Avesta FC 309L-T1

Flux cored wire, high-alloyed, austenitic stainless, special applications

Classification

AWS A5.22

E309LT1-1

Characteristics and typical fields of application

Avesta FC 309L-T1 is a high-alloy 23Cr 13Ni wire primarily intended for surfacing on low-alloy steels and for dissimilar welds between mild steel and stainless steels. It provides the excellent usability with stable arc, less spattering, good bead appearance, and better slag removal.

Avesta FC 309L-T1 is designed for all-round welding and can be used in all positions without cahnging parameter settings.

Base Materials

Primarily used when surfacing unalloyed or low-alloy steels and when joining non-molybdenum alloyed stainless and carbon steels.

Typical analysis of solid wire (wt.-%)

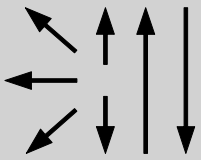
C	Si	Mn	Cr	Ni	Mo
0.03	0.60	1.50	23.2	12.8	0.02

Ferrite Number ≈ 10 – 15 FN WRC 92

Mechanical properties of all-weld metal

Heat treatment	Yield strength R_e N/mm²	Tensile strength R_m N/mm²	Elongation (L_0=5d_0)	Impact work ISO-V KV J
	MPa	MPa	%	- 20 °C
As Welded	390	550	35	50

Operating data



Polarity
DC+

Interpass temperature : Max. 150°C
Heat Input: Max. 2.0 KJ/mm
Shielding Gas : 100% CO_2
Gas Flow rate: 20-25 L/min
Wire stick out : 15-20 mm

Approvals

ABS

Size, Packaging and Electrical Operating Data

Size mm	Kg / Spool	Amperage (A)	Voltage (V)
1.20	15.0	150 – 240	22 – 30