



### **CROMOTHERME-92**

CODIFICATION: AWS: SFA 5.5 F9015-B92

### CHARACTERISTICS AND APPLICATIONS:

A low hydrogen non synthetic electrode deposits 9Cr - 0.5Mo - 1.7W and enriched with Niobium, Vanadium and Nitrogen. Tungsten additions provides adequate creep rupture strength at higher steam pressures and temperatures. The controlled addition of alloving elements improves the toughness and weldability. It is designed to weld advanced materials, which are being used to improve thermal efficiency in power plant, refineries etc. Ideal for welding steels of similar composition to achieve adequate creep rupture strength. Some typical materials that are welded with this consumable are A213 T92, A335 P92, A387 Gr 92. etc.

#### TYPICAL CHEMICAL COMPOSITION OF ALL WELD METAL:

Mn V Flement CII Percent .010 06 035 0012 0007 90 05 05 02 0.06 0.05 0.02 1.7 0 10 0 004

## TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL: (PWHT 760°C FOR 2 HRS)

UTS YS Elongation Hardness (MPa) (MPa) (L = 4d)% (BHN) 19 225 690 580

CREEP PROPERTIES: Creep Strength at 600°C/160MPa successfully completed for 20157 Hours and test still going on.

# CURRENT AND PACKING DATA: DC(+)

Size (mm) 5x450 4x350 3.15x350 2.5x350

Dia x Length

70-100 Current Range 160-220 120-160 90-120

(Amps)

Qty.(Pcs./Carton): 30 50 75 100

APPROVAL: CIB-MP PRECAUTIONS:

- 1. Ensure the electrodes are dry. Re-dry the electrodes at 300°C for one hour.
- 2. Use short arc, low current and stringer beads.