

MIG/MAG solid wires-TIG rods High strength steels

CARBOFIL NiMoCr is a copper coated GMn3Ni1CrMo/ER110S-G type solid MAG welding wire supplied random and precision layer wound, depositing C-1.2Mn0.25Cr1.5Ni0.25Mo weld metal, used for the welding of high tensile strength steels and type TI-HY100 steels. Suitable for use with Ar-CO2 mix shielding gases.

CARBOFIL NiMoCr is used to weld <690 MPa yield strength steels with excellent mechanical properties and also for low temperature applications down to -40°C.

CARBOFIL NiMoCr is available also in 300kg drum format. Low heat inputs are recommended to obtain optimum joint mechanical properties.

Classification	
EN ISO	16834-A: G 69 4 M Mn3Ni1CrMo
AWS	A5.28: ER 110 S-G

Approvals	Grade
DB	●
TÜV	●

CE

Chemical analysis (Typical values in %)

	C	Mn	Si	P	S	Cr	Ni	Mo
Wire	0.08	1.6	0.5	≤ 0.015	≤ 0.018	0.3	1.5	0.25
All weld metal (*)	0.08	1.2	0.3	≤ 0.015	≤ 0.018	0.25	1.5	0.25

(*) 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
As Welded	≥690	770 - 890	≥17	≥80	≥47

Gas test: M21-Arcal 21

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

Materials

S620, S690, HY 100

Storage

Keep dry and avoid condensation

Current condition and welding position

DC+



Packaging data

Packaging Type	B300	S300
Diam(mm) / weight(kg)	16	15
0.8	●	
1.0	●	●
1.2	●	