

**ROYAL CAST -3 (E NiCrFe-3)**

AWS: SFA 5.11, E NiCrFe-3

**Applications**

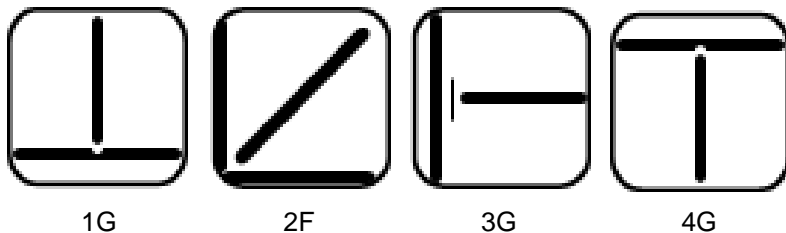
This is the versatile electrode for all position welding of nickel, inconel, monel, nickel-chromium-iron alloys, HK alloys, stainless and heat resisting steels. Also for welding dissimilar metals such as carbon steels, stainless steels, nickel and nickel alloys to each other. for use on equipment and components made of pure nickel, for fabrication of corrosion resistant tank and containers, heat exchangers, furnace components, boiler, fittings etc.

**Characteristics on Usage**

The Electrode gives soft stable arc on low current. Deposits are cold tough and have excellent resistance to scaling at high temperatures and corrosion resistance at both normal and elevated temperatures. Also possesses good thermal shock resistance.

**Notes On Usage**

- ✍ 1) Chip off base metal completely at the repairing part .
- ✍ 2) There is possibility that cracks spreads or makes holes at both ends of repairing part .
- ✍ 3) Keep the weld metal length less than 50 mm (2 inch ) to disperse welding heat- adopt back stepping stone or symmetry method by turns.
- ✍ 4) The preheat temperature vary in accordance with the size ,king and shape of the base metal 150°C is appropriate in general .

**Welding Positions**

1G

2F

3G

4G

**Chemical Composition Of Weld Metal**

C%	Mn%	Si%	S%	P%	Cr %	Ni %	Cu
0.10 Max	5.0 – 9.50	1.00 Max	0.015 Max	0.030 Max	13.0 - 17.0	59.0 Min	0.50

**Mechanical Properties Of Weld Metal**

U.T.S. (N/mm <sup>2</sup> )	ELONGATION ( L = 4d ) %
550 Min	30 % Min

**Packing and Welding Current**

SIZE ( mm )	KG PER PACKET	KG PER CARTON	Current (Amps)	In Amps
2.50 x 350	2	10	DC (+)	40 - 60
3.15 x 350	2	10		60 - 80
4.00 x 350	2	10		100 - 140

**Packing**

Vaccum packing