

# Wastewater | Sewage

Treatment Solutions





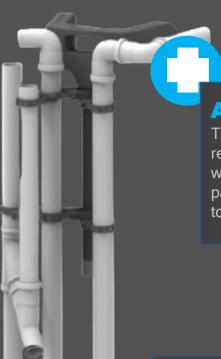






Aqua for *life* 

## Technological Advantages

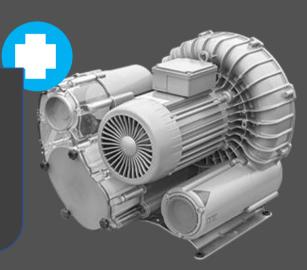


### **Air-Lift Technology**

The traditional submersible pumping mechanism has been replaced by the air-lift technology. The system is built of PVC, which eliminates the need for metal and moving mechanical parts, as well as the need for electricity underneath the water to assure the system's safety, dependability, and longevity.



The best of breed European products built for hard run with extremely low noise and low power consumption. Quality conformity guarantees the CE standards for EEA.





### **PLC Controlled**

Driven by a pre-programmed computer system with no human interaction. Adjustable for power saving during low utilization periods.



## The Process - SSB<sup>©</sup>

Our sewage treatment plants are fully biological, designed upon the latest SSB® technology (sequential stabilizing activated sludge process) developed by AQUATO® Umwelttechnologien GmbH, Germany.

The 3-phases of the SSB® process can be operated in modern single- or multi-chamber tanks or easily, without major structural changes in existing older tanks. All steps in the plant are carried out on a regular cycle, which is set and driven by the control panel.



#### 1. Aeration Phase

The incoming sewage initially reaches the first chamber. Here the biological treatment of the wastewater starts. Organic compounds are removed by microorganisms in the activated sludge. Optionally, the process of denitrification takes place here. In addition, coarse material is retained in the first chamber.



### 2. Sedimentation Phase

Biological treatment of the wastewater also takes place in the last chamber. In the same chamber but separated by time final sedimentation takes place. The activated sludge settles down to the ground of the aeration tank and the cleared water separates in the upper part of the tank.



### 3. Discharge Phase

The clearwater is pumped out of the tank through the outlet. Once the discharge phase is over, the cycle will continue to begin from phase 1.



## Models & Brands

### For industrial and commercial usage

capacity from 3000 L/day and above





# STPs for households and small business entities daily capacity up to 3000 liters

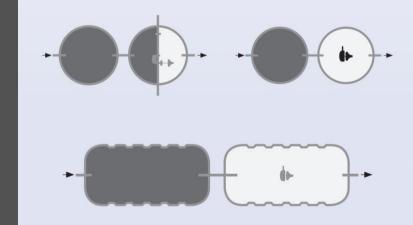






### New constructions or retrofitting made easy!!!

Simple installation. In no time at all to a fully biological Sewage Treatment Plant with our AQUATO® and ATB® systems.



#### **New installation**

The technology can be used as a complete system with stable, durable concrete or as a particularly lightweight system with high-quality plastic tanks.

#### Retrofitting

The technology is just as suitable for retrofitting in an old multi-chamber pit as it is for retrofitting in plastic tanks.



## **System Benefits**



**ECO** friendly: fully biological, there is no chemical involvement in the entire process



ODOUR-less: system is fully aerobic, thus no bad gases will be generated



SLUDGE-less: minimum sludge removals just for non-bio-degradable particles



PLC driven: fully automated, highly controllable and re-programmable, no operator required



HASSEL free: no submersible pumps, neither filter replacements or sludge removals



Low FOOTPRINT: comparatively, 50% smaller than to a conventional system

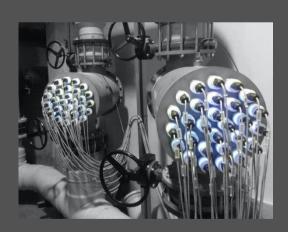


High EFFICIENCY: generally, more than 96% reduction of BOD5/COD values

## **Advanced Oxidation**

A chemical-free water purification & disinfection solution which eliminates micro-organisms, reduction of turbidity and odor without generating waste or by-products in the wastewater.

h2o. Titanium reactors manufactured from a single block of titanium dioxide (TiO2) whose function is to generate hydroxyl radicals (.OH) to eliminate organic material when activated as a catalyzer by means of UV radiation. The mineralization of organic material in the water gives an indirect boost to its disinfection.





h2o.TITANIUM

#### **UNIQUE Benefits**

- ⇒ Latest AOP technology
- ⇒ Simple and small unit
- □ Long lasting
- ⇒ No chemical use
- ⇒ 100% ecological

## Physio Chemical Solutions

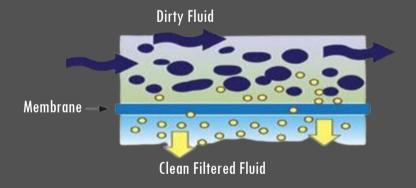
For industrial effluents which contain higher loads of non-bio-degradable pollutants, we offer home-grown alternative technologies based on Physio-Chemical principles. Different formulations of coagulants and Flocculants are applied in the process. Batch and continuous treatment mechanisms are designed to meet the regulatory discharged standards of authorities, and client preferences.





## Micro Filtration

Filtration or the separation science is considered as one of the most important process or unit operation for the modern mankind. Membrane is an important tool in separation science of which ceramic membrane is rightly termed as the 4th generation membrane as it is durable, efficient, and faster than existing polymer membrane or conventional filtration process.



Proven for lubricating oil filtration, chemical extractions in carbon black for ink/print industry, skim separation, protein hydrolysis filtration, sugar cane filtration, milk concentration in dairy industry, textile effluent, ethanol extraction





### **Profile**

Aquablu Lanka Pvt. Ltd. is a leading provider of waste management solutions in Sri Lanka, driven by a committed team of domain specialists. We are a CEA-registered firm specialized in implementing sewage based fully biological waste water treatment technologies developed in Germany.

Our technologies are the most advanced and effective in the business, and they are utilized all over the world to achieve high effluent discharge levels. The adaptable solutions can be tailored to fit into tight locations, require minimal monitoring and maintenance, and are cost-effective and simple to install.

The solutions have been successfully implemented in hotels, condominium apartments, workplaces, food processing plants, restaurants, schools, and other residential settings with limited space and a need for storage.

We partner with Germany's Aquato® and ATB® for Sewage Treatment Plants, Kerasiev® for Ceramic membrane filters and h2o.TITANIUM from Spain for AOP systems.



### **Technological Partners**



#### **Contact Details**

Aquablu Lanka Pvt. Ltd. No. 121/B1/1 Chilaw Road, Negombo, Sri Lanka

Office: 031 332 2253 Mobile: 071 481 9398 071 405 2829

Email: info@aquablu.lk Web: www.aquablu.lk







