



organic & food waste management

The Process

1. Food waste arrives at the plant in either bulk loads, containers or on pallets. It is off loaded in an airlock to ensure the external environment is protected when the waste enters the storage silo. It is also in this area that the vehicle is washed down before returning to the road.
2. The waste is pulverised by a mechanical shredder and is then screened for objects (i.e. metals and plastics) that are unsuitable for processing.
3. Once cleared of unsuitable objects, the waste is then transferred by conveyor to the initial treatment vessel.
4. From here it goes through the various treatment phases within the tank farm.
5. The final treatment process is to transfer the now treated waste to a filter press. This produces the dry fertiliser product, which is now ready to be used by farmers as a substitute to conventional PETRO-chemical fertilisers.
6. At this stage the dry product is sold as a fertiliser and is transported to local farmers for reuse.



Adding value to the waste industry



Vertal's 3rd generation ATAD* food and organic waste processing plant is ideally situated to stop food waste from leaving the capital.


Located in Mitcham, South London, the 70,000 tonne per year plant is unique in its ability to be able to treat a wide range of solid and liquid food waste arising from industry, retail outlets and domestic households.

The plant uses an innovative (wet) in-vessel aerobic process known as 3rd generation ATAD* generating temperatures of up to 80°C and completely pasteurising and treating the food waste in as little as 72 hours.

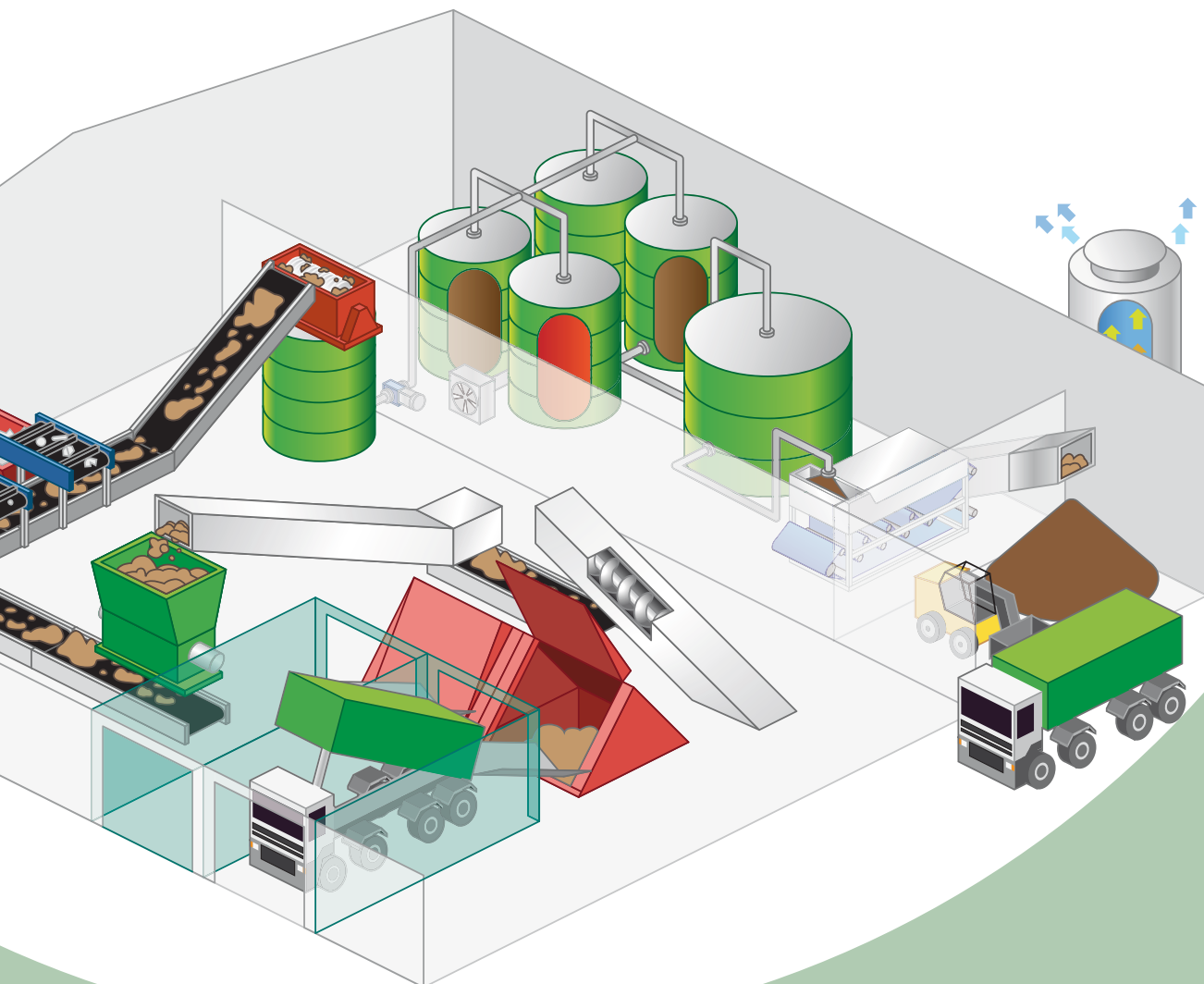
The Vertal process and location provides several distinct advantages over the usual in-vessel (IVC) and traditional composting methods.

They are:

- ▶ Treatment within the M25
- ▶ Rapid process times
- ▶ Reduced travelling times
- ▶ Cost effective alternative to landfill
- ▶ Cost effective alternative to ICV and AD processing
- ▶ Energy efficient and low carbon footprint
- ▶ Heat output used for direct heating

The plant, by way of output, manufactures high grade nutrient rich  fertiliser. This can be readily used in agriculture as a suitable alternative to fossil fuel based fertilisers.

For more information on this unique and urban friendly food waste processing facility, please phone sales on **020 8648 4555** or e-mail sales@vertal.co.uk



A real alternative to land fill for food waste

Your food waste no longer has to travel long distances to landfill, the solution is right here on your door step!

Our unique food processing plant in Mitcham, South London, has been specifically designed to treat and process a wide variety of biodegradable organic wastes including:

- ▶ Fruit & Vegetable waste
- ▶ Dairy process waste
- ▶ Brewery liquors
- ▶ Fish processing offal
- ▶ Abattoir effluents
- ▶ Supermarket returns
- ▶ Out-of-date products (packaged and non packaged)
- ▶ Colas and juices
- ▶ Pastries and Dough
- ▶ Butchery waste
- ▶ Catering & kitchen
- ▶ Liquid organics

The waste is processed using the **Vertal 3rd generation ATAD*** system (Autothermal Thermophilic Aerobic Digestion). The process uses natural heat and oxygen hungry bacteria to breakdown the waste into liquid slurry. Following this initial conversion, a combination of bacterial action and forced air is used to homogenise and digest the organic material at a rapid rate. This process is some five times faster than other composting processes.

As the **Vertal** system is exothermic (requiring no artificial heat input), the plant generates its own heat during the biological process and reaches temperatures in excess of 75°C.

This unique plant is able to treat and process liquid and solid food waste and does not rely on any green waste material for its process. It is also less dependent of non-sustainable fuels than any other process currently available and due to its small operating footprint is ideally suited to urban and food manufacturing locations.

For more information on this unique and urban friendly food waste processing facility, please phone sales on **020 8648 4555** or e-mail **sales@vertal.co.uk**





A greener more efficient composting process!


A waste processing plant Specifically designed for liquid organics and food!

As pressures increase on the recycling of food waste from the general public and commercial outlets, many Local Authorities are now moving away from "Green & Food Waste" collections to specific collections for garden waste and separated food waste. In this way Local Authorities can clearly define the true cost of waste processing.

Unlike most composting plants the **Vertal** system does not require any green (garden) waste to help the process along.

The Vertal 3rd generation ATAD* processing plant is purpose built to take the following food waste streams:

- ▶ Source separated food waste from domestic dwellings
- ▶ Restaurant kitchen and canteen waste
- ▶ Fast food outlets
- ▶ Hospital catering
- ▶ Out-of-date stock (foods & beverages)
- ▶ Contaminated foods*
- ▶ Supermarket "passed shelf life" food products
- ▶ ABPR category 3 waste
- ▶ Food factory waste


Many composting processes can only take a small percentage of food waste as the daily intake in relation to garden waste; the Vertal system uses a special process to take organic liquids and food waste to produce high quality  fertilizer ready for use by the farming community.

For more information on this specialist food waste processing facility, please phone sales on **020 8648 4555** or e-mail [**sales@vertal.co.uk**](mailto:sales@vertal.co.uk)

High quality, non-petrochem fertiliser


**An opportunity to use a high nutrient
eco-friendly fertiliser made from food waste.**

Over the previous pages you will have read how the unique Vertal composting process is able to take all forms of food waste from domestic dwellings, industry and commerce. How the plant is able to process organic liquids and all manner of food stuffs be it: vegetable, meat, dairy or pastry and turn it quickly and efficiently into a by-product for agriculture.

Because all that goes in is organic, all that comes out is organic. The output from the process is  fertiliser that is high in nutrient value and organic matter and a real cost effective alternative to petrochemical fertilisers.

The process is controlled by a strict Quality Assurance Process that is regularly checked and inspected by the regulatory authorities (Environment Agency and DEFRA).

Each process batch is checked and approved by our laboratories prior to dispatch. You can rest assured that Vertal will comply fully with the Duty of Care obligations and controls of the Environmental Protection Act.

Vertal's  fertiliser offers the following benefits:

- ▶ High levels of nutrients and organic matter
- ▶ Less dependency on non-sustainable fuels
- ▶ A competitive alternative to petrochemical fertilisers
- ▶ An eco-friendly product

For more information on how you can access this eco-friendly fertiliser, please phone sales on **020 8648 4555** or e-mail **sales@vertal.co.uk**







Vertal Limited

Mitcham
Riverside House
43 Willow Lane
Mitcham
CR4 4NA

T: 020 8648 4555

F: 020 8648 4554

sales@vertal.co.uk

www.vertal.co.uk

Printed on 100% Recycled Paper

Designed and produced by www.rubberneckcreative.co.uk