

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
M21 Shielding Gas			
As Welded	410 MPa (59 ksi)	580 MPa (84 ksi)	44 %
C1 Shielding gas			
As Welded	372 MPa (54 ksi)	568 MPa (82 ksi)	61 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
M21 Shielding Gas		
As Welded	-196 °C (-321 °F)	28 J (21 ft-lb)
As Welded	-29 °C (-20 °F)	50 J (37 ft-lb)
C1 Shielding gas		
As Welded	-29 °C (-20 °F)	60 J (44 ft-lb)
As Welded	-196 °C (-321 °F)	30 J (22 ft-lb)

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr
M21 Shielding Gas						
0.030	1.20	0.90	0.007	0.025	10.1	19.3
C1 shielding gas						
0.025	1.10	0.70	0.007	0.025	10.0	19.1

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)