

Klargester BioFicient® Domestic Sewage Treatment Plant



The Klargester BioFicient® treatment plant provides a reliable and effective solution for domestic applications without access to mains drainage. Suitable for homes with up to 30 people, the BioFicient is manufactured from high quality materials and uses the latest treatment technology to deliver a high level of water discharge quality.

Product Benefits

- Shallow Dig.
- New low energy compressor.
- Low level visibility with a lockable child-proof cover – safe for children and pets.
- Suitable for installation in traffic areas (structural advice required).
- Supplied with a control panel and alarm.
- Easy to set up and operate.
- Integral pump option available for BioFicient 1-4.



Performance and Compliance

- > BS EN 12566 Part 3 tested and approved.
- > Industry leading NH4 (ammonia) removal.
- > Fully CE marked in line with the CPR 2013.
- > Building control and S.R.66:2015 compliant.



Applications

The Klargester domestic BioFicient® 1-6 range is suitable for use across the following applications:



Single & Multiple Homes



Barn Conversions



Small Offices



Light Industrial Premises



Farms

01

Primary Chamber

Raw sewage gravitates to the unit where it is received in the primary settlement zone. Here, gross solids and other social debris settle to the bottom of the tank where they remain until the tank requires desludging. Settled sewage is displaced from primary zone and enters the first of two sequential moving aerated media reactors.

Technical Specifications

Model Reference	BioFicient 1	BioFicient 2	BioFicient 3	BioFicient 4	BioFicient 5	BioFicient 6
Population Equivalent	6	8	10	15	20	30
Overall Diameter (mm)	1,540	1,420	1,420	1,920	1,920	1,920
Length (mm)	2,500	3,760	3,760	3,230	4,390	6,220
Depth (mm)	1,794-2,104	1,830/2,330/2,830	1,830/2,330/2,830	2,300/2,800/3,300	2,300/2,800/3,300	2,300/2,800/3,300
Inlet Invert (mm)*	500-810/500-810*	500/1,000/1,500	500/1,000/1,500	500/1,000/1,500	500/1,000/1,500	5,00/1,000/1,500
Outlet Invert (mm)	600-910/555-865*	600/1,100/1,600*	600/1,100/1,600*	630/1,130/1,630*	630/1,130/1,630	630/1,130/1,630
Material	MDPE	GRP	GRP	GRP	GRP	GRP
Blower Ratings	50W	75W	75W	95W	115W	225W
Cover sizes	700	1,500 x 900	1,500 x 900	1,500 x 900+600**	1,500 x 900+600**	1,500 x 900+600**

Note: Optional inlet depth down to 1800mm

*BioFicient IPS models only (Outlet Depth 320mm) | **BioFicient 4, 5, 6 has two shafts.



02

Biozone 1 & 2

Solids are broken down by air agitated media in the Biozone. Media and liquid circulation in the Biozone is achieved through the use of a compressor and diffuser, which introduces fresh air into each compartment. The liquor is constantly recirculated and contacts the moving media. As it does so, it is purified by the micro organisms growing on the surface of the media and within the moving liquor. Excess growth of biomass is shed as solid particles into the liquor.

03

Final Settlement Tank

Fine solids are settled out in the final settlement tank. The Final effluent is discharged via either gravity outlet or IPS (Integral Pump System) chamber. With regulatory approval, it is suitable for discharge to a watercourse or drainage field.