Avesta Welding

SLR AC/DC

For welding steels such as Outokumpu	EN	ASTM	BS	NF	SS
4438	1.4438	317L	317S12	Z3 CND 19-15-04	2367
4439	1.4439	317LMN	–	Z3 CND 18-14-05 Az	–

Standard designations

EN 1600 E 19 13 4 N L R

Characteristics

AVESTA SLR AC/DC is a high Mo-alloyed electrode primarily designed for welding Outokumpu 4438 and 4439. It is also suitable for welding ASTM 317L stainless steel.

Welding data

DC+ or AC	Diam. mm	Current, A
	2.5	50 – 80
	3.25	80 – 120
	4.0	100 – 160

Weld deposit data

Metal recovery approx. 110%.

Typical analysis % (All weld metal)

C	Si	Mn	Cr	Ni	Mo
0.02	0.8	1.0	18.5	13.5	4.0

Ferrite 10 FN DeLong

Mechanical properties	Typical values (IIW)	Min. values EN 1600
Yield strength $R_{p0.2}$	490 N/mm^2	350 N/mm^2
Tensile strength R_m	635 N/mm^2	550 N/mm^2
Elongation A_5	31 %	25 %
Impact strength KV		
+20°C	45 J	
–40°C	30 J	
Hardness approx.	225 Brinell	

Interpass temperature: Max. 100°C.

Heat input: Max. 1.5 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: Considerably higher resistance than ASTM 316L and slightly higher than 317L in acid and chloride containing environments.

Approvals

- CE
- TÜV

Welding positions

Ø 2.5–3.25 Ø 4.0