Solid Wire Rod for TIG Welding

BA-TIG 385

Classification: EN ISO 14343-A: **W 20 25 5 Cu L**

SFA-5.9: **ER385**

Main Application:
BA-TIG 385 is a solid wire rod for GTAW, suitable for welding steels of similar chemical composition 20Cr/25Ni/4.5Mo/1.5Cu type (AISI 904L type). BA-TIG 385 has high resistance to corrosion in severe, non-oxidising environments, sulphuric, phosphoric and other inorganic and organic acids, also good resistance to corrosion in concentrated nitric acid. Due to the low carbon, high alloy content, allows excellent resistance to intergranular corrosion and stress corrosion cracking, high resistance to crevice and pitting corrosion when compared to standard grades AISI 304L and AISI 316L. Suitable for some offshore applications, including overlays on mild and low alloy steels.

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 385	0.015	0.4	1.9	4.5	25.0	20.0	0.015	0.015	1.50
W 20 25 5 Cu L acc. to ISO 14343-A	0.03	1.0	1.0-4.0	4.0-6.0	24.0-27.0	19.0-22.0	0.03	0.02	1.0-2.0
ER385 acc. to AWS A5.9	0.025	0.50	1.0-2.5	4.2-5.2	24.0-26.0	19.5-21.5	0.02	0.03	1.2-2.0

All - Weld Metal Mechanical Properties / Welding Data:

Heat Treatment	As Welded
Yield Strength Re, N/mm² (ksi)	400 (58)
Tensile Strength Rm, N/mm² (ksi)	560 (81)
Elongation A5 [%]	>35
Impact Energy ISO-V, J (ft lbs)	+20°C: 100 (74)
Current/polarity	DC -
Shielding Gas	ISO 14175: I1

Base Materials:
Similar Cr/Ni steels with high Mo content
1.4539 /X1NiCrMoCu25-20-5, 1.4439/ X2CrNiMoN17-13-5, 1.4537/ X1CrNiMoCuN25-25-5, UNS N08904

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.