

316/316H AC/DC

For welding steels such as Outokumpu	EN	ASTM	BS	NF	SS
4401	1.4401	316	316S16	Z7 CND 17-11-02	2347
4571	1.4571	316Ti	320S17	Z6 CNDT 17-12	2350
–	1.4919	316H	316S51	Z6 CND 17-13	2347

Standard designations

EN 1600 E 19 12 2 R

AWS A5.4 E316H-17

Characteristics

AVESTA 316/316H AC/DC is a high carbon Cr-Ni-Mo electrode primarily intended for welding ASTM 316 and 316H 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	100 – 160

Weld deposit data at maximum welding current

Electrode diam. mm	length mm					Metal recov. ~ %
		N	B	H	T	
2.5	300	0.55	91	0.99	40	110
3.25	350	0.59	45	1.66	50	108
4.0	350	0.62	30	2.21	58	107

Typical analysis % (All weld metal)

C	Si	Mn	Cr	Ni	Mo
0.06	0.8	1.0	19.0	12.0	2.8

Ferrite 5 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	615 N/mm ²	550 N/mm ²
Elongation A_5	35 %	25 %
Impact strength KV +20°C	50 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: Approx. 95% austenite and 5% ferrite.

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

Corrosion resistance: Excellent resistance to general, pitting and intercrystalline corrosion in chloride containing environments.

Intended for severe conditions, e.g. in dilute hot acids.

Approvals

- CE
- CWB
- TÜV

Welding positions

