

# 308/308H AC/DC

For welding steels such as					
Outokumpu	EN	ASTM	BS	NF	SS
4948	1.4948	304H	304S51	Z6 CN 18-09	2333
4301	1.4301	304	304S31	Z7 CN 18-09	2333
4541	1.4541	321	321S31	Z6 CNT 18-10	2337
–	1.4550	347	347S31	Z6 CNNb 18-10	2338

## Standard designations

EN 1600                    E 19 9 R  
 AWS A5.4                E308H-17

## Characteristics

AVESTA 308/308H is a high-carbon Cr-Ni electrode primarily intended for welding ASTM 304 and 304H type stainless steels exposed to temperatures above 400°C.

## Welding data

DC+ or AC	Diam., mm	Current, A
	2.5	50 – 80
	3.25	80 – 120
	4.0	130 – 160
	5.0	160 – 220

## Weld deposit data

### at maximum welding current

Electrode diam. mm	length mm					Metal recov. ~%
		N	B	H	T	
2.5	300	0.57	87	0.98	42	113
3.25	350	0.59	45	1.52	53	109
4.0	350	0.61	30	2.06	58	107
5.0	350	0.64	20	2.79	64	102

## Typical analysis % (All weld metal)

C	Si	Mn	Cr	Ni
0.06	0.7	1.1	20.0	10.0
Ferrite		5 FN	DeLong	

## Mechanical Properties

	Typical values (IIW)	Min. values EN 1600
Yield strength R <sub>p0,2</sub>	450 N/mm <sup>2</sup>	350 N/mm <sup>2</sup>
Tensile strength R <sub>m</sub>	605 N/mm <sup>2</sup>	550 N/mm <sup>2</sup>
Elongation A <sub>5</sub>	37 %	30 %
Impact strength KV		
+20°C	55 J	
-40°C	50 J	
Hardness	210 Brinell	

**Interpass temperature:** Max. 150°C.

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

**Heat treatment:** Generally none (in special cases quench annealing att 1050°C).

**Structure:** Austenite with 5 – 10 % ferrite.

**Scaling temperature:** Approx. 850°C (air).

**Corrosion resistance:** tatie modo dolendr erc

## Approvals

- CE
- CWB
- TÜV

## Welding positions

