

Shield-Bright 347

Shield-Bright 347 was developed for the welding of stainless steel Types 321 and 347. As with all 347 weld metals, for service at temperatures greater than 1000°F (540°C) it can be used in circumstances of lower stress and not under creep conditions. Shield-Bright 347 can also be used for the welding of Types 302, 304 and sometimes 304L stainless steels. Shield-Bright 347 was developed for welding in all positions and performs particularly well in the vertical position with excellent slag removal.

Specifications

Classifications	SFA/AWS A5.22 : E347T1-1 SFA/AWS A5.22 : E347T1-4 JIS Z 3323 : TS347-FB1 KS D 3612 : YF347C EN ISO 17633-A : T 19 9 Nb P C1 2 EN ISO 17633-A : T 19 9 Nb P M21 2
Approvals	DNV-GL : VL 347 (C1) NAKS/HAKC : 1.2mm

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
100% CO₂			
As Welded	433 MPa (63 ksi)	622 MPa (90 ksi)	47 %
75% Ar - 25% CO₂			
As Welded	520 MPa (75 ksi)	650 MPa (94 ksi)	35 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
C1 Shielding Gas		
As Welded	-196 °C (-321 °F)	29 J (21 ft-lb)
As Welded	-29 °C (-20 °F)	55 J (41 ft-lb)

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Cu
C1 Shielding Gas							
0.04	1.10	0.80	0.01	0.02	9.95	19.0	0.15

Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
1.2 mm (.045 in.)	130-220 A	24-29 V	5.8-14.4 m/min (228-567 in./min)	1.9-4.6 kg/h (4.2-10.1 lbs/h)