



GMAW/GTAW LOW ALLOY STEEL (High Temperature)

AUTOMIG 80S-B2 / TIGFIL 80S-B2

1.25Cr-0.5Mo COPPER COATED LOW ALLOY WIRE FOR HIGH TEMPERATURE APPLICATION



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

Automig 80S-B2: G CrMo1Si	ER80S-B2	IBR
Tigfil 80S-B2: W CrMo1Si	ER80S-B2	IBR/NTPC/BHEL

KEY FEATURES :

- Copper coated low alloy steel solid filler wire & rod
- Uniform copper coating
- Deposit notch free welds with excellent mechanical properties
- Typical 1.25 Cr-0.5 Mo weld deposit
- Careful control of pre-heat, interpass temperature & PWHT is essential to avoid cracking
- 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 0.5Cr-0.5Mo, 1Cr-0.5Mo and 1.25Cr-0.5Mo steel pipes, plates and castings
- Elevated temperature and corrosive service applications in Refineries, Petrochemicals & fertilizers plant
- Can be used for joining dissimilar combinations of Cr-Mo and Carbon steels
- Suitable for ASTM A 199-76, A 200-75, A 213-76D, A 335 Gr.P11, A 369-76, A 387 Gr.B, DIN 15CrMo3

STORAGE / HANDLING :

Keep dry and follow handling instructions mentioned on the box

CHEMICAL COMPOSITION OF BARE SOLID WIRE, Wt% :

	C	Mn	Si	Cr	Mo	Cu*	S	P
Specification	0.07-0.12	0.40-0.70	0.40-0.70	1.20-1.50	0.40-0.65	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: 620°C for 1 hr	550 min	470 min	19 min

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

PACKING DATA :

Automig 80S-B2	Ø, mm		Kg/Spool	
		1.2		15
	1.6		15	
Tigfil 80S-B2	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**