

# ROYALFIL GS 81-B6 (E 81T1-B6 C)

AWS A / SFA 5.29 E 81T1- B6C EN ISO 17634 A TCrMo5RC1H5

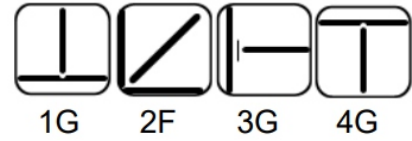
## Applications

It is used for welding of similar composition of Cr - Mo steel and other creep resistance steel. It is used in oil refineries, power plants, chemicals plants, fertilizer Industries. Materials to be welded are plate ASTM A387 Grade 9, Pipe/ Tube ASTM A 335 Grade 9, ASTM A234 Grade WP9 (fittings), ASTM A199 GradeT9, Forgings ASTM A182 Grade F9,

## Characteristics on Usage

It is all position low alloy Rutile base flux cored wire depositing approx 5% Cr, 0.50% Mo weld metal with Co<sub>2</sub> shielding. The slag coverage is complete, easily removable. The weld metal is radiographic quality and has creep resistance up to 650 Deg.

## Welding Positions



## Recommended Stick Out

15-20mm

## OutShielding Gas

Carbon Dioxide (CO<sub>2</sub>) shielding  
Gas Flow: 15-20 Lit/Min.

## Chemical Composition Of Weld Metal

C%	Mn%	Si%	S%	P%
0.05-0.12	1.25 Max	0.80 Max	0.030 Max	0.040 Max
Cr%	Mo%			
4.0-6.0	0.40-0.65			

## Mechanical Properties Of Weld Metal

U.T.S. (N/mm <sup>2</sup> )	Y.S. (N/mm <sup>2</sup> )	ELONGATION ( L = 4d ) %
550-690	470-530 Min	19-24 Min

## Welding Parameters (DC + VE)

Diameter (mm)	Flat & Horizontal (A)	Flat & Horizontal (V)	Vertical - Up (V)	Vertical - Up (V)	Overhead (V)	Overhead (V)
1.20	180-250	26-30	120-210	22-26	150-200	26-30
1.60	210-280	26-30	160-250	22-27	190-240	26-30

## Packing

15 kgs. Vacuum packed plastic spool