

CARBOROD NiCu is a copper coated ER80S-G type solid TIG welding rod depositing a C-1Mn 0.8Ni 0.4Cu weld metal for welding of weathering steels such as COR-TEN, Patinax, etc. Suitable for use mainly with Ar shielding gas.

CARBOROD NiCu is suitable for welding a range of structural weather resistant steels in applications such as bridge fabrication, exposed frame structures, transmission towers, barriers, ducting, chimneys, shields and inner exhaust systems. Due to the alloying system, CARBOROD NiCu can also be used for welding of high yield strength steels.

The addition of Ni and Cu to the weld metal provides increased resistance to atmospheric corrosion compared to conventional C-Mn steels.

Classification

AWS A5.28: ER 80S-G

Chemical analysis (Typical values in %)

C	Mn	Si	P	S	Cr	Ni	Cu
0.06	1.4	0.8	≤0.025	≤0.025	0.3	0.8	0.4

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	≥420	500-640	≥22	≥120	≥80

Gas test: 100% Ar

Shielding Gas - EN ISO 14175 : I1

Materials

S235J0W, S235J2W, S355J0W, S355J2W, S355K2W

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	W000272200
2.0	TUB	5	W000272199
2.4	TUB	5	W000272198
3.2	TUB	5	W000272197