# CARBOFIL 1A GOLD



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

CARBOFIL 1A GOLD is a special coated G4Si1/ER70S-6 type solid MAG weilding 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	•		

(€

## **Chemical analysis (Typical values in %)**

	C	Mn	Si	Р	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

<sup>(\*) 82%</sup> Ar+18% CO2, (\*\*) 100% CO2

#### **All-weld metal Mechanical Properties**

Heat Treatment	Yield Strength	Tensile Strength	Elongation	Impact Energy ISO - V (J)		
neat Heatillelit	(MPa)	(MPa)	A5 (%)	+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**

Rev: 2020-11-18

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

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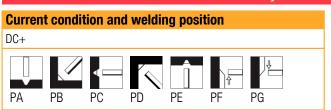
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## Storage

Keep dry and avoid condensation



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