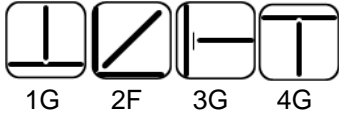


**Applications**

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****Recommended Stick Out**

15-20 mm

**Shielding Gas**

Carbon Dioxide (CO<sub>2</sub>) shielding  
Gas Flow :20-25 Lit / Min

**Chemical Composition Of Weld Metal**

Element	C%	Mn%	Si%	S%	P%	Cr %	Ni %	Mo %
Typical Values	0.050	1.50	0.50	0.010	0.015	0.50	2.00	0.40
Spec. Reqd.	0.15 Max	1.20 -2.25	0.80 Max	0.030 Max	0.030 Max	0.20-0.65	1.75-2.60	0.20-0.65

**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		Vertical - Up		Overhead	
	(A)	(V)	(A)	(V)	(A)	(V)
1.20	180-210	26-30	150-210	22-26	180-210	26-30
1.60	210-250	26-30	180-250	21-27	210-250	26-30

**Packing**

15 kgs. vacuum packed plastic spool.