

Avesta 309L

Stick electrode

Classifications

high-alloyed

EN ISO 3581-A:

AWS A5.4:

E 23 12 L R

E309L-17

Characteristics and field of use

Avesta 309L is a high-alloyed low carbon electrode designed for welding dissimilar joints between stainless and mild or low-alloy steels. The electrode is well suited as a buffer layer when overlay welding on mild steels, providing an 18 Cr 8 Ni deposit from the very first layer. Avesta 309L can also be used for welding some high temperature steels, such as 1.4833/ASTM 309S.

Base materials

For welding steels such as					
Outokumpu	EN	ASTM	BS	NF	SS
High-alloyed low carbon electrode for surfacing unalloyed steel, joint welding molybdenum-alloyed stainless steel to unalloyed steel and for welding clad material.					

Typical analysis of all-weld metal (Wt-%)

C	Si	Mn	Cr	Ni
0.02	0.8	0.8	23.0	13.3

FN 12; WRC-92

Mechanical properties of all-weld metal

Heat Treatment	Yield strength 0.2%	Tensile strength	Elongation ($L_0=5d_0$)	Impact values in J CVN	
	MPa	MPa	%	+20°C:	-40°C:
untreated	450	570	35	50	45

Operating data

Polarity = + / ~

Dimensions (mm)	Amperage A
2.0	35-60
2.5	50-80
3.25	80-120
4.0	100-160
5.0	160-220