



AUTOMIG FC 81T1-B2

FCAW LOW ALLOY STEEL (High Temperature)

AWS A/SFA 5.29 E81T1-B2C

CLASSIFICATION:

EN ISO 17634-A
T CrMo1 P C1 2

KEY FEATURES:

- Rutile type gas shielded FCW wire
- Stable and smooth arc
- Low fumes, Minimal spatters
- Easy slag removal, smooth weld bead
- 1.25Cr-0.5Mo type weld deposit
- Resistant to creep and heat up to 550°C
- Radiographic quality weld

APPROVALS: IBR/CE

TYPICAL APPLICATIONS:

- Welding of 1.25Cr-0.5Mo, 1Cr-0.5Mo steels
- For Cr and Cr-Mo bearing steels at elevated temperature service
- Suitable for 13CrMo44, 15CrMo5, 15Cr3, 16MnCr5, 20MnCr5
- Joining P4 materials 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
- Steam production plants, steam pipes

TYPICAL CHEMICAL COMPOSITION OF UNDILUTED WELD METAL, Wt %:

C	Mn	Si	Cr	Mo
0.06	1.0	0.6	1.2	0.45



MECHANICAL PROPERTIES OF ALL WELD METAL:

	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%
Typical	PWHT: 690°C for 1 Hr	620	550	22

CREEP TEST DATA:

Condition	Temperature, °C	Stress, MPa	Duration, Hrs	Strain% after 1000 Hrs
PWHT: 690°C for 1 Hr	500	300	1000	1.42
	550	140	1000	1.06

PARAMETERS - PACKING DATA:

∅, mm	Net Wt, Kg		
1.2	15	 DCEP STORAGE / HANDLING : Keep dry and follow handling instructions mentioned on the box	All Positions, Except Vertical Down 
1.6	15		

Shielding Gas	Gas Flow Rate, LPM
CO ₂	15-20