

# ROYAL THERM- 90 D (E 9018 -D3)

AWS: SFA 5.5, E 9018 -D3 IS : 1395: E 63BD 1241

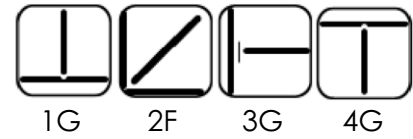
## Applications

Welding of grain refined steels. Q&T steel, HSLA steel, structural fabrication, Penstocks, Tanks, pressure vessels.

## Characteristics on Usage

A heavy coated low hydrogen iron powder type electrode. Welding in all positions. Used for welding steel having high tensile strength upto 70 Kg/mm<sup>2</sup> as well as low alloy structural steel. the weld metal is of radiographic quality having excellent welding characteristics like crack resistant with good toughness down to minus 50oC.

## Welding Positions



## Notes On Usage

- ⚠ Dry the electrode a 250 - 300 °C for 60 Min- before use .
- ⚠ Preheat at 100 - 200 °C & post heat at 620± 15 °C
- ⚠ Keep the arc as short as possible.

LOW ALLOY HIGH TENSILE ELECTRODES

## Chemical Composition Of Weld Metal

C%	Mn%	Si%	S%	P%	Cr%	Mo%
0.12 Max	1.0-1.75	0.80	0.030 Max	0.030 Max	0.90 Max	0.25-0.45

## Mechanical Properties Of Weld Metal

U.T.S. (N/mm <sup>2</sup> )	Y.S. (N/mm <sup>2</sup> )	ELONGATION ( L = 4d ) %	IMPACT (CVN) AT - 50° C ( J)
620 Min	530 Min	22 % Min	50 Joules

## Packing and Welding Current

SIZE ( mm )	KG PER PACKET	KG PER CARTON	Current (Amps)	In Amps
2.50 x 350	5	20	AC/DC (+)	70-100
3.15 x 450	5	20		100 - 140
4.00 x 450	5	20		140 - 180
5.00 x 450	5	20		180 - 230