

# 308L/MVR basic

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 B  
 AWS A5.4      E308L-15

### Characteristics

AVESTA 308L/MVR basic is a Cr-Ni electrode providing better ductility than 3D type electrodes, especially at cryogenic temperatures. The electrode is intended for welding ASTM 304 and 304L stainless steels.

### Welding data

DC+ or AC	Diam., mm	Current, A
	2.50	50 – 75
	3.25	70 – 100
	4.00	100 – 140

### Weld deposit data at maximum welding current

Electrode diam.	length					Metal recov. ~%
		N	B	H	T	
2.5	300	0.61	100	0.77	47	98
3.25	350	0.67	48	1.23	61	103
4.0	350	0.67	32	1.66	68	102

### Typical analysis, % (All weld metal)

C	Si	Mn	Cr	Ni
0.03	0.4	1.3	20.0	10.0

Ferrite 8 FN WRC-92

### Mechanical Properties

	Typical values (IIW)	Min. values EN 1600
Yield strength $R_{p0.2}$	420 N/mm <sup>2</sup>	320 N/mm <sup>2</sup>
Tensile strength $R_m$	560 N/mm <sup>2</sup>	510 N/mm <sup>2</sup>
Elongation $A_5$	38 %	30 %
Impact strength KV		
+20°C	95 J	
-196°C	42 J	
Lateral exp. at -196°C	0.6 mm	
Hardness, approx.	200 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

- CE
- TÜV

### Welding positions

