

# ROYAL - 2594 Super Duplex Stainless steel electrode

## TECHNICAL DATA

AWS / SFA 5.4 E 2594 -16 EN ISO 3581 A E 25 9 4 N L R 12

### Applications

It is rutile base electrode specially de-signed for welding of Super duplex stain- less steels. Which contain 25.5%Cr, 9.5% Ni, 4% Mo & 0.25% N. The deposited weld metal has a duplex microstructure con- sisting of an austenite ferrite matrix, with high ductility and improved resistance to pitting corrosive attack and to stress corrosion cracking. It gives excellent welding characteristic in all position with smooth and stable arc, self lifting slag .the weld bead is smooth, fine rippled and shiny.

### Classification

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### Typical Applications

It is used for welding of super duplex stainless steel such as SAF 2507,Zeron 100, ferralium 255 , UR47N , DP3 and similar steels.

CURRENT ( Amps )	SIZE ( mm )	CURRENT ( Amps )
AC/ DC + Ve	2.50 x 350	50 – 90
	3.15 x 350	90 – 130
	4.00 x 350	120 – 160
	5.00 x 350	160 – 200

### Chemical Analysis of Weld Metal:-

C%	Mn%	Si%	Cr%	Ni%
0.040 Max	0.50– 2.0	1.00 Max	24.0 - 27.0	8.0 – 10.5
S%	P%	Mo%	N%	Cu%
0.030 Max	0.040 Max	3.5-4.5	0.20- 0.30	0.75Max

### Mechanical Properties of Weld Metal:-

U.T.S.	760 N/mm2 Min.
ELONGATION ( L = 4 X d)	15.0 % Min.

### Packing Specification:- (Vaccum Pack)

SIZE ( mm )	KG PER PACKET	KG PER BOX
2.50 X 350	2 Kg	10 Kg
3.15 X 350	2 Kg	10 Kg
4.00 X 350	2 Kg	10 Kg
5.00 X 350	2 Kg	10 Kg