

ROYAL THERM- 90 D (E 9018 –D3)

AWS: SFA 5.5, E 9018 –D3

IS: 1395: E 63BD 1241

Applications

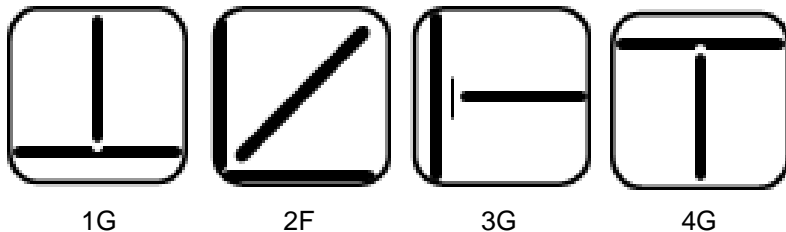
Welding of grain refined steels. Q&T steel, HSLA steel, structural fabrication, Penstocks, Tanks, pressure vessels.

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/mm² 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 50°C.

Notes On Usage

- ✍ 1) Dry the electrode a 350-400 °C for 60 Min- before use .
- ✍ 2) Preheat at 100 - 200 °C & post heat at 620 ± 15°C
- ✍ 3) Keep the arc as short as possible.

Welding Positions**Chemical Composition Of Weld Metal**

C%	Mn%	Si%	S%	P%	Ni %	Mo %
0.12 Max	1.0- 1.80	0.80 Max	0.030 Max	0.030 Max	0.90 Max	0.40 – 0.65

Mechanical Properties Of Weld Metal

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

Packing and Welding Current

SIZE (mm)	PIECES PER PACKET	PIECES PER CARTON	Current (Amps)	In Amps
2.50 x 350	150	600	AC / DC (+)	70 – 100
3.15 x 450	100	400		100 – 140
4.00 x 450	70	280		140 – 180
5.00 x 450	45	180		180 – 230