

BIOKUBE

Biological sewage treatment plants

BIOREACTOR SYSTEM



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FACTS

The BioReactor Series STP contains compact units of aerated biological treatment units - ready to build into in-situ cast concrete tanks.

The BioReactors take up a minimum of space compared to traditional SBR-systems.

The daily load of the concentration of the sewage determines the size and number of BioReactor elements.

Submerged aerated filter will secure treatment of the dissolved pollution in the sewage water. Prior to this process, the sewage is led through a pretreatment system (for removal of all larger particles) such as a pre-sedimentation tank, screen, rotary sieve or flotation unit, depending on the source of the waste water.

The BioReactor elements are sized to fit into standard containers to ensure optimal handling and logistics.



BENEFITS

- Allows for a reduction of more than 75 % in cost of civil works compared to traditional SBR systems.
- Modular design – easy to install in in-situ cast concrete tanks.
- Is highly efficient even with irregular flow of sewage.
- Patented technology that keeps out problems related to odor (H₂S).
- Preserves or restores local water environment.
- Low investment costs.
- Fully automatic system – no need for adjustments and/or daily service and maintenance.
- Self cleaning system using air lift pumps for cleaning the post-settling areas. This is to prevent sludge built up inside the system.
- Low operation cost as well as low service and maintenance cost.
- Easy to extend to higher daily volume of waste water or for higher treatment demands.
- GSM surveillance of functionality for optimal security.
- Allows for recirculation (reuse) of treated water for secondary purposes, such as irrigation, car wash, concrete mixing etc.
- Proven reliability from international accredited laboratory.

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ON-SITE WASTE WATER TREATMENT

The BioReactor series of the BioKube sewage treatment Technology is targeted for medium to large sized facilities such as small villages, towns up to approx. 50.000, persons, office buildings, hotels and resorts, food production industries etc. Each of whom have an interest in preserving local environment while keeping infrastructural investments at a minimum.

Biokube BioReactor Systems are suitable for treatment of sewage flows from 10 to 10.000 m³/per day



INSTALLATION IN THAILAND



INSTALLATION IN YEMEN



INSTALLATION IN ROMANIA



BIOLOGICAL SEWAGE TREATMENT PLANTS

TECHNICAL INFORMATION

HOW CLEAN IS WATER FROM A BOKUBE?

Monthly measurements by independent certified institute.

The monthly measurements cover a period of 4 years (2004-08-10 to 2008-09-18)

These measurements document the stability of the BioKube cleaning process.

1. Results of monthly measurements from tempered climate

Average results of 48 accredited measurements in the periode 8/10-2004 until 18/9-2008	NH ₄ 5 mg/l	BOD ₅ 10 mg/l	COD 75 mg/l	SS mg/l
	0,89 mg/l	2,82 mg/l	38,7 mg/l	9,9 mg/l

2. Measurements from tropical climate

City hall - Nonthabury, Bangkok measurements	N _{total} mg/l	BOD ₅ mg/l	SS mg/l
Inlet	105	368	2,042
Outlet	2,18	2,0	ND < 5.0

SPECIFICATIONS

	Height (mm)	Width (mm)	Length (mm)	Weight kg
Reactor 25	3005	1280	1280	450
Reactor 50	3005	1900	1560	800
Reactor 75	3005	2280	1810	1550
Reactor 100	3005	2280	2220	1650
Reactor 150	3005	2280	2220	1850

The Biokube BioReactor system is an Aerated Submerged Biological Waster Water System built into a square tank. With all major components built into the unit, the system is easy to install, and needs no daily service or maintenance. The elements are designated to waste water treatment, thus all components and material are corrosion proof and

CONTACT INFORMATIONS

