Shield-Bright 316L

FCAW wire for low carbon 18%Cr - 12%Ni – 2%Mo stainless steel for all-position welding. For welding type 316 stainless. Contains molybdenum which resists pitting corrosion induced by sulphuric and sulphurous acids, chlorides and cellulose solutions. Used widely in the rayon, dye and paper making industries. Carbon content 0.04% maximum.

Specifications	
Classifications	SFA/AWS A5.22 : E316LT1-1 SFA/AWS A5.22 : E316LT1-4 JIS Z 3323 : TS316L-FB1 KS D 3612 : YF 316LC EN ISO 17633-A : T 19 12 3 L P C1 2 EN ISO 17633-A : T 19 12 3 L P M21 2
Approvals	VdTÜV : 04834 (M20,M21) LR : 316L (C1) KR : RW316LG(C) (C1) CWB : AWS A5.22 E316LT1-1, E316LT1-4 ClassNK : KW316LG (C1) DNV : 316L (C1) BV : 316L (C1) ABS : E316LT1-1 (C1) CE EN : 13479

Approvals are based on factory location. Please contact ESAB for more information.

Welding Current	DC+
Alloy Type	C Cr Ni Mo
Shielding Gas	M21, C1 (EN ISO 14175)

Typical Tensile Properties			
Condition	**Yield Strength**	**Tensile Strength**	**Elongation**
C1			
As Welded	442 MPa (64 ksi)	570 MPa (83 ksi)	53 %
M21			
As Welded	450 MPa (65 ksi)	580 MPa (84 ksi)	40 %

Typical Charpy V-Notch Properties		
Condition	**Testing Temperature**	**Impact Value**
C1		
As Welded	-29 °C (-20 °F)	60 J (44 ft-lb)
As Welded	-196 °C (-321 °F)	26 J (19 ft-lb)
M21		
As Welded	-29 °C (-20 °F)	52 J (38 ft-lb)
As Welded	-196 °C (-321 °F)	25 J (19 ft-lb)

Typical Weld Metal Analysis %							
C	**Mn**	**Si**	**S**	**P**	**Ni**	**Cr**	**Mo**
C1							
0.028	1.10	0.80	0.010	0.027	11.8	18.50	2.60
M21							
0.030	1.20	0.90	0.010	0.027	12.0	18.5	2.70

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Deposition Data				
Diameter	**Current**	**Voltage**	**Wire Feed Speed**	**Deposition Rate**
1.2 mm (0.045 in.)	130-220 A	24-29 V	5.8-14.4 m/min (228-567 in./min)	1.9-4.6 kg/h (4.2-10. lbs/h)