



CROMOTEN 9M

LOW ALLOY STEEL (High Temperature)



Basic coated 9Cr-1Mo-V-Nb type Welding Electrode.

CLASSIFICATION : EN ISO 3580-A

AWS A/SFA 5.5

APPROVALS :

E CrMo91 B 32 H5

E 9018-B91

IBR

KEY FEATURES :

- Basic coated electrode
- 9Cr-1Mo-V-Nb type weld deposit
- Excellent strength and creep resistance at high temperature upto 600°C
- Addition of V and Nb increases the resistance to strain, corrosion & oxidation
- Radiographic quality weld deposit
- Positional welding capability

WELDING POSITION :



AC (70 OCV)/DCEP

TYPICAL APPLICATIONS :

- Suitable for welding of Cr-Mo-V-Nb steels such as P91, T91 and F91
- Suitable for material 1.4903 and similar steel Grades
- For Turbine rotors, Thermoelectric power plants, Petrochemical plants

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	Ni	V
Typical	0.1	0.6	0.2	9.4	1.0	0.4	0.2
Specification	0.08-0.13	1.20 max	0.30 max	8.0-10.5	0.85 -1.2	0.80 max	0.15-0.30
	Cu	Al	Nb	N	S	P	
Typical	0.1	0.01	0.06	0.04	0.006	0.005	
Specification	0.25 max	0.04 max	0.02-0.07	0.02-0.07	0.01 max	0.01 max	

MECHANICAL PROPERTIES OF ALL WELD METAL :

	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%	CVN Impact at 20°C, J
Typical	PWHT: 760°C for 2 hr.	675	590	20	55
Specification		620-720	530-625	17-22	47 min

Hardness, 3 Layer: 240 BHN max

Diffusible H2 Content: <5 ml/100 gm

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	211	4	24
3.15 x 350	100-140	110	4	45
4.0 x 350	140-180	70	4	71
5.0 x 450	190-250	40	4	115

EQUIVALENT : GMAW wire: Automig 90S-B9

GTAW filler: Tigfil-90S-B9