

Classifications

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

Characteristics and typical fields of application

Low carbon, core wire alloyed austenitic electrode with rutile-basic coating for use in all industries where similar type steels including higher carbon grades as well as ferritic 13% chromium steels are welded. This brand is noted for its outstanding welding characteristics, excellent weld ability on AC, and high hot cracking resistance of the weld metal. The main features of economic interest are excellent out-of-position weld ability, self-detaching slag with no residues, and moisture resistant coating. Resistant to intergranular corrosion up to 350°C.

Base materials

1.4306 X2CrNi19-11, 1.4301 X5CrNi18-10, 1.4311 X2CrNi18-10, 1.4312 G-X10CrNi18-8, 1.4541 X6CrNiTi18-10, 1.4546 X5CrNiNb18-10, 1.4550 X6CrNiNb18-10
AISI 304, 304L, 304LN, 302, 321, 347; ASTM A157 Gr. C9, A320 Gr. B8C or D

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

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

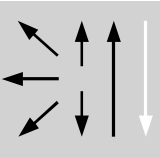
Mechanical properties of all-weld metal

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)	560 (≥ 520)	40 (≥ 30)	70	≥ 32	
sa						≥ 32

u untreated, as welded

sa solution annealed and quenched

Operating data

	Polarity	Redrying:	Electrode identification:	ø (mm)	L (mm)	Amps A
	DC (+) / AC	120 – 200°C, min. 2 h	308L-17	2.5	350	50 – 90
				3.2	350	80 – 120
				4.0	350	110 – 160

Approvals

TÜV (10647.), GL (4306), CE