



316L/SKR-2D

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-17

Characteristics

AVESTA 316L/SKR-2D is a Cr-Ni-Mo high recovery electrode for welding ASTM 316 and 316L stainless steels. The 2D type electrode provides a metal recovery of about 150%, giving high deposition rate and an improved productivity in horizontal butt and overlay welding.

Welding data

DC+ or AC	Diam. mm	Current, A
	2.5	60 – 90
	3.25	80 – 130
	4.0	110 – 170
	5.0	170 – 230

Weld deposit data at maximum welding current

Electrode diam. mm	length mm					Metal recov. ~ %
		N	B	H	T	
2.5	350	0.60	54	1.47	45	151
3.25	400	0.58	31	2.11	56	136
4.0	450	0.64	17	3.10	69	146
5.0	450	0.63	11	4.18	78	140

Typical analysis % (All weld metal)

C	Si	Mn	Cr	Ni	Mo
0.03	0.8	0.8	18.0	12.0	2.8

Ferrite 10 FN DeLong

Mechanical properties

	Typical values (IIW)	Min. values EN 1600
Yield strength $R_{p0.2}$	420 N/mm ²	320 N/mm ²
Tensile strength R_m	575 N/mm ²	510 N/mm ²
Elongation A_5	37 %	25 %
Impact strength KV		
+20°C	55 J	
-40°C	55 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 • CWB • DNV • TÜV

Welding positions

