

CARBOFIL 1A GOLD is a special coated G4Si1/ER70S-6 type solid MAG welding wire, developed to meet highest performance expectations in terms of feedability and weldability. It's ideal for very high welding parameters with automatic and robotic applications. For welding a wide range of mild and C-Mn structural steels, depositing C-1,3%Mn weld metal. Suitable for welding with CO₂ and Ar-based mixed shielding gases.

CARBOFIL 1A GOLD shows exceptional arc stability, low presence of spatters and smooth bead profile thanks to the improved surface finishing. It guarantees excellent feedability, low contact tip consumption and high oxidation resistance. Thanks to its constancy, it shows enhanced productivity and saving in terms of costs (maintenance/cleaning).

CARBOFIL 1A GOLD is available in a wide range of packaging formats, from standard spools (B300/BS300) to bulk packaging drums (till 800 kg) for robotic application. Suitable for infrastructures, earthmoving equipment, heavy machinery and automotive parts manufacturing.

For HYPERFILL process available as HF-version

Classification	
EN ISO	14341-A: G 46 3 C1 4Si1
EN ISO	14341-A: G 46 4 M21 4Si1
AWS	A5.18: ER 70S-6

Approvals	Grade
ABS	2YSA
ABS	3YSA
DB	●
DNV/GL	III YMS
DNV/GL	IV Y40MS
LR	2YS H15
LR	4Y40S H15
TÜV	●

CE

Chemical analysis (Typical values in %)

	C	Mn	Si	P	S
Wire	0.07	1.7	0.9	≤ 0.025	≤ 0.025
All weld metal (*)	0.08	1.3	0.7	≤0.025	≤0.025
All weld metal (**)	0.08	1.2	0.6	≤0.025	≤0.025

(*) 82% Ar+18% CO₂, (**) 100% CO₂

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)		
				+20 °C	-30 °C	-40 °C
As Welded (*)	≥460	530-680	≥24	≥100	≥80	≥70
As Welded (**)	≥460	530-680	≥24	≥80	≥47	

Gas test: (*) M21-Arcal 21, (**) C1-Arcal

Shielding Gas - EN ISO 14175 : C1, M14, M2, M3

Materials

S(P)235 - S(P)460; GP240; GP280

CARBOFIL 1A GOLD



MIG/MAG solid wires-TIG rods
Mild and low-alloy steels

Storage

Keep dry and avoid condensation

Current condition and welding position

DC+

