

Thermanit H-347

GTAW welding rod

Classifications	EN 12072	AWS A 5.9	Mat. No.
	W 19 9 Nb	ER347	1.4551

Characteristics and field of use
 Stainless; resistant to intercrystalline corrosion and wet corrosion up to 400 °C (752 °F). Corrosion-resistant similar to matching stabilized austenitic CrNi steels/cast steel grades.
 For joining and surfacing application with matching and similar – stabilized and non-stabilized – austenitic CrNi(N) steels and cast steel grades.

Marks  W 19 9 Nb

Materials
 TÜV-certified parent metal
 X6CrNiNb18-10 (1.4550) and the parent metals also covered by VdTÜV-Merkblatt 1000.
 AISI 347, 321, 302, 304, 304L, 304LN
 ASTM A296 Gr. CF8, A157 Gr. C9; A320 Gr. B8C or D

Typical analysis in %	C	Si	Mn	Cr	Ni	Nb
	0.05	0.5	1.8	19.5	9.5	≥12xC

Mechanical properties of the weld metal according to EN 1597-1 (min. values at RT)	Heat-treatment	Yield strength 0.2% N/mm ²	Yield strength 1.0% N/mm ²	Tensile strength N/mm ²	Elongation (L ₀ =5d ₀) %	Impact values in J CVN
	AW	400	430	570	30	65

Structure Austenite with part ferrite

Welding instruction

Materials	Preheating	Postweld heat treatment
Matching and similar steels/cast steel grades	None	Mostly none. Otherwise solution annealing at 1020 °C (1868 °F)

Polarity = –
Shielding gas (EN 439) I1

Approvals TÜV (Certificate No. 09475) VUZ

Packaging and weights	Diam. x Length (mm)	kg / pack
	1.6 x 1000	10
	2.0 x 1000	10
	2.4 x 1000	10
	3.2 x 1000	10