

316L/SKR-16

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 R
 AWS A5.4 E316L-16

Characteristics and welding directions

AVESTA 316L/SKR-16 is an all position Cr-Ni-Mo electrode for welding ASTM 316 and 316L stainless steels.

Welding data

DC+ or AC	Diam., mm	Current, A
	2.50	60 – 80
	3.25	80 – 110
	4.00	110 – 140

Chemical composition, wire (typical values, %)

C	Si	Mn	Cr	Ni	Mo
0.02	0.6	0.6	18.5	12.0	2.7
Ferrite		6 FN	WRC-92		

Mechanical Properties

	Typical values (IIV)	Min. values EN 1600
Yield strength $R_{p0.2}$	470 N/mm ²	320 N/mm ²
Tensile strength R_m	560 N/mm ²	510 N/mm ²
Elongation A_5	40 %	25 %
Impact strength KV		
+20°C	55 J	
-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: 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: –

Welding positions

