

# ROYAL THERM (E 7018)

AWS : A 5.1, E 7018  
IS : 814 EB 5426H3JX  
EN ISO 2560 A E 42 3 B 32 H5

## Applications

Ship Building, Pipelines, Bridges, Boilers, Pressure Vessels, Restrained Joints, Penstocks, Blast Furnace Steel Work, Atomic Reactor Shell & Pipework.

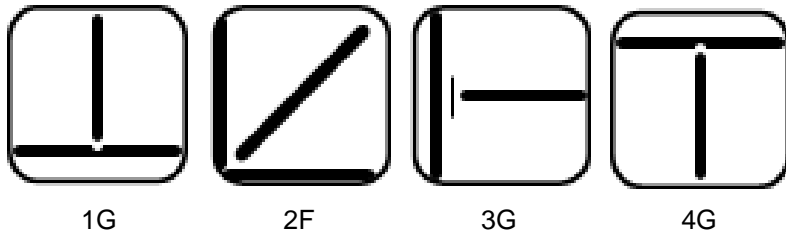
## Characteristics on Usage

This is a basic heavy coated low hydrogen iron powder type electrode with excellent weld characteristic. very smooth arc, medium penetration and low spatter, easy to remove slag. the weld metal is ductile and crack resistant and is of radiographic quality. it is easy to operate in all position and deposition efficiency is approximately 115%. ( PLEASE KEEP DRY )

## Notes On Usage

- ✍ 1) Dry the electrode a 300-350 °C for 60 Min- before use .
- ✍ 2) Keep the arc as short as possible
- ✍ 3) Use wind screen against strong wind.

## Welding Positions



## Chemical Composition Of Weld Metal

C%	Mn%	Si%	S%	P%	Cr %	Ni %	Mo %
0.15 Max	1.60 Max	0.75 Max	0.035 Max	0.035 Max	0.20 Max	0.30 Max	0.30 Max

## Mechanical Properties Of Weld Metal

U.T.S.	Y.S.	ELONGATION	IMPACT ( CVN )	RADIOGRAPHY TEST	Hydrogen (Mercury method)
(N/mm <sup>2</sup> )	(N/mm <sup>2</sup> )	( L = 4d ) %	AT - 30° C ( J )		in 100grm weld metal
490 Min	400 Min	22 % Min	27 Joules Min	Satisfactory as per IIW blue std	5 ml (Max)

## Approvals

L.R.S, I.R.S, I.B.R, P.D.I.L, B.V., B.I.S. [ISI], E.I.L, TOYO [TEIL], RPL-BECHTEL, THERMAX, L & T, I.P.C.L, K.PG.I.L, I.O.C.L, M.R.P.L, M.M.D., UDHE INDIA LTD. , B.H.E.L., B.H.P.V., ABS, DNV, NPCIL, M.N.DASTUR & CO., RDSO CLASS A4 B2, SUZLON ENERGY, TPL

## Packing and Welding Current

SIZE ( mm )	PIECES PER PACKET	PIECES PER CARTON	Current (Amps)	In Amps
2.50 x 350	200	800	AC 70 OCV/	60 - 95
3.15 x 450	100	400	DC+	90 - 120
4.00 x 450	70	280		140 - 190
5.00 x 450	45	180		190 - 250
6.30 x 450	30	120		250 - 310