

**ROYAL – 8016 C2 (E 8016-C2)**

AWS : SFA 5.5, E 8016-C2

**Applications**

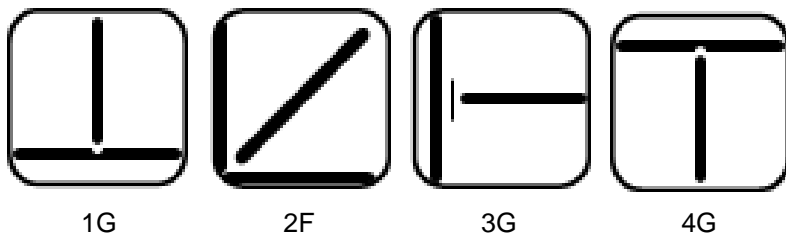
It is used for welding of nickel alloy equipments. Fabrication of pressure vessels, piping system, valves and tanks. Used for welding low temperature service for Locomotive main frames, Refineries, Pipe lines.

**Characteristics on Usage**

A medium heavy coated low hydrogen 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.

**Notes On Usage**

- ✍ 1) Dry the electrodes at 350 - 400°C
- ✍ 2) 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	0.60 Max	0.030 Max	0.030 Max	3.0 - 3.75

**Mechanical Properties Of Weld Metal: PWHT at 605+/- 15 for one hour soaking period**

U.T.S.	Y.S.	ELONGATION	IMPACT
(N/mm <sup>2</sup> )	(N/mm <sup>2</sup> )	( L = 4d ) %	(C.V.N)
560 Min	470 Min	20 % Min	AT - 75 °C ( J )
			27 Joules Min

**Approvals****Packing and Welding Current**

SIZE ( mm )	PIECES PER PACKET	PIECES PER CARTON	Current (Amps)	In Amps
2.50 x 350	150	600	AC / DC (+)	60 – 90
3.15 x 450	100	400		100 – 140
4.00 x 450	70	280		140 – 180
5.00 x 450	45	180		180 – 250