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PRESECO DRUM COMPOSTING PLANTS
ACU TECHNOLOGY - A PURELY NATURAL PROCESS



A COMBINATION OF THE MOST RECENT TECHNOLOGY AND COST-EFFECTIVENESS

Preseco drum composting plants are based on patented Accelerated Composting Unit (ACU) technology, treating different types of organic waste in a continuous, highly automated supervised process. During the short processing period (only 7–14 days) of this purely natural process, the amount of organic waste mixture is decreased by 30–50%. There is no need for chemicals or additional energy, and both the process and end product fulfil, for instance, all official EU requirements regarding emissions and hygiene.

ACU has been designed explicitly for local use. It does not require large amounts of waste to work profitably. On the contrary, a medium-sized horse stable, small town/village or a food processing business already make ACU work in a smart way: Efficiently, Automatically and Cost-Effectively.



RELIABLE, PROVEN TECHNOLOGY



INDIVIDUAL TOTAL SOLUTIONS

All our plants for biowaste, water and wastewater treatment as well as biodiesel production are compatible, and by combining them we are able to provide comprehensive and creative environmental solutions which turn all your waste streams into benefit. For example, a Preseco drum composting plant is ideal to treat reject sludge of a wastewater treatment plant or a biogas plant. A total solution for fish waste handling can also be built by combining a Preseco drum composting plant and a Preseco biodiesel processor.

TYPICAL TREATMENT CAPACITIES OF PRESECO DRUM COMPOSTING PLANTS

ACU 10 m3 Container Unit	600 l / day
ACU 50 Drum	3.5 m3 / day
ACU 125 Drum	8.2 m3 / day
3 x ACU 125 Drum	25 m3 / day
6 X ACU 125 Drum	50 m3 / day

We offer composting solutions for 500 - 12,000 tons of waste per year.

- ***Proven technology***
- ***Fully automated***
- ***Low energy consumption***

- ***Multi-source raw materials***
- ***Low operating costs***
- ***Grows with your business***
- ***High value end product with steady quality***



Our Composting Plants have been designed explicitly for local use, allowing their trouble-free location near by residential areas. Preseco Composting Plants function without odours, run-offs, insects or noise and do not attract vermin. The process consumes very little energy and the heat energy it produces can be exploited.

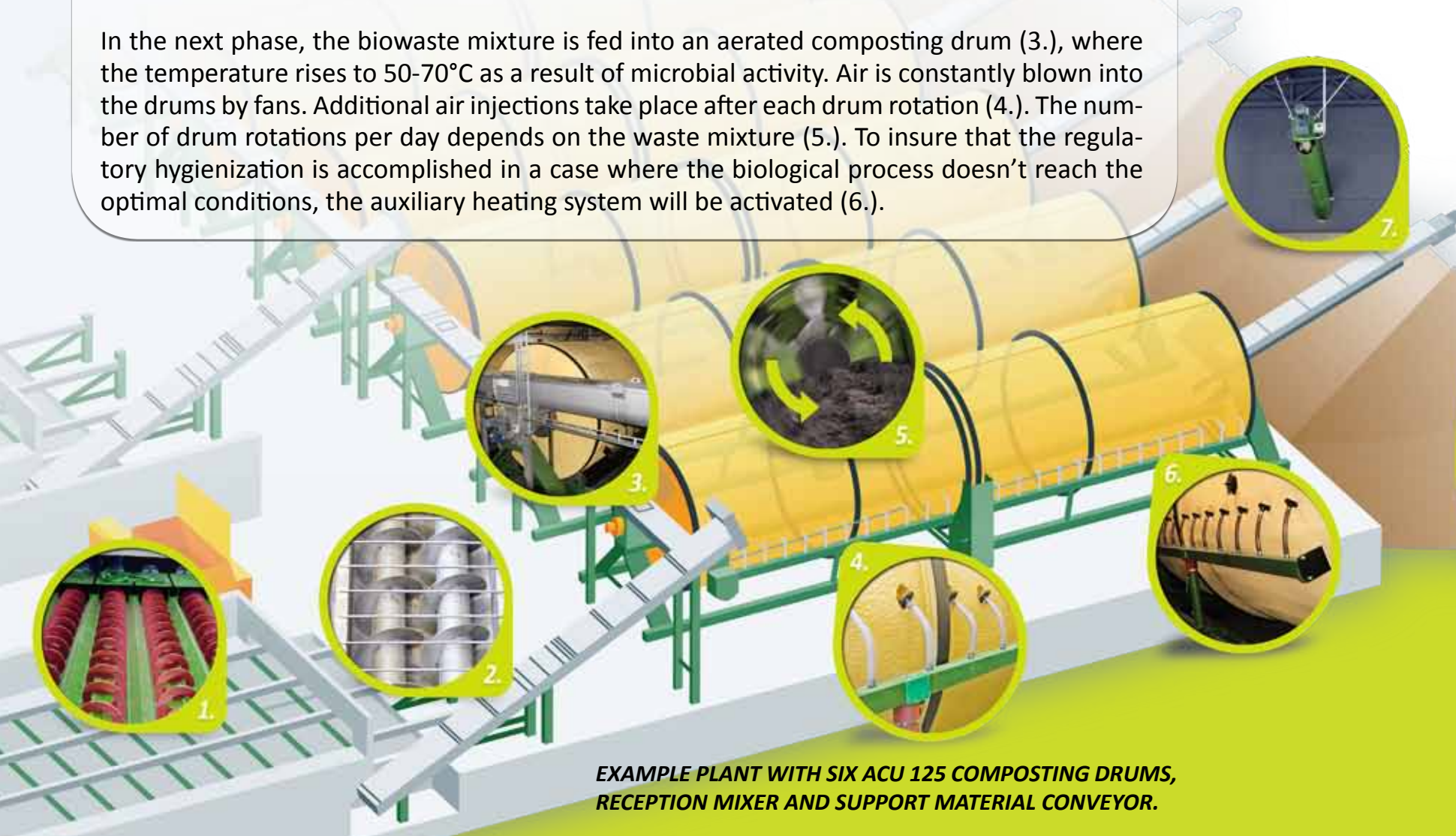
The end product of our Composting Plant is completely clean and hygienic. During a 2 – 3 month storage period, the compost matures and cools down, after which it can be sold as soil conditioner, biological fertilizer, for green building etc.

PROCESS OF PRESECO COMPOSTING PLANT

When the biowaste reaches the plant, support material is mixed to it in order to add carbon to the process and ensure the optimal structure of the mixture in terms of air and humidity (1.). Such support material can be peat, woodchips, straw or even cardboard, etc. The mixing of waste and support material is an automated process (2.).

In the next phase, the biowaste mixture is fed into an aerated composting drum (3.), where the temperature rises to 50-70°C as a result of microbial activity. Air is constantly blown into the drums by fans. Additional air injections take place after each drum rotation (4.). The number of drum rotations per day depends on the waste mixture (5.). To insure that the regulatory hygienization is accomplished in a case where the biological process doesn't reach the optimal conditions, the auxiliary heating system will be activated (6.).

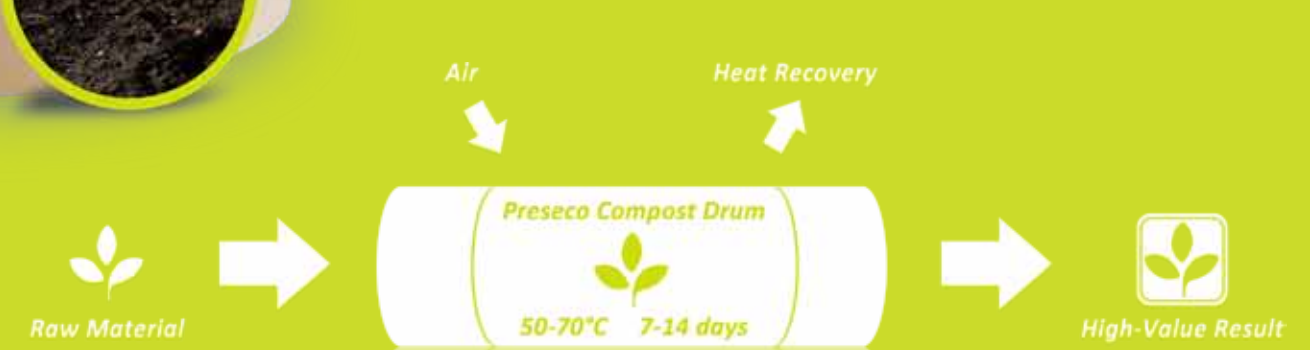
The high quality end product is transferred automatically out of the drum (7.). The heat generated in the continuous process can be recovered and used for heating, drying or producing hot water, etc. The compost is clean, odour-free and hygienic. During a 2 – 3 month storage period, the compost matures and cools down, after which it can be sold as soil conditioner, biological fertilizer, for green building, etc. (8.)



EXAMPLE PLANT WITH SIX ACU 125 COMPOSTING DRUMS, RECEPTION MIXER AND SUPPORT MATERIAL CONVEYOR.



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SOURCE MATERIAL VOLUME DECREASES 30-50%