

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

CARBOFIL Ni2 is a G2Ni2/ER 80S-Ni2 type solid MAG welding wire supplied precision layer wound, depositing a C-0.8Mn2.3Ni weld metal. Suitable for use with Ar-CO2 mix shielding gases.

CARBOFIL Ni2 is used for the welding of 2%Ni-steels, when weld metal toughness properties down to -90°C are required in the as welded condition.

Classification	
EN ISO	14341-A: G 46 7 M21 2Ni2
AWS	A5.28: ER 80S-Ni2

Approvals	Grade
GL	6Y42S
TÜV	●

CE

Chemical analysis (Typical values in %)

	C	Mn	Si	P	S	Ni
Wire	0.08	1.1	0.5	≤ 0.020	≤ 0.020	2.3
All weld metal (*)	0.07	0.8	0.4	≤ 0.020	≤ 0.020	2.3

(*) 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	-70 °C	-90 °C
As Welded (*)	≥460	550-680	≥22	>120	≥47	
580°C x 15h (**)	≥460	550-680	≥22	≥130	≥70	≥47


Gas test: (*) 82% Ar+18% CO2, (**) M21-Arcal 21

Shielding Gas - EN ISO 14175 : M2

Materials

S(P)275-S(P)460

Storage
Keep dry and avoid condensation.

Current condition and welding position
DC+


Packaging data

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