ER 347Si

Stainless Steel WIRE/GTAW

Standards

EN/ISO-Standard - 14343-A **EN/ISO-Classification -** W 19 9 Nb Si

AWS-Standard - A5.9 **AWS-Classification -** ER 347Si

Features and Applications

- Austenitic stainless steel wire with a significant presence of niobium, that provides resistance to intergranular chromium carbide precipitation, thus increasing the resistance to intergranular corrosion.
- Increased silicon content promotes weld pool fluidity to give a smooth deposit appearance.
- Ideal for welding and overlay of chromium-nickel stainless steel base metals of similar composition, stabilised either by Nb or Ti (e.g. types 321 and 347).
- Typically used on applications for the chemical industry, particularly
 at high temperatures (e.g. equipment intermittently heated within
 a temperature range varying from 400°C to 800°C). Including
 applications such as firewalls, pressure vessels, food processing,
 dairy, oil and textile industries etc.
- Test Certificates can be found online @wilkinsonstar247.com



Typical Base Materials

All 300 series austenitic stainless steel, particularly 321 and 347 (stabilised)*
* Illustrative, not exhaustive list

Welding Positions

EN ISO 6947 - PA, PB, PC, PD, PE, PF, PG

Shielding Gases	Polarity		
EN ISO 14175 - TIG: I1 (Argon)	DC (-)		

Mechanical Properties

Tensile Strength	Yield Strength	Elongation	Impact Strength
(N/mm²)	(N/mm²)	(%)	(J)
≥550	≥350	≥25	

Mechanical properties are approximate and may vary based on the heat, shielding gas, welding parameters and other factors.

Chemical Composition % (Typical)

C %	Mn%	Si %	S %	P %	Ni %	Cr %	Mo %	Cu%	Nb %
0.020	1.74	0.82	0.005	0.024	9.55	19.50	0.050	0.04	0.205

Packaging Data

Part No.	Diameter Ø (mm)	Package Length (mm)	Package Weight (Kg)	Package Type
6011100360	1.60	1000	5	Cardboard Tube
6011100362	2.40	1000	5	Cardboard Tube
6011100363	3.20	1000	5	Cardboard Tube

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