

MIG/MAG solid wires-TIG rods High strength steels

CARBOFIL MnMo is a copper coated G4Mo/ER 80S-D2 type solid MAG welding wire supplied both random and precision layer wound, depositing a C-1.6Mn0.5Mo weld metal for welding low alloy creep resistant ferritic steels. Suitable for use with Ar-CO2 mix shielding gases.

CARBOFIL MnMo is used in chemical plant construction operating at elevated temperatures up to 500°C. Suitable for applications in petrochemical process plant where some resistance to hot hydrogen attack is necessary. CARBOFIL MnMo is also suitable for welding of high yield strength steels <500 MPa.

CARBOFIL MnMo is available also in 300kg drum format.

Classification	
EN ISO	14341-A: G 50 4 M21 4Mo
AWS	A5.28: ER 80S-D2

Approvals	Grade
DB	●
TUV	

CE

Chemical analysis (Typical values in %)

	C	Mn	Si	P	S	Mo
Wire	0.09	1.85	0.70	≤0.020	≤0.020	0.50
All weld metal (*)	0.09	1.60	0.6	≤0.020	≤0.020	0.50

(*) 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	-40 °C
620°C x 3h	≥500	≥600	≥22	≥120	≥90
As Welded	≥520	≥680	≥22	≥100	≥70

Gas test: M21


Shielding Gas - EN ISO 14175 : M20, M21

Materials

fine grain steels with YS≤500

16Mo3

Storage
Keep dry and avoid condensation

Current condition and welding position
DC+


Packaging data

Packaging Type	B300
Diam(mm) / weight(kg)	16
0.8	●
1.0	●
1.2	●