

## Avesta FCW 309L-PW

Flux cored wire

## Classifications

high-alloyed rutile

EN ISO 17633-A:

AWS A5.22:

T 23 12 LP M21 1 ; T 23 12 LP C1 1

E309LT1-4 ; E309LT1-1

## Characteristics and field of use

Avesta FCW 309L-PW is a high-alloy wire primarily intended for surfacing on low-alloy steels and for dissimilar welds between mild steel and stainless steels. It can also be used for welding some high temperature steels, such as 1.4833/ASTM 309S. Avesta FCW 309L-PW has a stronger arc and a faster freezing slag compared to the 2D type. It is designed for all-round welding and can be used in all positions without changing the parameter settings. Avesta FCW 309L-PW should be welded using direct current positive polarity (DC+) with a recommended wire stick-out of 15 – 20 mm.

**Corrosion resistance:**

Superior to type 308L fillers. When used for overlay welding on mild steel a corrosion resistance equivalent to that of 1.4301/304 is obtained already in the first layer.

## Base materials

For welding steels such as					
Outokumpu	EN	ASTM	BS	NF	SS
Avesta 309L is primarily used for surfacing unalloyed or low-alloy steels and when joining non-molybdenum-alloyed stainless and carbon steels.					


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

C	Si	Mn	Cr	Ni
0.025	0.7	1.5	23.0	12.2

## 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:
untreated	390	550	35	55

## Operating data

	Polarity = +	Shielding gas: Ar + 15 – 25% CO <sub>2</sub> offers the best weldability, but 100% CO <sub>2</sub> can also be used (voltage should be increased by 2V). Gas flow rate 20–25 l/min.
---	--------------	---

Dimensions (mm)	Amperage A
1.2	150-240