



BioKube wastewater treatment systems. For Single Houses - Resorts - Cities - Industry.

BioKube wastewater systems.

BioKube develops, manufactures and sells systems for biological cleaning of sewage water. The treated waste water can be either domestic coming from households or industrial wastewater - typically from agricultural industries like slaughterhouses, dairies or fruit and vegetable factories.

Many sizes of wastewater systems.

The systems range in size from single household units (1 m³/day) up to systems cleaning 2.000 m³/day.

BioKube systems can be delivered ready to install or they can be produced locally under license.

How clean is the treated water?

Sewage water purified in a BioKube is so clean, that it can be outlet directly to a lake or river. The purified sewage water can also be reused - typically for irrigation.

BioKube purifies wastewater using only nature's own bacteria; we add no bacteria to the treatment system. A BioKube is better than comparable systems for the simple reason that every little detail in the system is optimized towards giving the bacteria optimum living conditions. It is quite simple really; the natural bacteria cleaning waste water are like other domestic household animals, the better living conditions they have, the better they will perform.



The problem is simple:

The treated sewage water must be "good for the duck" and absolutely harmless for nature.

No harmful material can penetrate into the ground water.

BioKube single house systems.

BioKube Pluto, Venus and Mars systems

Single house systems.

BioKube small standard systems clean sewage water for from 5 to 30 persons. BioKube small systems are offered standard as 5 PE, 10 PE, 15 PE, 20 PE and 30 PE systems. All systems can be delivered with or without phosphorous removal kits.

Size depends on number of people.

The difference between the different BioKube systems is basically only the amount of aeration and the size of the BioBlocks, where the bacteria needed to degrade the organic material live.

As the amount of sewage water to be cleaned increases – and thereby the organic material to be degraded increases - you simply need more bacteria and consequently a bigger BioKube system. This is true for all BioKube systems whether for a single house or a 2.000 m³ / day system.

On the picture below, it is evident that a BioKube Venus for 10 PE is about twice the size of a Venus for 5 PE

Size depends on the cleaning requirements.

The size of the system also depends on how clean the outgoing water must be according to the local requirements.

As the requirements increase, we need more bacteria to degrade the nourishment in the wastewater.

The picture below illustrates, that a BioKube Pluto built for cleaning requirements of COD < 125 mg/l and BOD < 25 mg/l is about half the size of a BioKube Venus built for cleaning requirements of BOD < 10 mg/l and COD < 75 mg/l.

BioKube systems can fulfill any requirements.

With our modular design all BioKube systems can be delivered to fulfill any national requirements. These possibilities include only reduction of organic material, reduction of NH₄, reduction of phosphate, removal of total nitrogen, limitation of E-coli including use of UV lighting or Ozone).

We are specialists and we can do it!



BioKube systems for Resorts and Cities.

BioKube Jupiter and BioReactor systems

Plug and Play wastewater systems.

BioKube systems for Resorts and small cities are delivered completely furnished ready to install. Locally you only need to build concrete tanks. Connect the pipes and power and the system is in operation.

Very little maintenance.

One of the big advantages of a BioKube system is that it is very low on maintenance. There are few mechanical parts that can fail and they are all delivered from first class manufactures guaranteeing a long service life and easy access to service and spare parts.

Local BioKube partner supplies service.

BioKube products are always sold, delivered and installed by a national BioKube agent. He is certified by BioKube.

Remote surveillance via GSM.

BioKube systems can be equipped with remote surveillance over the GSM network. And the systems can be delivered with double water pumps and air blowers that run alternatively. They can be reset over the GSM net if one pump or blower fails so the system runs on only one. This gives a very high rate of stability.

Town Hall Notamburi, Bangkok, Thailand.
75 m3 / day (400 PE)
Cleaned water is recycled to city lake.



Town Hall Notamburi, Bangkok, Thailand
Lake by Town Hall that receives the water
For security, the water is treated with Ozone.



Resort Hotel, Brodnica, Poland under construction
50 m3 / day (300 PE)
Water led to lake near resort



United Nation Peacekeeping Training Center,
Accra, Ghana, 75 m3 / day (400 PE)
Water reused for watering garden.



BioKube systems for Industries.

BioKube Jupiter and BioReactor.

Large systems as Plug and Play.

BioKube also offers our largest systems as “plug and play” waste water plant solutions”.

These systems are delivered with only the active cleaning units containing all the necessary hardware to be installed in ‘on site built’ concrete tanks.

Keep total cost down, utilize local labor.

Since the cleaning of sewage water with the BioKube-system is performed by natural bacteria living on submerged aerated filters (the BioBlocks) it is much more cost-effective to deliver only the active cleaning unit (the BioReactors) and install these in on-site built concrete tank.

With BioKube BioReactor systems, you also to the maximum extent use labor. This keeps the total cost down.

How big a system can you buy?

The necessary size of the tanks is roughly twice the size of the daily amount of sewage water to be cleaned. This volume allows 36 hours retention time for the sewage water in the cleaning unit plus room for the pre-cleaning unit and the necessary sludge handling system.

The biggest BioReactors BioKube deliver is the BioReactor/150. Each of these units will clean 150 m³ / day. How many BioReactors you need depends on the amount of wastewater and the cleaning requirements.

Wastewater system for vegetable factory in Poland. 1.800 m³ / day



Concrete tanks for vegetable factory under construction. Size for 8 BioReactor 150.

BioReactor 150 under delivery. Each BioReactor cleans 150 m³ / day



Slaughter house for Metro in Romania under construction. 50 m³ / day Jupiter system

