

OK Flux 10.94

Basic, chromium-compensating, agglomerated flux for butt welding of stainless steels. Specially recommended for welding of stainless steels of the superduplex type. Low Si addition during welding provides good mechanical properties in the weld metal.

Specifications	
Classifications	EN ISO 14174 : S A AF 2 56 64 DC

Slag Type	Fluoride basic CaF ₂ -Al ₂ O ₃ -SiO ₂
Alloy Transfer	Chromium compensating
Density	nom: 1.0 kg/dm ³
Basicity Index	nom: 1.9

Flux Consumption	
Volts	kg Flux / kg Wire DC+
34 V	0.8 kg
30 V	0.6 kg
26 V	0.5 kg
38 V	1.0 kg

Condition : Dimension 4.0 mm , Amps 580 A , Travel Speed 33 m/h

Classifications		
Wire	SFA/AWS - EN ISO	AWS - As Welded
OK Autrod 2209	A5.9:ER2209/ 14343-A:S 22 9 3 N L	-
OK Autrod 2509	A5.9:ER2594/ 14343-A:S 25 9 4 N L	A5.39: F120A8-ER2594/2594
OK Autrod 308L	A5.9:ER308L/ 14343-A:S 19 9 L	-
OK Autrod 347	A5.9:ER347/ 14343-A:S 19 9 Nb	-

Approvals	
Wire	
*Selected production units only. Please contact ESAB for more information. Visit esab.com to download specific flux/wire combination fact sheets for more details.	

Typical Weld Metal Analysis %									
C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
OK Autrod 2209 Current: DC+, 420A, 27V									
0.01	1.3	0.6	-	-	8.5	23.0	3.0	-	0.14
OK Autrod 2209									
-	-	-	0.01	0.02	-	-	-	0.1	-
OK Autrod 2509 Current: DC+, 400A, 28V, 48cm/min									
0.02	0.4	0.45	0.01	0.017	9.3	24.5	3.5	0.10	0.24
OK Autrod 308L DC+									
0.02	1.4	0.5	-	-	9.5	20	-	-	-
OK Autrod 308L									
-	-	-	-	-	-	-	0.2	0.1	-
OK Autrod 347									
-	-	-	-	-	-	-	-	-	-
OK Autrod 347 DC+									
0.04	1.0	0.5	-	-	9.6	19.6	-	-	-

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Typical Weld Metal Analysis %

Nb	FN WRC-92	W
OK Autrod 2209 Current: DC+, 420A, 27V		
-	45	-
OK Autrod 2509 Current: DC+, 400A, 28V, 48cm/min		
-	54	<0.002
OK Autrod 308L		
-	11	-
OK Autrod 347		
-	9	-
OK Autrod 347 DC+		
0.5	-	-

Typical Wire Composition %

C	Mn	Si	Ni	Cr	Mo	N	Nb	PRE	FN WRC-92
OK Autrod 2209									
0.01	1.5	0.5	8.5	22.7	3.2	0.17	-	35	55
OK Autrod 2509									
0.01	0.4	0.4	9.4	25.2	3.9	0.24	-	42	50
OK Autrod 308L									
0.02	1.9	0.4	9.8	19.8	-	0.05	-	-	-
OK Autrod 347									
0.04	1.4	0.4	9.5	19.2	-	0.05	0.6	-	7

Typical Mechanical Properties

Wire	Condition	Yield Strength	Tensile Strength	Elongation	Charpy V-Notch
OK Autrod 2209	As Welded DC+	630 MPa	780 MPa	30 %	60 J @ -40 °C 42 J @ -60 °C
OK Autrod 2509	As Welded DC+	680 MPa	870 MPa	25 %	70 J @ 20 °C 50 J @ -60 °C
OK Autrod 308L	As Welded	400 MPa	560 MPa	40 %	85 J @ 20 °C 70 J @ -40 °C 60 J @ -60 °C
OK Autrod 347	As Welded	455 MPa	620 MPa	35 %	100 J @ 20 °C 70 J @ -60 °C 50 J @ -110 °C 30 J @ -196 °C