

ROYAL – 8018 C1 (E 8018-C 1)

AWS : SFA 5.5, E 8018-C 1 EN ISO 2560 A E 46 6 2Ni B 32 H5

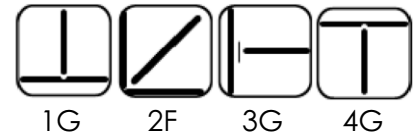
Applications

It is used for welding of nickel alloy piping, System valves and tanks. Used for welding low temperature service for Locomotive main frames, Refineries, Pipelines.

Characteristics on Usage

A medium heavy coated low hydrogen iron powder type electrodes, the weld metal deposits 2.5% Ni in the weld metal. It is specially designed for welding fine grained steel, nickel alloy steel . It gives high ductility, toughness and resistance to the service temperature at minus 59 °C. The electrode gives smooth arc with medium penetration and negligible spatter. It is all position electrodes with

Welding Positions



Notes On Usage

- ☞ Dry the electrodes at 250 - 300°C
- ☞ Preheat at 80-100°C
- ☞ Keep the arc as short as possible.

LOW ALLOY HIGH TENSILE ELECTRODES

Chemical Composition Of Weld Metal

| C% | Mn% | Si% | S% | P% | Ni% |
|----------|----------|----------|-----------|-----------|------------|
| 0.12 Max | 1.25 Max | 0.80 Max | 0.030 Max | 0.030 Max | 2.0 - 2.75 |

Mechanical Properties Of Weld Metal

After PWHT at 605 ± 15 °C for 1 Hr. soaking period

| U.T.S. (N/mm ²) | Y.S. (N/mm ²) | ELONGATION (L = 4d) % | RADIOGRAPY TEST | Hydrogen (Mercury method) in 100gm weld metal | IMPACT(C.V.N.) AT - 60 °C (J) |
|--------------------------------|------------------------------|----------------------------|--------------------|--|------------------------------------|
| 550 Min | 460 Min | 19 % Min | Satisfactory | 4 ml Max | 27 Joules Min |

Packing and Welding Current

| SIZE (mm) | KG PER PACKET | KG PER CARTON | Current (Amps) | In Amps |
|-------------|------------------|------------------|----------------|---------|
| 2.50 x 350 | 5 | 20 | AC/DC (+) | 60-90 |
| 3.15 x 450 | 5 | 20 | | 100-140 |
| 4.00 x 450 | 5 | 20 | | 140-180 |
| 5.00 x 450 | 5 | 20 | | 180-250 |