

Classifications

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

Characteristics and typical fields of application

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 as specified for LNG applications.

Corrosion resistance:

Good resistance to general corrosion.

Base materials

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.-%)

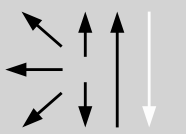
	C	Si	Mn	Cr	Ni	Mo
wt-%	0.02	0.4	1.2	17.2	12.3	2.6

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
	MPa	MPa	%	+20 °C	-196°C	HB
u	450	570	35	90	42	200

u untreated, as-welded

Operating data

	Polarity:	Electrode identification:	ø (mm)	L mm	Amps A
	DC (+)		2.5		50 – 80
			3.25		70 – 120
			4.0		100 – 160

Approvals

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