Thermanit H-347 Si

Solid wire, high-alloyed, austenitic stainless, stabilized

Classifications

EN ISO 14343-A	AWS A5.9 / SFA-5.9
G 19 9 Nb Si	ER347Si

Characteristics and typical fields of application

Solid wire of G 19 9 Nb Si / ER347Si type for joining and surfacing application with matching and similar stabilized and non-stabilized austenitic CrNi(N)-steels and cast steel grades. Max. service temperature 400ºC. Corrosion-resistant similar to matching stabilized austenitic CrNi-steels .

Base materials

1.4301 X5CrNi18-10, 1.4306 X2CrNi19-11, 1.4311 X2CrNiN18-9, 1.4312 GX10CrNi18-8, 1.4541 X6CrNiTi18-10, 1.4546 X5CrNiNb18-10, 1.4550 X6CrNiNb18-10, 1.4552 GX5CrNiNb19-11
UNS S30400, S30403, S30453, S32100, S34700
AISI 347, 321,302, 304, 304L, 304LN

Typical analysis

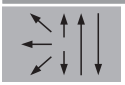
	C	Si	Mn	Cr	Ni	Nb
wt.-%	0.06	0.8	1.5	19.5	9.5	≥ 12×C

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)	570 (≥ 550)	30 (≥ 25)	65

u untreated, as-welded – shielding gas Ar + 2.5% CO_2

Operating data



Polarity	DC+
Shielding gas (EN ISO 14175)	M12 M13

Dimension mm
0.8
1.0
1.2

Suggested heat input is max. 1.5 kJ/mm and interpass temperature max. 100ºC.
Generally no heat treatment needed.

Approvals

TÜV (19611), DB (43.132.84), CE