



308L/MVR

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 is a Cr-Ni electrode for all position welding of ASTM 304 and 304L stainless steels.

Welding data

DC+ or AC	Diam. mm	Current, A
	1.6	25 – 45
	2.0	30 – 55
	2.5	45 – 70
	3.25	60 – 110
	4.0	90 – 150
	5.0	150 – 200

**Weld deposit data
at maximum welding current**

Electrode diam. length mm mm					Metal recov. ~ %
	N	B	H	T	
1.6 250	0.51	276	0.59	22	109
2.0 300	0.58	144	0.72	35	107
2.5 350	0.57	77	1.08	44	109
3.25 350	0.59	46	1.46	54	109
4.0 450	0.60	23	2.25	70	108
5.0 450	0.66	15	3.06	77	103

Typical analysis % (All weld metal)

C	Si	Mn	Cr	Ni
0.02	0.8	0.6	19.5	10.0

Ferrite 10 FN DeLong

**Mechanical
properties**

	Typical values (IIW)	Min. values EN 1600
Yield strength $R_{p0.2}$	470 N/mm ²	320 N/mm ²
Tensile strength R_m	570 N/mm ²	510 N/mm ²
Elongation A_5	37 %	30 %
Impact strength KV		
+20°C	60 J	
-40°C	55 J	
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
- DB
- DNV
- TÜV

Welding positions