

# ROYALFIL GS 81 RB (E81T5-B2 C)

AWS A / SFA 5.29 E81 T5 - B2 C EN ISO 17634 A TCrMo1BC1H5

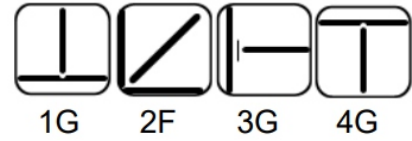
## Applications

Since all Cr-Mo electrodes produce weld metal which will harden in still air, both preheat & postweld heat treatment are required for most applications. Specially design for Cr-MO Steels with high temp & pressure service condition in steam pipes of boilers. It is used for welding of Iron / 0.5 Mo, 0.5 Cr/0.5 Mo & similar creep resistance steels. Eg. ASTM A 335 – P11' pipe, ASTM A 387 Gr. II

## Characteristics on Usage

It is low hydrogen low alloy all position type flux cored wire with highly basic slag having stable & smooth arc, good slag detachability. Weld metal is of radiographic quality. It is used for all position welding with CO2 shielding.

## Welding Positions



## Recommended Stick Out

15-20mm

## OutShielding Gas

Carbon Dioxide (CO2) shielding  
Gas Flow:20-25 Lit/Min.

## Chemical Composition Of Weld Metal

C%	Mn%	Si%	S%	P%	Cr%
0.05-0.12	1.25 Max	0.80 Max	0.030 Max	0.030 Max	1.00-1.50
Mo%					
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	470-545	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