



**FCAW C-Mn STEEL**  
**AUTOMIG FC 71T-1**

FCAW WIRE FOR C-Mn STEEL AND 500 MPa TENSILE STRENGTH STEEL



**CLASSIFICATION :** EN ISO 17632 A      AWS A/SFA 5.20

T 42 2 R C/M 2      E71T-1C/M

**APPROVALS :** RDSO (Class I)/ABS/BV/DNV/LRA/IRS/IBR/CWB/CE

**KEY FEATURES :**

- Rutile type gas shielded FCW wire
- Low fumes, Minimal spatters
- Easy slag removal, smooth weld bead
- High deposition rate
- Suitable for high quality single and multi pass welds
- All position capability
- Radiographic quality weld

**WELDING POSITION :**



**DCEP**

Shielding Gas	Gas Flow Rate, LPM	Stickout, mm
CO <sub>2</sub>	10-18	10-20
80Ar+20CO <sub>2</sub>	18-25	10-20

**TYPICAL APPLICATIONS :**

- Welding of C-Mn steel with tensile strength up to 500 Mpa
- Bridges, Shipbuilding, Towers, Cranes
- Chemical plant machinery, Hulls
- Storage tanks, Structural steel
- Construction equipment, Farm machinery, Rolling stocks
- General carbon steel fabrication

**STORAGE / HANDLING :**

Keep dry and follow handling instructions mentioned on the box

**CHEMICAL COMPOSITION OF UNDILUTED WELD METAL, Wt% :**

	C	Mn	Si	S	P
Typical	0.08	1.5	0.4	0.01	0.01
Specification	0.10 max	1.75 max	0.90 max	0.025 max	0.025 max

**MECHANICAL PROPERTIES OF ALL WELD METAL :**

	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%	CVN Impact at -20°C, J
Typical	As Welded	570	470	26	75
Specification		500-640	420 min	22 min	47 min

Hardness, 3 Layer: 140-200 BHN

Chemistry and mechanical properties tested with 100% CO<sub>2</sub> shielding gas

**PARAMETERS - PACKING DATA :**

Ø, mm	Voltage, V	Amperage, A	Kg/Spool
1.2	20 – 30	130 - 300	15
1.6	24 – 32	200 - 380	15

Use 1-2 volts lower when using mix shielding gas.

**EQUIVALENT :**

SMAW Electrode: **Supabase, Supabase X Plus**

GMAW Wire: **Automig 70S-6**