PRESECO

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 process without supervision. 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, additives 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.

SUITABLE FOR HANDLING ALL KINDS OF ORGANIC WASTE:

- *all farming biowaste (piggery, cow stables, poultry farm, horse stables, fur by-products)*
- *various kinds of garden waste*
- *special collected biowaste and biowaste from central kitchens*
- *sludge from waste water treatment plants*
- *biowaste from food industry*
- *biowaste (cleansing waste and fish remains) from fish industry*
- *even some wastes from the oil/chemical industry and polluted soil*

THE END PRODUCT:

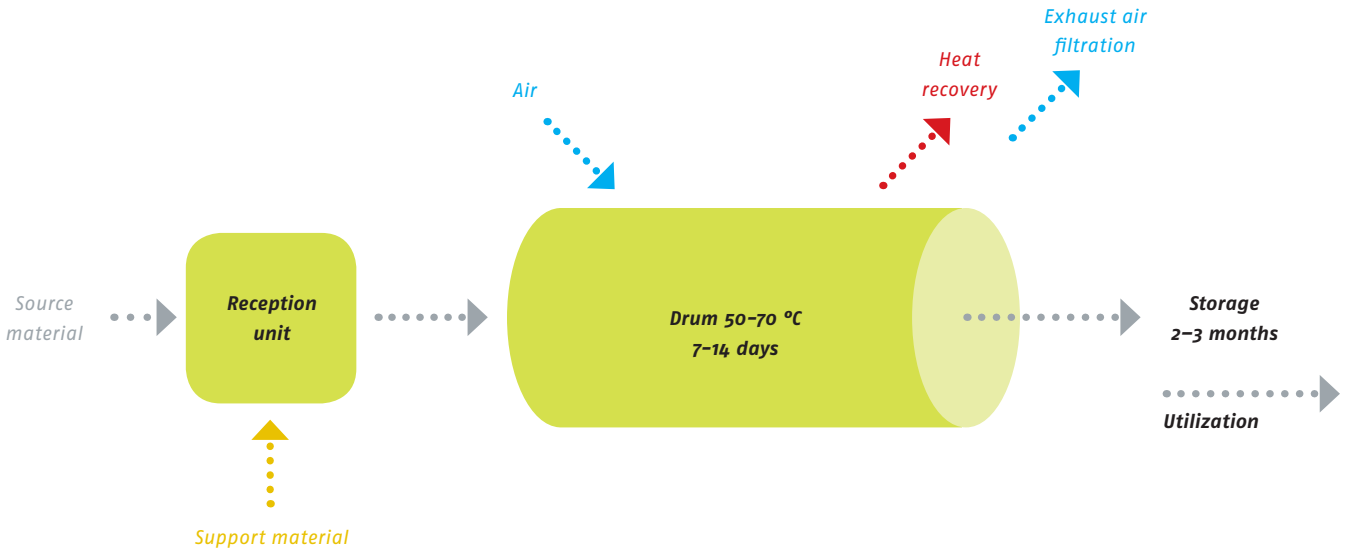
- *can be stored and sold*
- *nutrients are bound very well and are in a usable form for plants*
- *pH ≈ 7*
- *does not attract vermin (birds, rats, etc.)*
- *free of pathogens (salmonella, listeria, etc.) immediately after the drum*
- *easy to store, no leakages or odour, no need to turn*
- *no need for big composting fields nor open storages*
- *homogeneous*
- *output is 30–50% smaller than input*

PROCESS OF PRESECO COMPOSTING PLANT

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

In the next phase, the biowaste mixture is fed into an aerated composting drum, where the temperature rises to 50–70°C as a result of microbial activity. Air is constantly blown into the drum, and its amount is regulated by monitoring exhaust gases and the process temperature. In this way, optimal conditions can be maintained throughout the entire process.

The high quality end product is transferred automatically into the storage. The heat generated in the continuous process can be recovered and used for heating, drying or producing hot water, for example. The compost is clean, odour-free and hygienic, and during storage it matures and cools down, becoming fluffy. It is suitable as a high-value soil conditioner, among other applications.

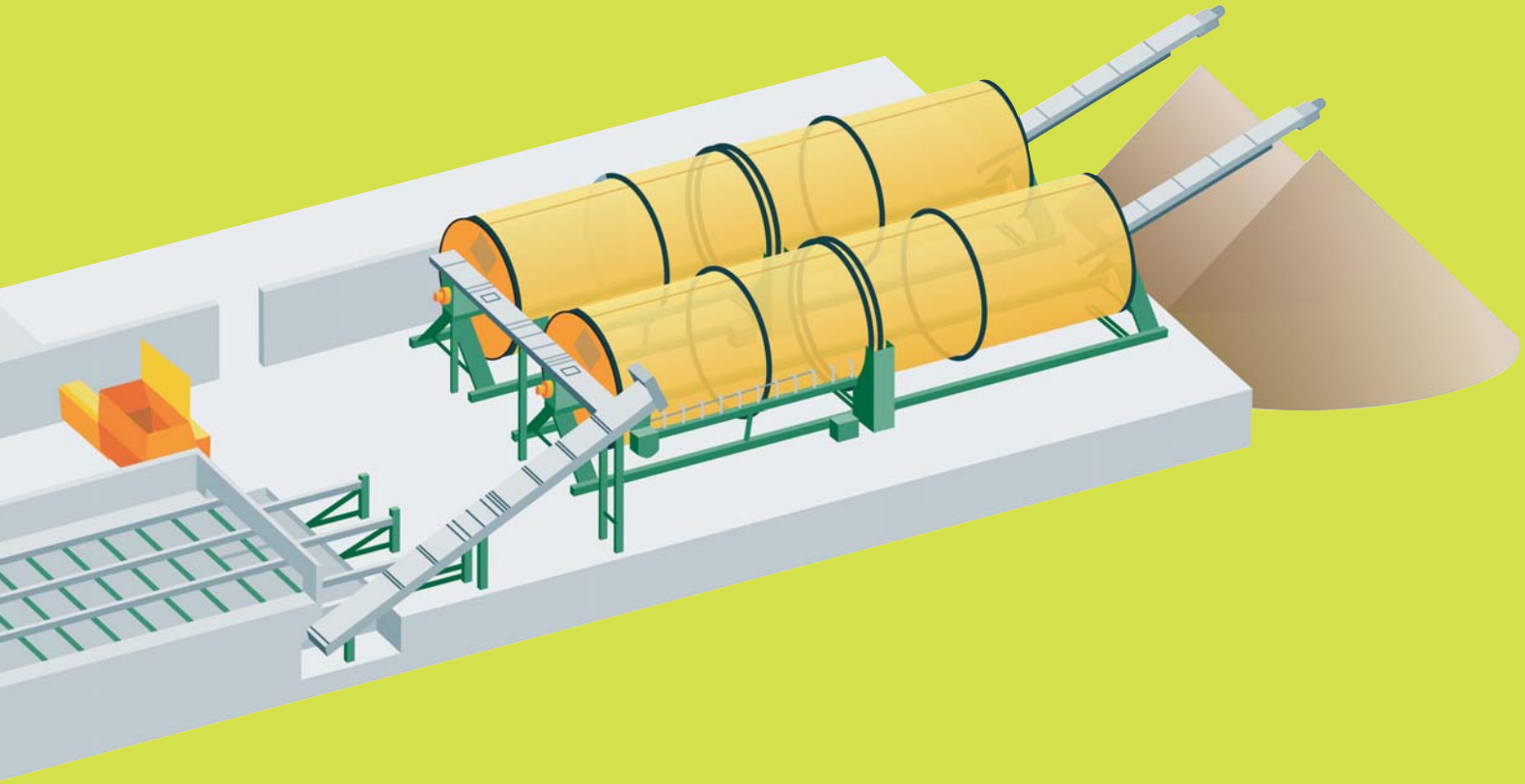


SOURCE MATERIAL VOLUME DECREASES 30–50%

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.



TYPICAL SETUP WITH TWO ACU 125 COMPOSTING DRUMS, RECEPTION MIXER AND SUPPORT MATERIAL CONVEYOR

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.

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