

## MIG/MAG solid wires-TIG rods Stainless and Heat resistant steels

INERTFIL 318 is a G 19 12 3 Nb/ER318 type solid MAG welding wire supplied precision layer wound, depositing a niobium stabilised C-19Cr12Ni2.5Mo weld metal. Suitable for use with Ar+2%O<sub>2</sub> or Ar+0.5...5%CO<sub>2</sub> mixed shielding gases.

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

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

Classification	
EN ISO	14343-A: G 19 12 3 Nb
AWS	A5.9: ER 318

Approvals	Grade
DB	●
TÜV	●

### Chemical analysis (Typical values in %)

	C	Mn	Si	P	S	Cr	Ni	Mo	Nb
Wire	0.05	1.75	0.4	≤0.025	≤0.020	19	12	2.6	0.6

### 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: M13

**Shielding Gas** - EN ISO 14175 : M12, M13

### Materials

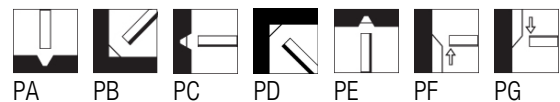
1.4571 (X6CrNiMoTi17-12-2) - 1.4401 (X4CrNiMo17-12-2)  
 1.4581 (GX5CrNiMoNb19-10) - 1.4436 (X4CrNiMo17-13-3)  
 1.4580 (X6CrNiMoNb17-12-2) - 1.4408 (GX5CrNiMo19-11)  
 1.4583 (X10CrNiMoNb18-12)

### Storage

Keep dry and avoid condensation.

### Current condition and welding position

DC+



### Packaging data

Packaging Type	BS300
Diam(mm) / weight(kg)	15
0.8	●
1.0	●
1.2	●