

**ROYAL – 8018 W (E 8018 W2)**

AWS : A/SFA 5.5, E 8018 W2

**Applications**

Ideal for welding high tensile steel. Specially recommended for weathering steel like CORTEN A and B and their equivalents used in Chemical, Petrochemical, Railway, Industries to resist atmospheric corrosion.

**Characteristics on Usage**

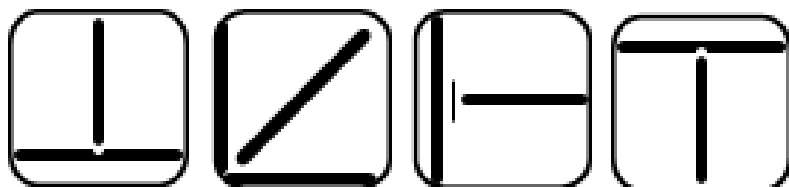
It is basic coated hydrogen controlled low alloy high tensile type electrode gives weld deposit of approx 0.6% Cr, 0.70% Ni and 0.50% Cu. which is highly resistance of atmospheric Corrosion. It gives a smooth arc medium penetration with easily removable slag. Easy to operate in all positions. Redry electrode at 250°C 2 hour for better results.

**Notes On Usage**

✍ 1) Dry the electrode a 250-350 °C for 60 Min- before use .

✍ 2) Keep the arc as short as possible.

✍

**Welding Positions**

1G

2F

3G

4G

**Chemical Composition Of Weld Metal**

| C%       | Mn%       | Si%       | S%        | P%        | Cr %      | Ni %      | Cu    |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|
| 0.12 Max | 0.50-1.30 | 0.35-0.80 | 0.030 Max | 0.030 Max | 0.45-0.70 | 0.40-0.80 | 0.30- |

**Mechanical Properties Of Weld Metal**

| U.T.S.               | Y.S.                 | ELONGATION   | Weld deposit<br>Hardness as<br>welded<br>condition | Diffusible<br>Hydrogen<br>contain<br><br>in 100-grm<br>weld metal<br>deposit | CVN IMPACT      |
|----------------------|----------------------|--------------|--|--|-----------------|
| (N/mm <sup>2</sup> ) | (N/mm <sup>2</sup> ) | ( L = 4d ) % |  |  | AT - 20°C ( J ) |
| 550 Min              | 460 Min              | 19 % Min     | 190 – 200 HV                                       | 5 ml Max   | 47 Joules Min   |

**Approvals****Packing and Welding Current**

| SIZE ( mm ) | PIECES PER<br>PACKET | PIECES PER<br>CARTON | Current<br>(Amps) | In Amps   |
|-------------|----------------------|----------------------|-------------------|-----------|
| 2.50 x 350  | 150                  | 600                  | AC / DC (+)       | 60 – 90   |
| 3.15 x 450  | 100                  | 400                  |                   | 100 – 140 |
| 4.00 x 450  | 70                   | 280                  |                   | 140 – 180 |
| 5.00 x 450  | 45                   | 180                  |                   | 180 – 250 |
| 6.30 x 450  | 30                   | 120                  |                   | 250 - 300 |