

## Classifications

EN ISO 14343-A	EN ISO 14343-B	AWS A5.9
W 19 9 H	SS19-10H	ER19-10H

## Characteristics and typical fields of application

GMAW rod with controlled delta ferrite content (3-8 FN) for austenitic CrNi steels with increased carbon contents (e.g. 1.4948 / 304H), in the boiler, reactor and turbine fabrication. Approved in long-term condition up to +700 °C service temperature (300 °C in the case of wet corrosion).

Steels to German material no. 1.4550 and 1.4551 which are approved for the high temperature range up to 550 °C, can also be welded.

## Base materials

Similar alloyed creep resistant steels

1.4948 X6CrNi18-10, 1.4878 X8CrNiTi18-10, 1.4940 X7CrNiTi18-10, 1.4912 X7CrNiNb18-10

AISI 304 H, 321 H, 347 H

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

	C	Si	Mn	Cr	Ni		FN
wt-%	0.05	0.4	1.6	18.8	9.3		3-8

## 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	-10 °C
u	<b>420</b> (≥ 350)	<b>620</b> (≥ 550)	<b>40</b> (≥ 30)	<b>150</b>	≥ 32

u untreated, as welded – shielding gas Argon

## Operating data

	Polarity:	Shielding gas:	Rod marking:	ø (mm)
	DC (-)	100 % Argon	front: ✦ W 19 9 H	2.0
			back: ER19-10H	2.4
				3.0

Interpass temperature should not exceed 200 °C.

## Approvals

TÜV (0139.), KTA 1408.1 (8068.), CE