OK Flux 10.72

OK Flux 10.72 is an agglomerated, basic flux, designed for the production of wind towers. It combines the high demands for multi-layer thick section welding, using high deposition rates with respectable toughness values down to -50°C when combined with a standard non-alloyed SAW wire. It is used for single and multi-wire procedures such as tandem, twin arc, tandem-twin welding and many more, for butt and fillet welds. It works equally well on DC and AC current. The excellent slag removal in narrow V-joints allows the included angle of the joint to be reduced. OK Flux 10.72 can be applied for unlimited plate thicknesses. In wind tower production, plate thicknesses of 50 mm and above are common, generally welded with Y-joints. It is essential that the slag is easily removable on the first run. For the remaining filling passes the flux needs to offer a high current carrying capacity, to allow for high deposition rates, for example, 38 kg/h with the tandem twin process. Often toughness values down to -50°C are required throughout the thickness. This excellent flux can also be utilised in other market segments with similar welding requirements e.g. pressure vessels and general construction welding.

Clasificări	EN ISO 14174 : S A AB 1 57 AC H5
Aprobări	CE EN 13479 DB 51.039.12

Aprobările depind de locul unde este amplasată fabrica. Pentru mai multe informații, vă rugăm să contactați ESAB.

Hidrogen difuzibil	max 5 ml H/100g weld metal (Redried flux)
Tip zgură	Aluminate-basic
Transferul aliajului	No Silicon and moderately Manganese alloying
Densitate	nom 1.2 kg/dm3
Indicator de bazicitate	nom 1.9
Mărime grăunte	0.315-2.0 mm (9x48 mesh)

Flux Consumption

Volts	kg Flux / kg Wire DC+	kg Flux / kg Wire AC
26 V	0.7 kg	0.6 kg
30 V	1.0 kg	0.9 kg
34 V	1.3 kg	1.2 kg
38 V	1.6 kg	1.4 kg

Dimensions	Amps	Travel Speed
Ø 4.0 mm	580 A	55 cm/min

Classifications

Wire	SFA/AWS - EN ISO	EN - As Welded	AWS - As Welded	AWS - PWHT
OK Autrod 12.20	A5.17:EM12/ 14171-A:S2	14171-A: S 38 5 AB S2	A5.17: F7A8-EM12	A5.17: F6P8-EM12
OK Autrod 12.22	A5.17:EM12K/ 14171-A:S2Si	14171-A: S 38 5 AB S2Si	A5.17: F7A8-EM12K	A5.17: F6P8-EM12K
OK Autrod 12.24	A5.23:EA2/ 14171-A:S2Mo; 24598-A:S S Mo	14171-A: S 46 3 AB S2Mo	A5.23: F8A5-EA2-A3	A5.23: F8P5-EA2-A3
OK Autrod 13.27	A5.23:ENi2/ 14171-A:S2Ni2	14171-A: S 46 6 AB S2Ni2	A5.23: F8A8-ENi2-Ni2	A5.23: F7P8-ENi2-Ni2
OK Autrod 13.62	A5.23:EG/ 14171-A:SZ3TiB			
OK Autrod 13.64	A5.23:EA2TiB/ 14171-A:S2MoTiB		A5.23: F8TA8-EA2TiB	

Approvals

Combined with Wire	DNV	GL	DB	CE	CWB	VdTÜV
OK Autrod 12.20	-	-	●	●	-	●
OK Autrod 12.22	●	●	●	●	●	●
OK Autrod 12.24	-	-	●	●	-	●
OK Autrod 13.27	-	-	-	●	-	-

Typical Mechanical Properties

Combined with Wire	Condition	Yield Strength	Tensile Strength	Elongation	Charpy V-Notch
OK Autrod 12.20	As Welded AWS DC+	415 MPa	500 MPa	30 %	125 J @ -30°C 125 J @ -30°C 100 J @ -40°C 70 J @ -50°C 70 J @ -50°C 50 J @ -62°C 50 J @ -62°C
OK Autrod 12.20	As Welded EN AC	420 MPa	500 MPa	33 %	140 J @ -30°C 130 J @ -40°C 80 J @ -50°C

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Typical Mechanical Properties					
Combined with Wire	**Condition**	**Yield Strength**	**Tensile Strength**	**Elongation**	**Charpy V-Notch**
OK Autrod 12.22	As Welded AWS DC+	415 MPa	500 MPa	30 %	120 J @ -30°C 120 J @ -30°C 100 J @ -40°C 70 J @ -50°C 70 J @ -50°C 50 J @ -62°C 50 J @ -62°C
OK Autrod 12.22	As Welded EN AC	425 MPa	500 MPa	32 %	140 J @ -30°C 130 J @ -40°C 80 J @ -50°C
OK Autrod 12.24	As Welded AWS DC+	500 MPa	590 MPa	25 %	60 J @ -30°C 60 J @ -30°C 40 J @ -40°C 35 J @ -46°C 35 J @ -46°C
OK Autrod 12.24	As Welded EN AC	535 MPa	600 MPa	24 %	70 J @ -30°C 50 J @ -40°C 40 J @ -50°C
OK Autrod 13.27	As Welded AWS DC+	490 MPa	610 MPa	30 %	100 J @ -40°C 80 J @ -51°C 80 J @ -51°C 50 J @ -62°C 50 J @ -62°C
OK Autrod 13.27	As Welded EN AC	520 MPa	610 MPa	27 %	120 J @ -30°C 100 J @ -40°C 80 J @ -50°C 60 J @ -60°C
OK Autrod 13.62	As Welded (acc. AWS) Plate thickness: 12mm; Heat Input: 2.2kJ/mm; Side 1: 600A, 32V, 53cm/min; Side 2: 700A, 32V, 60cm/min; DC+	500 MPa	610 MPa	27 %	50 J @ -62°C 50 J @ -62°C
OK Autrod 13.64	As Welded (acc. to AWS) Plate thickness 12mm Heat input 2.2kJ/mm 700A, 32V, 60cm/min DC+	560 MPa	660 MPa	27 %	50 J @ -62°C 50 J @ -62°C

Analiză tipică a metalului sudat %				
C	**Mn**	**Si**	**Ni**	**Mo**
OK Autrod 12.20 AC, 580A, 29V				
0.06	1.4	0.2	-	-
OK Autrod 12.20 DC+, 580A, 29V				
0.05	1.5	0.2	-	-
OK Autrod 12.22 AC, 580A, 29V				
0.06	1.4	0.3	-	-
OK Autrod 12.22 DC+, 580A, 29V				
0.05	1.5	0.3	-	-
OK Autrod 12.24 AC, 580A, 29V				
0.06	1.5	0.2	-	0.5
OK Autrod 12.24 DC+, 580A, 29V				
0.05	1.6	0.2	-	0.5
OK Autrod 13.27 AC, 580A, 29V				
0.07	1.4	0.30	2.2	-
OK Autrod 13.27 DC+, 520A, 29V				
0.05	1.4	0.30	2.2	-

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