

OK Flux 10.90

Agglomerated aluminate-fluoride-basic flux for welding of 9 % Ni steels and other high alloyed steels with Ni based wires. The flux is manganese adding, which reduces the risk of hot cracking. Good slag detachability and nice bead appearance.

Классификации	EN ISO 14174 : S A AF 2 55 53 MnNi DC
Тип шлака	Fluoride basic CaF ₂ -Al ₂ O ₃ -SiO ₂
Перенос легирующего элемента	Chromium compensating. Nickel- and manganese alloying.
Плотность	nom 1.0 kg/dm ³
Показатель щелочности	nom 1.7

Flux Consumption

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

Dimensions	Amps	Travel Speed
4.0 mm	580 A	33 m/h

Classifications

Wire	SFA/AWS - EN ISO	AWS - As Welded
OK Autrod 310	A5.9:ER310/ 14343-A:S 25 20	
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)	A5.39: F100A32-ERNiCrMo-3/G
OK Autrod NiCrMo-3	A5.14:ERNiCrMo-3/ 18274:S Ni 6625 (NiCr22Mo9Nb)	A5.39: F100A32-ERNiCrMo-3/G
OK Autrod NiCrMo-3 SAW	A5.14:ERNiCrMo-3/ 18274:S Ni 6625 (NiCr22Mo9Nb)	
OK Autrod NiCrMo-4	A5.14:ERNiCrMo-4/ 18274:S Ni 6276 (NiCr15Mo16Fe6W4)	A5.39: F100A32-ERNiCrMo-4/G
OK Autrod NiCrMo-4	A5.14:ERNiCrMo-4/ 18274:S Ni 6276 (NiCr15Mo16Fe6W4)	A5.39: F100A32-ERNiCrMo-4/G

Approvals

Combined with Wire	ABS	BV	DNV	RINA	CCS	ClassNK	KR	DNV-GL
OK Autrod NiCrMo-3	-	-	-	-	-	-	-	•
OK Autrod NiCrMo-3 SAW	-	-	•	-	-	-	-	-
OK Autrod NiCrMo-4	•	•	•	•	•	•	•	•

Typical Mechanical Properties

Combined with Wire	Condition	Yield Strength	Tensile Strength	Elongation	Charpy V-Notch
OK Autrod 310	As Welded ISO DC+ hr	390 MPa	570 MPa	34 %	85 J @ 20°C
OK Autrod NiCr-3	As Welded ISO DC+ hr	400 MPa	600 MPa	35 %	145 J @ -80°C 130 J @ -196°C
OK Autrod NiCrMo-13	As Welded 350 A, HI 1.3-1.7 kJ/mm DC+ hr	470 MPa	675 MPa	46 %	70 J @ -196°C
OK Autrod NiCrMo-3	As Welded HI ~1.0-1.7 kJ/mm DC+ hr	440 MPa	720 MPa	42 %	100 J @ -196°C 100 J @ -196°C
OK Autrod NiCrMo-3 SAW	As Welded HI ~1.0-1.7 kJ/mm DC+ hr	440 MPa	720 MPa	42 %	100 J @ -196°C
OK Autrod NiCrMo-4	As Welded DC+ hr	480 MPa	700 MPa	40 %	60 J @ -196°C 60 J @ -196°C

Хим. состав наплавленного металла

C	Mn	Si	S	P	Ni	Cr	Mo	V	Cu
OK Autrod 310									
0.07	3.2	0.40	0.010	0.020	20.5	25.5	0.015	-	0.010

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Хим. состав наплавленного металла

C	Mn	Si	S	P	Ni	Cr	Mo	V	Cu
OK Autrod NiCr-3									
0.004	4.4	0.35	0.007	0.005	Bal	19.3	0.1	-	-
OK Autrod NiCrMo-13 Current Type: DC+ , 350A, 29V									
0.01	2.8	0.2	0.001	0.01	bal.	22.0	15.0	-	-
OK Autrod NiCrMo-3 DC+, 350A, 29V									
0.01	1.7	0.2	0.01	0.01	Bal.	21.0	8.5	-	-
OK Autrod NiCrMo-4 DC+, 350A, 29V									
0.01	2.2	0.2	0.003	0.01	Bal.	15.0	15.5	0.04	0.01

Ti	Co	Fe	Nb+Ta	W
OK Autrod 310				
-	-	-	-	-
OK Autrod NiCr-3				
0.1	-	1.7	2.6	-
OK Autrod NiCrMo-13 Current Type: DC+ , 350A, 29V				
-	-	1	-	-
OK Autrod NiCrMo-3 DC+, 350A, 29V				
-	-	2.0	3.0	-
OK Autrod NiCrMo-4 DC+, 350A, 29V				
-	0.15	6.0	-	3.4