

Avesta FCW-2D 316L/SKR

Flux cored wire

Classifications

high-alloyed rutile

EN ISO 17633-A:

AWS A5.22:

T 19 12 3 L R M21 3 ; T 19 12 3 L R C1 3

E316LT0-4 ; E316LT0-1

Characteristics and field of use

Avesta FCW 316L is designed for welding 1.4436/ASTM 316 type stainless steels. It is also suitable for welding steels that are stabilized with titanium or niobium, such as 1.4571/ASTM 316Ti for service temperatures not exceeding 400°C. Avesta FCW-2D 316L/SKR provides excellent weldability in flat as well as horizontal/vertical position. Welding in vertical-up and overhead positions is preferably done using FCW 316L/SKR-PW. FCW-2D 316L/SKR diam. 0.9 mm can be welded in all positions. Avesta FCW-2D 316L/SKR 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	0.7	1.5	19.0	12.0	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:	-196°C
untreated	400	560	33	55	50	28

Operating data

	Polarity = +	Shielding gas: Ar + 15 – 25% CO ₂ offers the best weldability, but 100% CO ₂ 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
0.9	100-160
1.2	125-280
1.6	200-350