

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

CARBOFIL CrMo5 is a copper coated GCrMo5Si/ER 80S-B6 type solid MAG welding wire supplied precision layer wound, depositing a nominal C-0.3Mn5.6Cr0.6Mo low alloy steel weld metal. Ar-CO₂ mixed shielding gases preferred for improved mechanical properties.

CARBOFIL CrMo5 is used for welding elevated temperature creep resisting steels of similar composition (P/T5) as used in the power generation and petrochemical industries where corrosion resistance to steam, hot hydrogen gas and high sulphur crude oils is required.

Classification

EN ISO	21952-A: G CrMo5Si
AWS	A5.28: ER 80S-B6

Chemical analysis (Typical values in %)

	C	Mn	Si	P	S	Cr	Mo
Wire	0.07	0.5	0.5	≤ 0.020	≤ 0.020	5.70	0.6
All weld metal (*)	0.05	0.3	0.3	≤0.020	≤0.020	5.6	0.6

(*) 82% Ar+18% CO₂

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)
				+20 °C
760 °C x 1h	≥ 470	≥ 590	≥ 17	≥ 47

Gas test: 82% Ar+18% CO₂

Shielding Gas - EN ISO 14175 : M20, M21, M24, M26

Materials

12CrMo19-5, A182 Gr. F5, A199 Gr. T5 and similar steels

X12CrMo5,GX12CrMo5,A213 Gr.T5,A217 Gr.C5,A335 Gr.P5,A336 Cl. F5, A369 Gr. FP5, A387 Gr.5, Cl 1 and 2

Storage

Keep dry and avoid condensation.

Current condition and welding position

DC+

