

ROYALFIL GS 48R (E111T1-K3C)

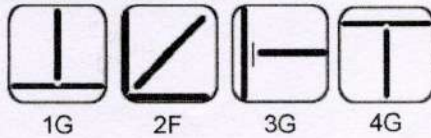
AWS A / SFA 5.29 E111T1 -K3C

Applications

RoyalFil GS 48 R is designed for welding of high strength, low alloy steels such as HY 100, A514 & similar HSLA and Q & T steels. Used in Shipbuilding, Crane building, Platforms, Pipe works etc.

Characteristics on Usage :

RoyalFil GS 48 R is low alloy rutile type all position flux cored wire with 100% with Co₂ gas shielding. The weld deposit of radiographic quality with low diffusible hydrogen, stable and smooth arc with good slag detachability. Suitable for single & multi pass welding of high strength low alloy steel.

Welding Positions

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 %	Mo
Typical Values	0.055	1.60	0.40	0.010	0.015	2.40	0.45
Spec. Reqd.	0.15 Max.	0.75-2.25	0.80 Max	0.030 Max	0.030 Max	1.25-2.60	0.25-0.65

Mechanical Properties Of Weld Metal

Property	U.T.S. (N/mm ²)	Y.S. (N/mm ²)	ELONGATION (L = 4d) %	IMPACT (CVN) AT -20 °C (J)
Typical Values	850	760	18	60
Spec. Reqd.	760-900	680 Min	15 Min	27 Min

Welding Parameters (DC + VE)

Diameter (mm)	Flat & Horizontal	Flat & Horizontal	Vertical - Up	Vertical - Up	Overhead	Overhead
	(A)	(V)	(A)	(V)	(A)	(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.