

# Solid Wire Rod for TIG Welding

# BA-TIG 2209

**Classification:** EN ISO 14343-A: **W 22 9 3 N L**  
SFA-5.9: **ER2209**

## Main Application:

BA-TIG 2209 is a solid wire rod for GTAW, suitable for welding duplex stainless steels grades 2205 and 2304. Weld metal exhibits corrosion resistance similar to grade 904L in most applications. BA-TIG 2209 is also suitable to weld grade 2205 or grade 2304 to mild steel.

**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	N	P	S	Cu total
Typical analysis BA-TIG 2209	≤ 0.02	0.7	1.6	3.2	9.0	23.0	0.15	0.015	0.012	0.10
W 22 9 3 N L acc. to ISO 14343-A	0.03	1.0	2.5	2.5-4.0	7.0-10.0	21.0- 24.0	0.1-0.2	0.03	0.02	0.3
ER2209 acc. to AWS A5.9	0.03	0.9	0.5-2.0	2.5-3.5	7.5-9.5	21.5- 23.5	0.08-0.2	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)	> 480 (70)	
Tensile Strength Rm, N/mm <sup>2</sup> (ksi)	660 - 860 (96 - 125)	
Elongation A5 [%]	>22	
Impact Energy ISO-V, J (ft lbs)	+20°C: > 80 (58)	-50°C: > 47 (34)
Current/polarity	DC -	
Shielding Gas	ISO 14175: I1	

## Base Materials:

1.4462/ X2CrNiMoN22-5-3, 1.4362/ X2CrNiN23-4, 1.4462/ X2CrNiMoN22-5-3 with 1.4583/ X10CrNiMoNb18-12  
UNS S31803, S32205

## Package Forms:

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

## Diameter:

1,2 – 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.