



GMAW/GTAW LOW ALLOY STEEL (High Strength)

AUTOMIG 80S-D2 / TIGFIL 80S-D2

COPPER COATED LOW ALLOY WIRE FOR Mn-Mo STEEL



CLASSIFICATION : EN ISO 14341-A EN 1668 AWS A/SFA 5.28 **APPROVALS :**

Automig 80S-D2: G 46 3 C G4Mo	-	ER80S-D2	-
Tigfil 80S-D2: -	W 46 3 W4Mo	ER80S-D2	IBR

KEY FEATURES :

- Copper coated solid filler wire and rod
- Mn-0.5 Mo type welds deposit
- Uniform copper coating
- Mo Provide increased strength
- High levels of Mn and Si provide good wetting, rust and scale tolerance
- Excellent sub-zero toughness
- Porosity free radiographic quality weld

WELDING POSITION :



GMAW: DCEP
GTAW: DCEN

Shielding Gas	Gas Flow Rate, LPM	Stickout, mm
GMAW: CO ₂	12-18	10-20
GTAW: Ar	10-15	-

TYPICAL APPLICATIONS :

- Welding of Mn-0.5 Mo steel
- Application in oil process pipe work and fittings where resistance to sulphide-induced stress corrosion cracking is important
- Suitable for single and multiple pass welding
- Variety of ordinary and difficult to weld carbon and low alloy, higher strength steels in both as welded and PWHT condition

STORAGE / HANDLING :

Keep dry and follow handling instructions mentioned on the box

CHEMICAL COMPOSITION OF BARE SOLID WIRE, Wt% :

	C	Mn	Si	Mo	Cu*	S	P
Specification	0.07-0.12	1.60-2.10	0.50-0.80	0.40-0.60	0.50 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%	CVN Impact at -30°C, J
Specification	As Welded	550 min	480 min	18 min	30 min

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

PACKING DATA :

Automig 80S-D2	Ø, mm		Kg/Spool	
		1.2		15
	1.6		15	
Tigfil 80S-D2	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