OK Flux 10.88

Agglomerated aluminate-rutile flux-wire-combination for Submerged Arc Welding. High tolerance against rust and mill scale. Excellent slag removal and smooth weld bead surface. For structural steels, fine grained steels, pressure vessel steels, etc. Suitable for DC and AC welding. Single layer and multi layer welding of up to about 30 mm plate thickness.

Specifications	
Classifications	EN ISO 14174 : S A AR 1 89 AC

Slag Type	Aluminate-rutile
Alloy Transfer	High Silicon and very high Manganese alloying
Density	nom: 1.2 kg/dm3
Basicity Index	nom: 0.7
Grain Size (met)	0.2-1.6 mm (10x65 mesh)

Flux Consumption		
Volts	**kg Flux / kg Wire DC+**	**kg Flux / kg Wire AC**
34 V	1.2 kg	1.0 kg
30 V	0.9 kg	0.7 kg
26 V	0.6 kg	0.5 kg
38 V	1.5 kg	1.3 kg

Condition : Dimension Ø 4.0 mm , Amps 580 A , Travel Speed 55 cm/min

Classifications				
Wire	**SFA/AWS - EN ISO**	**EN - As Welded**	**AWS - As Welded**	**AWS - PWHT**
OK Autrod 12.10	A5.17:EL12/ 14171-A:S1	14171-A: S 38 0 AR S1	A5.17: F6AZ-EL12	-
OK Autrod 12.10	A5.17:EL12/ 14171-A:S1	14171-A: S 38 0 AR S1	A5.17: F6AZ-EL12	-
OK Autrod 12.20	A5.17:EM12/ 14171-A:S2	14171-A: S 42 2 AR S2	A5.17: F7A0-EM12	-
OK Autrod 12.20	A5.17:EM12/ 14171-A:S2	14171-A: S 42 2 AR S2	A5.17: F7A0-EM12	-
OK Autrod 12.22	A5.17:EM12K/ 14171-A: S2Si	14171-A: S 42 2 AR S2Si	A5.17: F7A0-EM12K	A5.17: F6P0-EM12K
OK Autrod 12.22	A5.17:EM12K/ 14171-A: S2Si	14171-A: S 42 2 AR S2Si	A5.17: F7A0-EM12K	A5.17: F6P0-EM12K

Approvals					
Wire	**LR**	**ABS**	**BV**	**DNV**	**GL**
OK Autrod 12.22	•	•	•	•	•

Typical Weld Metal Analysis %		
C	**Mn**	**Si**
OK Autrod 12.10 DC+, 580A, 29V		
0.05	1.7	0.6
OK Autrod 12.10 AC, 580A, 29V		
0.05	1.5	0.5
OK Autrod 12.20 AC, 580A, 29V		
0.05	1.6	0.5
OK Autrod 12.20 DC+, 580A, 29V		
0.05	1.8	0.6
OK Autrod 12.22 AC, 580A, 29V		
0.05	1.6	0.6
OK Autrod 12.22 DC+, 580A, 29V		
0.05	1.8	0.7

OK Flux 10.88

Typical Wire Composition %		
C	**Mn**	**Si**
OK Autrod 12.10		
0.07	0.52	0.08
OK Autrod 12.20		
0.10	1.06	0.07
OK Autrod 12.22		
0.09	1.01	0.19

Typical Mechanical Properties					
Wire	**Condition**	**Yield Strength**	**Tensile Strength**	**Elongation**	**Charpy V-Notch**
OK Autrod 12.10	As Welded EN AC	450 MPa	500 MPa	30 %	60 J @ 0 °C
OK Autrod 12.10	As Welded AWS DC+	400 MPa	470 MPa	30 %	70 J @ 0 °C
OK Autrod 12.10	As Welded EN AC	450 MPa	500 MPa	30 %	60 J @ 0 °C
OK Autrod 12.20	As Welded EN AC	480 MPa	550 MPa	27 %	90 J @ 0 °C 70 J @ -20 °C
OK Autrod 12.20	As Welded EN AC	480 MPa	550 MPa	27 %	90 J @ 0 °C 70 J @ -20 °C
OK Autrod 12.20	As Welded AWS DC+	430 MPa	520 MPa	25 %	70 J @ 0 °C 50 J @ -18 °C
OK Autrod 12.20	As Welded AWS DC+	430 MPa	520 MPa	25 %	70 J @ 0 °C 50 J @ -18 °C
OK Autrod 12.22	As Welded EN AC	480 MPa	550 MPa	27 %	90 J @ 0 °C 60 J @ -20 °C
OK Autrod 12.22	As Welded AWS DC+	440 MPa	510 MPa	26 %	70 J @ 0 °C 50 J @ -18 °C
OK Autrod 12.22	As Welded EN AC	480 MPa	550 MPa	27 %	90 J @ 0 °C 60 J @ -20 °C 90 J @ 0 °C 60 J @ -20 °C
OK Autrod 12.22	As Welded AWS DC+	440 MPa	510 MPa	26 %	70 J @ 0 °C 50 J @ -18 °C