

Shield-Bright 309L X-tra

FCAW wire for 22%Cr - 12%Ni stainless steel For flat and horizontal position welding. Developed to be used when welding most mild or carbon steels to type 304. The higher percentages of Cr and Ni provide the necessary crack resistance. Carbon content 0.04% maximum.

Classifications Weld Metal	SFA/AWS A5.22 : E309LT0-4 SFA/AWS A5.22 : E309LT0-1 JIS Z 3323 : YF-309LC KS D 3612 : YF-309LC EN ISO 17633-A : T 23 12 L R C1 3 EN ISO 17633-A : T 23 12 L R M21 3
Approvals	ABS E309LT0-1 BV 309L (C1) CCS 309LS (C1) CE EN 13479 CWB E309LT0-1 (C1) CWB E309LT0-4 (M21) DNV NV 309L MS (C1) DNV NV 309L MS (M21) NAKS/HAKC 1.2MM VdTUV 06594

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

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

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
M21 Shielding Gas			
As Welded	480 MPa	600 MPa	35 %
C1 shielding gas			
As Welded	410 MPa	546 MPa	38 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
C1 shielding gas		
As Welded	-29 °C	40 J
As Welded	-196 °C	15 J

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr
0.032	1.46	0.66	0.004	0.021	12.8	24.50

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