

Classifications

EN ISO 14343-A

AWS A5.9 / SFA-5.9

W 19 9 H

ER19-10H

Characteristics and typical fields of application

TIG rod of W 19 9 H / ER19-10H type for joining and surfacing applications on matching and similar creep resistant steel and cast steel grades. Creep resistant up to 700°C. Controlled microstructure with max. 5% ferrite.

Base materials

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

AISI 304H, 321H, 347H

Typical analysis

	C	Si	Mn	Cr	Ni
wt.-%	0.05	0.4	1.8	18.8	9.3

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A ($L_0=5d_0$)	Impact energy ISO-V KV J
	MPa	MPa	%	20°C
u	400 (≥ 350)	600 (≥ 550)	≥ 30	100 (≥ 47)

u untreated, as-welded – shielding gas Ar

Operating data

	Polarity	DC-	Dimension mm
	Shielding gas	I1	1.6 x 1000
	(EN ISO 14175)		2.0 x 1000
			2.4 x 1000
			3.2 x 1000

Heat input max. 2.0 kJ/mm, interpass temperature max. 150°C.

Creep rupture properties according to matching high temperature steels / alloys.

Shielding gas: Ar

Approvals

TÜV (19654), CE