

## MIG/MAG solid wires-TIG rods C-Mn and low-alloy steels

CARBOFIL Mo is a copper coated GMoSi/ER70S-A1 type solid MAG welding wire supplied precision layer wound, depositing a C-0.8Mn0.5Mo weld metal. Suitable for use with CO<sub>2</sub> and Ar-CO<sub>2</sub> mix shielding gases.

CARBOFIL Mo is used for welding low alloy creep resistant ferritic steels, used in chemical plant construction operating at elevated temperatures up to 500°C. Suitable for applications in petrochemical process plant where some resistance to hot hydrogen attack is necessary, and for welding of micro-alloyed steels where increased strength is required.

Classification		Approvals	Grade
EN ISO	21952-A: G MoSi	DB	●
AWS	A5.28: ER 70S-A1	TÜV	●

CE

### Chemical analysis (Typical values in %)

	C	Mn	Si	P	S	Mo
Wire	0.10	1.0	0.6	≤0.020	≤0.020	0.5
All weld metal (*)	0.10	0.8	0.4	≤ 0.020	≤ 0.020	0.5

(\*) 82% Ar+18% CO<sub>2</sub>

### All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)	
				+20 °C	-20 °C
As Welded (*)	≥480	515-620	≥22	≥100	≥47
580 °C x 15h (**)	≥380	480-560	≥19	≥100	≥47

Gas test: (\*) M21, (\*\*) M21-Arcal 21

### Shielding Gas - EN ISO 14175 : C1

### Materials

S(P)235-S(P)460, 16Mo3

### Storage

Keep dry and avoid condensation.

### Current condition and welding position

DC+



### Packaging data

Packaging Type	B300	S300
Diam(mm) / weight(kg)	16	15
0.8	●	●
1.0	●	●
1.2	●	●