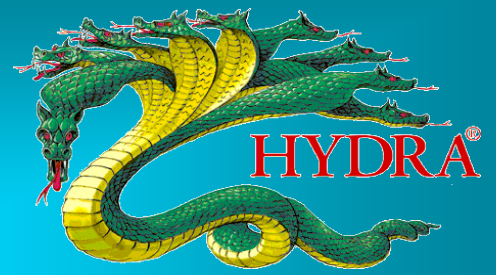
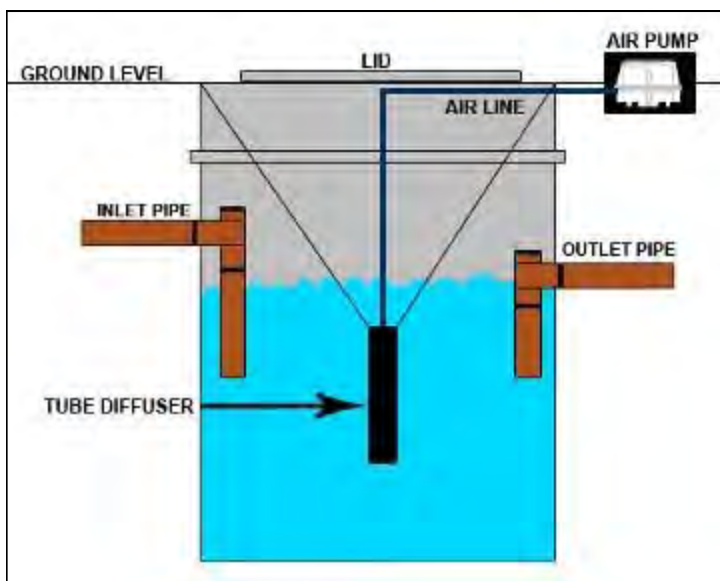


Septo Air Basic



Commercial & Domestic Systems

**Septic Tank Air Conversion Unit - Rectifies Failed Percolation Fields
Saves Replacing System Soak-away Pipework - Saves Thousands ££££'s**



**Generates Highly Effective
Aerobic Bacteria**

HYDRA®

Features & Advantages

Hydra Septo Air Conversion

- Most economic treatment system in UK.
- Regenerates blocked leach/percolation fields and soak-away systems.
- Converts existing septic tanks and cesspools without expensive digging or ground-works.
- Utilizes highly efficient aerobic bacteria to breakdown sewage.
- Avoid rotten egg smell coming out of your septic tank caused by production of toxic gases.
- Easy to install in one hour.
- Reduces sludge levels in tanks.
- Aerobic bacteria use the bio-matt produced by anaerobic bacteria's an energy source.
- Help maintain efficient soak away fields.
- Works in high water tables.
- Simply once per year maintenance.
- Designed in accordance with British Standard BS6297:1983 - Design and Installation of Small Sewage Treatment Works.

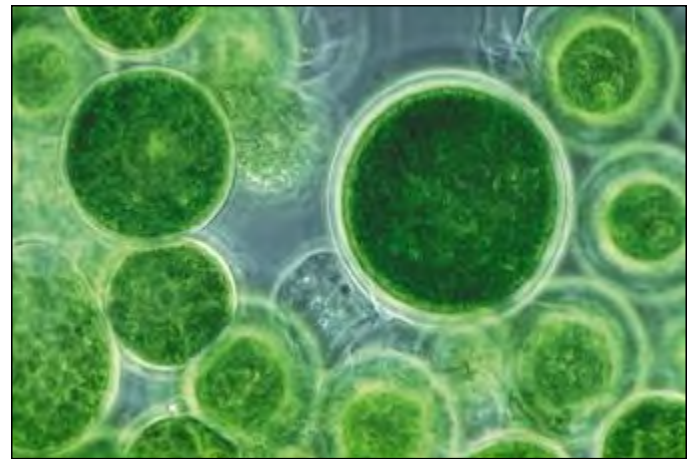
The Problem

Septic tanks work by utilising anaerobic bacteria (bacteria that reproduce without oxygen) in the tank itself, when new effluent is added these anaerobic bacteria partially digest the sewage.



As new effluent enters the system some of the partial digested sewage from the tank is pushed into the leach / drainage field (a series of porous pipe work which allows treated effluent to soak into the soil).

When the partially digested sewage enters the soil it encounters aerobic bacteria (bacteria that reproduces by oxygen (air = 21% oxygen) this bacteria continues to break down the effluent until it is pure enough to enter water courses.



Meanwhile the anaerobic bacteria in the septic tank is secreting a heavy bio-slime which is pushed into the leach field, normally the aerobic bacteria would consume this bio-slime as an energy source.

However if there is insufficient oxygen available i.e. water logged soil or more effluent entering the system than it was designed for, then this bio-slime will build-up into a bio-matt that will further prevent oxygen from reaching the effluent.

Eventually the walls of the pipework and the surround soil in the leach fields will be blocked with bio-matt and the whole system will back up either to the house or overflow the septic tank.

Solves failed leach field problems (blockages caused by anaerobic produced bio-matt).



Description

The bacteria that is found in septic tanks comes from the human body, this bacteria is facultative this means it is anaerobic if there is no oxygen present and aerobic if oxygen is present.

The facultative bacteria will switch within 1 generation (15-20 minutes depending upon oxygen availability).

The advantage of bacteria operating in the aerobic condition (with oxygen) is that it is approximately 20 times more efficient at breaking down effluent. This is one of the reasons you turn a compost heap in order to introduce air to speed up the composting time.

The aerobic bacteria do not secrete the heavy bio-mat that anaerobic bacteria do.

Hydra have now developed an economic alternative to drain field renewal or full bio-treatment plant saving many thousands of pounds.

The **Hydra Septo Air Conversion System** has been designed to overcome the pitfalls of the frequently inefficient anaerobic systems.

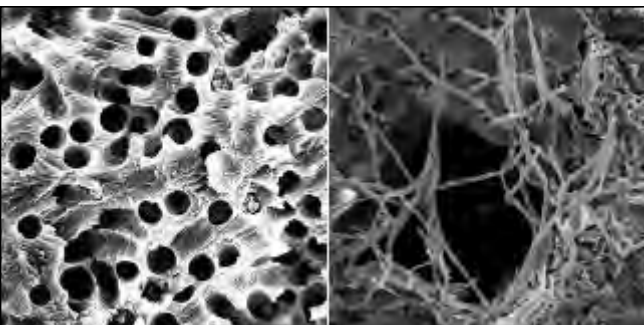
We have engineered the highly efficient **Hydra Septo Air System** using only the latest and best sewage treatment plant technology.



Our tough diffusers are the same as used in city sewage plants dealing with millions of gallons of effluent daily. These highly efficient diffusers release millions of tiny bubbles every minute to ensure a massive surface area for efficient oxygen exchange. Their flexible EPDM covers also ensure that they are self cleaning.

One of the secrets of efficient effluent degradation is to have sufficient biological media for bacteria to colonise.

To do this the media must have the largest surface area possible. Hydra achieve this by using a natural porous media less than 5 micron in diameter these tiny particles are honeycombed with millions of tiny holes for the bacteria to colonise.



We also only use reliable linear air pumps that are robust, energy efficient and have been used for many years in this industry.

Our efficient alarm system with warning beacon and battery back up warns you in the unlikely event of power cut or system failure.

To ensure your system gets off to a flying start we also include our natural blend of Hydra Bacteria which contains enzymes, microbes and micronutrients for the fast build-up of an efficient, effluent busting bio-mass we incorporate this in the biological media.

This gives you typical final effluent quality of less than 20:30:20 BOD:SS:Ammonia.



Simple yearly maintenance kit ensures system keeps running efficiently for many years.

Fantastic Cost Savings

By utilising Hydra's buying power and large scale production facilities we are able to minimise our production costs.

As you are dealing direct with the manufacture we pass these savings direct to you, this means that the **Hydra Septo Air Systems** are only a fraction of the price of our inefficient competitors.

Instead Of:

Competitors septic tank conversion system.

Typical cost £1,800 - £2,500.

Replacing leach field / drainage field.

Typical cost £2,000 - £4,000).

Full bioremediation system.

Typical cost £5,000 - £8,000.

**** Buy the Hydra Septo Air Conversion System ****

The Best Septic Tank Solution on the Market

See back page for full range of models.

Use the calculators at:

<https://www.hydra-bio.com/bod-percolation-test-calculator.html>

to work out the size you need.

If you are not sure our technical team can advise you.

Hydra Septo Air Basic Model Range

Choose the model for your needs.

Check chart below for:

Domestic: number of persons. Commercial: BOD Loadings.

List of Models and Capacities

| Model | Litres Air per hour | Power | Noise Level db. | Diffuser Size | Domestic No of Persons | Commercial BOD Loadings |
|--------------------------|---------------------|-----------|-----------------|---------------|------------------------|-------------------------|
| Hydra Septo Air BSYS0060 | 3600 | 55 watts | 40 | 500mm | <20 | 4,600 |
| Hydra Septo Air BSYS0080 | 4800 | 85 watts | 40 | 750mm | <30 | 6,200 |
| Hydra Septo Air BSYS0100 | 6000 | 105 watts | 45 | 750mm | <40 | 7,760 |
| Hydra Septo Air BSYS0120 | 7200 | 125 watts | 45 | 1000mm | <45 | 9,320 |
| Hydra Septo Air BSYS0150 | 9000 | 125 watts | 45 | 1000mm | <55 | 11,654 |
| Hydra Septo Air BSYS0200 | 12000 | 210 watts | 46 | 1000mm | <75 | 15,414 |




All systems come with linear air pump, air diffuser assembly, fittings for both brick/concrete and fibreglass/plastic tanks, bacteria starter pack incorporated into biological media and 30 metre braided air-hose.

Shipping to UK mainland is included in the price.

Your system needs to be emptied and cleaned before fitting the **Hydra Septo Air Basic System**.

Air pump needs to be located in a weatherproof area, garage, shed etc.

Warranty period is 1 years on air pump and 5 years on diffuser (provided unit is serviced yearly).

| Extra Fittings for Hydra Septo Air Systems | |
|---|---|
| Image | Description |
|  | 100mm (4 inch) Straight connector for broken outlet pipes |
|  | Outlet pipe extension 110mm (4 inch) so filter is under manhole cover (if required) |
|  | Push on connector housing for filter |

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