

Solid Wire Rod for TIG Welding

BA-TIG 316H

Classification: EN ISO 14343-A: **W 19 12 3 H**
SFA-5.9: **ER316H**

Main Application:

BA-TIG 316H is a solid wire rod for GTAW, suitable to weld austenitic stainless steels that will operate at high temperatures 500-800°C, under long term creep conditions. BA-TIG 316H is also suitable for welding 321/321H and 347/347H grades for high temperature service. Recommended for welding steam piping, super heater headers for petro-chemical industry and power plants.

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 316H	0.05	0.45	1.7	2.7	12.3	19.0	0.020	0.013	0.15
W 19 12 3 H acc. to ISO 14343-A	0.04- 0.08	1.0	1.0-2.5	2.0-3.0	11.0- 14.0	18.0- 20.0	0.03	0.02	0.3
ER316H acc. to AWS A5.9	0.04- 0.08	0.30- 0.65	1.0-2.5	2.0-3.0	11.0- 14.0	18.0- 20.0	0.03	0.03	0.75

All - Weld Metal Mechanical Properties / Welding Data:

Heat Treatment	As Welded
Yield Strength Re, N/mm ² (ksi)	380 (55)
Tensile Strength Rm, N/mm ² (ksi)	570 (83)
Elongation A5 [%]	>30
Impact Energy ISO-V, J (ft lbs)	+20°C: 70 (52)
Current/polarity	DC -
Shielding Gas	ISO 14175: I1

Base Materials:

316/316H, CF10M, BS 316S51, 316S52, 316S53, 316C16, 316C71, UNS S31609

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.