



BEE SYSTEM
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BEE™ SYSTEM

ADVANCED MECHANICAL BIOLOGICAL TREATMENT
ENCLOSED BIOREACTOR FOR PROCESSING OF LARGE VOLUMES OF MSW

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ENTSORGA'S PATENTED BEE SYSTEM IS **THE STATE OF THE ART, EFFICIENT AND RELIABLE SOLUTION** FOR MECHANICAL AND ORGANIC PROCESSING (BIODRYING) OF WASTE

HIGH RELIABILITY, MAXIMUM ENVIRONMENTAL COMPATIBILITY AND TOTAL AUTOMATION MAKE THIS TECHNOLOGY ONE OF THE MOST COMPETITIVE ON THE MARKET IN TERMS OF **ECONOMIC EFFICIENCY AND SAFETY.**

ENTSORGA
GREEN TECHNOLOGY REVOLUTION



DEVELOPED AND IN OPERATIONS SINCE 2005, THE BEE™ SYSTEM IS **THE HIGHER CAPACITY SINGLE REACTOR** PATENTED BY ENTSORGA FOR MECHANICAL AND ORGANIC PROCESSING (MBT) OF WASTE. THANKS TO A **CLEAN AND EFFICIENT PROCESS** ALLOWS PROVIDING **UP TO 90% LANDFILL DIVERSION, MAXIMIZING RECYCLING AND RECOVERY PROGRAMS** AND EXTENDING CAPACITY OF LANDFILL ASSETS.

A STATE OF THE ART INDUSTRY SOLUTION, TODAY THE BEE SYSTEM IS **THE ENTSORGA'S MOST ADVANCED WASTE PROCESSING PLATFORM**, WITH A NUMBER OF COMMERCIAL FACILITIES OPERATING IN **EUROPE AND IN USA**.

H.E.BIO.T.™

ENTSORGA'S ADVANCED MBT TREATMENT

The BEE™ systems uses the **H.E.BIO.T.™ process** (High Efficiency Biological System), an **highly efficient and highly automated biological treatment system** that leverages on **20 years** of successful industrial operations and a continuous effort in research and development.

The **winning principles** on which the process is based are:

- **Accelerated aeration (1)**: the combined use of integrated air management, flow inversions and preheating of the material, substantially improve the efficiency of the bio-oxidation process, ensuring a more homogeneous and rapid treatment
- **Automatic process control**: proprietary software collects, analyzes and regulates data, optimizing process parameters
- **Automation and optimized material handling (2)** limited to transfers and not to process requirements.

ADVANTAGES

- **Higher treatment's capacity and surfaces optimization**: compared to a biocell system, the plant allows to process more quantities of waste in less space
- **Equipment reliability**, thanks to a **24/7 automatic control system** that minimizes human errors and optimizes process management
- **Reduced energy costs** due to a **smart process approach**, based on the controlled management of the air flows and not on the mechanical handling of the material
- **Reduction of labor and management costs**, thanks to high automation
- **Maximum environmental compatibility and safety for operators**, not exposed to process air, dust and pathogens
- **High productivity**, with recovery up to 90% of waste
- **Flexibility of application**, from composting to the production of alternative fuels

1. VENTILATION SYSTEM



2. MATERIAL HANDLING WITH AUTOMATIC CRANE, WITHOUT NEEDING TO SEPARATE THE SECTORS



APPLICATIONS

Flexible and reliable, the Bee™ System is suitable for all needs of **aerobic biological waste treatment**:

- **COMPOSTING** the organic fraction of waste and sludge
- **BIOSTABILIZATION** of waste before sending it to landfill
- **BIODRYING** of waste and biomass to produce **SRF (Solid Recovered Fuel)**



COMPOSTING SOLUTIONS



ANAEROBIC DIGESTION



BIODRYING AND PRODUCTION OF SRF



BIOSTABILIZATION



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