

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.

Specifications

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	AWS/EN	AWS - As Welded
OK Autrod NiCrMo-3	A5.14:ERNiCrMo-3/ 18274:S Ni 6625 (NiCr22Mo9Nb)	A5.39: F100A32-ERNiCrMo-3/NiCrMo-3
OK Band NiCrMo3	A5.14:EQNiCrMo-3/ 18274:B Ni 6625 (NiCr22Mo9Nb)	-

Approvals

Combined with 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 NiCrMo-3 DC+, 350A, 28V, 35cm/min									
0.01	0.6	0.3	-	-	Bal.	20.7	8.5	-	-
OK Autrod NiCrMo-3									
-	-	-	0.010	0.01	-	-	-	0.02	-
OK Band NiCrMo3									
-	-	-	0.01	0.01	-	-	-	-	0.025
OK Band NiCrMo3 DC+, 750A, 27V, 13cm/min									
0.02	1.0	0.2	-	-	Bal	19.0	7.4	-	-

Typical Weld Metal Analysis %

Fe	Nb+Ta
OK Autrod NiCrMo-3 DC+, 350A, 28V, 35cm/min	
1.0	3.0
OK Band NiCrMo3	
-	2.8
OK Band NiCrMo3 DC+, 750A, 27V, 13cm/min	
12.8	2.6

Typical Wire Composition %

C	Mn	Si	Ni	Cr	Mo	Fe	Nb+Ta
OK Autrod NiCrMo-3							
0.02	0.04	0.06	Bal	22.7	8.6	0.3	3.5

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Typical Wire Composition %

C	Mn	Si	Ni	Cr	Mo	Fe	Nb+Ta
OK Band NiCrMo3							
<0.1	0.3	0.1	58.0	22.0	9.0	2.0	4.0

Typical Mechanical Properties

Combined with Wire	Condition	Yield Strength	Tensile Strength	Elongation	Charpy V-Notch
OK Autrod NiCrMo-3	As Welded HI ~1.0-1.7 kJ/mm DC+	450 MPa (65 ksi)	720 MPa (104 ksi)	50 %	110 J @ -140 °C (81 ft-lb @ -220 °F) 100 J @ -196 °C (74 ft-lb @ -320.8 °F)