

# ROYAL 8018 B1 (E 8018-B1)

AWS : SFA 5.5, E 8018-B1 EN ISO 3580 A E CrMo 0.5 B 32 H5

## Applications

Joining of crack resistant steels, low alloy steels. Welding on equipment of Oil refineries, pipeline & high temperature synthetic chemical industries. Electric power plant.

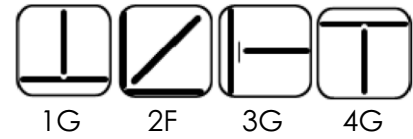
## Characteristics on Usage

It is a hydrogen controlled basic iron powder type all position electrode running with smooth & stable arc with easily detachable slag. It is designed for welds of radiographic quality and used in joining creep resistant steel and low alloy steel. The weld metal possess excellent mechanical properties and resistance to cracking caused by heavy stresses or hydrogen.

## Notes On Usage

- Preheat at 150 - 300 °C and post heat at 690 ± 15 °C.
- Dry the electrode a 250 - 300 °C for 60 Min- before use .
- Keep the arc as short as possible.

## Welding Positions



## Chemical Composition Of Weld Metal

C%	Mn%	Si%	S%	P%	Cr%	Mo%
0.05 - 0.12	0.90 Max	0.80 Max	0.03 Max	0.03 Max	0.40 - 0.65	0.40 - 0.65

## Mechanical Properties Of Weld Metal

(After PWHT at 690 ± 150C for 1 Hr soaking)

U.T.S. (N/mm <sup>2</sup> )	Y.S. (N/mm <sup>2</sup> )	ELONGATION ( L = 4d ) %	Hydrogen content in 100grm weld metal
550 Min	460 Min	19 % Min	5ml Max

## 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