

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

CARBOFIL Ni1 is a G3Ni1/ER 80S-Ni1 type solid MAG welding wire supplied precision layer wound, depositing a C-0.8Mn1.0Ni weld metal. Suitable for use with Ar-CO2 mix shielding gases.

CARBOFIL Ni1 is used for welding of 1%Ni steels and fine grain steels, when the weld metal toughness properties down to -60°C are required in the as welded conditions. The weld metal contains less than 1% Ni conforming to NACE requirement.

Classification

EN ISO	14341-A: G 46 6 M21 3Ni1
AWS	A5.28: ER 80S-Ni1

Chemical analysis (Typical values in %)

	C	Mn	Si	P	S	Ni
Wire	0.08	1.1	0.6	≤ 0.020	≤ 0.020	0.9
All weld metal (*)	0.07	0.8	0.4	≤ 0.020	≤ 0.020	0.9

(*) 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	-60 °C
As Welded	≥ 480	550-680	≥ 24	≥ 110	≥ 47

Gas test: 82% Ar+18% CO2

Shielding Gas - EN ISO 14175 : M2

Materials

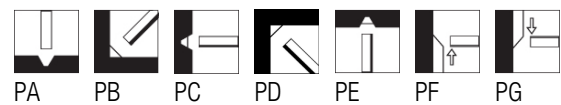
S(P)235-S(P)460, GP240-GP280

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	●