

# 308L/MVR-NF

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-16)\*

\*Ni higher than standard

## Characteristics and welding directions

AVESTA 308L/MVR-NF is a Cr-Ni electrode for all position welding of austenitic stainless steels. The carefully controlled chemical composition gives a fully austenitic weld metal with very good toughness down to  $-196^{\circ}\text{C}$ .

## Welding data

DC+ or AC	Diam., mm	Current, A
	2.50	50 – 80
	3.25	70 – 120
	4.00	100 – 160

## Weld deposit data

Metal recovery approx. 100 %.

## Chemical composition, wire (typical values, %)

C	Si	Mn	Cr	Ni
0.02	0.5	1.9	19.4	12.9

Ferrite 0 FN

## Mechanical Properties

	Typical values (IIV)	Min. values EN 1600
Yield strength $R_{p0.2}$	400 N/mm <sup>2</sup>	320 N/mm <sup>2</sup>
Tensile strength $R_m$	520 N/mm <sup>2</sup>	510 N/mm <sup>2</sup>
Elongation $A_5$	40 %	30 %
Impact strength KV $-196^{\circ}\text{C}$	37 J	
Lateral expansion	0.60 mm	

**Interpass temperature:** Max.  $150^{\circ}\text{C}$ .

**Heat input:** Max. 2.0 kJ/mm

**Heat treatment:** Generally none. In special cases quench annealing at  $1020 - 1080^{\circ}\text{C}$ .

**Structure:** Fully austenitic.

**Scaling temperature:** Approx.  $850^{\circ}\text{C}$  (air).

**Corrosion resistance:** Good resistance to general corrosion.

**Approvals:** –

## Welding positions

