

ROYAL ER 320 (ER 320)

AWS –SFA A 5.9 ER 320

Applications

It is used to weld casting and wrought alloys of similar composition without PWHT. It is also use for welding of 320 to 320 alloys and Ni casting alloys.

Characteristics on Usage

The Nominal Composition (wt %) of this classification is 20Cr, 34 Ni, 2.5 Mo, 3.5 Cu, with Nb added to provide resistance to intergranular corrosion. Filler metal of this classification is primarily used for weld base metal of similar composition for applications where resistance to severe corrosion involving a wide range of chemicals, including sulfuric and sulfurous acid and their salts.

Chemical Composition Of Weld Metal

| C% | Mn% | Si% | S% | P% | Cr % | Ni % | Mo% | Cu% | Nb% |
|----------|----------|----------|-----------|-----------|-------------|-------------|-----------|-----------|---------|
| 0.07 Max | 2.50 Max | 0.60 Max | 0.030 Max | 0.030 Max | 19.0 - 21.0 | 32.0 - 36.0 | 2.0 - 3.0 | 3.0 - 4.0 | 1.0 Max |

Mechanical Properties Of Weld Metal

| U.T.S. (N/mm ²) | ELONGATION (L = 4d) % |
|--------------------------------|----------------------------|
| 550 Min | 30 % Min |

Packing

Each Packets content 5 kg of Wire Rods having length 500 mm.,1000mm.