

Shield-Bright 316L X-tra

FCAW wire for 18%Cr - 12%Ni – 2%Mo stainless steel. For flat and horizontal position welding. Designed specifically for applications where the service environment can produce pitting corrosion. Commonly used in the pulp and paper industry. Carbon content 0.04% maximum.

Specifications	
Classifications	SFA/AWS A5.22 : E316LT0-1 SFA/AWS A5.22 : E316LT0-4 JIS Z 3323 : TS316L-FB0 - KR KS D 3612 : YF 316LC - KR EN ISO 17633-A : T 19 12 3 L R C1 3 EN ISO 17633-A : T 19 12 3 L R M21 3
Approvals	VdTÜV : 06612 LR : 316L S (C1) KR : RW316LG (C1) DNV : 316L (C1) CWB : AWS A5.22 E316LT0-1, E316LT0-4 ABS : E316LT0-1 (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
M21 Shielding Gas			
As Welded	450 MPa (65 ksi)	580 MPa (84 ksi)	36 %
C1 Shielding Gas			
As Welded	431 MPa (63 ksi)	565 MPa (82 ksi)	37 %

Typical Charpy V-Notch Properties		
Condition	Testing Temperature	Impact Value
C1 Shielding Gas		
As Welded	-29 °C (-20 °F)	45 J (33 ft-lb)
As Welded	-196 °C (-321 °F)	20 J (15 ft-lb)

Typical Weld Metal Analysis %							
C	Mn	Si	S	P	Ni	Cr	Mo
75% Ar - 25% CO₂							
0.030	1.30	0.60	0.008	0.020	12.0	19.0	2.70
100% CO₂							
0.026	1.47	0.46	0.006	0.024	12.0	18.5	2.70

Deposition Data				
Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
1.2 mm (0.045 in.)	150-250 A	25-32 V	8.0-16.0 m/min (315-630 in./min)	2.5-7.0 kg/h (5.5-15. lbs/h)
1.6 mm (1/16 in.)	200-350 A	26-34 V	4.0-11.0 m/min (157-433 in./min)	3.0-7.5 kg/h (6.6-16. lbs/h)