

## **BIODIGESTER PA SEWAGE TREATMENT PLANTS**

For any application, residential, commercial, industrial, where there is no access to a mains sewer, the Biodigester PA sewage treatment plant provides an extremely efficient reliable and cost effective solution to sewage disposal. The PA system is a single tank unit up to 300 residential population equivalent and a modular system for larger applications.

### **Performance with Peace of Mind**

Regulations in the UK require that only fully CE marked and certified treatment plants are acceptable. The Biodigester PA treatment plant has undergone extensive independent testing to BSEN12566-3 making it fully compliant with the European Standard. It is important to note that the standard relates to all units in the range from 6 persons Domestic Population Equivalent (PE) up to 50 persons PE.

The CE Marking includes both process and structural testing.

The Biodigester PA sewage treatment system is designed to achieve the required effluent quality standard of 20mg/l Biochemical Oxygen Demand (BOD), 30mg/l Suspended Solids (SS) and 20mg/l Ammoniacal Nitrogen as N. The European Standard performance testing relates to an efficiency of better than 94%, the certified performance of the Biodigester PA system is that it produces an average final effluent quality of 11mg/l BOD, 16mg/l SS and 6mg/l Ammoniacal Nitrogen as N. This confirms an average efficiency ratio of 96.2%.

As part of the test procedure the Biodigester PA was confirmed to have low operating costs.

### **Process**

The Biodigester PA treatment system is a three stage biological process contained within a single tank structure, based on the principles of a submerged aerated filter and designed in accordance with the requirements of BS6297. Careful configuration of the internal flowpath and the inclusion of non-mechanical recirculation systems in some cases ensures optimal process performance as demonstrated by the exceptional results obtained from the independent testing, providing peace of mind for the end user. There are no electrical or mechanical components within the treatment plant, in the smaller systems, thereby eliminating the need for any specialist servicing arrangements and ensuring that any maintenance requirements on the Biodigester PA system are kept to an absolute minimum.

### **Servicing and Maintenance**

The Biodigester PA systems have minimal mechanical components and therefore require only simple maintenance procedures ensuring that, whether it is a 6 person unit or a 300 person unit, annual maintenance costs remain at a low level.

All Biodigester PA sewage treatment systems come with a comprehensive two year warranty.

### **Biodigester PA Sewage/Wastewater Treatment Systems**

- Full technical back up and customer support
- Single tank installation to minimise costs
- Failure alarm systems as standard
- No mechanical or electrical parts within the smaller units
- Robust polypropylene construction for easy and cost effective installation
- No visual intrusion. Flat, flush ground level covers suitable for 1 ton load – standard duty. Reinforced concrete slab required for vehicular duties
- Integral discharge pumps where required (all models) no additional tanks required
- Deep inlet inverts available to avoid pumping untreated sewage
- Low running and maintenance costs