



CROMOTHERME-91

CODIFICATION: AWS : SFA 5.5 E9015-B91 (Formerly Known as E9015-B9)

CHARACTERISTICS AND APPLICATIONS:

It is 9Cr – 1Mo, non-synthetic, low hydrogen electrode modified with Aluminium, Niobium, Vanadium and Nitrogen designed to provide improved creep strength, toughness, fatigue life, oxidation and corrosion resistance at elevated temperatures. It is designed to weld the materials in power plant and refineries. Following are some of the steels that can be welded with this electrode. I) Plate: A 387 Gr. 91 (II) Pipes: A 335- P91 (III) Tubes: A 213- T91

TYPICAL CHEMICAL COMPOSITION OF ALL WELD METAL:

Element:	C	Mn	Si	P	S	Cr	Ni	Mo	V	Nb	N	Cu	Al
Percent:	0.10	0.65	0.25	0.007	0.008	9.00	0.25	1.00	0.20	0.06	0.03	0.02	0.02

TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL:

(PWHT: 760°C FOR 2 HRS)

UTS (MPa)	YS (MPa)	% El (L=4d)	CVN Impact at + 20°C (Joules)	Hardness VPN
690	580	19	55	205

CREEP PROPERTIES: Creep Strength at 600°C/100MPa successfully completed for 40119 Hours.

DIFFUSIBLE HYDROGEN CONTENT: 4 ml/100 gms of weld metal Max. (When measured according to AWS-4.3-86 Specification)

CURRENT AND PACKING DATA: DC(+)

Size (mm)	:	5x450	4x350	3.15x350	2.5 x 350
Dia x Length					
Current Range (Amps)	:	170-230	130-170	80-120	60-80
Qty.(Pcs./Carton)	:	30	50	75	100

APPROVAL: Adani Infra, CIB-MP, Reliance (SASAN Power)

PRECAUTIONS:

1. Use short arc and stringer bead.
2. Ensure the electrodes are perfectly dry.
3. Re-dry the electrodes at 300°C for one hour, as per standard recommended practice.