Solid Wire Rod for TIG Welding

BA-TIG 347Si

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

SFA-5.9: **ER347Si**

Main Application:
BA-TIG 347Si is a solid wire rod for GTAW with higher Si content than BA-TIG 347, suitable to weld 18Cr/10Ni stabilized with Ti or Nb austenitic stainless steels grades 321 and 347. Also suitable for welding similar unstabilized grades 304 or 304L. BA-TIG 347Si has high resistance to intergranular corrosion.

Typical analysis and chemical composition acc. to EN ISO 14343-A and AWS A5.9: (Weight Percent)

Wire rod	C	Si	Mn	Mo	Ni	Cr	Nb	P	S	Cu total
Typical analysis BA-TIG 347Si	0.05	0.8	1.6	0.1	9.8	19.5	0.6	0.015	0.013	0.10
W 19 9 Nb Si acc. to ISO 14343-A	0.08	0.65-1.2	1.0-2.5	0.3	9.0-11.0	19.0-21.0	10xC to 1.0	0.03	0.02	0.3
ER347Si acc. to AWS A5.9	0.08	0.65-1.0	1.0-2.5	0.75	9.0-11.0	19.0-21.5	10xC to 1.0	0.03	0.03	0.75

All - Weld Metal Mechanical Properties / Welding Data:

Heat Treatment	As Welded
Yield Strength Re, N/mm² (ksi)	400 (58)
Tensile Strength Rm, N/mm² (ksi)	550 (80)
Elongation A5 [%]	>28
Impact Energy ISO-V, J (ft lbs)	+20°C: 70 (52)
Current/polarity	DC -
Shielding Gas	ISO 14175: I1

Base Materials:
1.4550/ X6CrNiNb18-10, 1.4541/ X6CrNiTi18-10, 1.4552/ GX5CrNiNb19-11,1.4301/ X5CrNi18-10,1.4312/ GX10CrNi18-8, 1.4546/ X5CrNiNb18-10, 1.4311/ X2CrNiN18-10, 1.4306/ X2CrNi19-11
AISI 347, 321, 302, 304, 304L, 304LN, ASTM A296 Gr. CF 8 C, A157 Gr. C9, A320 Gr. B8C or D

Package Forms:
5 kg carton boxes as standard package form for GTAW wire rods.

Diameter:
1,0 – 3,2 mm. Sizes and tolerances acc. to ISO 544 and AWS A5.9.

Wire Rod Surface:
Smooth finish free from surface defects and foreign matter.