

OK Flux 10.66

Agglomerated fluoride-basic flux for Submerged Arc Welding. Especially for combination with OK Autrod B2 SC. Designed for multi-run welding of creep resistant Cr-, Mo-alloyed steels when highest toughness values are required also after step cooling treatment. Very low level of impurities and thus exceptionally clean weld metal. X-bar max. 10 with the wire as above. Mainly for petrochemical and chemical industries, power generation, pressure vessels, etc. Very good slag release, as well in narrow gap joints. Low-oxygen weld metal (approx. 300 ppm) and hydrogen contents maximum 5 ml/100 g, Designed for single and multi wire procedures, welds equally well on DC and AC current. Mainly for multi layer welding of unlimited plate thickness.

Specifications	
Classifications	EN ISO 14174 : S A FB 1 55 AC H5
Approvals	CE : EN 13479 UKCA : EN 13479

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: 1.0 kg/dm ³
Basicity Index	nom: 2.3

Flux_Consumption_SAW		
Volts	DC+ Weight	AC Weight
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

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

Classifications_SAW		
Wire	AWS/EN	AWS - PWHT
OK Autrod B2 SC	A5.23:EB2R/ 24598-A:S S CrMo1	A5.23: F8P4-EB2R-B2R

Approvals_SAW	
Wire	CE
OK Autrod B2 SC	•

Typical Weld Metal Analysis %									
C	Mn	Si	S	P	Ni	Cr	Mo	V	Al
OK Autrod B2 SC									
0.06	0.85	0.19	0.006	0.005	0.03	1.08	0.44	0.004	0.01

Typical Weld Metal Analysis %									
Cu	Nb	Ti	Sb	As	B	Sn	Mn+Si	Nb+Ti+V	P+Sn
OK Autrod B2 SC									
0.04	0.002	0.008	0.001	0.001	0.0002	0.002	1.04	0.014	0.006

Typical Weld Metal Analysis %		
PE	J-Factor	X-bar
OK Autrod B2 SC		
2.0	70	6

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Typical Wire Composition %

C	Mn	Si	S	P	Ni	Cr	Mo	V	Al
OK Autrod B2 SC									
0.10	0.65	0.12	0.003	0.004	0.06	1.20	0.50	0.005	0.005

Typical Wire Composition %

Cu	Nb	Ti	Sb	As	B	Sn	Mn+Si	Nb+Ti+V	P+Sn
OK Autrod B2 SC									
0.08	0.004	0.002	0.002	0.003	0.0005	0.002	0.77	0.011	0.006

Typical Wire Composition %

J-Factor	X-bar
OK Autrod B2 SC	
50	5

SAW_Typical_Mech_Properties

Wire	Testing Condition	Yield Strength	Tensile Strength	Elongation	Charpy V-Notch Result
OK Autrod B2 SC	PWHT AWS DC+ (1 hour(s))	470 MPa	560 MPa	17 %	40 J @ -40 °C
OK Autrod B2 SC	PWHT AWS AC (22 hour(s))	430 MPa	530 MPa	31 %	250 J @ -30 °C
OK Autrod B2 SC	PWHT AWS AC (2 hour(s))	460 MPa	560 MPa	29 %	200 J @ -30 °C
OK Autrod B2 SC	PWHT AWS DC+ (2 hour(s))	420 MPa	530 MPa	32 %	170 J @ -30 °C
OK Autrod B2 SC	PWHT AWS DC+ (22 hour(s))	400 MPa	515 MPa	32 %	220 J @ -30 °C
OK Autrod B2 SC	PWHT EN ISO AC (1 hour(s))	480 MPa	570 MPa	24 %	220 J @ 20 °C