

# 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 <sup>2</sup>	320 N/mm <sup>2</sup>
Tensile strength $R_m$	600 N/mm <sup>2</sup>	510 N/mm <sup>2</sup>
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

