

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

INERTFIL 347 is a G 19 9 Nb/ER 347 type solid MAG welding wire, supplied precision layer wound, depositing a niobium stabilised 19Cr9Ni weld metal. Suitable for use with Ar+2%O₂ or Ar+0.5...5%CO₂ mixed shielding gases.

INERTFIL 347 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 possibility of intergranular chromium carbide precipitation and thus reduces the susceptibility to intergranular corrosion.

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

Approvals	Grade
DB	●
CE	

Chemical analysis (Typical values in %)

	C	Mn	Si	P	S	Cr	Ni	Nb
Wire	0.040	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: M13


Shielding Gas - EN ISO 14175 : 98%Ar+2%O₂, Ar+0.5≤CO₂≤5

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	S300
Diam(mm) / weight(kg)	15	15
0.8	●	●
1.0	●	●
1.2	●	●