

Applications

Royalfil GS-80B6 is used for welding of similar composition of Cr – Mo steel and other creep resistance steel. It is also used for welding of high temp. & Pipe steel for oil refineries, power plant, chemicals plant, fertilizers Industries, fabrication of SA 387 Grade 5 plates & pipes.

Characteristics on Usage

Royalfil GS-80B6 is flat and horizontal position low alloy Rutile base flux cored wire depositing approx 5% Cr, 0.50% Mo weld metal with CO₂ shielding. The slag coverage is complete easily removable. The weld metal is radiographic quality and has creep resistance up to 650°C

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 %	Ni %	Mo %	Cu %
Typical Values	0.064	0.84	0.64	0.010	0.018	5.0	0.28	0.50	0.12
Spec. reqd.	0.05-0.12	1.25 Max	1.00 Max	0.030 Max	0.040 Max	4.0-6.0	0.40 Max	0.40 -0.65	0.50 Max

Mechanical Properties Of Weld Metal

(After PWHT at 745 ± 15°C for 1 Hr)

Property	U.T.S. (N/mm ²)	Y.S. (N/mm ²)	ELONGATION (L = 4d) %
Typical Values	624	512	24
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. vacuum packed plastic spool.