Solid Wire Rod for TIG Welding

BA-TIG 309LNb

Classification: EN ISO 14343-A: **W 23 12 Nb**
SFA-5.9: **ER(309LNb)**

Main Application:
BA-TIG 309LNb is a solid wire rod for GTAW, niobium-stabilized similar to BA-TIG 309L with the addition of Nb. Suitable for overlay carbon and low-alloy steels, when a type 347 overlay is required.

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 309LNb	0.018	0.35	1.8	0.1	12.5	24.0	0.8	0.020	0.013	0.15
W 23 12 Nb acc. to ISO 14343-A	0.08	1.0	1.0-2.5	0.3	11.0-14.0	22.0-25.0	10x%C-1.0	0.03	0.02	0.3
ER(309LNb) acc. to AWS A5.9	0.03	0.65	1.0-2.5	0.75	12.0-14.0	23.0-25.0	10x%C-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)	590 (86)
Elongation A5 [%]	>30
Impact Energy ISO-V, J (ft lbs)	+20°C: 100 (74)
Current/polarity	DC -
Shielding Gas	ISO 14175: I1

Base Materials
Steel cladding when chemistry of AISI 347 or AISI 321 is required for the first layer. Overlay welding of 2.25Cr-1Mo steels.

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

Diameter:
1,6 – 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.