

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	ABS : E316LT0-1 CE : EN 13479 CWB : E316LT0-1 (M21) CWB : E316LT0-4 (C1) DNV-GL : VL 316L (C1) KR : RW316LG (C1) LR : 316L UKCA : EN 13479 VdTÜV : 06612

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	580 MPa	36 %
C1 Shielding Gas			
As Welded	431 MPa	565 MPa	37 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
C1 Shielding Gas		
As Welded	-29 °C	45 J
As Welded	-196 °C	20 J

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo
M21 Shielding Gas							
0.030	1.30	0.60	0.008	0.020	12.0	19.0	2.70
C1 shielding Gas							
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	150-250 A	25-32 V	8.0-16.0 m/min	2.5-7.0 kg/h
1.6 mm	200-350 A	26-34 V	4.0-11.0 m/min	3.0-7.5 kg/h