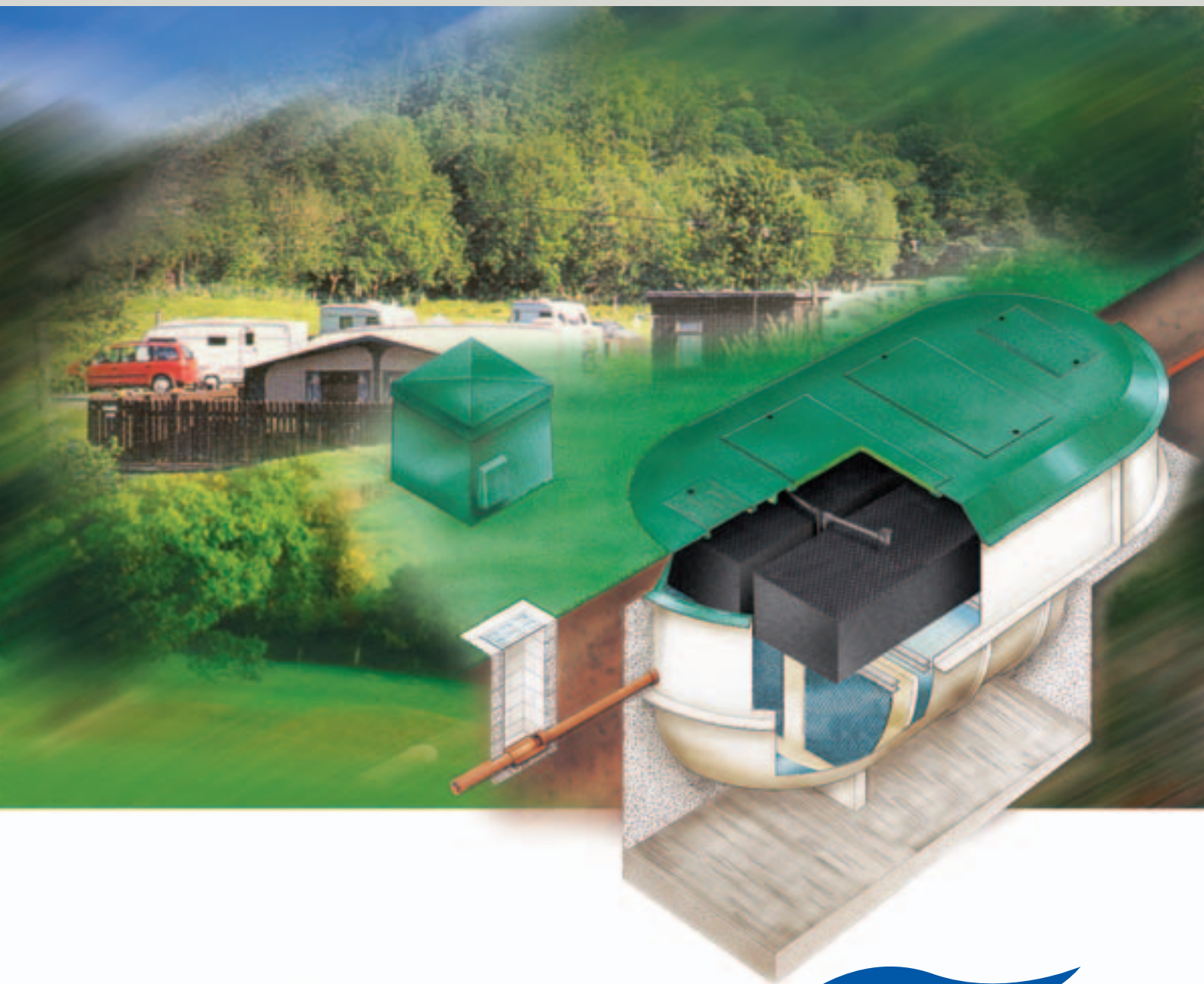


# AirFlow AF4 - AF10

Package Sewage Treatment Plants for Residential and Commercial Applications



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**Klargester**

# AirFlow AF4-AF10

Package Sewage Treatment Plants for Residential and Commercial Applications

## Applications

The Klargester AirFlow series of package sewage treatment plants is designed to treat the sewage from a whole range of developments where access to the main sewer is not possible.

Suitable for housing estates, camping and caravan sites, rest homes, schools, construction sites, hotels, country clubs, public houses and restaurants.

## Features

- Below ground installation, minimises visual impact.
- The cover has been specifically designed to blend with surroundings. Generous access for maintenance.
- Efficient air blower is quiet and ensures low running and maintenance costs.
- Casing construction to BS4994 (1987) in GRP (Glass Reinforced Plastic).
- Built in surge flow control.
- No moving mechanical parts or electrical components within the plant.
- All Klargester products are manufactured under the quality procedures of BS ISO 9001: 2000.

## Design

AirFlow sewage treatment plants are available as standard or high level nitrification plants. They employ a development of the well proven aerobic biological process for the purification of sewage and waste water.

This process takes place in four distinct stages:-

### 1. Primary Settlement

This is the initial stage of treatment and simply involves the retention of coarse solids present in raw sewage and waste water for subsequent gradual breakdown.

### 2. Carbonaceous 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 continually distributing the screened liquids over the biological media.

### 3. Nitrifying Biological Treatment

Additional treatment is provided in order to reduce the Ammoniacal Nitrogen. There are several levels of Nitrification available. For most applications the standard is suitable. However, for particularly sensitive applications a high level unit can be selected.

### 4. Final 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. Under normal domestic conditions 20mg/L BOD, 30mg/L SS, 20mg/L Ammonia can be achieved with standard plants and 10mg/L Ammonia can be achieved with high rate plants.

## Installation

The unit is normally installed below ground with the cover flush, however it can protrude above ground if required by site levels. Ideally siting should be under a pedestrian area no closer than 15m from the nearest house. The tank should be vented independently or back through a local building vent stack.

Installation is quick and economical, the plant requiring only to be seated on a concrete base with a surround of concrete.

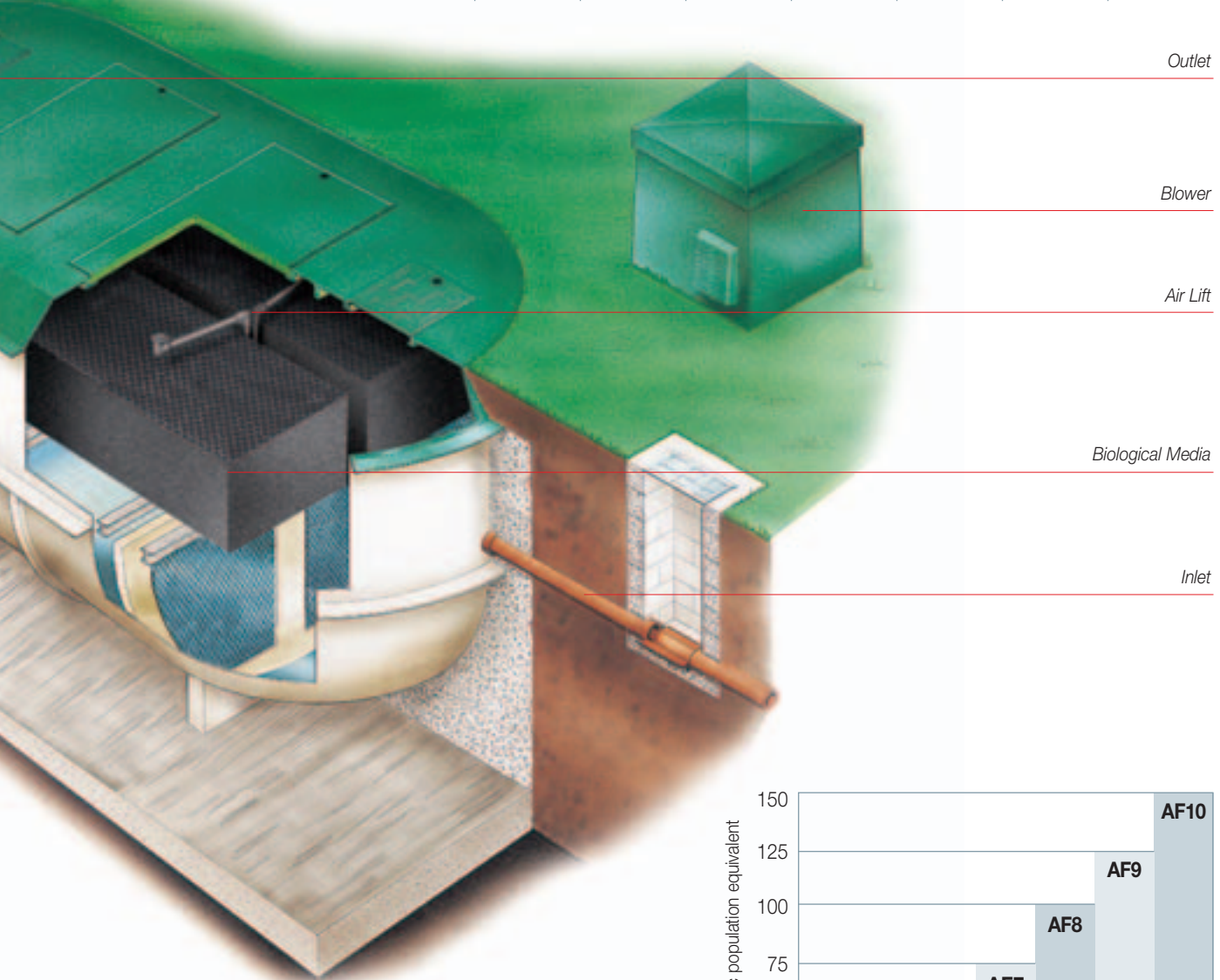
The blower housing can be sited anywhere with access to mains electricity within a 15m radius of the plant itself.

## Options

- Pumpsets - where the treated effluent has to be dispersed to a higher area because of site levels or ground water.
- Sample Chambers - for accurate and convenient effluent sampling, as required by the Environment Agency.
- Alarm Systems - for the warning of power or equipment failure.



| Unit Size                            | AF4   | AF5   | AF6   | AF7   | AF8   | AF9   | AF10  |
|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Weight (tonnes) standard units empty | 0.320 | 1.080 | 1.100 | 1.500 | 2.000 | 2.500 | 2.900 |
| Length (m)                           | -     | 5.1   | 5.1   | 6.8   | 7.6   | 8.1   | 9.9   |
| Width (m)                            | 2.6   | 2.9   | 2.9   | 2.8   | 2.8   | 2.8   | 2.8   |
| Depth (m)                            | 2.6   | 2.8   | 2.8   | 2.5   | 2.5   | 2.5   | 2.5   |
| Motor Rating                         | 150W  | 370W  | 370W  | 550W  | 550W  | 550W  | 750W  |

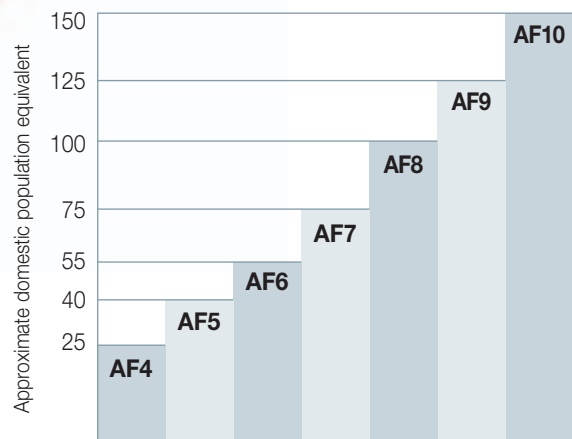


### Advice

The information in this sales literature is, by necessity, brief. For more detailed technical literature and drawings regarding applications, installation, maintenance or specific options, please contact Klargester. We have both internal and field sales staff who will be pleased to assist.

### Legal Requirements

Prior to installation, there is a legal requirement to obtain a Consent to Discharge from the appropriate agency. Klargester offer full assistance in this respect.



#### Maximum Flow m<sup>3</sup>/day

|     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|
| 5   | 8   | 11  | 15  | 20  | 25  | 30  |
| 1.5 | 2.4 | 3.3 | 4.5 | 6.0 | 7.5 | 9.0 |

#### BOD Load kg/day

# Klargester Off-Mains Solutions

- BioDisc® Sewage Treatment Plants
- AirFlow Sewage Treatment Plants
- Sigma SuperSeptic
- HillMaster Package Pump Systems
- Pumpstor24 Pumps Systems
- Stormwater Attenuation Systems
- Septic Tanks
- Cesspools
- Grease & Silt Traps
- Oil/Water Separators
- Silage Effluent Tanks
- Reed Beds
- Rainwater Harvesting
- Garden Watering Systems



## Certified Installers

Strategically located throughout the UK, Klargester Certified Installers are appointed following rigorous selection procedures which assess their installation expertise, reputation and financial status.

These performance criteria, together with their design skills and knowledge of Klargester products are also reviewed on an annual basis to ensure that the highest levels of professionalism are maintained.

## Klargester Service

Klargester have a dedicated service division providing maintenance for waste water treatment products. Factory trained engineers are available for site visits as part of a planned maintenance contact or on an 'on-call' basis.

## Unique Customer Care

Klargester offers a unique and comprehensive care package both before and after care. Throughout the UK, our team of service engineers is always on hand to ensure that Klargester products provide their owners with a long and cost-effective life. Call our Customer Care Department for further information.

## Larger Applications

Klargester also manufactures a range of AirFlow plant to cater for larger applications such as residential developments, caravan sites and hotels.

As specialists in waste water treatment we are able to provide solutions for many different applications. Please contact us for further information.

*In keeping with Company policy of continuing research and development and in order to offer our clients the most advanced products, Klargester reserves the right to alter specifications and drawings without prior notice.*



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