Solid Wire Rod for TIG Welding

BA-TIG 410

Classification: EN ISO 14343-A: **W 13**
SFA-5.9: **ER410**

Main Application:
BA-TIG 410 is a solid wire rod for GTAW, suitable for welding 13% chromium steels, overlay carbon steels for improved corrosion, erosion and abrasion resistance. Service temperature up to +450 °C.
Pre-heat and inter-pass temperature shall be ≥ 200°C. Main used for surfacing steel mill rolls, furnace and burner parts, turbine parts.

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 410	0.10	0.4	0.4	0.2	0.1	13.0	0.015	0.015	0.2
W 13 acc. to ISO 14343-A	0.15	1.0	1.0	0.3	0.3	12.0-15.0	0.03	0.02	0.3
ER410 acc. to AWS A5.9	0.12	0.5	0.6	0.75	0.6	11.5-13.5	0.03	0.03	0.75

All - Weld Metal Mechanical Properties / Welding Data:

Heat Treatment	PWHT: 750°C x 1h
Yield Strength Re, N/mm² (ksi)	≥ 350 (51)
Tensile Strength Rm, N/mm² (ksi)	≥ 450 (65)
Elongation A5 [%]	≥ 17
Impact Energy ISO-V, J (ft lbs)	+20°C: 47 (34)
Current/polarity	DC -
Shielding Gas	ISO 14175: I1

Base Materials:
1.4000 (X6Cr13); 1.4006 (X12Cr13), AISI 410

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

Diameter:
1,6 – 2,4 mm. Sizes and tolerances acc. to ISO 544 and AWS A5.9.

Wire Rod Surface:
Smooth finish free from surface defects and foreign matter.