

**Classifications**

high-alloyed

EN ISO 3581-A:

AWS A5.4:

E 19 12 3 L R

E316L-16

**Characteristics and field of use**

Avesta 316L/SKR Cryo is a Cr-Ni-Mo electrode for all position welding of austenitic stainless steels such as 1.4436/ASTM 316. The carefully controlled chemical composition gives a weld metal with a ferrite content in the range of 3 – 8 FN (WRC-92) and very good toughness down to -196°C.

**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
0.02	0.4	1.2	17.2	12.3	2.6

**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	%	-196°C:
untreated	450	570	35	42

**Operating data**


Polarity = +

**Dimensions (mm)**
**Amperage A**

2.5	50-80
3.25	70-120
4.0	100-160