

ROYALFIL GS 81 RM (E81T1-B1 C)

AWS A / SFA 5.29 E81 T1 - B2 C EN ISO 17634 A TCrMo1LRC1H5

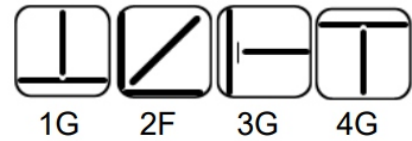
Applications

RoyalFil GS- 81R-M is Suitable for single & multiple pass welding using DCEP polarity. It is used for welding of similar composition of Cr-MO steels & other creep resistant steels with CO₂ shielding. Commonly used in steam power plants, ships, chemical plants & refineries.

Characteristics on Usage

RoyalFil GS- 81R-M is an all position rutile based low alloy steel wire depositing Approx 0.5%Cr & 0.5%Mo weld metal. It is characterized by spray transfer, less spatter, smooth & stable arc with good penetration & moderate volume of slag which completely covers the weld bead. Weld metal is of radiographic quality

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	0.030 Max
Cr%	Mo%			
0.4 -0.65	0.40 - 0.65			

Mechanical Properties Of Weld Metal

U.T.S. (N/mm ²)	Y.S. (N/mm ²)	ELONGATION (L = 4d) %
550-690	470-520 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