# ROYALFIL GS 12M (E71T-1M)

# Applications

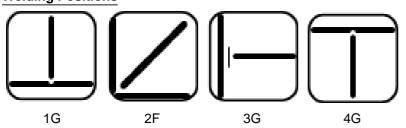
Royalfil GS-12M is designed for single and multiple pass welding of low and medium carbon steels. Suitable for joining steels conforming to ASTM A-36 /A-36M, A 283 / A 283M, A 414 / A414M, Fabrication in chemical plant machinery structures & Steel Sheets in ship building, auto industries, heavy bridges, towers, electrical appliance industries, earth moving equipments etc.

# Characteristics on Usage

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Royalfil GS-12M is an all position rutile type flux cored wire designed for optimum performance when using 80% Argon – 20% CO2 shielding gas. Weld Metal is consistently free of inclusions, porosity & is of radiographic quality. Slay coverage is complete & gets removed very easily. This wire characterized by a spray transfer, low spatter loss, less fumes & having ability produce higher deposition rates. It is more resistant to burn- through also.

# Welding Positions



#### Chemical Composition Of Weld Metal

Element	C%	Mn%	Si%	S%	P%
Typical Values	0.055	1.30	0.45	0.010	0.018
Spec. Reqd.	0.12 Max	1.75 Max	0.90 Max	0.030 Max	0.030 Max

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## **Mechanical Properties Of Weld Metal**

Property	U.T.S. Y.S.		ELONGATION	CVN IMPACT	
	(N/mm²)	(N/mm²)	(L = 4d)%	AT - 20°C ( J )	
Typical Values	590	500	26	70	
Spec. Reqd.	490-670	390 Min	22 Min	27 Min	

## Welding Parameters (DC + VE)

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