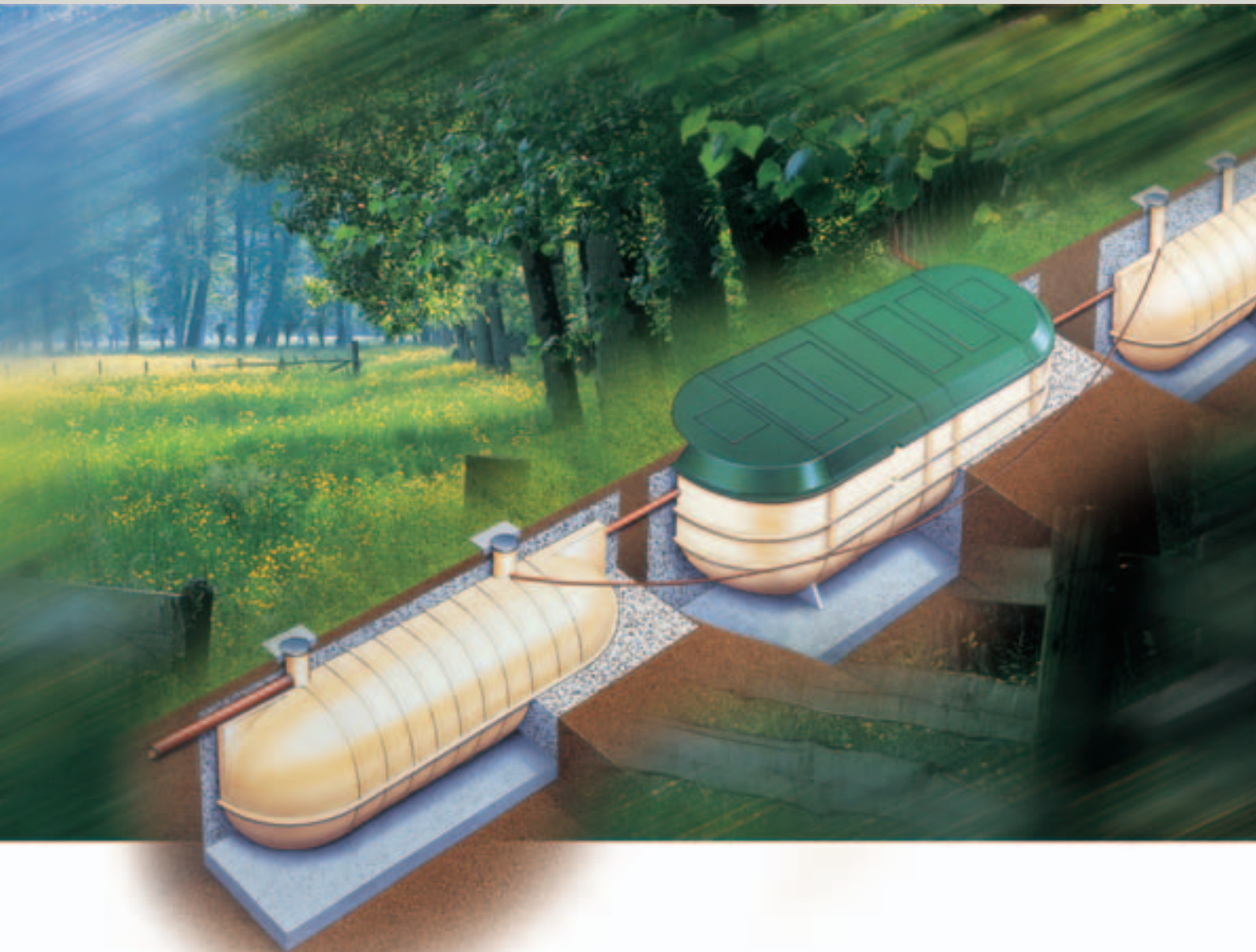


AirFlow AF10H - AF14

Package Sewage Treatment Plants for Residential and Commercial Developments



klargester.com


Klargester

AirFlow AF4-AF10

Package Sewage Treatment Plants for Residential and Commercial Developments

Applications

The Klargest AirFlow AF10H-14 packaged sewage treatment plants are 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, restaurants.

Applications for populations in excess of 375 are catered for with installation of multiple units. For more information contact Klargest.

Features

- Below ground installation, minimises visual impact
- No moving mechanical parts or components within the plant
- The cover has been specifically designed to blend in with surroundings with generous access for maintenance
- Controlled ventilation minimises risk of odour nuisance
- Efficient air blower is quiet and ensures low running and maintenance costs
- Casing construction to BS4994 (1987) in GRP (Glass Reinforced Plastic)
- All Klargest products are manufactured under the quality procedures of BS EN 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

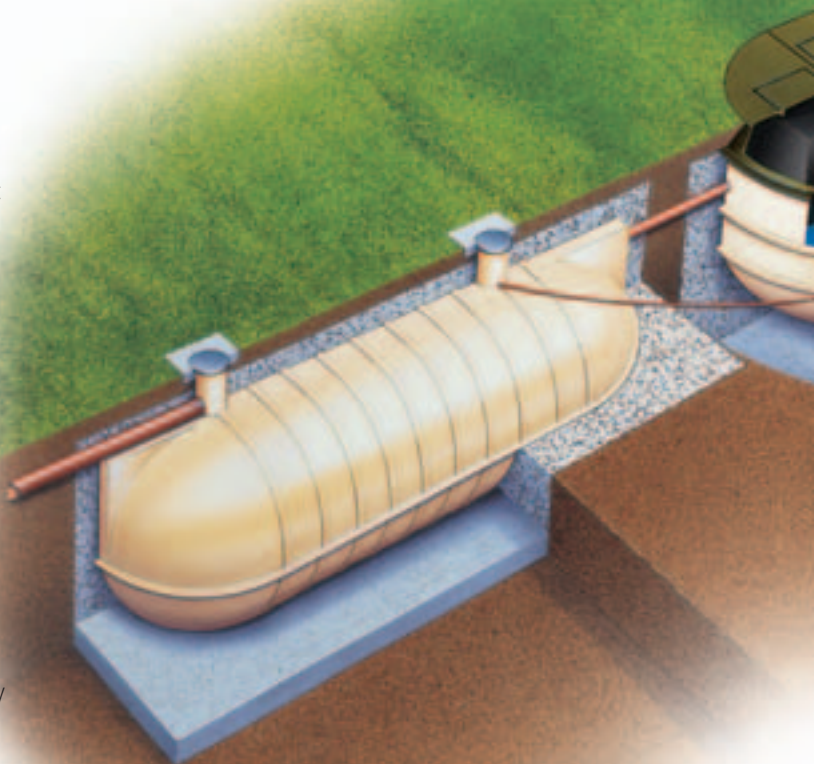
A natural by-product of biological treatment is humus sludge and this is separated for further treatment. The treated effluent is discharged via the outlet. Under normal domestic conditions 20mg/L BOD, 30mg/L SS, 20mg/L Ammonia can be achieved with standard plants and 10mg/L Ammonia can be achieved with high rate plants.

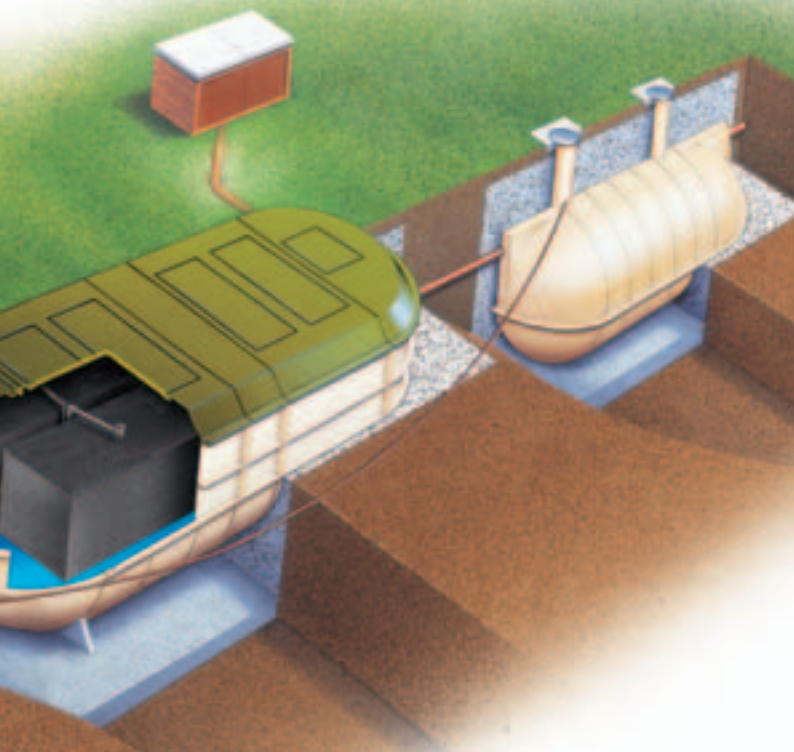
Installation

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 within a pedestrian only area no closer than 10m. from the nearest house. The tank should be vented independently or back through the 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 brick built blower housing (not supplied) can be sited anywhere with access to 3 phase mains electricity within a 15m. radius of the plant itself.





	AF10H	AF11	AF12	AF13	AF14
Max No. of full time residents	150	200	250	300	375
Average Flow M ³ /Day	30	40	50	60	75
BOD Load kg/Day	9	12	15	18	22.5

Three phase power supply up to 2.2 kw

AF10H				
	length (m)	width (m)	depth (m)	weight (kg)
Primary Chamber	4.32	2.82	3.715	780
Bio Module	6.83	2.80	3.450	2200
Final Settlement Chamber	4.32	2.82	4.460	780

AF11				
	length (m)	width (m)	depth (m)	weight (kg)
Primary Chamber	5.09	2.82	3.715	930
Bio Module	6.90	2.80	3.450	2200
Final Settlement Chamber	4.32	2.82	4.460	780

AF11H				
	length (m)	width (m)	depth (m)	weight (kg)
Primary Chamber	5.09	2.82	3.715	930
Bio Module	8.10	2.80	3.455	3000
Final Settlement Chamber	4.32	2.82	4.460	780

AF12				
	length (m)	width (m)	depth (m)	weight (kg)
Primary Chamber	7.74	2.82	3.715	1490
Bio Module	7.50	2.80	3.450	2900
Final Settlement Chamber	5.09	2.82	4.460	930

AF12H				
	length (m)	width (m)	depth (m)	weight (kg)
Primary Chamber	7.74	2.82	3.715	1490
Bio Module	9.31	2.80	3.455	4000
Final Settlement Chamber	5.09	2.82	4.460	930

AF13				
	length (m)	width (m)	depth (m)	weight (kg)
Primary Chamber	7.74	2.82	3.715	1490
Bio Module	8.10	2.80	3.450	3500
Final Settlement Chamber	6.19	2.82	4.460	1200

AF13H				
	length (m)	width (m)	depth (m)	weight (kg)
Primary Chamber	7.74	2.82	3.715	1490
Bio Module	8.10	2.80	3.450	4700
Final Settlement Chamber	6.19	2.82	4.460	1200

AF14				
	length (m)	width (m)	depth (m)	weight (kg)
Primary Chamber	7.74	2.82	3.715	1490
Bio Module	9.90	2.80	3.450	4200
Final Settlement Chamber	6.19	2.82	4.460	1200

Weights are dry weights and installers must ensure there is no water in the tanks before lifting. All weights are approximate.

Maintenance

AirFlow sewage treatment plant are designed for minimum low cost maintenance. Klargester offer a full commissioning and after sales service involving planned maintenance visits.

Under normal usage the plant will require periodic emptying to prevent excessive build up of surplus sludge.

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.

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.

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.



Klargester Environmental

Head Office: College Road North, Aston Clinton, Aylesbury, Buckinghamshire HP22 5EW
Tel: +44 (0) 1296 633000 Sales Office Tel: +44 (0) 1296 633033 email:uksales@klargester.co.uk

Klargester Scotland: Tel: +44 (0) 1355 248484

Klargester Ireland: NI Tel: +44 (0) 28 302 66799 ROI Tel: +353 (0) 48 302 66799 email:info@klargester.ie

klargester.com