

ROYALFIL GS 41 R (E91T1-B3 C)

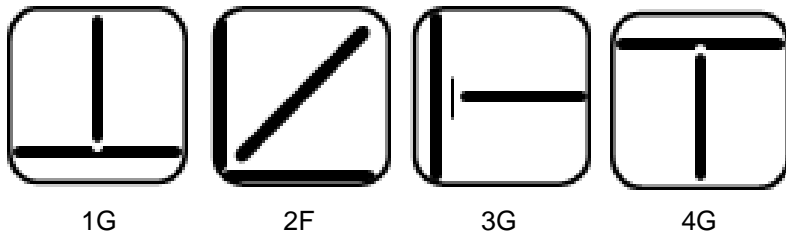
AWS A / SFA 5.29 E91T1-B3 C

Applications

RoyalFil GS 41R is used for welding of similar composition of Cr-Mo steels and other creep resistant steels. It is also used for welding of high temperature & pipe steels for oil industry and for welding of steel casting (DIN 7245:GS-18CR Mo9-10) Suitable for joining steels conforming to ASTM Grade F22 of SA-182/ SA-182M & SA-336/ SA-336M, Grade T4, T22 of SA- 199 / SA-1995M, Grade P22 of SA-335/SA-335M etc.

Characteristics on Usage

RoyalFil GS 41R is an all position low alloy rutile base flux cored wire depositing approximately 2.25% Cr & 1.0%Mo weld metal with CO₂ shielding. The slag coverage is complete and designed for easy removal. Weld metal is consistently free of inclusions and porosity for radiography soundness

Welding Positions**Chemical Composition Of Weld Metal**

Element	C%	Mn%	Si%	S%	P%	Cr %	Mo
Typical values	0.06	0.50	0.40	0.010	0.018	2.25	1.0
Spec. Reqd.	0.05-0.12	1.25 Max	0.80 Max	0.03 Max	0.03 Max	2.00- 2.50	0.90-

Mechanical Properties Of Weld Metal

(After PWHT at 690 ± 15°C for 1 Hr)

Property	U.T.S. (N/mm ²)	Y.S. (N/mm ²)	ELONGATION (L = 4d) %
Typical values	705	585	20
Spec. Reqd.	620-760	540 Min	17 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.