



CROMOTEN 9M SPL

LOW ALLOY STEEL (High Temperature)



Low hydrogen Welding Electrode for elevated temperature heat and creep resistance

CLASSIFICATION : EN ISO 3580-A

AWS A/SFA 5.5

APPROVALS :

E CrMo91 B 32 H5

E 9016-B91

IBR

KEY FEATURES :

- Basic coated electrode
- 9Cr-1Mo-V-Nb type weld deposit
- Excellent strength and creep resistance at high temperature under long term stresses
- Resist strain, corrosion and oxidation
- Exhibit excellent low temperature fracture toughness
- Preheat and interpass temperatures between 200-300°C
- Positional welding capability

WELDING POSITION :



AC (70 OCV)/DCEP

TYPICAL APPLICATIONS :

- Welding of high temperature 9% Chromium P91, T91 & F91 steels to provide improved long term creep properties
- Fabrication of turbine and boilers e.g. turbine casings
- Application in Power plants, Petrochemical plants, Oil refineries, Coal liquefaction and Gasification plants
- Welding of X10CrMoVNb9-1

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	0.15	8.9	1.0	0.4	0.2
Specification	0.08-0.13	1.2 max	0.3 max	8.0-10.5	0.85 -1.2	0.80 max	0.2-0.3
	Cu	Al	Nb	N	S	P	
Typical	0.1	0.02	0.07	0.05	0.005	0.005	
Specification	0.25 max	0.04 max	0.02-0.1	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 18°C, J
Typical	PWHT: 760°C for 2 hr.	675	590	20	56
Specification		620 min	530 min	17 min	45 min

Diffusible H2 Content: <5 ml/100 gm

PARAMETERS - PACKING DATA :

Ø x L, mm	Amperage, A	Wt./Carton, Kg	Carton/Box	Net wt./Box, Kg
2.5 x 350	50-80	4	4	16
3.15 x 350	90-120	4	4	16
4.0 x 350	110-160	4	4	16
5.0 x 450	140-190	4	4	16

EQUIVALENT : GMAW wire: Automig 90S-B9

GTAW filler: Tigfil-90S-B9