

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.

Specifications	
Classifications	ASME SFA 5.23 ASME SFA 5.17 AWS A5.17 : F6P8-EM12K AWS A5.23 : F8A4-ENi1K-Ni1 AWS A5.17 : F7A8-EM12K AWS A5.17 : F7P5-EM14K AWS A5.23 : F9A4-ENi4-Ni4
Approvals	CWB : CSA W48 F49A6-EM12K-H8 DB : 51.039.12 CE 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	Aluminate-basic
Alloy Transfer	No Silicon and moderately Manganese alloying
Density	nom: 1.2 kg/dm ³
Basicity Index	nom: 1.9

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

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

Classifications			
Wire	AWS/EN	AWS - As Welded	AWS - PWHT
Spoolarc 71	AWS A5.17: EM14K	-	F7P5-EM14K
Spoolarc 75	AWS A5.23: ENi1K	F8A4-ENi1K-ENi1	-
Spoolarc 81	AWS A5.17: EM12K	F7A8-EM12K	F6P8-EM12K
Spoolarc ENi4	AWS A5.23: ENi4	F9A4-ENi4-ENi4	-

Approvals						
Combined with Wire	CWB	CE	DB	VdTÜV	ABS	DNV
Spoolarc 81	•	-	-	-	-	-
OK Autrod 12.20	-	•	•	•	-	-
OK Autrod 12.22	-	•	•	•	•	•
OK Autrod 12.24	-	•	•	•	-	-
OK Autrod 13.27	-	•	-	-	-	-

Typical Weld Metal Analysis %							
C	Mn	Si	S	P	Ni	Mo	Cu
Spoolarc 75							
0.06	1.80	0.50	0.009	0.013	0.90	-	-
Spoolarc 81							

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Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Mo	Cu
0.06	1.60	0.30	0.0069	0.013	-	-	-
Spoolarc ENi4							
0.07	1.60	0.20	0.006	0.012	1.80	0.15	0.15

Typical Mechanical Properties

Combined with Wire	Condition	Yield Strength	Tensile Strength	Elongation	Charpy V-Notch
Spoolarc 75	As Welded	550 MPa (76 ksi)	655 MPa (89 ksi)	28 %	149 J @ -40 °C (110 ft-lb @ -40 °F)
Spoolarc 81	As Welded	425 MPa (62 ksi)	515 MPa (75 ksi)	30 %	50 J @ -62 °C (35 ft-lb @ -80 °F)
Spoolarc 81	Stress Relieved 1 hr @ 621C (1150F)	405 MPa (59 ksi)	510 MPa (74 ksi)	32 %	50 J @ -62 °C (35 ft-lb @ -80 °F)
Spoolarc 81	Stress Relieved 8 hrs @ 621C (1150F)	400 MPa (58 ksi)	510 MPa (74 ksi)	34 %	163 J @ -46 °C (120 ft-lb @ -50 °F)
Spoolarc ENi4	As Welded	585 MPa (85 ksi)	680 MPa (96 ksi)	26 %	156 J @ -40 °C (115 ft-lb @ -40 °F)