

OK Flux 10.93

OK Flux 10.93 is an agglomerated, basic flux for submerged arc welding of stainless steels. It is used for single and multi-run welding of all plate thicknesses. It can be combined with a wide range of stainless steel wires and is commonly used for butt & fillet welding of all standard austenitic and higher alloyed stainless steels. It provides a very good slag detachability, a smooth surface finish and an excellent bead appearance.

Specifications	
Classifications	EN ISO 14174 : S A AF 2 56 54 DC
Approvals	CE : EN 13479 DB : 51.039.10 NAKS/HAKC : RD 03-613-03 UKCA : EN 13479

Approvals are based on factory location. Please contact ESAB for more information.

Slag Type	CaF ₂ -Al ₂ O ₃ -SiO ₂
Alloy Transfer	Non alloying
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

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

Classifications	
Wire	SFA/AWS - EN ISO
OK Autrod 16.10	A5.9: ER308L
OK Autrod 16.11	A5.9: ER347
OK Autrod 16.30	A5.9: ER316L
OK Autrod 16.53	A5.9: ER309L

Approvals									
Combined with Wire	ABS	BV	CE	ClassNK	DNV-GL	LR	VdTÜV	DB	DNV
OK Autrod 2209	•	•	•	•	•	•	•	-	-
OK Autrod 2509	-	-	•	-	-	-	•	-	-
OK Autrod 308L	•	•	•	-	•	-	•	•	-
OK Autrod 309L	•	-	•	-	•	•	•	-	-
OK Autrod 316L	•	-	•	-	-	-	•	•	•
OK Autrod 318	-	-	•	-	-	-	•	•	-
OK Autrod 347	-	-	•	-	-	-	•	•	-

Typical Weld Metal Analysis %						
C	Mn	Si	Ni	Cr	Mo	Nb
OK Autrod 16.10 DC+						
0.02	1.40	0.60	8.60	18.80	-	-
OK Autrod 16.11 DC+						
0.05	1.20	0.55	8.50	18.30	-	0.50
OK Autrod 16.30 DC+						
0.02	1.40	0.50	10.60	17.50	2.00	-

OK Flux 10.93

Typical Weld Metal Analysis %

C	Mn	Si	Ni	Cr	Mo	Nb
OK Autrod 16.53 DC+						
0.02	1.40	0.50	11.60	22.10	-	-

Typical Mechanical Properties

Combined with Wire	Condition	Yield Strength	Tensile Strength	Elongation	Charpy V-Notch
OK Autrod 16.10	As Welded DC+	410 MPa	570 MPa	38 %	80 J @ -60 °C 60 J @ -110 °C 45 J @ -196 °C
OK Autrod 16.11	As Welded DC+	420 MPa	590 MPa	36 %	60 J @ -60 °C 45 J @ -110 °C 30 J @ -196 °C
OK Autrod 16.30	As Welded DC+	400 MPa	530 MPa	35 %	70 J @ -60 °C 65 J @ -110 °C 40 J @ -196 °C
OK Autrod 16.53	As Welded DC+	430 MPa	570 MPa	35 %	65 J @ -60 °C 55 J @ -110 °C 35 J @ -196 °C