OK Flux 10.62

Agglomerated fluoride-basic flux for Submerged Arc Welding. Primarily for multi-run welding. For highest demands on impact properties, low temperature toughness, strength and CTOD-values. Especially suitable for narrow gap welding due to good slag detachability and smooth side-wall blending. The Advanced Slag Release version improves weldability with excellent slag detachability, even better side wall wetting and stronger grains which improve weld quality due to flux grain size consistency also after multiple recycling cycles. All other attributes unchanged. For Offshore constructions, pressure vessels, power generation, shipbuilding, pipe mills, civil constructions, transport industries, etc. Produces weld metals with hydrogen contents maximum 5 ml/100 g, in BlockPac (moisture protection) maximum 4 ml/100g. Operates optimally at the lower end of the voltage range. Designed for single and multi wire procedures, for butt and fillet welds. Works equally well on DC and AC current. Single layer and multi layer welding of unlimited plate thickness.

Specifications	
Classifications	EN ISO 14174 : S A FB 1 55 AC H5 EN ISO 14174 : S A FB 1 55 AC H4 only BlockPac/moisture-protection
Approvals	CE : EN 13479 DB : 51.039.07 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); max 4 ml/100g in BlockPac (moisture protection)
Slag Type	Fluoride-basic
Alloy Transfer	No Silicon or Manganese alloying
Density	nom: 1.1 kg/dm3
Basicity Index	nom: 3.2

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	**SFA/AWS - EN ISO**
Spoolarc 83	A5.23:EA3K
Spoolarc 95	A5.23:EM2

Approvals		
Wire	**ABS**	**CWB**
Spoolarc 81	•	•

Typical Wire Composition %									
C	**Mn**	**Si**	**S**	**P**	**Ni**	**Cr**	**Mo**	**Cu**	**Ti**
Spoolarc 71									
0.10	1.22	0.55	0.01	0.01	-	-	-	-	0.07
Spoolarc 81									
0.09	0.95	0.26	0.01	0.01	-	-	-	-	-
Spoolarc 83									
0.08	1.69	0.63	0.011	0.01	0.09	-	0.4	0.17	-
Spoolarc 86									
0.08	1.4	0.8	0.001	0.01	-	-	-	0.1	-
Spoolarc 95									

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Typical Wire Composition %									
C	**Mn**	**Si**	**S**	**P**	**Ni**	**Cr**	**Mo**	**Cu**	**Ti**
0.07	1.40	0.35	0.007	0.008	1.80	0.20	0.35	-	-
Spoolarc ENi4									
0.17	0.73	0.19	0.00	0.00	1.74	-	0.17	0.06	-

Typical Weld Metal Analysis %									
C	**Mn**	**Si**	**S**	**P**	**Ni**	**Cr**	**Mo**	**V**	**Al**
Spoolarc 71 As Welded									
0.08	1.21	0.59	0.006	0.012	0.017	0.028	0.010	0.005	0.020
Spoolarc 71 Stress Relieved 1 hr. @ 1150°F									
0.08	1.21	0.59	0.006	0.012	0.017	0.028	0.010	0.005	0.020
Spoolarc 81									
0.09	0.97	0.18	0.009	0.011	-	-	-	-	-
Spoolarc 83 As Welded									
0.07	1.79	0.76	0.007	0.015	0.07	0.08	0.47	0.008	0.021
Spoolarc 83 Stress Relieved 1 hr. @ 1150°F									
0.07	1.79	0.76	0.007	0.015	0.07	0.08	0.47	0.008	0.021
Spoolarc 86 Stress Relieved 1 hr. @ 1150°F									
0.08	1.33	0.75	0.006	0.008	-	-	-	-	-
Spoolarc 95 As Welded									
0.06	1.55	0.32	0.003	0.008	1.74	0.15	0.38	-	-
Spoolarc ENi4 As Welded									
0.08	0.94	0.21	0.002	0.013	1.68	0.05	0.13	-	-
Spoolarc ENi4 Stress Relieved 1 hr. @ 1150°F									
0.08	0.94	0.21	0.002	0.013	1.68	0.05	0.13	-	-

Typical Weld Metal Analysis %			
Cu	**Nb**	**Ti**	**Co**
Spoolarc 71 As Welded			
0.083	0.002	0.019	0.004
Spoolarc 71 Stress Relieved 1 hr. @ 1150°F			
0.083	0.002	0.019	0.004
Spoolarc 81			
0.140	-	-	-
Spoolarc 83 As Welded			
0.120	0.003	0.011	0.036
Spoolarc 83 Stress Relieved 1 hr. @ 1150°F			
0.120	0.003	0.011	0.036
Spoolarc 86 Stress Relieved 1 hr. @ 1150°F			
0.010	-	-	-
Spoolarc 95 As Welded			
0.170	-	-	-
Spoolarc ENi4 As Welded			
0.120	-	-	-
Spoolarc ENi4 Stress Relieved 1 hr. @ 1150°F			
0.120	-	-	-

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Typical Mechanical Properties					
Wire	**Condition**	**Yield Strength**	**Tensile Strength**	**Elongation**	**Charpy V-Notch**
Spoolarc 71	As Welded	511 MPa	590 MPa	28 %	126 J @ -51 °C
Spoolarc 81	As Welded	442 MPa	527 MPa	31 %	80 J @ -62 °C
Spoolarc 83	As Welded	692 MPa	746 MPa	24 %	62 J @ -51 °C
Spoolarc 95	As Welded	686 MPa	758 MPa	25 %	101 J @ -51 °C
Spoolarc ENi4	As Welded	532 MPa	618 MPa	27 %	145 J @ -62 °C 109 J @ -73 °C