

ROYALFIL GS T12 R (E71T-12 C)

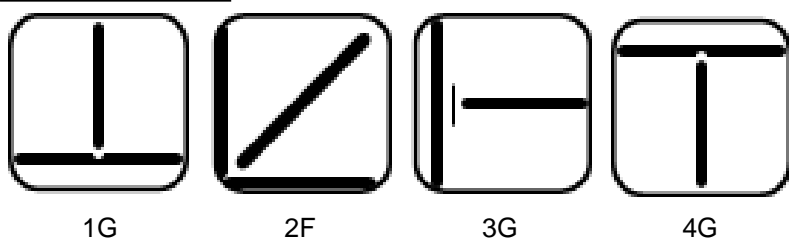
AWS A / SFA 5.20 E71T-12 C

Applications

RoyalFil GS- T12 R is suitable for single and multipass welding of oil and gas constructions, pipe and offshore constructions where low temperature service is required.

Characteristics on Usage

RoyalFil GS-T12R is Rutile base flux cored wire for all position optimum performance when using with CO2 shielding. Metal transfer is smooth, slag coverage is complete and easy removal. Weld metal is consistently free from inclusions and porosity for X ray soundness. Weld deposit is with 0.5 % Ni to improve impact toughness at low temperature service down to – 30 °C even after stress is relieving . The wire is formulated to produce fewer fumes, minimum spatter. Weld metal with 0.5 % Ni. Max and 1.60 % Mn. Max. conforms to the A- no.1 analysis group in the ASME boiler and pressure vessel code, section IX

Welding Positions**Chemical Composition Of Weld Metal**

Element	C%	Mn%	Si%	S%	P%	Ni %
Typical Values	0.05	1.25	0.40	0.010	0.018	0.40
Spec. Req'd.	0.12 Max	1.60 Max	0.90 Max	0.030 Max	0.030 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. Req'd.	490-620	390 Min	22 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.