



**GMAW/GTAW LOW ALLOY STEEL (High Strength)**  
**AUTOMIG 100S-G / TIGFIL 100S-G**

COPPER COATED MEDIUM ALLOYED WIRE FOR HIGH STRENGTH LOW ALLOY



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

ER100S-G    -

**KEY FEATURES :**

- Copper coated alloy steel wire
- Ni-Cr-Mo alloyed
- Smooth feedability, low spatter
- Exhibit high strength as well as low temperature toughness
- Radiographic quality

**WELDING POSITION :**



**GMAW: DCEP**  
**GTAW: DCEN**

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

**TYPICAL APPLICATIONS :**

- Welding of HY 80 and other similar grade materials
- Welding of high strength and low alloy steels
- Joining large vehicles and crane manufacturing
- Suitable for single and multi-pass welding of low alloy steels

**STORAGE / HANDLING :**

Keep dry during storage and handling

**CHEMICAL COMPOSITION OF BARE SOLID WIRE, Wt% :**

	C	Mn	Si	Cr	Ni	Mo	V	S	P
Typical	0.08	1.5	0.5	0.3	1.4	0.3	0.08	0.015	0.015

**MECHANICAL PROPERTIES OF ALL WELD METAL :**

	Condition	UTS, MPa	YS, MPa	EL%	CVN Impact at -40°C, J
Typical	As Welded	800	710	24	60

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

**PACKING DATA :**

Automig 100S-G	Ø, mm		Kg/Spool	
		1.2		15
	1.6		15	
Tigfil 100S-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