

Shield-Bright 308L X-tra

Shield-Bright 308L X-tra was designed for welding type 304L stainless steel but can be used for types 301, 302, and 304 steels. It may also be used successfully for welding of types 321 and 347 stainless steel. Service conditions should not exceed an approximate of 750°F (399°C). Shield-Bright 308L X-tra was designed for welding in the flat position and for horizontal fillet welds with flat to concave beads with excellent slag removal.

Specifications

Classifications

EN ISO 17633-A : T 19 9 L R M21 3
 EN ISO 17633-A : T 19 9 L R C1 3
 KS D 3612 : YF 308LC - KR
 JIS Z 3323 : TS308L-FB0 - KR
 SFA/AWS A5.22 : E308LT0-4
 SFA/AWS A5.22 : E308LT0-1

Approvals

VdTÜV : 06611
 LR : 304L S (C1)
 KR : RW308LG(C) (C1)
 DNV : 308L (C1)
 CWB : AWS A5.22 E308LT0-1, E308LT0-4
 BV : 308L (M21)
 ABS : E308LT0-1 (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)	40 %
C1 shielding gas			
As Welded	409 MPa (59 ksi)	549 MPa (80 ksi)	55 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
M21 Shielding Gas		
As Welded	-29 °C (-20 °F)	40 J (30 ft-lb)
As Welded	-196 °C (-321 °F)	24 J (18 ft-lb)

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr
75% Ar - 25% CO2						
0.022	1.40	0.90	0.004	0.020	9.9	19.6
100% CO2						
0.030	1.30	0.48	0.004	0.020	9.8	19.4

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. lbs/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. lbs/h)