

# ROYAL – 9018 B3L (E 9018 B3L)

AWS : SFA 5.5, E 9018 B3L IS : 814E 53 B-B3-26 Fe EN ISO 3580 A E CrMo 2 L B 32 H5

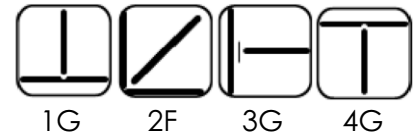
## Applications

Suitable for welding 2.25% Cr, 1% Mo steels. Low alloy steel boilers and pipeline operation, Repair of high tensile steel castings. Pipelines for oil refinery, power plant at service ,

## Characteristics on Usage

A medium heavy coated controlled Carbon, low Hydrogen Iron powder type electrode, welding in all positions. used for welding of similar Cr-Mo steel. Its deposition efficiency is 106% approximately, the weld metal is of radiographic quality and has creep resistance up to 600 oC. The weld metal gives 2.25% Cr and 1.0% Mo having excellent welding characteristics. Dry the electrode at 300 oC for obtaining best results.

## Welding Positions



## Notes On Usage

- Preheat at 150 - 250 °C and postheat at 690± 15 °C.
- Dry the Dry the electrode at 250 - 300 °C for 60 Min- before use.

LOW ALLOY HIGH TENSILE ELECTRODES

## Chemical Composition Of Weld Metal

C%	Mn%	Si%	S%	P%	Cr%	Mo%
0.050 Max	0.90 Max	0 .80 Max	0.030 Max	0.030 Max	2.0 – 2.50	0.90 – 1.20

## Mechanical Properties Of Weld Metal

(After S.R. at 690± 15oC for 1 Hr soaking)

U.T.S. (N/mm <sup>2</sup> )	Y.S. (N/mm <sup>2</sup> )	ELONGATION ( L = 4d ) %	Creep strength AT 550 oC	1% offset in 10000 Hrs AT 575 °C
620 Min	530 Min	17 %	12 Kg/mm <sup>2</sup>	9.0 Kg/mm <sup>2</sup>

## Packing and Welding Current

SIZE ( mm )	KG PER PACKET	KG PER CARTON	Current (Amps)	In Amps
2.50 x 350	5	20	AC/DC (+)	60 – 90
3.15 x 450	5	20		100 – 130
4.00 x 450	5	20		140 – 180
5.00 x 450	5	20		190 – 230