

Classifications

EN ISO 3581-A	AWS A5.4 / SFA-5.4
E 19 9 L B 2 2	E308L-15

Characteristics and typical fields of application

Low-carbon, core-wire alloyed austenitic stick electrode of type E 19 9 L B / E308L-15 with basic coating. Thanks to the specially adapted alloy concept and a controlled ferrite content of 3 - 8 FN, the high requirements (at -196 °C, lateral width > 0.38 mm) for use in the low temperature range, e.g. LNG, can be optimally met. For all industries where similar steels are used for special areas of application. Developed for first class welds with good root and position welding. Good gap bridging and easy weld pool and slag control. Slag can be easily removed even in tight seams. The pure seam surface guarantees shorter reworking times. Also suitable for structures subject to tension and assembly welds. Operating temperature max. 350 °C.

Base materials

1.4301 X5CrNi18-10, 1.4306 X2CrNi19-11, 1.4307 X2CrNi18-9, 1.4311 X2CrNiN18-9, 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


	C	Si	Mn	Cr	Ni
wt.-%	0.03	0.4	1.3	19.5	10.5

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength	Tensile strength	Elongation A	Impact energy ISO-V KV J		Lateral expansion
	R _{p0.2}	R _m	(L ₀ =5d ₀)	20°C	-196°C	-196°C
	MPa	MPa	%			
u	410 (≥ 320)	555 (≥ 520)	43 (≥ 30)	125	53 (≥ 34)	0.70 (≥ 0.38)

u unbehandelt, Schweißzustand

Operating data

	Polarity	DC+	Dimension mm	Current A
	Electrode identification	FOX EAS 2 (LF) 308L-15 E 19 9 L B	2.5 × 350	50 – 80
			3.2 × 350	80 – 110
			4.0 × 350	110 – 140

Heat input max. 1.5 kJ/mm and interpass temperature max. 150°C.

Approvals

–