

**ROYAL – 9018 B3L (E 9018 B3L)**

AWS : SFA 5.5, E 9018 B3L

IS : 814E 53 B-B3-26 Fe

**Applications**

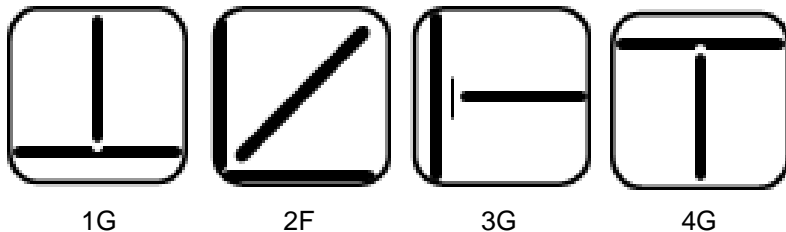
Suitable for welding 2.25% Cr, 1% Mo steels. Low alloy steel boilers and pipeline operation, Repair of high tensile steel castings. Pipelines for oil refinery, power plant at service ,

**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 °C. The weld metal gives 2.25% Cr and 1.0% Mo having excellent welding characteristics. Dry the electrode at 300 °C for obtaining best results.

**Notes On Usage**

- ✍ 1) Preheat at 150 - 250 °C and postheat at  $690 \pm 15$  °C.
- ✍ 2) Dry the electrode at 350-400 °C for 60 Min- before use.

**Welding Positions****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  $690 \pm 15$ °C for 1 Hr soaking)

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

**Approvals****Packing and Welding Current**

SIZE ( mm )	PIECES PER PACKET	PIECES PER CARTON	Current (Amps)	In Amps
2.50 x 350	150	600	AC / DC (+)	60 – 90
3.15 x 450	100	400		100 – 130
4.00 x 450	70	280		140 – 180
5.00 x 450	45	180		190 – 230