

## Classifications

high-alloyed rutile

EN ISO 17633-A:

AWS A5.22:

T 19 12 3 LP M21 1 ; T 19 12 3 LP C1 1

E316LT1-4 ; E316LT1-1

## Characteristics and field of use

Avesta FCW 316L/SKR-PW is designed for welding 1.4436/ASTM 316 type stainless steels. It is also suitable for welding steels that are stabilised with titanium or niobium, such as 1.4571/ASTM 316Ti for service temperatures not exceeding 400°C. Avesta FCW 316L/SKR-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. Weldability is excellent in the vertical-up and overhead welding positions. Avesta FCW 316L/SKR-PW should be welded using direct current positive polarity (DC+) with a recommended wire stick-out of 15 – 20 mm.

**Corrosion resistance**

Excellent resistance to general, pitting and intercrystalline corrosion in chloride containing environments. Intended for severe service conditions, e.g. in dilute hot acids.

## Base materials

For welding steels such as					
Outokumpu	EN	ASTM	BS	NF	SS
4436	1.4436	316	316S33	Z7 CND 18-12-03	2343
4432	1.4432	316L	316S13	Z3 CND 17-12-03	2353
4429	1.4429	S31653	316S63	Z3 CND 17-12 Az	2375
4571	1.4571	316Ti	320S31	Z6 CNDT 17-12	2350

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


C	Si	Mn	Cr	Ni	Mo
0.025	0.8	1.5	18.8	11.8	2.7

Ferrite 10 FN; 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	400	560	37	60	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.
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Dimensions (mm)

Amperage A

1.2

150-240