

**ROYAL – 70 S - 6 (ER 70S-6)**AWS : A 5.18 ER 70S-6  
IS – 6419 EN – 440 G 46 3 M G4 Si 1**Applications**

Suitable for welding of structural steel, with tensile strength up to 540N/mm<sup>2</sup> Butt and fillet welding of automobile bodies, bridges, ships, containers, railway rolling stock, bogies, storage tanks and general structural fabrications.

**Characteristics on Usage**

Royal Arc-Co<sub>2</sub> Wire is a copper coated solid wire for Ar/CO<sub>2</sub> welding for general engineering and structural application. It gives spatter free welding with Co<sub>2</sub> gas and Ar+Co<sub>2</sub> gas mixtures. The weld deposit are free from porosities with very smooth and uniform weld bead.

**Chemical Composition Of Weld Metal**

C%	Mn%	Si%	S%	P%	Cr %	Ni %	V %	Mo %	Cu %
0.06- 0.15	1.40 – 1.85	0.80 – 1.15	0.035 Max	0.025 Max	0.15 Max	0.15 Max	0.03 Max	0.15 Max	0.50 Max

**Mechanical Properties Of Weld Metal**

U.T.S.	Y.S.	ELONGATION	IMPACT
(N/mm <sup>2</sup> )	(N/mm <sup>2</sup> )	( L = 4d ) %	( CVN ) AT - 30° C ( J )
490	400	22	27

**Packing and Welding Current**

SIZE ( mm )	Current (Amps)	In Amps	In Volts	GAS FLOW L/M
0.8	DC (+)	50 - 180	18 - 25	10 – 25
1.0		80 – 200	20 – 26	12 – 20
1.2		130 – 300	22 – 36	15 – 25
1.6		200 - 400	24 - 38	16 – 28

**Packing**

Standard plastic spool of 270 mm dia and weight 15kg sealed in an air tight polythene bag and then packed in a corrugated box. Silica gel drying agent provided inside to prevent moisture pick up and increase shelf life.

Shrink packing can also be given on customer requirement. We can also manufacture wire according to customer requirements.