



CROMOTEN

LOW ALLOY STEEL (High Temperature)



Cr-Mo alloyed Welding Electrode for elevated temperature creep resistance.

CLASSIFICATION : EN ISO 3580-A

AWS A/SFA 5.5

APPROVALS :

E CrMo1 B 32 H5

E 8018-B2

ABS/IBR/NPCIL

KEY FEATURES :

- Basic coated iron powder electrode
- 1.25Cr-0.5Mo type weld deposit
- Resistant to creep and heat upto 550°C
- Preheat and interpass temperature of 150-200°C followed by PWHT
- Radiographic quality weld deposit
- Positional welding capability

WELDING POSITION :



AC (70 OCV)/DCEP

TYPICAL APPLICATIONS :

- Welding of 1.25Cr-0.5Mo, 1Cr-0.5Mo steels in refineries, power plants, chemical plants
- Pressure vessels and Boilers
- Cr and Cr-Mo bearing steels at elevated temperature service e.g. steam production plants, steam pipes
- Joining P4 materials e.g. ASTM SA 182/182M Gr.F2/F11/F12, SA 213/213M Gr.T11/T12, SA 335/335M Gr.P11/P12, SA 387/387M Gr.2/11/12
- Suitable for 13CrMo44, 15CrMo5, 15Cr3, 16MnCr5, 20MnCr5

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	0.06	0.8	0.5	1.3	0.6	0.02	0.01
Specification	0.05 - 0.12	0.9 max	0.8 max	1.0 - 1.5	0.4 - 0.65	0.03 max	0.03 max

MECHANICAL PROPERTIES OF ALL WELD METAL :

	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%	CVN Impact at 27°C, J
Typical	PWHT: 690°C for 1 hr.	615	525	24	68
Specification		550 min	460 min	19 min	50-100

Diffusible H2 Content: <5 ml/100 gm

CREEP TESTS DATA :

Condition	Temperature, °C	Stress, MPa	Duration, Hrs	Strain% after 1000 Hrs
PWHT: 695°C for 1 hr.	500	300	1000	0.40
	500	140	1000	0.68

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	219	4	23
3.15 x 450	100-140	106	4	47
4.0 x 450	140-180	75	4	66
5.0 x 450	190-250	50	4	98

EQUIVALENT : GMAW wire: Automig-80S-B2

GTAW filler: Tigfil-80S-B2