

Classifications

EN ISO 14343-A	EN ISO 14343-B	AWS A5.9
W 19 9 Nb	SS347	ER347

Characteristics and typical fields of application

GTAW rod of type W 19 9 Nb / ER 347 engineered to a very precise analysis to create a weld deposit of high purity, superior hot cracking a corrosion resistance.

CVN toughness down to $-196\text{ }^{\circ}\text{C}$, resistant to intergranular corrosion up to $+400\text{ }^{\circ}\text{C}$.

Base materials

1.4550 X6CrNiNb18-10, 1.4541 X6CrNiTi18-10, 1.4552 G-X5CrNiNb19-11, 1.4301 X5CrNi18-10, 1.4312 GX10CrNi18-8, 1.4546 X5CrNiNb18-10, 1.4311 X2CrNi18-10, 1.4306 X2CrNi19-11
AISI 347, 321,302, 304, 304L, 304LN; ASTM A296 Gr. CF 8 C, A157 Gr. C9, A320 Gr. B8C or D

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

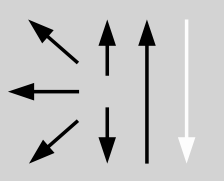
	C	Si	Mn	Cr	Ni	Nb
wt.-%	0.05	0.5	1.8	19.6	9.5	+

Mechanical properties of all-weld metal

Condition	Yield strength $R_{p0,2}$	Tensile strength R_m	Elongation A ($L_0=5d_0$)	Impact work ISO-V KV J	
	MPa	MPa	%	+20 °C	-196 °C
u	490 (≥ 350)	660 (≥ 550)	35 (≥ 25)	140	≥ 32

u untreated, as-welded – shielding gas Argon

Operating data

	Polarity: DC (-)	Shielding gas: 100 % Argon	Rod marking: front: ✦ W 19 9 Nb back: ER 347	ø (mm)
				1.6
				2.0
				2.4
				3.0

Preheating and post weld heat treatment is not required by the weld metal deposit

Approvals

TÜV (00142.), GL (4550), LTSS, SEPROZ, CE, NAKS