

**ROYALFIL GS 42 R (E111T1-K4C)**

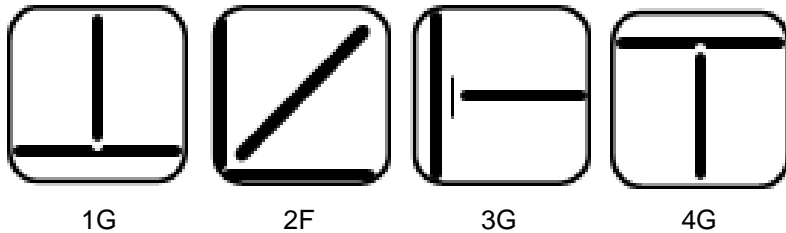
AWS A/ SFA 5.29 E111T 1- K4C

**Applications**

It is primarily intended for as welded applications for welding wire low alloy high strength steels. Addition of approximately 0.50Cr provides higher strength for many applications needing in excess of 830 N/ mm<sup>2</sup> tensile strength such as "armour" plate. Typical applications include welding of Hy100 and ASTM A 514 steels.

**Characteristics on Usage**

RoyalFil GS 42 R is rutile base low hydrogen type all position flux cored wire design for single and multiple pass welding with Co<sub>2</sub> shield gas. Weld metal is of radiographic quality.

**Welding Positions****Chemical Composition Of Weld Metal**

Element	C%	Mn%	Si%	S%	P%	Cr %	Ni %
Typical Values	0.050	1.50	0.50	0.010	0.015	0.50	2.0
Spec. Reqd.	0.15 Max	1.20 -2.25	0.80 Max	0.030 Max	0.030 Max	0.20-0.65	1.75-

**Mechanical Properties Of Weld Metal**

Property	U.T.S. (N/mm <sup>2</sup> )	Y.S. (N/mm <sup>2</sup> )	ELONGATION ( L = 4d ) %	CVN IMPACT AT - 20°C ( J )
Typical Values	840	740	20	60
Spec. Reqd.	760-900	680 Min	15 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.