OK Flux 10.62 SAW

Type Basic EN 760: SA FB 1 55 AC H5

Description

OK Flux 10.62 is an all-mineral, non-alloying, high-basic flux. The weld metal can be fully controlled through the suitable choice of wires, independently of the welding parameters. It is therefore very suitable for the multi-run welding of thick materials using the single-wire and multiple-wire technique. OK Flux 10.62 is designed for the multi-pass butt welding of mild, medium and high tensile steels, as well as low-alloyed steels, with an impact strength down to -40°/-60°C. As it is a flux of the high-basic type, OK Flux 10.62 has a high current-carrying capacity on both AC and DC. To increase productivity with no loss of mechanical properties, OK Flux 10.62 is best used together with iron powder addition. OK Flux 10.62 is especially suitable for narrow gap welding, due to its good slag detachability and smooth side-wall blending. Pressure vessels for nuclear applications and offshore constructions in which good CTOD values are required are two areas in which OK Flux 10.62 can be successfully used. It operates optimally at the lower end of the voltage range.
OK Flux 10.62 yields low-oxygen weld metal (approx. 300 ppm) and produces low-hydrogen weld metal (lower than 5 ml/100 g).

Density

approx. 1.1 kg/dm^3

Basicity index

3.4

Flux consumption kg flux/kg wire

Voltage	DC+	AC
26	0.7	0.6
30	0.9	0.75
34	1.2	1.0
38	1.5	1.25

Typical all weld metal composition, %

Wire	C	Si	Mn	Cr	Ni	Mo
OK Autrod 12.24	0.07	0.22	1.0	-	-	0.5
OK Autrod 12.34	0.10	0.21	1.45	-	-	0.5
OK Autrod 12.44	0.08	0.21	1.9	-	-	0.5
OK Autrod 13.10SC	0.08	0.22	0.7	1.1	-	0.5
OK Autrod 13.20SC	0.08	0.20	0.60	2.0	-	0.85
OK Autrod 13.21	0.06	0.25	1.0	-	0.9	-
OK Autrod 13.24	0.08	0.30	1.4	-	0.9	0.2
OK Autrod 13.27	0.06	0.25	1.0	-	2.1	-
OK Autrod 13.40	0.07	0.26	1.50	-	0.9	0.5
OK Autrod 13.43	0.08	0.25	1.35	0.6	2.2	0.5

Typical mech. properties all weld metal

Wire	Yield stress MPa	Tensile strength MPa	Charpy V °C	J
OK Autrod 12.24	500	580	+20	140
			0	115
			-20	80
			-40	60
			-51	45
OK Autrod 12.34	540	620	+20	170
			0	160
			-20	140
			-40	115
			-51	45
OK Autrod 12.44	600	700	-20	105
			-40	80
			-50	65
			-62	50
OK Autrod 13.10SC	500	610	-18	110
			-29	80
OK Autrod 13.20SC	525	620	-18	120
			-29	80
OK Autrod 13.21	470	560	+20	195
			0	185
			-20	160
			-40	70
			-51	60
OK Autrod 13.24	530	620	-40	120
			-50	110
			-60	70
			-73	50
OK Autrod 13.27	510	605	-20	150
			-40	120
			-60	80
			-70	60
OK Autrod 13.40	650	730	-40	70
			-50	60
			-62	50
OK Autrod 13.43	700	795	-20	100
			-40	75
			-50	65
			-60	55
			-62	50

Approvals

Wire	ABS	LR	DNV	BV	GL	RS	Ü	DB	VdTÜV
OK Autrod 12.24				A3, 3YM					
OK Autrod 12.34	4YQ500M	4Y50M	III YM	A4Y50M	4Y50M				
OK Autrod 12.44									
OK Autrod 13.10 SC								x	x
OK Autrod 13.20 SC									
OK Autrod 13.21									
OK Autrod 13.24									
OK Autrod 13.27	5YQ460M	5Y46M	5Y46M	5Y46M	5Y46M				x
OK Autrod 13.40									x
OK Autrod 13.43	4YQ690M	4Y69M	IV Y69M	4Y69M	4Y69M				

Classifications

Wire	EN 756	SFA/AWS A5.23
OK Autrod 12.24	S 46 4 FB S2Mo	F8A6-EA2-A2/F7P6-EA2-A2
OK Autrod 12.34	S 50 4 FB S3Mo	F8A6-EA4-A4/F8P6-EA4-A4
OK Autrod 12.44	S 50 5 FB S4Mo	F9A8-EA3-A3/F9P8-EA3-A3
OK Autrod 13.10 SC		F8P2-EB2R-B2
OK Autrod 13.20 SC		F8P2-EB3R-B3
OK Autrod 13.21	S 42 4 FB S2Ni1	F7A6-ENi1-Ni1/F7P8-ENi1-Ni1
OK Autrod 13.24	S 50 6 FB S0	F8A10-EG-G/F8P8-EG-G
OK Autrod 13.27	S 46 7 FB S2Ni2	F8A10-ENi2-Ni2/F8P10-ENi2-Ni2
OK Autrod 13.40	S 62 6 FB S3Ni1Mo	F10A8-EG-F3/F9P6-EG-F3
OK Autrod 13.43	S 69 6 FB S3Ni2,5CrMo	F11A8-EG-G/F10P8-EG-G