

CARBOROD Ni3 is an ER 80S-Ni3 type solid TIG welding rod depositing a C-1.0Mn3.2Ni weld metal. Suitable for use with mainly Ar shielding gas.

CARBOROD Ni3 is used for welding 3.5% nickel steels for low temperatures service, where weld metal toughness properties down to -101°C are required.

Classification

EN ISO	636-B: W 55A 10 WN71
AWS	A5.28: ER 80S-Ni3

Chemical analysis (Typical values in %)

C	Mn	Si	P	S	Ni
0.08	0.8	0.5	≤0.010	≤0.010	3.5

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)	
				-80 °C	-101 °C
As Welded	≥ 460	≥ 550	≥ 24	≥ 130	≥ 47

Gas test: 100% Ar

Shielding Gas - EN ISO 14175 : I1

Materials

ASTM A203 Grades D, E, F

Storage

Keep dry and avoid condensation

Current condition and welding position

DC-



Packaging data

Diam. (mm)	Packaging Type	Weight (kg)	Code
1.6	TUB	5	W000283403
2.0	TUB	5	W000283404
2.4	TUB	5	W000283405
3.2	TUB	5	W000283406