



GMAW/GTAW LOW ALLOY STEEL (High Temperature)
AUTOMIG 70S-A1 / TIGFIL 70S-A1

A COPPER COATED LOW ALLOY WIRE



CLASSIFICATION : EN ISO 21952-A AWS A/SFA 5.28 **APPROVALS:**

Automig 70S-A1: G MoSi ER 70S-A1 -
 Tigfil 70S-A1: W MoSi ER 70S-A1 IBR/BHEL

KEY FEATURES :

- Copper coated low alloy GMAW wire & rod
- Typical 0.5Mo content
- Smooth feeding and stable arc under optimum welding conditions
- Increase strength at elevated temperature
- Weld deposit highly resistant to cold cracking
- Shiny welds of radiographic quality

WELDING POSITION :   **GMAW: DCEP**
GTAW: DCEN

Shielding Gas	Gas Flow Rate, LPM	Stickout, mm
GMAW: Ar/1-5O ₂	15-22	10-20
GTAW: Ar	10-15	-

TYPICAL APPLICATIONS :

- Welding creep resistant 0.5% Mo steels and fine grained steels with service temperatures up to 500°C
- High temperature and high pressure boilers
- Suitable for 15Mo3, 16Mo3, 14Mo6
- Welding low alloy steels such as type ASTM A335 grade P1 and similar materials
- Pipe line and crane construction as well as in structural steel engineering

STORAGE / HANDLING :

Keep dry and follow handling instructions mentioned on the box

CHEMICAL COMPOSITION OF BARE SOLID WIRE, Wt% :

	C	Mn	Si	Mo	S	P	Cu*
Specification	0.12 max	1.30 max	0.30-0.70	0.40-0.60	0.020 max	0.020 max	0.35 max

* Including Cu in the coating

MECHANICAL PROPERTIES OF ALL WELD METAL :

	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%
Specification	PWHT: 620°C for 1 hr	520 min	420 min	22 min

Mechanical properties will vary with the type of shielding gas used.

PACKING DATA :

Automig 70S-A1	Ø, mm		Kg/Spool	
	1.2		15	
	1.6		15	
Tigfil 70S-A1	Ø x L, mm	Primary Box, Kg	No. of Primary Boxes	Net Wt. of Carton, Kg
	1.6 x 1000	5	4	20
	2.0 x 1000	5	4	20
	2.5 x 1000	5	4	20

EQUIVALENT :

SMAW Electrode: **Molyten**