



## CROMOTHERME-92

**CODIFICATION:** AWS : SFA 5.5 E9015-B92

### CHARACTERISTICS AND APPLICATIONS:

A low hydrogen non synthetic electrode deposits 9Cr – 1Mo and enriched with Niobium, Vanadium, Nitrogen and Tungsten. Tungsten additions provides adequate creep rupture strength at higher steam pressures and temperatures. The controlled addition of alloying 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, A387Gr 92, etc.

### TYPICAL CHEMICAL COMPOSITION OF ALL WELD METAL:

Element	: C	Mn	Si	P	S	Cr	Ni	Mo	V	Nb	N	Al	W	Cu	B
Percent	: 0.10	0.6	0.35	0.012	0.007	9.0	0.5	0.5	0.2	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 (MPa)	YS (MPa)	Elongation (L = 4d)%	Hardness (BHN)
690	580	19	225

**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					
Current Range (Amps)	:	160-220	120-160	90-120	70-100
Qty.(Pcs./Carton)	:	30	50	75	100

### 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.