

Shield-Bright 308L

FCAW wire for 18%Cr - 8%Ni stainless steel, For all-position welding. For welding types 301, 302, 304, 304L, 308 and 308L of stainless steel. May be used for welding types 321 and 347 if service temperature does not exceed 500°F(260°C). Low carbon content minimizes carbide precipitation. Ferrite values will lower as impact toughness increases. Carbon content 0.04% maximum.

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

ABS : E308LT1-4
ABS : E308LT1-1
BV : 308L (C1)
BV : SA 308L (M21)
CCS : 308L (C1)
CE : EN 13479
ClassNK : KW308LG(C)
CWB : E308LT1-1 (M21)
CWB : E308LT1-4 (C1)
DNV : VL 308L (M21)
KR : RW308LG (C) (C1)
LR : 304L
RS : A-5 (x3CrNi 19 11)
UKCA : EN 13479
VdTÜV : 04832 (M20,M21)

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)

Tensile Properties

Testing Condition	Yield Strength	Tensile Strength	Elongation
M21 Shielding Gas			
As Welded	410 MPa	580 MPa	44 %
C1 Shielding gas			
As Welded	372 MPa	568 MPa	61 %

Charpy Testing

Testing Condition	Testing Temp	Impact Value
M21 Shielding Gas		
As Welded	-196 °C	28 J
As Welded	-29 °C	50 J
C1 Shielding gas		
As Welded	-29 °C	60 J
As Welded	-196 °C	30 J

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

Shield-Bright 308L

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr
C1 shielding gas						
0.025	1.10	0.70	0.007	0.025	10.0	19.1

Deposition Data

Diameter	Amps	Volts	Wire Feed Speed	Deposition Rate
1.2 mm	130-220 A	24-29 V	5.8-14.4 m/min	1.9-4.6 kg/h