



AK Filter

Cross section of the AK adsorption filter

The AK adsorption filter for the removal of oil vapor and other hydrocarbons with absolute retention efficiency.

Aircel adsorption filter elements consist of two filter stages. At the activated carbon stage, oil and hydrocarbon vapors and odors are removed by adsorption. Particles are removed at the microfiber fleece depth filter stage. In addition, support fleece and an outer stainless steel support sleeve ensure structural integrity of the adsorption and filter stages.

The two stage adsorption efficiency offers a large adsorption surface and thus a longer service life time and a high economy of operation. The stainless steel support sleeves as well as the filter material securely hold the activated carbon and ensure that no activated carbon particles are being passed on into the process.

AK Series Features

- Special unique design of the activated carbon within the filter element
- Recommended temperature range: 50 – 104°F; T max. = 140°F borosilicate media
- Two stage adsorption process to remove vapor and gaseous hydrocarbons

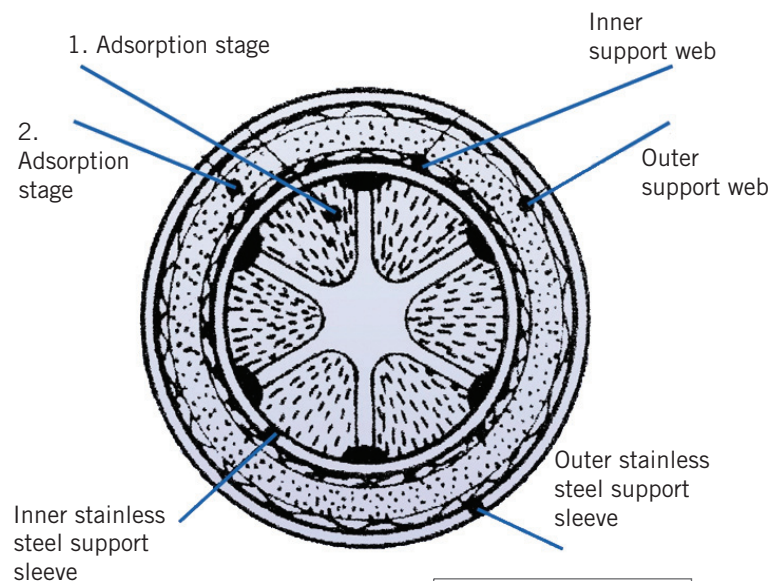
AK Series Benefits

- Reduction of the adsorption time, higher volume flow
- Optimum adsorption efficiency
- Large adsorption surface which extends the service life
- High economy of operation

AK Series Applications

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|--|--------------------------------|
| • Chemical industry | • Prefiltration of sterile air |
| • Petrochemical industry | • Filling machines |
| • Pharmaceutical industry | • Packaging machines |
| • Breathing air supply | • Food industry |
| • Process industry for instrumentation and control air | • Beverage industry |

AK SERIES Adsorption Filter Design



Oil Free - Odor Free

AK Model Comparison

Specifications

Recommended Max. Differential Pressure:	72.5 psi at 68°F, irrespective of system pressure
Retention Rate:	Residual oil content 0.003 ppm in combination with SMF
Initial Differential Pressure at Nominal Flow:	1.16 psi
Recommended Application Temperature:	50°F-104°F (Tmax = 140°F)

Materials

Adsorption Stage:	Two stage adsorption, Activated carbon granulate, embedded into PUR ester foam
Filter Medium:	Finest grounded activated carbon being imbedded between binderfree mirco fiber fleece
Bonding:	Epoxy resin
End Caps:	Aluminium
Two O-Rings:	Perbunan – Siliconfree and free of parting compound (standard)
Support Sleeves:	304 Stainless steel (inner and outer)

AK Element Typical Adsorption Effectiveness

Ethane	D
Toluene	A
Acetic Acid	A
Methanol	B
Acetone	B
Isopropyl Ether	A
Methyl Acetate	B
Sulphuric Acid	A
Hydrogen Sulphide	C
Chlorine	B
Freon	C
Ammonia	C
Citrus Fruits	A
Perfumes	A

Key:

- A = very good
- B = good
- C = poor
- D = slight



Due to a continuous program of product improvement, specification and dimensions are subject to change without notice.