Klargester BioFicient®

Commercial Sewage Treatment Plant



The Klargester BioFicient commercial sewage treatment plant is designed with efficiency in mind. It offers reliable performance using tried and tested technology to ensure consistently high effluent quality.

Product Benefits

- · Adaptable to specific consent requirements including 'Total Nitrogen'.
- · Minimal footprint area and visual
- · Variable invert options (0.5 2.0 m).
- · May be installed in trafficked areas (subject to loading).
- · Low maintenance.
- · Alarm protected.

Performance and Compliance

- > Compliant with EN-12255 and EN12566-3 (up to 50 PE).
- > Designed and sized in accordance with British Water Code of Practice Flows and Loads but can be sized to suit local site conditions.

Applications:

The BioFicient range is suitable for a range of applications including:

Leisure

Hospitality

Offices



Public sector





Campsites



Multi-housing developments



Primary Settlement Chamber

This is the initial stage of treatment and simply involves the retention of coarse solids present in raw sewage and wastewater for subsequent gradual breakdown. BioFicient features two chambers to ensure efficient operation with a flow balancing facility.

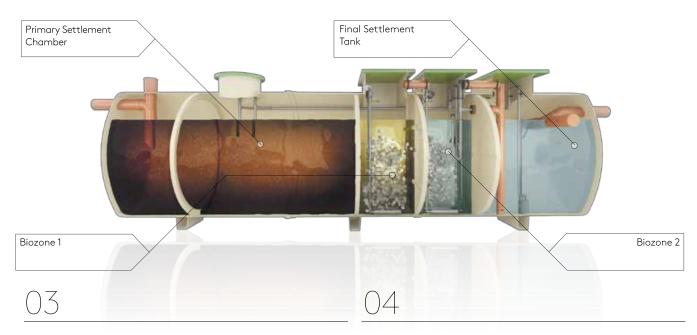
Biozone 1

The liquor enters the first stage of Biological treatment where the active bacteria within the fluidized bed begin to break down organic solids, majority of BOD removal occurs here.



Technical Specifications

Model Reference	17H	23H	34H	38H	42H	47H	55H	67H	80H
A Overall Length (m)	7.4	9.3	7.4	8.1	8.9	9.7	11.2	13.5	15.8
B Overall Width (m)	1.9	1.9	1.9	1.9	1.9	2.8	2.8	2.8	2.8
C Height (m)									
560mm Inlet / 860mm Outlet Invert*	2.28	2.28	3.02	3.02	3.02	3.02	3.02	3.02	3.02
1060mm Inlet / 1360mm Outlet Invert*	2.78	2.78	3.52	3.52	3.52	3.52	3.52	3.52	3.52
1560mm Inlet / 1860mm Outlet Invert*	3.28	3.28	4.02	4.02	4.02	4.02	4.02	4.02	4.02
2060mm Inlet / 2360mm Outlet Invert*	3.78	3.78	4.52	4.52	4.52	4.52	4.52	4.52	4.52
D Diameter (m)	1.8	1.8	1.8	1.8	1.8	2.6	2.6	2.6	2.6
Volume (m3)	17	23	34	38	42	47	55	67	80
Weight Approx (kg)	1200	1450	3000	3200	3400	3800	4200	4700	5400
Inlet / Outlet Diameter (mm)	160	160	160	160	160	160	160	160	160
Maximum Flow (m3/day) Models	8	11	15	20	25	30	40	50	60
Retention Time (hrs)	76	66	51	43	39	35	31	31	30



Biozone 2

Within the second stage of Biological treatment the second fluidized bed continues to clean the liquor giving further BOD reduction along with removal of nitrogen.

Final Settlement Tank

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 or to disinfection stage.