# RATNA CR 9

# Hydrogen controlled iron powder Electrode for welding Creep-Resistant 9Cr-1Mo steels.

**CLASSIFICATION** : AWS/SFA-5.5: E 8018 B8

IS-1395: E41 BB 826Fe

#### **APPROVAL** :

**CHARACTERISTICS**: A basic coated, hydrogen controlled, iron powder type electrode, producing 9% Cr / 1.0% Mo deposit. Weld deposit is of radiographic quality, highly resist to corrosion, oxidation and exhibits creep resistance property at elevated temp. up to 600°C. The finish is excellent.

### APPLICATION

- 1) Ideally suitable for oil refinery petrochemical industries, chemical industries.
- 2) Power house applications where steels of similar compositions are used.
- 3) For welding 7-10% Cr 1% Mo steels and castings of similar compositions.

**RE-DRY CONDITION**: Re-Dry the electrode at 250°C for 1 hrs before use.

### **ALL WELD CHEMICAL COMPOSITION %**

| С         | Mn       | Si       | S         | P         | Cr         | Mo        |
|-----------|----------|----------|-----------|-----------|------------|-----------|
| 0.05-0.10 | 1.00 Max | 0.60 max | 0.030 Max | 0.030 Max | 8.00-10.50 | 0.85-1.20 |

#### **ALL WELD MECHANICAL PROPERTIES:**

| YS         | UTS        | EL %   |  |
|------------|------------|--------|--|
| $(N/mm^2)$ | $(N/mm^2)$ | (1=4d) |  |
| 460-580    | 550-680    | 20-28  |  |

## DIEMENSION, CURRENT CONDITION & PACKING DATA

| Size(mm)         | Size(inch)   | Current Condition | No. of    | No. of Pcs./Case |
|------------------|--------------|-------------------|-----------|------------------|
| (Dia)            | (Dia)        | (DC+) Amps        | Pcs./pkt. | 0.0011           |
| 2.50/ 2.40 X 350 | 3/32" X 14"  | 60-80             | 170       | 640              |
| 3.15/ 3.20 X 450 | 1/8" X 18"   | 100-140           | 110       | 440              |
| 4.00 X 450       | 5/ 32" X 18" | 140-180           | 72        | 288              |
| 5.00 X 450       | 3/16" X 18"  | 190-240           | 50        | 200              |

Customer packing on request.

