

New

**First
Patented
System**



Slurry Treatment System

Easy to install
User friendly
Cost effective

Captures lost Nitrogen

**Ammonium Nitrogen
increased between
100% to 400%**

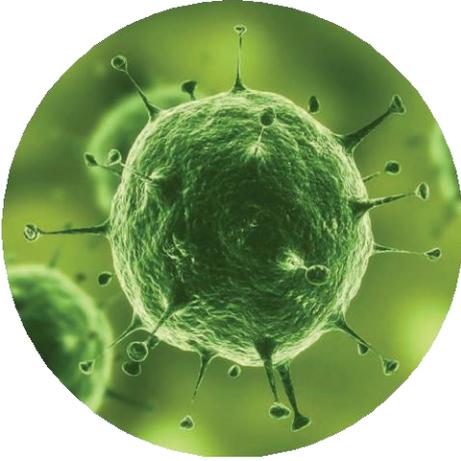
**Homogeneous -
ready to use**

**Grows
more grass**

**Produce your
own fertiliser**

**Retrofittable -
no need to
empty first**





Benefits

- + Captures Nitrogen
- + Reduces lethal & toxic gasses
- + Excellent mixing
- + Homogenous liquid ready to spread
- + Reduces odour
- + Plant friendly fertiliser
- + Enhanced grass yield

Aeration & microbial systems – background

The process has been developed from over 20 years experience supplying aeration systems to the wastewater industry and research undertaken with the support of Staffordshire University and Keele University.

Grass requires Nitrogen and other nutrients to grow. Natural bacteria in the soil breakdown sources of Nitrogen to form inorganic soluble nitrate. When manure is produced in the field this process occurs naturally (The Nitrogen Cycle). However, during storage anaerobic conditions are created which results in the production of lethal gasses including Methane and deadly Hydrogen Sulphide. Pungent odours are produced and significant amounts of nitrogen are lost as Ammonia gas (up to 80%).

The Aerobact system provides oxygen to change the bioecology of the slurry to meet Biological Oxygen Demand (BOD) and create an aerobic environment for the selected bacteria to thrive.

The resultant liquid is safe to handle, homogenous and a plant friendly fertiliser.

Advantages of fine bubble aeration

The unique fine bubble diffusers require **no fixing** and are easy to handle and install. Fine bubbles need less energy to produce and provide a highly efficient transfer of oxygen. Rising bubbles create an excellent mixing action.

Aerobic bacteria digest biosolids and anaerobic conditions are significantly reduced and in some cases eliminated altogether.

The Nitrogen that would otherwise be lost is captured within the liquid.



Maximising the use and value of slurry is vital to keeping farm costs down and protecting yourself against ever increasing artificial fertiliser costs. Air diffusers are easily installed, simply thrown into the liquid and sink to the bottom. The diffusers can be easily removed. The inoculant of micro organisms is added **ONCE ONLY**. The aeration creates a healthy environment for the bacteria to thrive and multiply.

3 Ring Tower with separator case study

Using 3 phase air blower with ring main connected to 15 fine bubble diffusers, running 24/7 during the winter storage period. Ammonium Nitrogen increased from 445mg/l to 2,200mg/l (397% increase).

Ammonium Nitrogen increased by 8090kgs giving an extra 43 units of Nitrogen per acre.

Value of slurry increased from £9.95 per cow to £49.48 per cow. Mr Graham Cooper, Bridge Farm, was so pleased he commented,

"It's like rocket fuel for grass".

Lagoon 2,4000,000 litres case study

Part system using single phase power with 4 fine bubble diffusers running 8 hours per day. Value of slurry increased from £6.00 per cow to £11.93 per cow (100% increase).

Mr Giles Bristol, Barnfields Farm added,

"Seeing is believing! I have visually seen the increases in spring grass growth and our plate meter readings back this up over last year.

The fields we spread on were much quicker to get going than the fields with AN alone".



Mr Graham Cooper,
Bridge Farm



Mr Giles Bristol,
Barnfields Farm



Slurry Aeration & Microbial Systems

Easy to install, user friendly,
cost effective

- + Captures lost Nitrogen
- + Increases Ammonium Nitrogen
- + Excellent mixing
- + Reduces gasses & odour
- + Plant friendly fertiliser

Please contact us to receive the farm trial case study process description and independent laboratory results.



To increase the value of your slurry please contact us for a quotation:

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