

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

CARBOFIL KV7M is a copper coated GCrMo91/ER90S-B9 type solid MAG welding wire supplied precision layer wound, for welding creep resisting steels of the type 9Cr1MoVNbN. Ar-CO2 mix shielding gases preferred for improved mechanical properties.

CARBOFIL KV7M is especially designed for the ASTM steels T91/P91. Approved in long-term condition <+650°C service temperature.

Improved creep strength is obtained by the addition of nitrogen, niobium and vanadium.

Classification	
EN ISO	21952-A: G CrMo91
AWS	A5.28-05: ER 90S-B9

Chemical analysis (Typical values in %)

C	Mn	Si	Cr	Ni	Mo	Nb	V
0.10	0.6	0.3	9.0	0.7	0.9	0.06	0.2

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 2h	≥ 620	≥ 720	≥ 17	≥ 55








Gas test: 97.5%Ar + 2.5%CO2

Shielding Gas - EN ISO 14175 : M12

Materials

1.4903, X10CrMo V9-1, X10CrMoVNb9-1, A199 T91, A200 T91, A213 T91, A335 P91, A336 P91

Storage
Keep dry and avoid condensation.

Current condition and welding position						
DC+						
						
PA	PB	PC	PD	PE	PF	PG

Packaging data

Packaging Type	B300
Diam(mm) / weight(kg)	16
1.0	●
1.2	●