

OK Flux 10.63

OK Flux 10.63 is an agglomerated, high-basic flux for submerged arc welding. It is used for multi-run welding of creep resistant Cr-Mo-alloyed steels when high toughness values are required, even after step cooling heat treatment. It can be used for single and multi-wire procedures, for butt and fillet welds and works equally well on DC and AC current. The flux is neutral in terms of Si and Mn alloying and thus it is perfect for multi-layer welding of unlimited plate thicknesses. It is well suited for narrow gap welding, due to good slag detachability and smooth sidewall blending. The optimum voltage is at the lower end of the voltage range. The weld metal produced has a very low level of impurities with well controlled X-factors. It has a low oxygen content, approx. 300ppm and hydrogen levels lower than 5ml/100g. OK Flux 10.63 is used in the petrochemical, chemical, power generation, pressure vessels industries etc.

Specifications

Classifications	EN ISO 14174 : S A FB 1 55 AC H5
Approvals	NAKS/HAKC : RD 03-613-03

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

Diffusible Hydrogen	max 5 ml /100g weld metal (Redried flux)
Slag Type	Fluoride-basic
Alloy Transfer	No Silicon or Manganese alloying
Density	nom: 1.1 kg/dm ³
Basicity Index	nom: 3.0
Grain Size	0.2-1.6 mm (10x65 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

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

Classifications

Wire	SFA/AWS - EN ISO	AWS - PWHT
OK Autrod 13.10 SC	A5.23 :EB2R / 24598-A: S S CrMo1	A5.23: F8P4-EB2R-B2R
OK Autrod 13.20 SC	A5.23: EB3R / 24598-A: S S CrMo2	A5.23: F8P8-EB3R-B3R

Approvals

Combined with Wire

*Selected production units only. Please contact ESAB for more information. Visit esab.com to download specific flux/wire combination fact sheets for more details.

Typical Weld Metal Analysis %

C	Mn	Si	Cr	Mo	X-bar
OK Autrod 13.10 SC AC, 565A, 30V					
0.08	0.85	0.20	1.15	0.50	<= 12 ppm
OK Autrod 13.10 SC DC+, 485A, 30V					
0.075	0.80	0.25	1.10	0.50	<= 12 ppm
OK Autrod 13.20 SC DC+, 580A, 29V					
0.07	0.60	0.20	2.10	1.00	<= 15 ppm
OK Autrod 13.20 SC AC, 580A, 29V					
0.08	0.60	0.20	2.10	1.00	<= 15 ppm

Typical Mechanical Properties

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

Combined with Wire	Condition	Yield Strength	Tensile Strength	Elongation	Charpy V-Notch
OK Autrod 13.10 SC	Stress Relieved AWS DC+	500 MPa	600 MPa	27 %	200 J @ -20 °C 150 J @ -29 °C 140 J @ -40 °C
OK Autrod 13.20 SC	Stress Relieved AWS DC+	530 MPa	630 MPa	25 %	150 J @ -20 °C 110 J @ -40 °C 50 J @ -62 °C