### MANTAIR

Mantair Ltd is a family owned British company which specialises in the manufacture, installation and servicing of wastewater treatment products for areas not serviced by 'mains drainage'.

The Mantair brand has been providing consumers with reliable, sustainable and economical drainage solutions for over two decades and continues to provide a professional service using modern technologies.

#### **INSTALLATION & COMMISSIONING**

Our 'in house' contracting division provides a professional service in the field of wastewater treatment products, including design, installation and commissioning of septic tanks, septic tank conversions and packaged sewage treatment plants, for both commercial and domestic customers.

Our engineers ensure care is taken at all times during delivery and installation of the wastewater treatment product to negate the potential of any damage. At all times during the contract the client is kept informed of progress. On final commissioning of the treatment plant the site is left in a clean and tidy condition.



#### **MAINTENANCE & SERVICING**

MANTAIR Maintenance Division is a dedicated maintenance department, providing service agreements for the majority of domestic and commercial sewage treatment plants available in the UK.

Our customer Service Team provides an efficient service using our customized database to ensure that all of our customers expectations are fulfilled. All of our engineers are experienced and trained to deal with customers in a friendly yet professional manner.



#### THE AREA WE COVER



For further information and advice on selecting the appropriate wastewater treatment system for your situation, contact MANTAIR for professional and friendly assistance.

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## BIOSURE Package Sewage Treatment System • EN-12566-3



BioSure from MANTAIR is a compact packaged sewage treatment plant which provides a discreet, reliable and affordable solution to sewage treatment for domestic dwellings and commercial premises without access to mains drainage.

Providing a safe environment for the collection and treatment of waste water, BioSure produces a clear, odourless treated effluent suitable for discharge direct to a ditch, stream, or river.

#### **ENVIRONMENTAL ADVANTAGES**

- Low Power Usage.
- No noise pollution.
- No visual impact.
- Protection to ground and surface waters.
- Manufactured in the UK.

# bioSure

#### **CONSUMER ADVANTAGES**

- Certified to European Standard EN 12566-3.
- Compact and simple design provides 'value for money'.
- Low level visibility with a lockable child-proof pedestrian duty cover safe for children and pets.
- Low energy consumption.
- Low maintenance requirements.
- Specifically designed to produce an effluent suitable for discharge to a natural watercourse or ground (subject to Regulating Authority Approval).

#### THE SCIENTIFIC PRINCIPLE

There are three treatment zones within the single BioSure tank structure. The first zone is a primary settlement chamber where solids and floating material are retained. The liquids pass through to the second chamber, which is a biozone.

Central to the operation of the BioSure sewage treatment plant is the biozone. Within the biozone aerobic micro-organisms develop through the use of fine bubble aeration and floating plastic media. This biozone process provides an extremely robust means of treating sewage, especially for reducing Ammoniacal Nitrogeon.

"BioSure is a single tank system which is installed completely below ground and uses Aeration Technology incorporating a biozone for the growth of aerobic micro-organisms which degrade the sewage."

The third chamber is a final settlement zone where fine solids are separated and returned automatically to the first chamber using a recirculation airlift. The treated liquid is then suitable for discharge direct to a ditch or stream.

The only electrical component for the BioSure is a small air compressor.



#### SELECTING THE RIGHT BIOSURE

BioSure sewage treatment plants are available in population equivalents of (PE) 6 – 55. When sizing a new sewage treatment plant the British Water Flows & Loads Code of Practice – 3 should be used.

This Code of Practice provides the information required to ensure the correct size of treatment plant is installed.

Model Type	BioSure 1	BioSure 2	BioSure 3	BioSure 4	BioSure 5	BioSure 6
Maximum Number of Full- time Residents	6 (p/day)	12 (p/day)	18 (p/day)	25 (p/day)	40 (p/day)	55 (p/day)
Weight Empty	250 kg	500 kg	650 kg	720 kg	1,200 kg	1,450 kg
External Diameter	1,530 mm	1,920 mm	1,920 mm	1,920 mm	1,920 mm	1,920 mm
Overall Length	2,720 mm	3,250 mm	3,980 mm	5,550 mm	7,200 mm	9,400 mm
Overall Height	1,730/2030 /2,280 mm	2,470/2,720 mm	2,470/2,720 mm	2,470/2,720 mm	2,275/2,775 /3,275 mm	2,275/2,775 /3,275 mm
Inlet Invert from ground level	450/750 /1,000 mm	750/1,000 mm	750/1,000 mm	750/1,000 mm	500/1,000 /1,500 mm	500/1,000 /1,500 mm
Inlet Invert to Base	1,280 mm	1,720 mm	1,720 mm	1,720 mm	1,775 mm	1,775 mm
Blower Motor Rating	64 Watts	77 Watts	120 Watts	120 Watts	270 Watts	270 Watts

All models are available with an integral pumped outlet for applications where discharge by gravity is not possible (IPS).





