

ROYALFIL GS 16 R (E81T1-Ni1 C)

AWS A / SFA 5.29 E81T1-Ni1 C EN ISO 17632 A T4631NiRC1H5

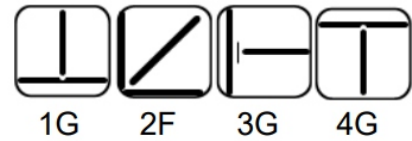
Applications

Royalfil-GS-16R 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.

Characteristics on Usage

Royalfil GS-16 R is Rutile base gas shielded flux cored wire welding for all position welding with Co2 shielding 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



Recommended Stick Out

15-20mm

OutShielding Gas

Carbon Dioxide (CO₂) shielding
Gas Flow: 15-20 Lit/Min.

Chemical Composition Of Weld Metal

C%	Mn%	Si%	S%	P%
0.12 Max	1.50 Max	0.80 Max	0.030 Max	0.030 Max
Ni%	Mo%			
0.80 -1.10	0.35 Max			

Mechanical Properties Of Weld Metal

U.T.S. (N/mm ²)	Y.S. (N/mm ²)	ELONGATION (L = 4d) %	MPACT(CVN) AT -30 °C (J)
450 - 690	520-470 Min	19-24 Min	27-80 Min

Welding Parameters (DC + VE)

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