

ROYALFIL GS T12 R (E71T-12 C)

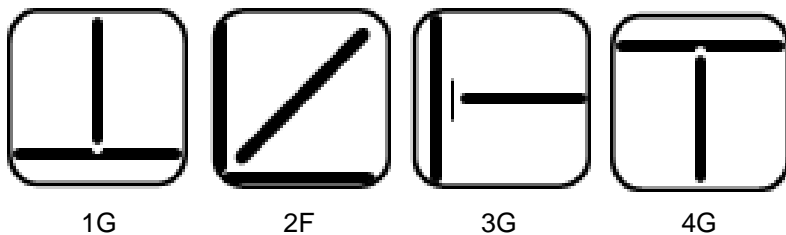
AWS A / SFA 5.20 E71T-12 C

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. Reqd.	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. Reqd.	490-620	390 Min	22 Min	27 Min

Welding Parameters (DC + VE)

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