

Shield-Bright 308L

Shield-Bright 308L was developed for welding type 304L stainless steel and can also be used for welding types 301, 302, and 304 steels. It may also be used for welding types 321 and 347 if the service conditions do not exceed an approximate of 750°F (399°C).

Specifications	
Classifications	SFA/AWS A5.22 : E308LT1-1 SFA/AWS A5.22 : E308LT1-4 JIS Z 3323 : YF 308LC KS D 3612 : YF 308LC EN ISO 17633-A : T 19 9 L P C1 2 EN ISO 17633-A : T 19 9 L P M21 2
Approvals	CWB : AWS A5.22 E308LT1-1, E308LT1-4 VdTÜV : 04832 (M20,M21) LR : 304L (C1) KR : RW308LG (C) (C1) DNV : NV 308L (C1) ClassNK : KW308LG(C) (C1) CCS : 308L (C1) ABS : E308LT1-1 (C1) CE EN : 13479

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

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

Typical Tensile Properties			
Condition	Yield Strength	Tensile Strength	Elongation
C1			
As Welded	372 MPa (54 ksi)	568 MPa (82 ksi)	61 %
M21			
As Welded	410 MPa (59 ksi)	580 MPa (84 ksi)	44 %

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)	30 J (22 ft-lb)
M21		
As Welded	-29 °C (-20 °F)	50 J (37 ft-lb)
As Welded	-196 °C (-321 °F)	28 J (21 ft-lb)

Typical Weld Metal Analysis %						
C	Mn	Si	S	P	Ni	Cr
C1						
0.025	1.10	0.70	0.007	0.025	10.0	19.1
M21						
0.030	1.20	0.90	0.007	0.025	10.1	19.3

Deposition Data				
Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate

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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)
1.6 mm (1/16 in.)	160-320 A	24-33 V	5.0-13.0 m/min (197-512 in./min)	2.0-4.5 kg/h (4.4-9.9 lbs/h)