

INERTROD 318 is a W 19 12 3 Nb/ER318 type solid TIG welding rod depositing a C-19Cr 12Ni 2.5Mo niobium stabilised weld metal. Suitable for use mainly with Ar shielding gas.

INERTROD 318 is used for the welding of 316Ti and 316Nb stainless steels in a wide range of applications including the fabrication of pipe, plate and vessel.

The weld metal provides good resistance to crevice corrosion by oxidising acids.

Classification		Approvals	Grade
EN ISO	14343-A: W 19 12 3 Nb	DB	●
AWS	A5.9: ER 318	TÜV	●

Chemical analysis (Typical values in %)

C	Mn	Si	P	S	Cr	Ni	Mo	Nb	Ferrite
0.05	1.75	0.4	≤0.025	≤0.020	19	12	2.6	2.6	5-10

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)	
				+20 °C	-110 °C
As Welded	≥400	≥550	≥30	≥65	≥32

Gas test: 100% Ar

Shielding Gas - EN ISO 14175 : I1

Materials

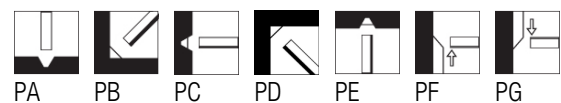
1.4583; 1.4580; 1.4408; 1.4581; 1.4436; 1.4571; 1.4401

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	W000283465
1.2	TUB	5	W000283466
1.6	TUB	5	W000283467
2.0	TUB	5	W000283468
2.4	TUB	5	W000283469
3.2	TUB	5	W000283470