



## CROMOTEN C

LOW ALLOY STEEL (High Temperature)



Basic Coated Electrode for welding 2.25 Cr-1Mo type creep resistant steel.

**CLASSIFICATION : EN ISO 3580-A**

**AWS A/SFA 5.5**

**APPROVALS :**

E CrMo2 B 32 H5

E 9018-B3

ABS/IBR/NPCIL

### KEY FEATURES :

- Basic coated
- Low alloy steel Cr-Mo deposit
- Resistant to creep and heat upto 600°C
- Ductile and crack resistant and heat treatable weld
- Radiography quality weld metal

### WELDING POSITION :



AC (70 OCV)/DCEP

### TYPICAL APPLICATIONS :

- Welding of 2.25Cr-0.5Mo and 2.25Cr-1Mo type creep resistant steels
- Cr-Mo and Cr-Mo-V bearing steels for high temperature applications
- Main steam pipes of boilers in electric power plant, Boiler super heaters
- Joining of P5A materials
- Suitable for 12CrMo9-10, 10CrSiMoV7 German steels
- Joining ASTM A 335 Gr.P22, A 387 Gr.22 materials
- Application in refineries, power plants, pressure vessels, boilers

**REDRYING CONDITION : 250-300°C for minimum 1 hr. (Also available in vacuum packed condition)**

### CHEMICAL COMPOSITION OF UNDILUTED WELD METAL, Wt % :

	C	Mn	Si	Cr	Mo	S	P
Typical	0.08	0.6	0.4	2.4	1.0	0.02	0.02
Specification	0.05 - 0.12	0.9 max	0.8 max	2.0-2.5	0.9-1.2	0.03 max	0.03 max

### MECHANICAL PROPERTIES OF ALL WELD METAL :

	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%
Typical	PWHT: 690°C for 1 Hr	660	580	22
Specification		620 min	530 min	17 min

Hardness, 3 Layer: 180-200 BHN

Diffusible H2 Content: <5 ml/100 gm

### CREEP TEST DATA:

Condition	Temperature, °C	Stress, MPa	Duration, Hrs	Strain% after 1000 Hrs
PWHT: 690°C for 1 Hr	550	140	1000	0.84
	600	80	1000	1.15

### PARAMETERS - PACKING DATA :

Ø x L, mm	Amperage, A	Approx. Pcs/Carton	Carton/Box	Approx. wt. of 1000 pcs, Kg.
2.5 x 350	60-90	230	4	22
3.15 x 450	100-140	112	4	44
4.0 x 450	140-180	75	4	66
5.0 x 450	190-250	54	4	91