

# Solid Wire Rod for TIG Welding

# BA-TIG 317L

**Classification:** EN ISO 14343-A: **W 19 13 4 L**  
SFA-5.9: **ER317L**

## Main Application:

BA-TIG 317L is a solid wire rod for GTAW, suitable to weld 19Cr/13Ni/3.5Mo austenitic stainless steels type 317L. The increase Mo content compared to grade 316L assures increased resistance to pitting and crevice corrosion. Also suitable for the welding of 316, 316L and 316LN grades, when is necessary to provide better pitting corrosion resistance. Suitable for service temperatures from -60 °C to +300 °C.

## 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 317L	0.015	0.4	2.1	3.6	13.7	19.0	0.020	0.013	0.1
W 19 13 4 L acc. to ISO 14343-A	0.03	1.0	1.0-5.0	3.0-4.5	12.0- 15.0	17.0- 20.0	0.03	0.02	0.3
ER317L acc. to AWS A5.9	0.03	0.30- 0.65	1.0-2.5	3.0-4.0	13.0- 15.0	18.5- 20.5	0.03	0.03	0.75

## All - Weld Metal Mechanical Properties / Welding Data:

Heat Treatment	As Welded
Yield Strength Re, N/mm <sup>2</sup> (ksi)	350 (51)
Tensile Strength Rm, N/mm <sup>2</sup> (ksi)	550 - 650 (80-94)
Elongation A5 [%]	>30
Impact Energy ISO-V, J (ft lbs)	+20°C: 100 (74)
Current/polarity	DC -
Shielding Gas	ISO 14175: I1

## Base Materials:

1.4435/ X2CrNiMo18-14-3, 1.4429/ X2CrNiMoN17-13-3, 1.4438/ X 2 CrNiMo 18-15-4, AISI 316L, 316 LN, 317LN, 317L.

## 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.