

ER 347Si

Stainless Steel WIRE/GMAW

Standards

EN/ISO-Standard - 14343-A
EN/ISO-Classification - G 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).
- Precision layer wound for superior wire feeding characteristics.
- 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

Shielding Gases

EN ISO 14175 - M12, M13

Polarity

DC (+)

Welding Parameters - M12

Ø mm	0.80	1.00	1.20
Current (A)	40-120	80-160	100-210
Voltage (V)	15-20	16-22	17-23

Welding Parameters - M13

Ø mm	0.80	1.00	1.20
Current (A)	160-210	180-280	200-300
Voltage (V)	24-28	25-30	26-32

Mechanical Properties

Tensile Strength (N/mm ²)	Yield Strength (N/mm ²)	Elongation (%)	Impact Strength (J)
≥550	≥350	≥25	≥50

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 Weight (Kg)	Package Type	Pallet Quantity
6011100431	0.80	15	D300 PLW	72
6011100434	1.00	15	D300 PLW	72
6011100437	1.20	15	D300 PLW	72

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