

Classifications

EN ISO 3581-A	EN ISO 3581-B	AWS A5.4
E 19 12 3 L R 3 2	ES316L-16	E316L-17

Characteristics and typical fields of application

Avesta 316L/SKR is a low carbon core wire alloyed Cr-Ni-Mo electrode for welding of 1.4436/ASTM 316 type stainless steels.

The core wire alloyed concept ensures constant corrosion properties.

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

Base materials

1.4401 X5CrNiMo17-12-2, 1.4404 X2CrNiMo17-12-2, 1.4435 X2CrNiMo18-14-3, 1.4436 X3CrNiMo17-13-3, 1.4571 X6CrNiMoTi17-12-2, 1.4580 X6CrNiMoNb17-12-2, 1.4583 X10CrNiMoNb18-12, 1.4409 GX2CrNiMo19-11-2

UNS S31603, S31653; AISI 316L, 316Ti, 316Cb

Typical analysis of all-weld metal

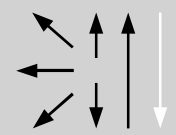
	C	Si	Mn	Cr	Ni	Mo
wt-%	0.02	0.8	0.7	18.0	12.0	2.8

Mechanical properties of all-weld metal

Heat-treatment	Yield strength R_e N/mm ²	Tensile strength R_m N/mm ²	Elongation ($L_0=5d_0$)	Impact work ISO-V KV J			Hardness
				+20 °C	-40°C	-120°C	
u	460	590	36	60	55	32	210

u untreated, as-welded

Operating data

	Polarity: DC (+) AC	Electrode identification: 316L-17/SKR	Ø mm	L mm	Amps A	
			1.6			25 – 50
			2.0			30 – 60
			2.5			45 – 80
			3.2			70 – 120
			4.0			90 – 160
			5.0			150 – 220

Approvals

TÜV (1073.), DB(30.014.18), DNV GL