

Applications

RoyalFil GS-81B is designed for all position single and multipass welding of ship-building steels etc.

Characteristics on Usage

RoyalFil GS-81B is a semi-automatic type gas shielded flux-cored wire, whereby CO₂ shield is applicable. The weld metal is of radiographic quality with excellent impact strength at sub-zero temperatures up to minus 20°C. The slag coverage is complete and designed for easy removal. The wire is specially designed for welding of ship building steels, etc

Welding Positions

1G 2F 3G 4G

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%	Ni %
Typical Values	0.06	1.50	0.70	0.010	0.015	0.75
Spec. Reqd.	0.12 Max	1.75 Max	0.90 Max	0.03 Max	0.03 Max	0.50 Min

Mechanical Properties Of Weld Metal

Property	U.T.S. (N/mm ²)	Y.S. (N/mm ²)	ELONGATION (L = 4d) %	CVN IMPACT AT - 20°C (J)
Typial Values	635	560	25	60
Spec.Req'd.	550-690	470 Min	19 Min	27 Min

Welding Parameters (DC + VE)

Diameter (mm)	Flat		Vertical - Up		Overhead	
	(A)	(V)	(A)	(V)	(A)	(V)
1.20	180-210	26-30	150-210	22-26	180-210	26-30
1.60	210-250	26-30	180-250	21-27	210-250	26-30

Approvals

IRS

Packing

15 kgs. vaccum packed plastic spool.