



GMAW/GTAW LOW ALLOY STEEL (High Temperature)

AUTOMIG 80S-B8 / TIGFIL 80S-B8

9Cr-1Mo COPPER COATED LOW ALLOY WIRE FOR ELEVATED TEMPERATURE CREEP RESISTANCE



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

Automig 80S-B8: G CrMo9	ER80S-B8	-
Tigfil 80S-B8: W CrMo9	ER80S-B8	-

KEY FEATURES :

- Copper coated low alloy steel solid filler wire & rod
- Uniform copper coating
- Careful control over pre-heat, interpass temperature required
- Typical 9 Cr-1 Mo weld deposit
- Air hardenable alloy highly resistant to elevated temperature creep and heat
- Radiographic quality weld

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 of 9Cr-1Mo type and equivalent materials in pipe and tube forms
- Welding of ferritic martensitic chrome steels
- For general corrosion and heat resistance application
- Joining P9/T9 materials of similar composition
- Application in Power plants, Oil refineries, Chemical and Petrochemical industries

STORAGE / HANDLING :

Keep dry and follow handling instructions mentioned on the box

CHEMICAL COMPOSITION OF BARE SOLID WIRE, Wt% :

	C	Mn	Si	Cr	Mo	Ni	Cu*	S	P
Specification	0.10 max	0.40-0.70	0.50 max	8.0-10.5	0.80-1.20	0.50 max	0.35 max	0.025 max	0.025 max

* Including Cu in the coating

MECHANICAL PROPERTIES OF ALL WELD METAL :

	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%
Specification	PWHT: 745°C for 1 hr	550 min	470 min	17 min

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

PACKING DATA :

Automig 80S-B8	Ø, mm		Kg/Spool	
	1.2		15	
	1.6		15	
Tigfil 80S-B8	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: **Cromoten 9**