

HASTELLOY® B-3® Coated Electrodes

Product Description:

HASTELLOY® B-3® coated electrodes are used for the shielded metal arc welding of B-3® alloy materials. The weld metal has excellent resistance to hydrochloric acids at all temperatures and also withstands hydrogen chloride, sulfuric, acetic and hydrofluoric acids. The alloy has improved thermal stability and resistance to stress corrosion cracking over alloy B-2. The electrode can be used for the overlay and cladding of carbon and stainless steels with no butter layer needed. The coating is designed for great operability, especially in out-of-position welding.

Specifications:

AWS A 5.11 ENiMo-10 ASME IX F-43
ASME SFA 5.11 ENiMo-10 UNS W860675
Kennblatt 7617.02*
*Specify at time of order

Composition:

| | | | |
|--------------------|-----------|--------------------|-----------|
| Nickel: | Balance | Copper: | 0.50 max. |
| Molybdenum: | 27.0-32.0 | Other: | 0.50 max. |
| Iron: | 1.0-3.0 | Silicon: | 0.20 max. |
| Chromium: | 1.0-3.0 | Carbon: | 0.02 max. |
| Cobalt: | 3.0 max. | Sulfur: | 0.03 max. |
| Tungsten: | 3.0 max. | Phosphorus: | 0.04 max. |
| Manganese: | 2.0 max. | | |

Minimal Mechanical Properties:

| | |
|-----------------------|---------|
| Tensile (psi) | 100,000 |
| Mpa | 690 |
| Elongation (%) | 25 |

Available Product Forms and Sizes:

| | | | | |
|----------------------------|-------|--------|--------|---------|
| Diameter in | 0.093 | 0.125 | 0.156 | 0.187 |
| Diameter mm | 2.40 | 3.20 | 4.00 | 4.70 |
| Length in | 10 | 14 | 14 | 14 |
| Length mm | 254 | 355.6 | 355.6 | 355.6 |
| Package Weight lbs. | 5 | 10 | 10 | 10 |
| Current (A) DCEP | 40-70 | 70-100 | 80-140 | 120-150 |

Packaged in Hermetically Sealed Containers