



308L/MVR-4D

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

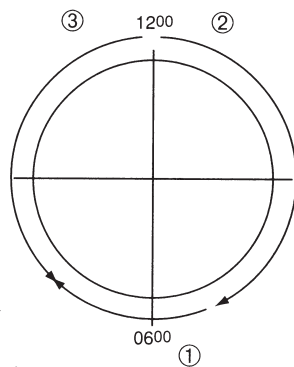
Standard designations

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

Characteristics

AVESTA 308L/MVR-4D is a thin-coated, rutile-acid type electrode specially developed for thin-walled pipe and sheet welding. The electrode is characterised by its good weldability in different positions and the good restriking properties. This electrode is primarily intended for pipe and position welding, but it can also be used as a general purpose electrode, especially for thin material.

Pipe welding can be performed in several different ways. One possibility is to start welding in the overhead position (1), followed by vertical-down on both sides from the 12 o'clock position (2 and 3). Another possibility



is to start at the 7 o'clock position and weld vertical-up to the 11 o'clock position on both sides. This requires an inverter power source with a remote control.

To bridge large root gaps DC- is often preferred.

Welding data

DC+ or AC	Diam. mm	Current, A
	1.6	15 – 40
	2.0	25 – 55
	2.5	30 – 85
	3.25	45 – 110

Typical analysis % (All weld metal)

C	Si	Mn	Cr	Ni
0.02	0.8	0.6	19.5	10.5

Ferrite 5 FN DeLong

Mechanical properties

	Typical values (IIW)	Min. values EN 1600
Yield strength $R_{p0.2}$	420 N/mm ²	320 N/mm ²
Tensile strength R_m	520 N/mm ²	510 N/mm ²
Elongation A_5	35 %	30 %
Impact strength KV		
+20°C	54 J	
-40°C	38 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

- CE
- TÜV

Welding positions

