

308L/MVR-VDX AC/DC

For welding steels such as Outokumpu	EN	ASTM	BS	NF	SS
4301	1.4301	304	304S31	Z7 CN 18-09	2333
4307	1.4307	304L	304S11	Z3 CN 18-10	2352
4311	1.4311	304LN	304S61	Z3 CN 18-10 Az	2371
4541	1.4541	321	321S31	Z6 CNT 18-10	2337

Standard designations

EN 1600 E 19 9 L R
AWS A5.4 E308L-17

Characteristics

AVESTA 308L/MVR-VDX is a Cr-Ni electrode specially developed for optimal welding properties when welding thin ASTM 304 and 304L stainless plates in the vertical-down position.

Welding data

DC+ or AC	Diam. mm	Current, A
	2.0	35 – 55
	2.5	50 – 70
	3.25	95 – 105

Weld deposit data at maximum welding current

Electrode diam. length mm mm					Metal recov. ~ %
	N	B	H	T	
2.0 250	0.66	184	0.71	28	104
2.5 300	0.72	96	0.94	40	103
3.25 350	0.73	48	1.45	52	104

Typical analysis % (All weld metal)

C	Si	Mn	Cr	Ni
0.02	0.7	0.8	19.0	10.0

Ferrite 5 FN DeLong

Mechanical properties

	Typical values (IIW)	Min. values EN 1600
Yield strength $R_{p0.2}$	450 N/mm ²	320 N/mm ²
Tensile strength R_m	600 N/mm ²	510 N/mm ²
Elongation A_5	35 %	30 %
Impact strength KV		
+20°C	55 J	
-40°C	40 J	
Hardness approx.	210 Brinell	

Interpass temperature: Max. 150°C.

Heat input: Max. 2.0 kJ/mm.

Heat treatment: Generally none (in special cases quench annealing at 1050°C).

Structure: Austenite with 5 – 10% ferrite.

Scaling temperature: Approx. 850°C (air).

Corrosion resistance: Very good under fairly severe conditions, e.g. in oxidising acids and cold or dilute reducing acids.

Approvals

- CWB

Welding positions

