

ROYAL – 8018 C1 (E 8018-C 1)

AWS : SFA 5.5, E 8018-C 1

Applications

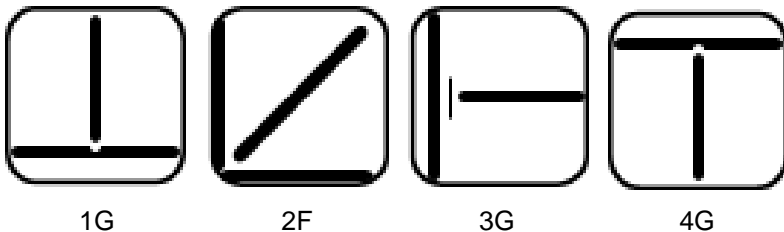
It is used for welding of nickel alloy piping, System valves and tanks. Used for welding low temperature service for Locomotive main frames, Refineries, Pipelines.

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 Radiographic quality of weld deposit. Dry the electrode at 250 °C for 1 hour before using.

Notes On Usage

- 1) Dry the electrodes at 350 - 400°C
- 2) Preheat at 80 - 100°C
- 3) Keep the arc as short as possible.

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

Approvals**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