

Classifications		
EN ISO 17633-A	EN ISO 17633-B	AWS A5.22
T 19 12 3 L R C1 (M21) 3	TS316L-FB0	E316LT0-1 E316LT0-4

## Characteristics and typical fields of application

Rutile flux cored welding wire of type T 19 12 3 L R / E316LT0 for GMAW of stainless steels like 1.4435 / 316L.

This product achieves high productivity and is easy to operate providing excellent operating characteristics, self releasing slag, almost no spatter formation and temper discoloration, smooth weld finish and safe penetration. Increased travel speeds as well as little demand for cleaning and pickling provide considerable savings in time and money. Suitable for service temperatures of -120°C to +400°C. Resists intergranular corrosion up to +400 °C.

Avesta FCW-2D 316L/SKR AG ø1,2 mm can be used for wall thicknesses from 3 mm and up. Wire ø1,2 mm and ø1,6 mm are recommended mainly for down hand and horizontal welding positions, horizontal/vertical position as well as in position PC/2G. FN 4-8 (calculated WRC-92, 100 % CO<sub>2</sub>).

## 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 (wt.-%)

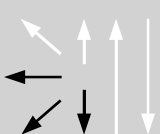
	C	Si	Mn	Cr	Ni	Mo
wt.-%	0.03	0.7	1.5	18.8	12.0	2.7

## Mechanical properties of all-weld metal

Heat-treatment	Yield strength R <sub>p2.0</sub>	Tensile strength R <sub>m</sub>	Elongation A (L <sub>0</sub> =5d <sub>0</sub> )	Impact work ISO-V KV J	
	MPa	MPa	%	+20 °C	-120 °C
u	400 (≥ 320)	560 (≥ 510)	38 (≥ 30)	≥ 47	≥ 32

u untreated, as welded – (Argon + 15 – 25 % CO<sub>2</sub>; 100 % CO<sub>2</sub>)

## Operating data

	Polarity:	Shielding gases:	Redrying:	ø (mm)	Amps A	Voltage V
	DC ( + )	M1 – M3; C1	possible 150 °C / 24 h	1.2 1.6	125 – 280 200 – 350	20 – 34 25 – 35

Welding with standard GMAW-facilities possible, slightly trailing torch position (angel appr. 80°), when using Argon + 15 – 25 % CO<sub>2</sub> as shielding gas it is necessary to decrease the voltage by 2 V; the gas flow should be 15 – 18 l/min.

## Approvals

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