

# ROYAL 70 S - 3

AWS : A 5.1 8 ER 70S-3 IS – 6419 EN ISO 14341 A G/W 42 3 M G2Si1

## Description

Royal – 70S-3 wire is a copper coated solid wire for Co2 welding for general engineering and structural application. It gives spatter free welding with Co2 gas and Ar+Co2 gas mixtures. The weld de-posit is free from porosities with smooth and uniform weld bead.

## Classification

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## Packing Specification

Each Packets content 5 kg of Wire Rods having length 1000mm.

## Procedure

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

## WELDING CURRENT D.C. (+) :-

WIRE	CURRENT Amps	VOLTS	GAS FLOW L/M
1.60 x 1000 mm	150 - 200	22 – 26	10 – 25
2.00 x 1000 mm	200 - 250	24 – 32	12 – 20
2.40 x 1000 mm	250 - 300	26 – 36	15 – 25
3.20 x 1000 mm	250 - 300	28 – 38	16 – 28

## TYPICAL CHEMICAL ANALYSIS OF WIRE (%) :-

C	Mn	Si	S	P	Cr
0.06 - 0.14	0.90 – 1.30	0.50 – 0.80	0.025 Max	0.025 Max	0.15 Max
Ni	Mo	V	Cu	Ti + Zr	Al
0.15 Max	0.15 Max	0.03 Max	0.35 Max	0.15 Max	0.020 Max

## TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL :-

YIELD STRESS (0.2% Offset)	420 N/mm <sup>2</sup> Min
U.T.S.	500 - 640 N/mm <sup>2</sup>
ELONGATION % (L=5d )	20 % Min
CVN IMPACT AT – Minus 40 °C	47 Joules Min