

Bioteg - Biofiltration and Biofilter Material

Bioteg Biofilters suitable for sewer manholes



Manhole Biofilter
(MBF - Series)



Manhole Biofilter
(KSBF - Series)



Odor Trap Flap
(SEVK-Series)

Bioteg Biofilters suitable for Force Main Ventilation Shafts, Air Release Valves



Force Main Ventilation
Shaft Biofilters
(EKBF-Series)

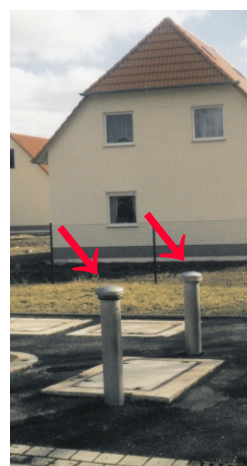


Force Main Biofilter
(DEBF-Series)

Bioteg Biofilters suitable for various Vent Pipes



Vent Pipe Biofilter - various Sizes
(REBF-Series)



Bioteg specializes in the planning, designing and manufacturing of biofilters as an odor and air pollution control technology. With experts in microbiology, environmental engineering, manufacturing and sales, we are able to offer a comprehensive range of services.

Why Biofiltration ?

Biofiltration is an air pollution control technology which utilizes microorganisms to biologically degrade odors and other volatile air pollutants contained in waste air streams. The reason why **Bioteg** has specialized in biofiltration rather than in any other odor and air pollution control technology is because our experienced staff are convinced of the **many advantages** that come with this technology:

- Biofiltration is an easy and cost-effective technology
- High efficiency (99.9% odor removal, up to 99% VOC removal)
- Low investment costs
- Low maintenance and low operation costs
- Use of organic, nontoxic, biodegradable filter material
- No hazardous byproducts and secondary waste streams

All in all, an environmentally friendly and cost-effective Odor and Air Pollution Control Technology.

It is easy to see why we so enthusiastically support biofiltration and are dedicated to developing new biofiltration solutions to meet air filtration needs.

Bioteg Biofilter Material

Bioteg has developed a very effective organic filter material based on shredded pine roots. This filter material is extremely stable, and alters its physical and microbiological properties only slightly over time. There is practically no long-term compaction of the filter bed. This stable structure results in a low pressure drop providing for low energy costs.

Our special preconditioning procedure increases the media's surface area, which is populated by microorganisms, resulting in a very high removal efficiency of the biofilter material.

Two different types of Bioteg bpc-Biofilter Material are available:

Bioteg bpc-BT50: appropriate for our small biofilters,

Bioteg bpc-BT100: appropriate for our large biofilter systems.

Our compact biofilters are filled with a mixture of Bioteg bpc-BT50 and bpc-BT100.



bioteg bpc-BT50



bioteg bpc-BT100

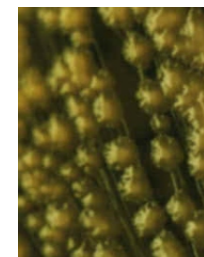


Fig. 1



Fig. 2

Examples of micro-organisms, metabolizing waste air contaminants. These bacteria were isolated from active biofilter material. (fig. 1 + 2)

References

We are proud to include companies such as BASF, Hoechst, Merck and BAT (British American Tobacco) among our list of many satisfied customers.

bioteg - biofilters conform to the German Engineering Standard for Biofilters - VDI 3477

Bioteg - Biofilter Products

Bioteg Compact Biofilters suitable for Pump Stations, Storage Tanks, Industry



Drop-In Biofilter (EBF-Series)



Circular Stand-Alone Biofilter
(SRBF-Series)



Drop-In Biofilter
(EBF-Series)

Bioteg Biofilter Products

Ever since its establishment **Bioteg** has been working together with wastewater treatment engineers and technicians to develop a range of products adapted to the needs of the wastewater industry. Today we proudly offer a variety of these small biofilters in addition to our larger biofilter systems, suitable for various municipal and industrial applications.

All our **Bioteg** biofilters conform to the German Engineering Standard for biofilters (VDI 3477) and have the following design elements and properties in common:

- All surfaces in contact with the contaminating media are chemical, corrosion and UV-resistant Polyethylenes (PE), Polypropylenes (PP), PVCs or high density stainless steel.
- The biofilter material is an organic, nontoxic, biodegradable product that can be readily composted after use.
- Depending on the environmental conditions, the biofilter material lasts 3 to 7 years. The replacement of the filter material is an easy and inexpensive process.
- All our biofilters and biofilter systems are practically maintenance free.

Bioteg offers biofilters for basically any application. Please look through our product overview and contact us for further information.

Bioteg Small Biofilters

Our small biofilters are designed as passive biofilters to treat small waste air streams from various sources.

The **Bioteg Manhole Biofilter** is a specially designed manhole insert to biologically remove odors from sewer manholes. The **Bioteg Odor Trap Flap** can be used in conjunction with the Manhole Biofilter to trap odors in the sewer system.

The **Bioteg Force Main Biofilter** is a specially designed biofilter to reduce sewage odor from force main ventilation shafts.

To eliminate odors from Ventilation Pipes, e.g. From pumping shafts, Bioteg has developed the **Bioteg Vent Pipe Biofilter** that comes in a standard range of sizes fitting various ventilation pipes.

An advanced version of this filter is the complete **Bioteg Ventilation Shaft** with integrated **Biofilter Cartridge**.

Bioteg Compact Biofilters

Our compact biofilters can be used as inexpensive passive biofilters (displacing method), and are readily upgradeable to active biofilters, at any time, by the addition of a cover and a fan. A controlled surface irrigation system is optional. They are designed to treat medium waste air streams from e.g. Wastewater Treatment Facilities, Pump Stations, Landfills, Food or Chemical Industry.

The **Bioteg Drop-In Biofilter** is a self-suspending biofilter designed to be inserted into the opening of any covered storage tank.

The **Bioteg Circular Stand-Alone Biofilter** can be used individually or can be networked to adapt to higher air streams.

Bioteg Modular Biofilter Systems

Our modular biofilter systems are fully self-contained biofiltration systems, designed to treat large waste air streams. They are suitable for various municipal and industrial applications. The modular design allows adaptation to higher airflow rates.

The **Bioteg Modular Container Biofilter System** consists of one to four double walled filter containers and operates automatically with practically no need for maintenance.

All Bioteg Biofilters can be designed to meet your specific requirements.

Bioteg Biofilter Systems suitable for WWTPs, Landfills, Composting Facilities, Food or Chemical Industry



Modular Container Biofilter System (MCBF-Series)

www.bioteg.com

© bioteg GmbH