

OK Flux 10.80

Agglomerated calcium-silicate flux for Submerged Arc Welding. Very high alloying of Si and Mn. For single and limited pass butt welds in general construction, pressure vessels, surfacing tasks such as surface build up of diesel engine pistons, etc. Suitable for single and multi wire procedures, for DC and AC. Due to high alloying intended for plate thickness up to about 20 mm.

Specifications

Classifications	EN ISO 14174 : S A CS 1 89 AC
Approvals	CE : EN 13479 DB : 51.039.02

Approvals are based on factory location. Please contact ESAB for more information.

Slag Type	Calcium-silicate
Alloy Transfer	High Silicon and very high Manganese alloying
Density	nom: 1.1 kg/dm ³
Basicity Index	nom: 1.1

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 CS S1	A5.17: F7A2-EL12	A5.17: F6P0-EL12
OK Autrod 12.20	A5.17:EM12/ 14171-A:S2	14171-A: S 42 0 CS S2	A5.17: F7A2-EM12	A5.17: F6P0-EM12
OK Autrod 12.22	A5.17:EM12K/ 14171-A:S2Si	-	A5.17: F7A2-EM12K	A5.17: F6P0-EM12K

Approvals

Wire	CE	DB	VdTÜV
OK Autrod 12.10	•	•	•
OK Autrod 12.20	•	•	•

Typical Mechanical Properties

Wire	Condition	Yield Strength	Tensile Strength	Elongation	Charpy V-Notch
OK Autrod 12.10	As Welded AWS DC+	410 MPa	520 MPa	28 %	110 J @ 20 °C 80 J @ 0 °C 45 J @ -20 °C 40 J @ -29 °C
OK Autrod 12.10	As Welded EN AC	440 MPa	530 MPa	27 %	125 J @ 20 °C 100 J @ 0 °C 50 J @ -20 °C
OK Autrod 12.20	As Welded EN AC	460 MPa	560 MPa	28 %	100 J @ 20 °C 60 J @ 0 °C
OK Autrod 12.20	As Welded AWS DC+	440 MPa	550 MPa	29 %	90 J @ 20 °C 70 J @ 0 °C 40 J @ -29 °C
OK Autrod 12.22	As Welded As Welded DC+	440 MPa	550 MPa	30 %	60 J @ -18 °C 45 J @ -29 °C