

ROYALFIL GS-81 B8 (E81T1-B8C)

AWS A / SFA 5.29 E81T1-B8C EN ISO 17634 A TZRC1H5

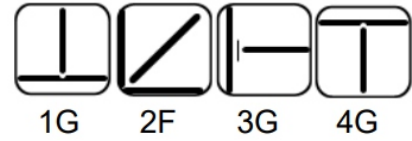
Applications

Royalfil GS-81 B8 flux cored wire is recommended for welding of 9% Cr+Mo air hardening steel for elevated temperature service up to 600°C with reasonable degree of corrosion resistance from steam, Hot hydrogen gas & High sulphur crude oil. This include steels like A387 grade 9, A335 grade P9, A234 grade WP9(fitting), A199 grade T9, A213

Characteristics on Usage

Royalfil GS-81 B8 is all position Rutile based flux cored wire depositing approx 9% Cr, 1.00% Mo, 0.3 Ni%, weld metal with CO₂ shielding. The slag coverage is complete & easily removable. The weld metal is of radiographic quality. Since all Cr+Mo electrodes produce weld metal which will hardens is still air, both pre & post weld heat treatment (PWHT) are required for most applications.

Welding Positions



Recommended Stick Out

15-20mm

OutShielding Gas

Carbon Dioxide (CO₂) 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%	Ni%	Mo%		
8.0-10.50	0.40 Max	0.85-1.20		

Mechanical Properties Of Weld Metal

U.T.S. (N/mm ²)	Y.S. (N/mm ²)	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