

Shield-Bright 316L X-tra

Shield-Bright 316L X-tra was developed for the welding Type 316L stainless steel and also can be used for the other stainless steels including Types 316 and 304L. In a few cases, e.g. nitric acid service, Shield-Bright 316L X-tra should not be used to weld 304L. It was designed specifically for applications where the service environment can produce pitting corrosion. Shield-Bright 316L X-tra was developed for welding in the flat position and for horizontal fillet welds with flat to concave beads with excellent slag removal.

Approvals	CWB AWS A5.22 E316LT0-1 VdTUV 06612 LR 316L S (C1) KR RW316LG (C1) DNV 316L (C1) E316LT0-4 ABS E316LT0-1 (C1) CE EN 13479
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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)
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)

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. lb/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. lb/h)