

Solid Wire Rod for TIG Welding

BA-TIG 2594NL

Classification: EN ISO 14343-A: **W 25 9 4 N L**
SFA-5.9: **ER2594**

Main Application:

BA-TIG 2594NL is a solid wire rod for GTAW, suitable for welding Super-duplex stainless steels 2507 and other super-duplex stainless steels. The wire rod has excellent resistance to stress corrosion (SCC) in chloride-bearing environments and excellent resistance to pitting and crevice corrosion. BA-TIG 2594NL is also suitable for welding Duplex stainless steel grade 2205 and corresponding duplex steels when high corrosion resistance 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	N	W	P	S	Cu total
Typical analysis BA-TIG 2594NL	≤ 0.02	0.35	0.8	3.5	9.5	25.0	0.23	0.6	0.015	0.012	0.5
W 25 9 4 N L acc. to ISO 14343-A	0.03	1.0	2.5	2.5-4.5	8.0-10.5	24.0-27.0	0.2-0.3	1.0	0.03	0.02	1.5
ER2594 acc. to AWS A5.9	0.03	1.0	2.5	2.5-4.5	8.0-10.5	24.0-27.0	0.2-0.3	1.0	0.03	0.02	1.5

All - Weld Metal Mechanical Properties / Welding Data:

Heat Treatment	As Welded	
Yield Strength Re, N/mm ² (ksi)	≥ 650 (94)	
Tensile Strength Rm, N/mm ² (ksi)	≥ 740 (107)	
Elongation A5 [%]	>25	
Impact Energy ISO-V, J (ft lbs)	+20°C: ≥ 60 (44)	-50°C: ≥ 47 (34)
Current/polarity	DC -	
Shielding Gas	ISO 14175: I1	

Base Materials:

UNS S32760, UNS J93380, 1.4508, 1.4501, ASTM A890 6A, ASTM A182 F55 ACI, CD3MWCuN, UNS 32750, 2507, UNS S32550, S32520, UNS S39274, UNS S32950, UNS J93404, 1.4469, ASTM A890 5A, ACI CE3M

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.