

## Classifications

EN ISO 14343-A

W Z16 13 Nb

## Characteristics and typical fields of application

GTAW rod for high quality weld joints in high efficiency boilers and turbine components. Approved in long-term condition up to +8000 °C service temperature.

Fully austenitic weld deposit. Insusceptible to embrittlement and resistant to hot cracking.

## Base materials

Similar alloyed creep resistant steels

1.4961 X8CrNiNb16-13, 1.4910 X3CrNiMoN17-13-3, 1.4981 X8CrNiMoNb16-16, 1.4988 X8CrNiMoVNb16-13

## Typical analysis of the TIG rods (wt.-%)

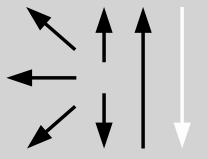
	C	Si	Mn	Cr	Ni	Nb
wt-%	0.16	0.5	2.5	15.8	13.5	1.7

## Mechanical properties of all-weld metal

Condition	Yield strength R <sub>p0.2</sub>	Tensile strength R <sub>m</sub>	Elongation A (L <sub>0</sub> =5d <sub>0</sub> )	Impact work ISO-V KV J
	MPa	MPa	%	+20 °C
u	<b>460</b> (≥ 390)	<b>630</b> (≥ 550)	<b>25</b> (≥ 20)	<b>60</b> (≥ 32)

u untreated, as welded – shielding gas Argon

## Operating data

	<b>Polarity:</b> DC (–)	<b>Shielding gas:</b> 100 % Argon	<b>Rod marking:</b> front: ✦ W Z 16 13 Nb back: 1.4961	<b>ø (mm)</b> 2.0 2.4
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Preheating is not required, low heat input is recommended, interpass temperature should not exceed 150 °C.

## Approvals

TÜV (2728.), CE