

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.

Solid wires for welding steels that resist hot creep with 5,5% Cr 0.5% Mo. Used in the chemical industry and in ammonia synthesis processes.

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+

