

INERTROD 347 is a W 19 9 Nb/ER 347 type solid TIG welding rod depositing a niobium stabilised 19Cr 9Ni weld metal. Suitable for use mainly with Ar shielding gas.

INERTROD 347 is used for the welding of 321 and 347 grade stainless steels in a wide range of applications, including the fabrication of pipe, plate and vessels. The weld metal has a high resistance to corrosive media at service temperatures <400°C.

The presence of niobium reduces the possibility to intergranular chromium carbide precipitation and thus reduces to susceptibility to intergranular corrosion.

Classification	
EN ISO	14343-A: W 19 9Nb
AWS	A5.9: ER 347

Approvals	Grade
DB	●
TÜV	●

CE

### Chemical analysis (Typical values in %)

C	Mn	Si	P	S	Cr	Ni	Nb
0.04	1.6	0.45	≤ 0.025	≤ 0.020	19.5	10	0.5

### All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)	
				+20 °C	-120 °C
As Welded	≥ 400	≥ 550	≥ 30	≥ 65	≥ 32

Gas test: 100% Ar

**Shielding Gas** - EN ISO 14175 : I1

### Materials

AISI 347 - 321

1.4541 (X6CrNiTi18-10); 1.4301 (X4CrNi18-10); 1.4550 (X6CrNiNb18-10); 1.4551

### Storage

Keep dry and avoid condensation

### Current condition and welding position

DC-



### Packaging data

Diam. (mm)	Packaging Type	Weight (kg)	Code
1.0	TUB	5	●
1.2	TUB	5	●
1.6	TUB	5	●
2.0	TUB	5	●
2.4	TUB	5	●
3.2	TUB	5	●