

INERTFIL 347Si is a G 19 9 Nb Si/ER 347Si type solid MAG welding wire, supplied precision layer wound, depositing a niobium stabilised 19Cr 9Ni weld metal. Suitable for use with Ar+2%O₂ or Ar+0.5...5%CO₂ mixed shielding gases.

INERTFIL 347Si is used for welding of 321 and 347 grade stainless steels. The wire is used for a 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 propensity of intergranular chromium carbide precipitation and thus reduces the susceptibility to intergranular corrosion. The increased silicon content results in increased weld pool fluidity to give a smooth deposit appearance.

Classification		Approvals	Grade
EN ISO	14343-A: G 19 9 Nb Si	DB	●
AWS	A5.9: ER 347Si	TÜV	●

Chemical analysis (Typical values in %)

C	Mn	Si	P	S	Cr	Ni	Nb
0.040	1.6	0.8	≤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: 98% Ar+2% O₂

Shielding Gas - EN ISO 14175 : M12, M13

Materials

AISI 347 - 321

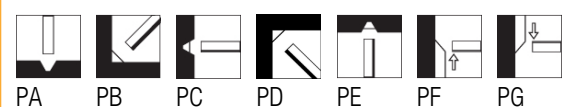
1.4541 (X6CrNiTi18-10); 1.4301 (X4CrNi18-10); 1.4550 (X6CrNiNb18-10)

Storage

Keep dry and avoid condensation.

Current condition and welding position

DC+



Packaging data

Packaging Type	BS300
Diam(mm) / weight(kg)	15
0.8	W000283040
1.0	W000283041
1.2	W000283042