

OK Flux 10.16

OK Flux 10.16 is an agglomerated fluoride basic, non-alloying flux for submerged arc welding specially designed for joining as well as overlay applications on Ni-based alloys.

Classifications	EN ISO 14174 : S A FB 2 55 43 DC
Approvals	NAKS/HAKC RD 03-613-03

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

Welding Current	900 A (60 x 0.5 mm strip)
Slag Type	Fluoride basic CaF ₂ -Al ₂ O ₃ -(TiO ₂)-(MnO)
Alloy Transfer	Moderately manganese and silicon alloying
Density	nom 1.2 kg/dm ³
Basicity Index	nom 2.4

Classifications

Wire	SFA/AWS - EN ISO
OK Autrod NiCr-3	A5.14:ERNiCr-3/ 18274:S Ni 6082 (NiCr20Mn3Nb)
OK Autrod NiCrMo-13	A5.14:ERNiCrMo-13/ 18274:S Ni 6059 (NiCr23Mo16)
OK Autrod NiCrMo-3	A5.14:ERNiCrMo-3/ 18274:S Ni 6625 (NiCr22Mo9Nb)
OK Autrod NiCrMo-3 SAW	A5.14:ERNiCrMo-3/ 18274:S Ni 6625 (NiCr22Mo9Nb)
OK Band NiCrMo3	A5.14:EQNiCrMo-3/ 18274:B Ni 6625 (NiCr22Mo9Nb)

Approvals

Combined with Wire	VdTUV
OK Band NiCr3	•

Typical Mechanical Properties

Combined with Wire	Condition	Yield Strength	Tensile Strength	Elongation	Charpy V-Notch
OK Autrod NiCr-3	As Welded 325A DC+ Feed speed: 25m/h	360 MPa (52 ksi)	600 MPa (87 ksi)	41 %	140 J @ 20°C (104 ft-lb @ 68°F) 100 J @ -196°C (74 ft-lb @ -320.8°F)
OK Autrod NiCrMo-13	As Welded 300A DC+ Feed speed: 25m/h	490 MPa (71 ksi)	730 MPa (106 ksi)	44 %	80 J @ 20°C (59 ft-lb @ 68°F) 75 J @ -60°C (56 ft-lb @ -76°F) 60 J @ -196°C (44 ft-lb @ -320.8°F)
OK Autrod NiCrMo-3	As Welded HI ~1.0-1.7 kJ/mm DC+	450 MPa (65 ksi)	720 MPa (104 ksi)	38 %	100 J @ -140°C (74 ft-lb @ -220°F) 90 J @ -196°C (67 ft-lb @ -320.8°F)
OK Autrod NiCrMo-3	As Welded HI ~1.0-1.7 kJ/mm DC+	450 MPa (65 ksi)	720 MPa (104 ksi)	43 %	100 J @ -140°C (74 ft-lb @ -220°F) 90 J @ -196°C (67 ft-lb @ -320.8°F)
OK Autrod NiCrMo-3 SAW	As Welded HI ~1.0-1.7 kJ/mm DC+	450 MPa	720 MPa	43 %	100 J @ -140°C 90 J @ -196°C

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Al	Cu
OK Autrod NiCr-3 DC+ , 325A, 30V									
0.01	3.2	0.3	0.010	0.010	Bal.	19.0	-	-	-
OK Autrod NiCrMo-13 Current Type: DC+ , 300A, 30V									
0.02	0.7	0.2	-	-	Bal	18.0	16.5	0.1	-
OK Autrod NiCrMo-3 DC+, 320A, 30V									
0.01	0.6	0.3	0.01	0.01	Bal.	19.5	8.5	-	0.08

Co	Fe	Nb+Ta
OK Autrod NiCr-3 DC+ , 325A, 30V		



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Co	Fe	Nb+Ta
-	1.3	2.3
OK Autrod NiCrMo-13 Current Type: DC+ , 300A, 30V		
0.1	2.0	0.1
OK Autrod NiCrMo-3 DC+, 320A, 30V		
-	2.0	3.0