

ROYAL 8018C3 ()

AWS : SFA 5.5, E 8018-C 3

Applications

It is used for welding of nickel alloy equipments. Fabrication of pressure vessels, piping system, valves and tanks. Used for welding low temperature service for Locomotive main frames, Refineries, Pipe lines.

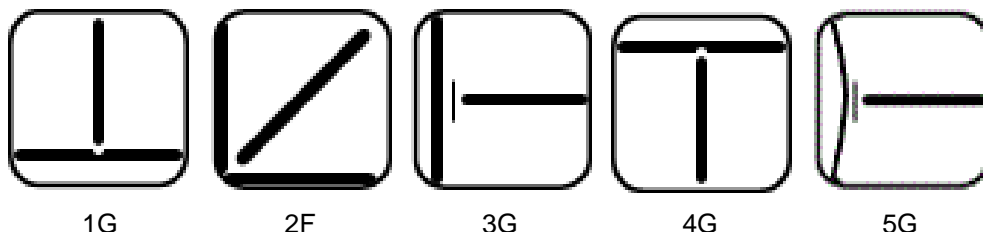
Characteristics on Usage

A medium heavy coated low hydrogen iron powder type electrodes, the weld metal deposits 1.0% Ni in the weld metal. It is specially designed for welding fine grained steel, nickel steel and nickel alloy steel. It gives high ductility, toughness and resistance to the service temperature at minus 40 C. The electrode gives smooth arc with medium penetration and negligible spatter. It is all position electrodes with Radiographic quality of weld deposit.

Notes On Usage

1) Dry the electrode at 250 C for 1 hour before using.

2) Keep the arc as short as possible.

**Welding Positions**

1G

2F

3G

4G

5G

Chemical Composition Of Weld Metal

C%	Mn%	Si%	S%	P%	Cr %	Ni %	Mo
0.12 Max	0.40 - 1.25	0.80 Max	0.030 Max	0.030 Max	0.15 Max	0.80 - 1.10	0.35

Mechanical Properties Of Weld Metal

U.T.S. (N/mm ²)	Y.S. (N/mm ²)	ELONGATION (L = 4d) %	IMPACT (CVN) AT -40 °C (J)
550 Min	470 Min	24 % Min	27 Joules Min

Packing and Welding Current

SIZE (mm)	PIECES PER PACKET	PIECES PER CARTON	Current (Amps)	In Amps
2.50X350	150	600	AC/DC (+)	60-90
3.15X450	100	400		100-140
4.00X450	70	280		140-180
5.00X450	45	180		180-250