

OK Flux 10.99

This flux/wire combination is designed for welding of stainless chromium nickel no stabilized alloys. The weld metal is austenitic with adequate amount of ferrite and offers good resistance to uniform corrosion. OK Flux 10.99 works equally well on DC+ and AC current.

Caractéristiques	
Classements	EN ISO 14174 : S A FB 2 55 53 AC
Type de laitier	Fluoride basic CaF ₂ - MgO - Al ₂ O ₃
Transfert d'alliage	Non alloying
Densité	nom: 1.0 kg/dm ³
Indice de basicité	nom: 2.1

Consommation de flux		
Tensions	kg flux / kg fil, c.c.	kg flux / kg fil, c.a.
34 V	0.9 kg	1.1 kg
30 V	0.8 kg	0.8 kg
26 V	0.7 kg	0.6 kg
38 V	1.1 kg	1.3 kg

Condition : Dimension 3.2 mm , A 400 A , Vitesse de déplacement 50 cm/min

Classifications		
Fil	AWS/EN	AWS – brut de soudage
OK Autrod 308L	A5.9:ER308L/ 14343-A:S 19 9 L	-
OK Autrod 309L	A5.9:ER309L/ 14343-A:S 23 12 L	-
OK Autrod 316L	A5.9:ER316L/ 14343-A:S 19 12 3 L	-
OK Autrod 316LMn	A5.9:ER316LMn/ 14343-A:S 20 16 3 Mn N L	-
OK Autrod NiCrMo-4	A5.14:ERNiCrMo-4/ 18274:S Ni 6276 (NiCr15Mo16Fe6W4)	A5.39: F100A32-ERNiCrMo-4/NiCrMo-4

Homologations		
Fil	CCS	LR
OK Autrod NiCrMo-4	•	•

composition du fil									
C	Mn	Si	Ni	Cr	Mo	Cu	N	FN WRC-92	W
OK Autrod 308L									
0.02	1.9	0.4	9.8	19.8	-	-	0.05	-	-
OK Autrod 309L									
0.02	1.8	0.4	13.4	23.2	0.10	0.1	0.05	10	-
OK Autrod 316L									
0.01	1.7	0.4	12.0	18.2	2.6	-	0.04	7	-
OK Autrod 316LMn									
0.01	6.9	0.4	15.9	19.9	3.0	-	0.18	-	-
OK Autrod NiCrMo-4									
0.01	0.45	0.05	Bal.	15.5	16.1	-	-	-	3.5

composition du fil	
Fe	
OK Autrod NiCrMo-4	
5.8	

OK Flux 10.99

analyse du métal d'apport									
C	Mn	Si	S	P	Ni	Cr	Mo	V	Cu
OK Autrod 308L AC									
0.025	1.9	0.3	-	-	9.8	19.2	0.1	-	-
OK Autrod 308L DC+									
0.02	1.9	0.3	-	-	9.8	19.2	0.1	-	-
OK Autrod 308L									
-	-	-	0.01	0.02	-	-	-	-	0.2
OK Autrod 309L									
-	-	-	0.01	0.02	-	-	-	-	0.04
OK Autrod 309L AC									
0.030	1.9	0.4	-	-	13.0	22.0	0.1	-	-
OK Autrod 316L AC									
0.025	1.7	0.4	-	-	12.0	18.3	2.6	-	-
OK Autrod 316L									
-	-	-	0.01	0.02	-	-	-	-	0.2
OK Autrod 316LMn									
0.03	7.0	0.5	0.01	0.02	16.0	20.0	3.0	-	0.30
OK Autrod NiCrMo-4									
0.015	0.7	0.08	0.002	0.006	Bal	15.2	15.6	0.1	0.1

analyse du métal d'apport				
N	Co	FN WRC-92	W	Fe
OK Autrod 308L AC				
0.07	-	6	-	-
OK Autrod 308L DC+				
0.07	-	6	-	-
OK Autrod 309L AC				
0.09	-	-	-	-
OK Autrod 316L AC				
0.05	-	6	-	-
OK Autrod 316LMn				
0.17	-	-	-	-
OK Autrod NiCrMo-4				
-	0.1	-	3.7	6.5

Propriétés mécaniques types					
Fil	Condition	Limite d'élasticité	Résistance la traction	Allongement	Charpy entaille en V
OK Autrod 308L	Brut de soudage DC+	400 MPa (58 ksi)	560 MPa (81 ksi)	36 %	85 J @ -20 °C (63 ft-lb @ -4 °F) 80 J @ -40 °C (59 ft-lb @ -40 °F) 75 J @ -60 °C (56 ft-lb @ -76 °F) 50 J @ -196 °C (37 ft-lb @ -320.8 °F)
OK Autrod 308L	Brut de soudage AC	400 MPa (58 ksi)	560 MPa (81 ksi)	36 %	105 J @ -20 °C (78 ft-lb @ -4 °F) 100 J @ -40 °C

OK Flux 10.99

Propriétés mécaniques types					
Fil	Condition	Limite d'élasticité	Résistance la traction	Allongement	Charpy entaille en V
					(74 ft-lb @ -40 °F) 90 J @ -60 °C (67 ft-lb @ -76 °F) 55 J @ -196 °C (41 ft-lb @ -320.8 °F)
OK Autrod 309L	Brut de soudage AC	410 MPa (59 ksi)	575 MPa (83 ksi)	36 %	105 J @ -20 °C (78 ft-lb @ -4 °F) 100 J @ -40 °C (74 ft-lb @ -40 °F) 95 J @ -60 °C (70 ft-lb @ -76 °F) 85 J @ -110 °C (63 ft-lb @ -166 °F)
OK Autrod 316L	Brut de soudage AC	410 MPa (59 ksi)	570 MPa (83 ksi)	35 %	110 J @ -20 °C (81 ft-lb @ -4 °F) 105 J @ -40 °C (78 ft-lb @ -40 °F) 100 J @ -60 °C (74 ft-lb @ -76 °F) 70 J @ -196 °C (52 ft-lb @ -320.8 °F)
OK Autrod 316LMn	Brut de soudage 400A, 30V, 33m/h AC	420 MPa (61 ksi)	630 MPa (91 ksi)	40 %	105 J @ -60 °C (78 ft-lb @ -76 °F) 90 J @ -110 °C (67 ft-lb @ -166 °F) 55 J @ -196 °C (41 ft-lb @ -320.8 °F)
OK Autrod NiCrMo-4	Brut de soudage HI ~0, 9-1,1 kJ/mm DC+	480 MPa (70 ksi)	720 MPa (104 ksi)	42 %	75 J @ -196 °C (56 ft-lb @ -320.8 °F)
OK Autrod NiCrMo-4	Brut de soudage HI ~0, 9-1,1 kJ/mm AC	480 MPa (70 ksi)	720 MPa (104 ksi)	42 %	100 J @ -196 °C (74 ft-lb @ -320.8 °F)