

# 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 somewhat better ductility than AC/DC type electrodes especially at lower temperatures. The electrode is intended for welding ASTM 316 and 316L stainless steels.

## Welding data

DC+	Diam. mm	Current, A
	2.5	50 – 70
	3.25	70 – 110
	4.0	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	1.7	18.5	12.0	2.8

Ferrite 5 FN DeLong

## Mechanical properties

	Typical values (IIW)	Min. values EN 1600
Yield strength $R_{p0.2}$	430 N/mm <sup>2</sup>	320 N/mm <sup>2</sup>
Tensile strength $R_m$	565 N/mm <sup>2</sup>	510 N/mm <sup>2</sup>
Elongation $A_5$	34 %	25 %
Impact strength KV		
+20°C	70 J	
-40°C	50 J	
-196°C	25 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:** 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

