



CROMOTEN STC

LOW ALLOY STEEL (High Temperature)

AWS A/SFA 5.5 **E8018-B2**

CLASSIFICATION:

EN ISO 3580-A
E CrMo1 B 32 H5
IS 1395
E 55B-B2

KEY FEATURES:

- Non Synthetic, 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

APPROVALS: CE

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

TYPICAL CHEMICAL COMPOSITION OF UNDILUTED WELD METAL, Wt %:

C	Mn	Si	Cr	Mo
0.055	0.6	0.45	1.1	0.45

MECHANICAL PROPERTIES OF ALL WELD METAL:

	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%	CVN Impact at -30°C, J
Typical	PWHT: 690°C for 1 hr.	615	525	24	100
Specification		550 min	460 min	19 min	-


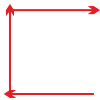
Hardness, 3 Layer: 220BHN max

X factor = $(10P + 5Sb + 4Sn + As)/100 < 15\text{ppm}$

Diffusible H2 Content: <5 ml/100 gm

Special Tests: Creep Rupture Test at 500°C - 120 MPa, stress for min. 1000 hrs

PARAMETERS - PACKING DATA:

Ø x L, mm	Amperage, A		
2.5 x 350	50-80	 AC (70 OCV)/DCEP REDRYING CONDITION: 250-300°C for minimum 1 hr.	All Positions, except vertical Down 
3.15 x 450	90-130		
4.0 x 450	130-170		
5.0 x 450	180-240		

Available in Standard carton packing of 20 kg box containing 4 cartons of 5 kg each. Also available in vacuum packing

EQUIVALENT:

GTAW	SAW	
	Flux	Wire
Tigfil 80S-B2 SPL	Automelt B20 Plus	Automelt EB2R