



BIOFILTRO  
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# BIOFILTER

ODOR EMISSIONS ABATEMENT SYSTEM

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NATURAL AND ENVIRONMENTALLY FRIENDLY, **THE BIOFILTER DESIGNED BY ENTSORGA IS A SIMPLE AND EFFECTIVE TECHNOLOGY TO ABATE AND CONTROL ODOR EMISSIONS FROM WASTE PROCESSING AREAS.**

**LOW MAINTENANCE COST AND LONG OPERATING LIFE MAKE IT ONE OF THE MOST USED AND AFFORDABLE ODOR CONTROL SYSTEMS AVAILABLE ON THE MARKET.**





THE ENTSORGA BIOFILTER EFFECTIVELY CONTROLS AND MINIMIZES THE ISSUE OF ODOR EMISSIONS FROM MATERIAL HANDLING AND PROCESSING OF MUNICIPAL SOLID WASTE. THIS NATURAL, BIOLOGICAL PROCESS SOLUTION, IS HIGHLY EFFECTIVE AND SUSTAINABLE, AND IS A GREAT FIT FOR PLANTS LOCATED NEAR RESIDENTIAL AREAS.

## MAIN FEATURES

The process air drawn from the processing areas by a **forced aeration system (1)** is conveyed to the bottom of the **biofilter (2)** consisting of slotted plastic plates.

The purification of the air effluents is performed without using any synthetic chemical, but simply by exploiting the action of heterogeneous microbes, composed of bacteria, molds and yeasts, which metabolize up to 99.5% of organic and inorganic substances and transform odorous compounds into carbon dioxide and water vapor.

The microbial activity develops inside a **natural medium (3)**, the filtering bed, which is composed by a mix of barks and wood, through which air effluents are circulated.

## STRENGTHS

- **excellent odor control**
- **natural process**, without synthetic chemical additives
- **easy to install**
- **low energy consumption**: the high porosity of the filtering bed ensures reduced pressure drops and therefore allows for overall low energy consumption
- **long operating life**: the filtering material is replaced every 4-5 years and at the end of its life can be used as bulking agent in composting or economically disposed as landfill cover.
- **maximum process reliability**, thanks to the automatic control system that records, processes and optimizes process data (temperature and humidity)
- **modularity and flexibility** of use in different process systems
- **standardization**: the continuous monitoring and control on an industrial scale guarantees **maximum reliability and performance**

1. FORCED AERATION SYSTEM



2. PLASTIC SLOTTED FLOOR



3. FILTERING MIX



## APPLICATIONS

Without need of modifications, EntSORGA's Biofilter system is suitable for all types of aerobic biological treatment including :

- **COMPOSTING** the organic waste, digestate and sludges
- **BIOSTABILIZATION** of waste before landfilling
- **BIODRYING** of waste and biomass and subsequent production of Solid Recovered Fuel (SRF)



COMPOSTING  
SOLUTIONS



ANAEROBIC  
DIGESTION



BIODRYING AND  
PRODUCTION OF SRF



BIOSTABILIZATION

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