

Applications

Royalfil GS-31RB is designed for single and multipass welding of low and medium carbon steels. Suitable for joining steels conforming to ASTM Grade C,D,E OF SA-414 /SA-414M, (P.No.1) Typical application includes steel plant equipments, heavy machinery etc.

Characteristics on Usage

Royalfil GS-31RB is basic type flux cored wire for flat & horizontal welding with CO₂ shielding. The slag coverage is complete and easy to remove. Weld metal is consistently free of inclusions and porosity for X-ray soundness. This wire is formulated to produce fewer fumes, minimal spatter.

Welding Positions

1G 2F

Recommended Stick Out

15 - 20mm

Shielding GasCarbon Dioxide (CO₂) shielding
Gas Flow :20-25 Lit / Min**Chemical Composition Of Weld Metal**

Element	C%	Mn%	Si%	S%	P%	Ni %
Typical Values	0.05	1.41	0.40	0.010	0.018	0.30
Spec. Reqd.	0.12 Max	1.75 Max	0.90 Max	0.03 Max	0.03 Max	0.50 Max

Mechanical Properties Of Weld Metal

Property	U.T.S. (N/mm ²)	Y.S. (N/mm ²)	ELONGATION (L = 4d) %	IMPACT (CVN) AT - 30° C (J)
Typical Values	550	470	26	60
Spec. Reqd.	480 Min	400 Min	22 Min	27 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.