

Thermanit JEW 308L-17

Rutile covered electrode

Classifications	EN 1600	AWS A 5.4	Mat. No.
	E 19 9 L R 3 2	E308L-17	1.4316

Characteristics and field of use

Stainless; resistant to intercrystalline corrosion and wet corrosion up to 350 °C (662 °F). Corrosion resistant similar to matching low carbon and stabilized austenitic 18/8 CrNi(N) steels/cast steel grades.

Good resistance to nitric acid. For joining and surfacing applications with matching and similar – stabilized and non stabilized – CrNi(N) steels/cast steel grades. Cold toughness at subzero temperatures as low as –105 °C (–157 °F).

Materials

TÜV certified parent metals
 X2CrNi18-10 (1.4311) X6CrNiNb18-10 (1.4550);
 AISI 304, 304L, 304LN, 302, 321, 347;
 ASTM A157 Gr. C9; A320 Gr. B8C or D

Typical analysis in %	C	Si	Mn	Cr	Ni
	<0.04	<0.9	0.8	19.5	9.5

Mechanical properties of the weld metal according to EN 1597-1 (min. values at RT)	Heat-treatment	Yield strength 0.2% N/mm ²	Yield strength 1.0% N/mm ²	Tensile strength N/mm ²	Elongation (L ₀ =5d ₀) %	Impact values in J CVN
	AW	320	350	550	35	65 (+20 °C) 40 (–105 °C)

Structure Austenite with part ferrite

Welding instruction

Materials	Preheating	Postweld heat treatment
Matching and similar non stabilized and stabilized CrNi(N) steels/cast steel grades	None	Mostly none. If necessary, solution annealing at 1000 °C (1832 °F)
Cryogenic austenitic steels/cast steel grades	None	None

Welding position



Polarity = + / ~

Approvals

TÜV (Certificate No. 0558)
 Controlas (0627)

DB (Reg. form No. 30.132.07)
 CWB

Packaging, weights and amperages	Dimensions (mm)	pcs./pack	kg/pack	Amperage A
	2.0 x 300	335	3.8	40- 60
	2.5 x 350	215	4.5	50- 90
	3.2 x 350	130	4.4	80-120
	4.0 x 350	90	4.6	110-160
	5.0 x 450	60	5.9	140-200