



**SITE SERVICES**  
OFFMAINS SEWAGE SOLUTIONS

**BioFicient**

# BIOFICIENT COMMERCIAL

ADVANCED SEWAGE TREATMENT SYSTEMS FOR RESIDENTIAL,  
BUSINESS & LEISURE APPLICATIONS

---





BioFicient  
Commercial

### Introducing BioFicient

BioFicient is designed for large domestic and commercial applications such as camp sites, hotels or industrial units. Its design incorporates flow management in order to both stabilise influent volume variations and to minimise hydraulic impact on the final settlement process. Such control ensures that final effluent remains at a consistently high quality.

The BioFicient commercial plant range is shipped as a single piece tank up to 300PE with modular systems available for up to 1000 PE. The BioFicient commercial range is designed in accordance with BS EN 12255.

### Effluent Quality

In a standard configuration, the BioFicient Commercial will deliver BOD levels of less than 20mg/l, 30mg/l Suspended Solids, and Ammonia levels lower than 5mg/l. This means it will outperform most of the packaged systems currently on the market for nitrogen reduction.

### Product Benefits

- GRP inspection covers for increased corrosion protection.
- Vent pipes added to every neck to allow better ventilation and air-flow.
- Necks on each side of the primary settlement tank to allow for better inspection and easier de-sludging.
- Biozones are now very similar in volume to aid performance.
- Inlet pipe has a rodding point inside the neck for easier access.
- A more efficient blower means less power consumption.
- More airflow to diffusers to improve process.
- Stainless-steel diffusers to avoid corrosion.
- Minimal footprint area.
- Alarm protected.
- Variable invert options.
- Other Made To Order / bespoke options are available.
- BioFicient comes fully supplied with control panel, externally sited air blower and loss of pressure alarms as standard

### Applications

The BioFicient commercial range is suitable for use across the following applications:

- Residential
- Leisure
- Public sector
- Hospitality
- Transport
- Offices
- Campsites

## EXPERTISE

- › Providing you with the confidence that comes from a world leading wastewater brand. We offer expert guidance on choosing the correct wastewater treatment solution, right through to aftersales service and maintenance.

## RELIABILITY

- › Our wastewater solutions use tried and tested technologies. Our reliable performance products are hassle free for ultimate peace of mind.

## TRUST

- › With over 60 years' experience delivering high performance and reliable wastewater treatment systems worldwide.

REQUEST  
A FREE SITE  
VISIT FROM OUR  
EXPERT TEAM.

info@siteservices.co.uk  
01706 813733

# BioFicient HOW IT WORKS



BioFicient employs a plug flow combination of aerobic and anoxic processes in a fluidised bed arrangement. This operates in conjunction with an advanced system of air diffusers and selected media to deliver optimum levels of purification. As well as catering for large commercial developments we also offer a bespoke BioFicient solution for up to 1000 PE.

## 1 - 2 Primary Settlement

This is the initial stage of treatment and simply involves the retention of coarse solids present in raw sewage and wastewater for subsequent gradual breakdown. BioFicient features two chambers to ensure efficient operation with a flow balancing facility.

## 3 - 5 Biological Treatment

Substantial BOD reduction takes place here, where the carbonaceous pollutants are removed by presenting the sewage to the micro-organisms in the presence of oxygen. The treatment is achieved by high efficiency air diffusers continually pumping oxygen through the biological media and fluidised effluent.

## 6 Settlement

A natural by-product of biological treatment is humus sludge and this is separated for further treatment. The treated effluent is discharged via the outlet.

### Features

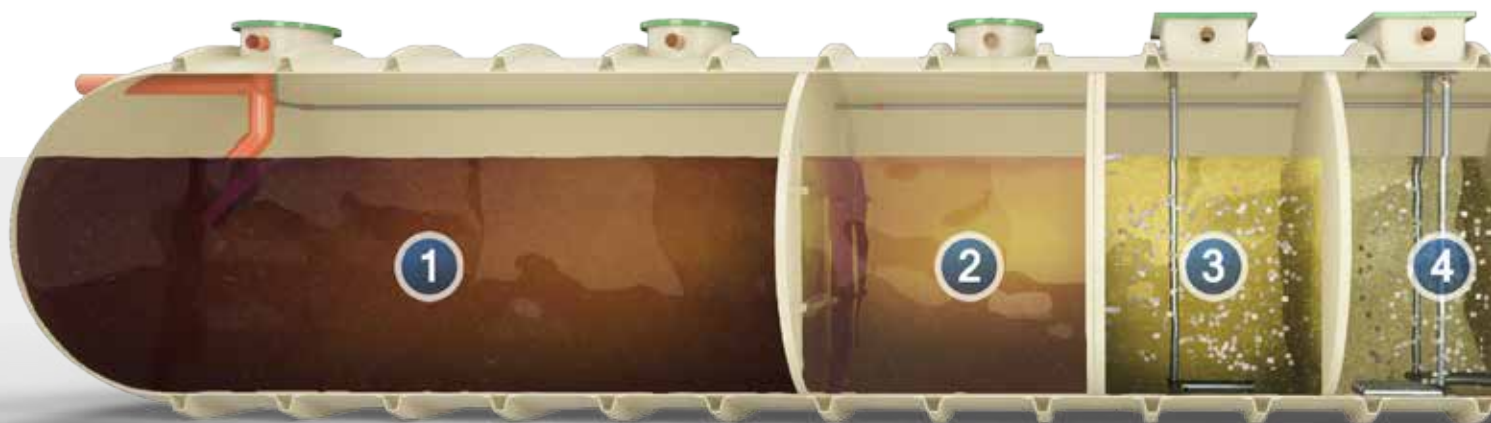
- Choice of inverts (from 0.5 to 2.0m)
- Sample chambers
- Duty and Standby blowers (as required)
- Pumping stations
- Alarm Systems

### Additional products

The commercial applications with a catering function require a grease separator installed in addition to the sewage treatment plant to prevent the oils, fats and grease from entering the unit. Kingspan Klargester offer a range of grease separators designed in accordance with BS EN 1825-1.

For applications where drainage levels on site will not support a gravity fall in to or out of the BioFicient, we offer a full range of Foul or Effluent Pump Stations to facilitate any drainage requirement.

Kingspan Klargester product experts are here to help you with the right solution to improve the performance of your system and reduce risk of breakdown.



1 Primary Settlement Tank 1

2 Primary Settlement Tank 2

3 Biozone 1

4 Biozone 2