ROYAL – 8018 C2 (E 8018-C2)

AWS : SFA 5.5, E 8018-C2 IS: 814E 55 Bc22gFe EN ISO 2560 AE 46 6 3Ni B 32 H5

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

Characteristics on Usage

A medium heavy coated low hydrogen iron powder type electrode, the weld metal deposits 3.5%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 80° C. The electrode gives smooth arc with medium penetration and negligible spatter. It is all position electrode with radiographic quality of weld deposit. Dry the electrode at 250° C for 1 hour before using.

Welding Positions

1G 2F 3G 4G

Notes On Usage

- Dry the electrodes at 250 - 300°C for 60 min before use.
- Keep the arc as short as possible
- Adopt back step method or strike the arc on a small plate prepared for this particular purpose because ar stricking o the base metal is in danger of initing cracking.

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	3.0 - 3.75

Mechanical Properties Of Weld Metal

U.T.S. (N/mm^2)	Y.S. (N/mm^2)	ELONGATION (L = 4d) %	IMPACT (CVN) AT - 75 °C (J)
550 Min	460 Min	19% Min	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