

ROYALFIL GS 17 R (E81T1-Ni2-C)

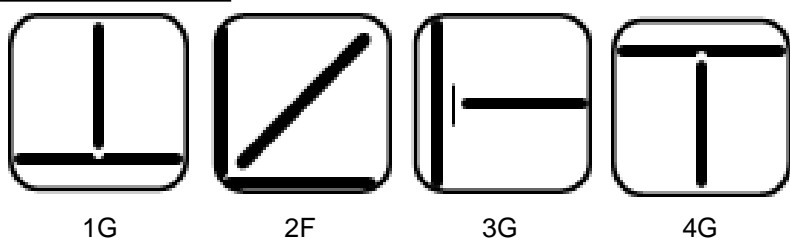
AWS A / SFA 5.29 E81T1-Ni2 C

Applications

Royalfil-GS-17R fcw wire have been designed to produce weld metal with increase strength (without being air hardenable) & with increase notch toughness at low temperature. This Nickel steel weld metal can be used without PWHT. Often used in structural applications where excellent toughness is required. For e.g. Construction machineries, Structural bridges & storage tanks. Ideal for welding quenched & tempered steels of HY 80 type. Suitable for welding of 560 N/mm² high tensile steel

Characteristics on Usage

Royalfil GS-17 R is Rutile base gas shielded flux cored wire welding for all position welding with Co₂ shield gas depositing radiographic quality metal. Arc is smooth & stable with low spatter and good bead appearance. Slag coverage is complete and easy removal.

Welding Positions**Chemical Composition Of Weld Metal**

Element	C%	Mn%	Si%	S%	P%	Ni %
Typical Values	0.045	1.20	0.50	0.007	0.017	2.00
Spec. Reqd.	0.12 Max	1.50 Max	0.80 Max	0.030 Max	0.030 Max	1.75-2.75

Mechanical Properties Of Weld Metal

Property	U.T.S. (N/mm ²)	Y.S. (N/mm ²)	ELONGATION (L = 4d) %	IMPACT (CVN) AT -40 °C (J)
Typical Values	620	530	24	70
Spec. Reqd.	550-690	470 Min	19 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.