ROYAL – 307 (E 307 – 15)

AWS: SFA 5.4, E 307 - 15 DIN – 8556 E 18.8 Mn B 20

Applications

Ideally suitable for welding of dissimilar steel, 13% Mn steels, & carbon steel. Use for buffer layer prior to hard surfacing, railway linear, marine shaft building, bucket lips etc. 301, 302, 304, & 308 types.

Characteristics on Usage

It is a rutile coated austenitic stainless steel electrode deposit 18% Cr, 8% Ni, and 6% Mn type of weld metal with 5% ferrite. The weld metal is excellent in crack resistance when welding with unknown steel, dissimilar steel etc. It is all position electrodes giving a very smooth, quite, stable arc with controllable slag. The weld is of radiographic quality.

Notes On Usage

- Dry the electrodes at 350 °C for 60 min. before use.
- Keep the current as low as possible.
- Remove rust, water, oil, paint etc. from groove.

Welding Positions

1G 2F 3G 4G

Packing

Vaccum Pack

Chemical Composition Of Weld Metal

C%	Mn%	Si%	S%	P%	Cr %	Ni %	Mo %
0.040 -0.14	3.30 – 4.75	1.00 Max	0.030 %Max	0.040 %Max	18 – 21	9.0 –10.70	0.50-1.50

Mechanical Properties Of Weld Metal

U.T.S. (N/mm^2)	Y.S. (N/mm^2)	ELONGATION (L = 4d) %
590	490	30

Packing and Welding Current

SIZE (mm)	KG PER PACKET	KG PER CARTON	LBS PER PACKET	LBS PER CARTON	In Amps	Current (Amps)
2.50 x 350	2	10	4.40	22.05	60 – 80	DC (+)
3.20 x 350	2	10	4.40	22.05	80 – 120	
4.00 x 350	2	10	4.40	22.05	120 – 160	
5.00 x 350	2	10	4.40	22.05	160 – 200	