

Classifications

EN ISO 3581-A	AWS A5.4 / SFA-5.4
E 19 9 L R 3 2	E308L-17

Characteristics and typical fields of application

Rutile coated, core wire alloyed electrode of E 19 9 L R / E308L-17 type. Preferably used for 1.4306 / 304L and 304LN steel grades. Designed for first class weld seams and easy handling on AC or DC. High current carrying capacity with minimum spatter formation. Self-releasing slag, smooth and clean weld profile. Max. service temperature 350°C.

Base materials

1.4301 X5CrNi18-10, 1.4306 X2CrNi19-11, 1.4307 X2CrNi18-9, 1.4311 X2CrNi18-9, 1.4312 GX10CrNi18-8, 1.4541 X6CrNiTi18-10, 1.4546 X5CrNiNb18-10, 1.4550 X6CrNiNb18-10
UNS S30400, S30403, S30453, S32100, S34700
AISI 304, 304L, 304LN, 302, 321, 347

Typical analysis of all-weld metal

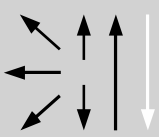
	C	Si	Mn	Cr	Ni
wt.-%	0.03	0.8	0.8	19.8	10.2

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 work ISO-V KV J		
	MPa	MPa	%	20°C	-120°C	-196°C
u	430 (≥ 320)	580 (≥ 520)	45 (≥ 30)	75	43	34 (≥ 32)

u untreated, as welded

Operating data

	Polarity DC+ / AC	Electrode identification FOX EAS 2-A 308L-17 E 19 9 L R	Dimension mm	Current A
			1.5 × 250	25 – 40
			2.0 × 300	40 – 60
			2.5 × 250/350	50 – 90
			3.2 × 350	80 – 120
			4.0 × 350	110 – 160
			5.0 × 450	140 – 200

Suggested heat input is max. 2.0 kJ/mm and interpass temperature max. 150°C.

Post-weld heat treatment generally not needed. In special cases, solution annealing can be performed at 1050°C followed by water quenching.

Redrying if necessary at 120 – 200°C for min. 2 h.

Approvals

TÜV (01095), DB (30.014.15), ABS, DNV GL, CWB, CE