

OK Flux 10.72

Agglomerated aluminate-basic flux for Submerged Arc Welding especially for applications with toughness requirements at low temperature. Excellent slag removal also in narrow V-joints. For wind tower productions, pressure vessels, general constructions etc. Extremely high current carrying capacity. For single or multi wire procedures. Suitable for DC and AC welding. Single layer and multi layer welding of unlimited plate thickness.

Classifications	EN ISO 14174 : S A AB 1 57 AC H5
Approvals	CE : EN 13479 DB : 51.039.12

Diffusible Hydrogen	max 5 ml H/100g weld metal (Redried flux)
Slag Type	Aluminate-basic
Alloy Transfer	No Silicon and moderately Manganese alloying
Density	nom: 1.2 kg/dm ³
Basicity Index	nom: 1.9
Grain Size (met)	0.315-2.0 mm (9x48 mesh)

Flux Consumption		
Volts	kg Flux / kg Wire DC+	kg Flux / kg Wire AC
34 V	1.3 kg	1.2 kg
30 V	1.0 kg	0.9 kg
26 V	0.7 kg	0.6 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 13.24	A5.23:ENi6/ 14171-A: S3Ni1Mo0,2			
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							
Wire	CE	DB	VdTÜV	CWB	DNV	GL	
OK Autrod 12.20	•	•	•	-	-	-	
OK Autrod 12.22	•	•	•	•	•	•	
OK Autrod 12.24	•	•	•	-	-	-	
OK Autrod 13.27	•	-	-	-	-	-	

Typical Mechanical Properties					
Wire	Condition	Yield Strength	Tensile Strength	Elongation	Charpy V-Notch

OK Flux 10.72

Typical Mechanical Properties					
Wire	Condition	Yield Strength	Tensile Strength	Elongation	Charpy V-Notch
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
OK Autrod 12.20	As Welded AWS DC+	415 MPa	500 MPa	30 %	125 J @ -30 °C 100 J @ -40 °C 70 J @ -50 °C 50 J @ -62 °C 125 J @ -30 °C 70 J @ -50 °C 50 J @ -62 °C
OK Autrod 12.22	As Welded AWS DC+	415 MPa	500 MPa	30 %	120 J @ -30 °C 100 J @ -40 °C 70 J @ -50 °C 50 J @ -62 °C 120 J @ -30 °C 70 J @ -50 °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 40 J @ -40 °C 35 J @ -46 °C 60 J @ -30 °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 13.24	As Welded AWS DC+	530 MPa	660 MPa	28 %	90 J @ 0 °C 35 J @ -40 °C
OK Autrod 13.27	As Welded AWS DC+	490 MPa	610 MPa	30 %	100 J @ -40 °C 80 J @ -51 °C 50 J @ -62 °C 80 J @ -51 °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 12mmHeat input 2.2kJ /mm700A 32V 60cm /min DC+	560 MPa	660 MPa	27 %	50 J @ -62 °C 50 J @ -62 °C

OK Flux 10.72

Typical Weld Metal Analysis %				
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 DC+, 520A, 29V				
0.05	1.4	0.30	2.2	-
OK Autrod 13.27 AC, 580A, 29V				
0.07	1.4	0.30	2.2	-