Avesta 309L-16

SMAW electrode, High alloyed

Classification		
AWS A5.4	**EN ISO 3581-A**	**GB/T 983**
E309L-16	E 23 12 L R	E309L-16

Characteristics and typical fields of application

23Cr-12Ni stainless steel rutile - coated electrode; with good corrosion resistance below 300 ° C; Electrode designed for dissimilar welding betwenn stainless steel and carbon steel (austenitic / ferrite)

Base Materials

Over-alloyed electrode for surfacing unalloyed steel, joint welding non-molybdenum-alloyed stainless steel to unalloyed steel and welding clad material.

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

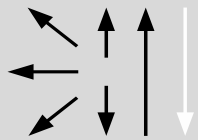
C	Si	Mn	Cr	Ni	Mo	Cu	N
0.02	0.7	0.80	23.5	12.4	0.05	0.02	0.07

Ferrite Number ≈ 10-15 FN WRC 92

Mechanical properties of the weld metal

Heat Treatment	Yield strength R_e N/mm^2	Tensile strength R_m N/mm^2	Elongation (L_0=4d_0)	Impact work ISO-V KV J	
	MPa	MPa	%	+20°C	-46°C
As Welded	450 (≥ 320)	560 (≥ 510)	40 (≥ 30)	65 (≥ 40)	40 (≥ 32)

Operating Data



Polarity
DC (+) / AC

Interpass temperature: Max. 150°C
Instruction for Re-drying: Re-dry for 3 h at 250-280°C before using

Approval

ABS, CWB, CE

Size, Packing and Recommended welding parameters

Size (mm)	Capsule Pack		Vacuum Pack		Amperage (A)
	Kg / Pack	Kg / Box	Kg / Pack	Kg / Box	
2.50 x 350	5.00	15.00	2.00	16.00	50-80
3.25 x 350	5.00	15.00	2.00	16.00	80-120
4.00 x 350	5.00	15.00	2.00	16.00	100-160
5.00 x 450	5.00	15.00	2.00	16.00	160-220