

Applications

Since all Cr-Mo electrodes produce weld metal which will harden in still air, both preheat & post weld heat treatment are required for most applications. Specially design for Cr-Mo Steels with high temp & pressure service condition in steam pipes of boilers.

Characteristics on Usage

RoyalFil GS 80 RB is low hydrogen 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 flat & horizontal position welding with CO₂ shielding.

Welding Positions

1G 2F

Recommended Stick Out

15-20mm

Shielding Gas

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

Chemical Composition Of Weld Metal

Element	C%	Mn%	Si%	S%	P%	Cr %	Mo %
Typical Values	0.060	0.70	0.40	0.010	0.015	1.25	0.50
Spec. reqd.	0.05 –0.12	1.25 Max	0.80 Max	0.030 Max	0.030 Max	1.00-1.50	0.40-0.65

Mechanical Properties Of Weld Metal

(After PWHT at 690 ± 15°C for 1 Hr)

Property	U.T.S. (N/mm ²)	Y.S. (N/mm ²)	ELONGATION (L = 4d) %
Typical Values	600	545	24.50
Spec. reqd.	550-690	470 Min	19 Min

Welding Parameters (DC + VE)

Diameter (mm)	Flat & Horizontal	
	(A)	(V)
1.20	180-210	26 -30
1.60	210-250	26-30

Packing

15 kgs. vaccum packed plastic spool.