OK Flux 10.77

Agglomerated aluminate-basic flux-wire-combination for Submerged Arc Welding. Especially designed for multi wire welding of line pipe steels up to X70. Mainly for spiral pipe production. Shallow reinforcement, low transition angles, smooth surface finish even at high welding speeds. Designed for single and multi wire procedures. Suitable for DC and AC welding.

Specifications	
Classifications	ASME SFA 5.23 ASME SFA 5.17 AWS A5.23 : F8TA6-EG AWS A5.23 : F8A4-EA2-A2 AWS A5.23 : F7P2-EA2-A2 AWS A5.17 : F7A5-EM12K
Approvals	CE : EN 13479 NAKS/HAKC : RD 03-613-03

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

Diffusible Hydrogen	max 5 ml H/100g weld metal (Redried flux)
Slag Type	Aluminate-basic
Alloy Transfer	Slightly Silicon and moderately Manganese alloying
Density	nom: 1.2 kg/dm3
Basicity Index	nom: 1.3

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	**AWS/EN**	**AWS - As Welded**
OK Autrod 12.24	AWS A5.23: EA2	F8A4-EA2-A2
Spoolarc 81	AWS A5.17: EM12K	-

Approvals	
Combined with Wire	**CE**
OK Autrod 12.20	•
OK Autrod 12.22	•
OK Autrod 12.24	•

Typical Weld Metal Analysis %		
C	**Mn**	**Si**
OK Autrod 12.24		
0.07	1.3	0.3
Spoolarc 81		
0.07	1.4	0.4

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 12.24	As Welded	495 MPa (72 ksi)	580 MPa (84 ksi)	25 %	40 J @ -40 °C (30 ft-lb @ -40 °F)
OK Autrod 12.24	Stress Relieved 1 hr @ 621C (1150F)	450 MPa (65 ksi)	550 MPa (80 ksi)	25 %	25 J @ -40 °C (18 ft-lb @ -40 °F)
Spoolarc 81	As Welded	420 MPa (61 ksi)	520 MPa (75 ksi)	26 %	110 J @ -29 °C (81 ft-lb @ -20 °F)