

## MIG/MAG solid wires-TIG rods High strength steels

CARBOFIL 2NiMoCr is a copper coated GMn4Ni2CrMo/ER 120S-G type solid MAG welding wire supplied both random and precision layer wound, depositing C-1.5Mn0.4Cr2.2Ni0.6Mo weld metal, used for welding Cr-Ni-Mo low alloyed and high yield strength steels. Suitable for use with Ar-CO<sub>2</sub> mix shielding gases.

Excellent mechanical properties, CARBOFIL 2NiMoCr up to 890 MPa yield strength steels and also for low temperature applications to -40°C.

CARBOFIL 2NiMoCr is also available in 300kg drum packaging. Low heat inputs are recommended to obtain optimum joint mechanical properties.

### Classification

EN ISO	16834-A: G 89 4 M Mn4Ni2CrMo
AWS	A5.28: ER 120S-G

### Chemical analysis (Typical values in %)

	C	Mn	Si	P	S	Cr	Ni	Mo
Wire	0.08	1.7	0.7	≤ 0.015	≤ 0.018	0.4	2.2	0.6
All weld metal (*)	0.08	1.5	0.6	≤ 0.015	≤ 0.018	0.4	2.2	0.6

(\*) 82% Ar+18% CO<sub>2</sub>

### 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	≥890	≥940	≥15	≥80	≥47

Gas test: 82% Ar+18% CO<sub>2</sub>

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

### Materials

S690; S890

### Storage

Keep dry and avoid condensation

### Current condition and welding position

DC+



### Packaging data

Packaging Type	B300	DRUM	S300
Diam(mm) / weight(kg)	16	300	15
0.8	●		
1.0	●		●
1.2	●	●	