

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

CARBOFIL is a copper coated G2Si/ER70S-3 type solid MAG welding wire supplied both random and precision layer wound, depositing C-0.8%Mn weld metal, for welding a wide range of mild and C-Mn structural steels. Suitable for welding with CO<sub>2</sub> or Ar-based mixed shielding gases.

CARBOFIL is used mainly for single pass welding and for steels that have a rusty or dirty surfaces.

Classification		Approvals	Grade
EN ISO	14341-A: G 38 3 C1 2Si1	DB	●
EN ISO	14341-A: G 42 3 M21 2Si1	CE	
AWS	A5.18: ER 70S-3		

### Chemical analysis (Typical values in %)

	C	Mn	Si	P	S
Wire	0.08	1.25	0.55	≤ 0.025	≤ 0.025
All weld metal (*)	0.08	0.85	0.35	≤ 0.025	≤ 0.025
All weld metal (**)	0.06	0.55	0.20	≤ 0.025	≤ 0.025

(\*) 82% Ar+18% CO<sub>2</sub>, (\*\*) 100% CO<sub>2</sub>

### All-weld metal Mechanical Properties

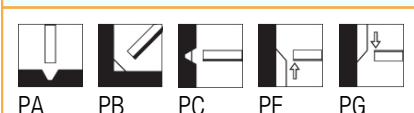
Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)
				0 °C
As Welded	≥ 420	480-550	≥ 22	≥ 90

Gas test: 82% Ar+18% CO<sub>2</sub>

### Shielding Gas - EN ISO 14175 : M2 - C1

### Materials

Steel up to a yield strength of 420 N/mm<sup>2</sup>: e.g. S(P)235 to S(P)355; GP240; GP280

Storage	Current condition and welding position
Keep dry and avoid condensation	DC+
	

### Packaging data

Packaging Type	B300
Diam(mm) / weight(kg)	16
0.6	●
0.8	●
1.0	●
1.2	●
1.6	●
1.60	●