4.0 |
| Fe | 0.75 max. | P | 0.03 max. |
| S | 0.02 max. | Others | 0.50 max. |
| Si | 1.25 max. | | |

Minimum Mechanical Properties

| | |
|-----------------------|--------|
| Tensile Strength, psi | 60,000 |
| MPa | 414 |
| Elongation, (4d) % | 20 |

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 | 305 12 | 356 14 | 356 14 | 356 14 |
| Current (DC+) | A | 65-85 | 90-125 | 125-170 | 170-225 |

