



**GMAW/GTAW LOW ALLOY STEEL (High Strength)**  
**AUTOMIG 80S-G / TIGFIL 80S-G**

MEDIUM STRENGTH COPPER COATED LOW ALLOY STEEL WIRE



**CLASSIFICATION :** AWS A/SFA 5.28      **APPROVALS :**

Automig 80S-G: ER80S-G      -  
 Tigfil 80S-G: ER80S-G      -

**KEY FEATURES :**

- Copper coated low alloy steel solid filler wire & rod
- Characterized by smooth and shiny welds
- Uniform copper coating
- Provide good wetting, rust and scale tolerance
- Weld deposit is resistant to cold cracking
- Recommended with 100% CO<sub>2</sub> shielding gas
- Radiographic quality even over poor cleaned base metals

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

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

**TYPICAL APPLICATIONS :**

- Welding of Mn-0.5 Mo steel
- Pipelines and pressure vessels with operating temperatures of about 500°C
- Repair of medium strength steel castings
- Suitable for a wide range of base metals such as problem steels containing high sulfur to the basic carbon and low alloy Cr-Mo base metals

**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
Typical	0.09	1.6	0.6	0.4	0.01	0.01

**MECHANICAL PROPERTIES OF ALL WELD METAL :**

	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%	CVN Impact at -30°C, J
Typical	As Welded	600	540	24	40

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

**PACKING DATA :**

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