

Classifications

EN ISO 3581-A	AWS A5.4	Mat. No.
E 19 9 Nb B 2 2	E347-15	1.4551

Characteristics and typical fields of application

Stainless; resistant to intercrystalline corrosion and wet corrosion up to 400 °C (752 °F). Corrosion resistant similar to matching low carbon and stabilized 18/8 CrNi(N) steels / cast steel grades.

For joining and surfacing applications with matching and similar – stabilized and non stabilized – CrNi(N) steels / cast steel grades.

For joining work on steel clad products and for weld cladding on unalloyed / low-alloyed creep-resistant steels / cast steel grades. To be used from the second layer onwards.

Base materials

TÜV certified parent metal 1.4550 – X6CrNiNb18-10; AISI 347, 321, 302, 304, 304L, 304LN; ASTM A296 Gr. CF 8 C; A157 Gr. C 9; A320 Gr. B8C od. D

Typical analysis of all-weld metal (wt.-%)

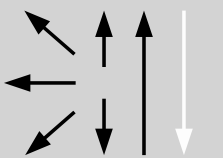
	C	Si	Mn	Cr	Ni	Nb
wt-%	< 0.035	0.5	1.3	19.5	10.0	> 13xC

Structure: Austenite with part ferrite

Mechanical properties of all-weld metal

Heat-treatment	Yield strength R _{p0.2}	Yield strength R _{p1.0}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact work ISO-V KV J
	MPa	MPa	MPa	%	+20 °C
aw	400	410	600	30	65

Operating data

	Polarity: DC (+)	ø (mm) 3.2 4.0	L mm 350 350	Amps A 80 – 110 110 – 140
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Welding instruction

Materials	Preheating	Postweld heat treatment
Joining of matching nonstabilized and stabilized 18/8 CrNi(N) steels / cast steel grades	None	Mostly none. If necessary, solution annealing at 1020 °C (1868 °F)
Claddings	According to parent metal	Stress relieving at max. 610 °C (1130 °F) max. 25 h

Approvals

TÜV (07665), CE