



FCAW LOW ALLOY STEEL (High Temperature)

AUTOMIG FC 91T1-B3

LOW ALLOY STEEL FCAW WIRE FOR WELDING OF GRADE 22 TYPE CREEP RESISTANT STEEL



CLASSIFICATION : AWS A/SFA 5.29

E91T1-B3C

KEY FEATURES :

- Rutile type gas shielded FCW wire
- Stable and smooth arc
- Low fumes, Minimal spatters
- Easy slag removal, smooth weld bead
- Low alloy steel Cr-Mo deposit
- Resistant to creep and heat upto 600°C
- Radiographic quality weld

WELDING POSITION :



DCEP

Shielding Gas	Gas Flow Rate, LPM	Stickout, mm
CO ₂	10-20	10-20

TYPICAL APPLICATIONS :

- Welding of 2.25Cr-0.5Mo, 2.25Cr-1Mo type creep resistant steels
- Cr-Mo and Cr-Mo-V bearing steels for high temperature applications
- Main steam pipes of boilers in electric power plant, Boiler super heaters
- Joining of P5A materials
- Joining ASTM A 335 Gr.P22, A 387 Gr.22 materials
- Application in refineries, power plants, pressure vessels, boilers

STORAGE / HANDLING :

Keep dry and follow handling instructions mentioned on the box

CHEMICAL COMPOSITION OF UNDILUTED WELD METAL, Wt% :

	C	Mn	Si	Cr	Mo	S	P
Specification	0.05-0.12	1.25 max	0.80 max	2.0-2.50	0.90-1.20	0.025 max	0.025 max

MECHANICAL PROPERTIES OF ALL WELD METAL :

	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%
Specification	PWHT: 690°C for 1 Hr	620-760	540 min	17 min

PARAMETERS - PACKING DATA :

Ø, mm	Voltage, V	Amperage, A	Kg/Spool
1.2	22 – 30	130 - 300	15
1.6	24 – 32	180 - 350	15

EQUIVALENT :

SMAW Electrode: **Cromoten C**

GMAW wire: **Automig 90S-B3**

GTAW filler: **Tigfil 90S-B3**