

316L/SKR basic

For welding steels such as					
Outokumpu	EN	ASTM	BS	NF	SS
4436	1.4436	316	316S33	Z7 CND 18-12-03	2343
4432	1.4432	316L	316S13	Z3 CND 17-12-03	2353
4429	1.4429	S31653	316S63	Z3 CND 17-12 Az	2375
4571	1.4571	316Ti	320S31	Z6 CNDT 17-12	2350

Standard designations

EN 1600 E 19 12 3 L B
 AWS A5.4 E316L-15

Characteristics

AVESTA 316L/SKR basic is a Cr-Ni-Mo electrode providing better ductility than 3D type electrodes, especially at cryogenic temperatures. The electrode is intended for welding ASTM 316 and 316L stainless steels.

Welding data

DC+ or AC	Diam., mm	Current, A
	2.50	50 – 70
	3.25	70 – 110
	4.00	100 – 150

Weld deposit data at maximum welding current

Electrode diam. mm	length mm					Metal recov. ~%
		N	B	H	T	
2.5	300	0.63	93	0.86	45	105
3.25	350	0.68	46	1.30	60	108
4.0	350	0.71	30	1.85	64	106

Typical analysis, % (All weld metal)

C	Si	Mn	Cr	Ni	Mo
0.03	0.2	1.3	18.5	12.0	2.6
Ferrite		6 FN	WRC-92		

Mechanical Properties

	Typical values (IIV)	Min. values EN 1600
Yield strength $R_{p0.2}$	430 N/mm ²	320 N/mm ²
Tensile strength R_m	565 N/mm ²	510 N/mm ²
Elongation A_5	34 %	25 %
Impact strength KV		
+20°C	95 J	
-196°C	40 J	
Lateral exp. at -196°C	0.5 mm	
Hardness, approx.	210 Brinell	

Interpass temperature: Max. 150°C.

Heat input: Max. 2.0 kJ/mm

Heat treatment: Generally none (n special caes quench annealing at 1050°C).

Structure: Austenite with 5 – 10 % 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 • TÜV

Welding positions

