Solid Wire Rod for TIG Welding

BA-TIG 312

Classification: EN ISO 14343-A: **W 29 9**
SFA-5.9: **ER312**

Main Application:
BA-TIG 312 is a solid wire rod for GTAW, suitable for welding or surfacing hardly weldable steels. Suitable to weld buffer layers of hard depositions. The excellent mechanical properties and the notch resistance make this wire of general use.

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	P	S	Cu total
Typical analysis BA-TIG 312	0.10	0.4	1.8	0.15	9.3	29.5	0.020	0.013	0.15
W 29 9 acc. to ISO 14343-A	0.15	1.0	1.0-2.5	0.3	8.0-12.0	28.0-32.0	0.03	0.02	0.3
ER312 acc. to AWS A5.9	0.15	0.30-0.65	1.0-2.5	0.75	8.0-10.5	28.0-32.0	0.03	0.03	0.75

All - Weld Metal Mechanical Properties / Welding Data:

Heat Treatment	As Welded
Yield Strength Re, N/mm² (ksi)	450 (65)
Tensile Strength Rm, N/mm² (ksi)	660 (96)
Elongation A5 [%]	>25
Impact Energy ISO-V, J (ft lbs)	+20°C: 120 (88)
Current/polarity	DC -
Shielding Gas	ISO 14175: I1

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.