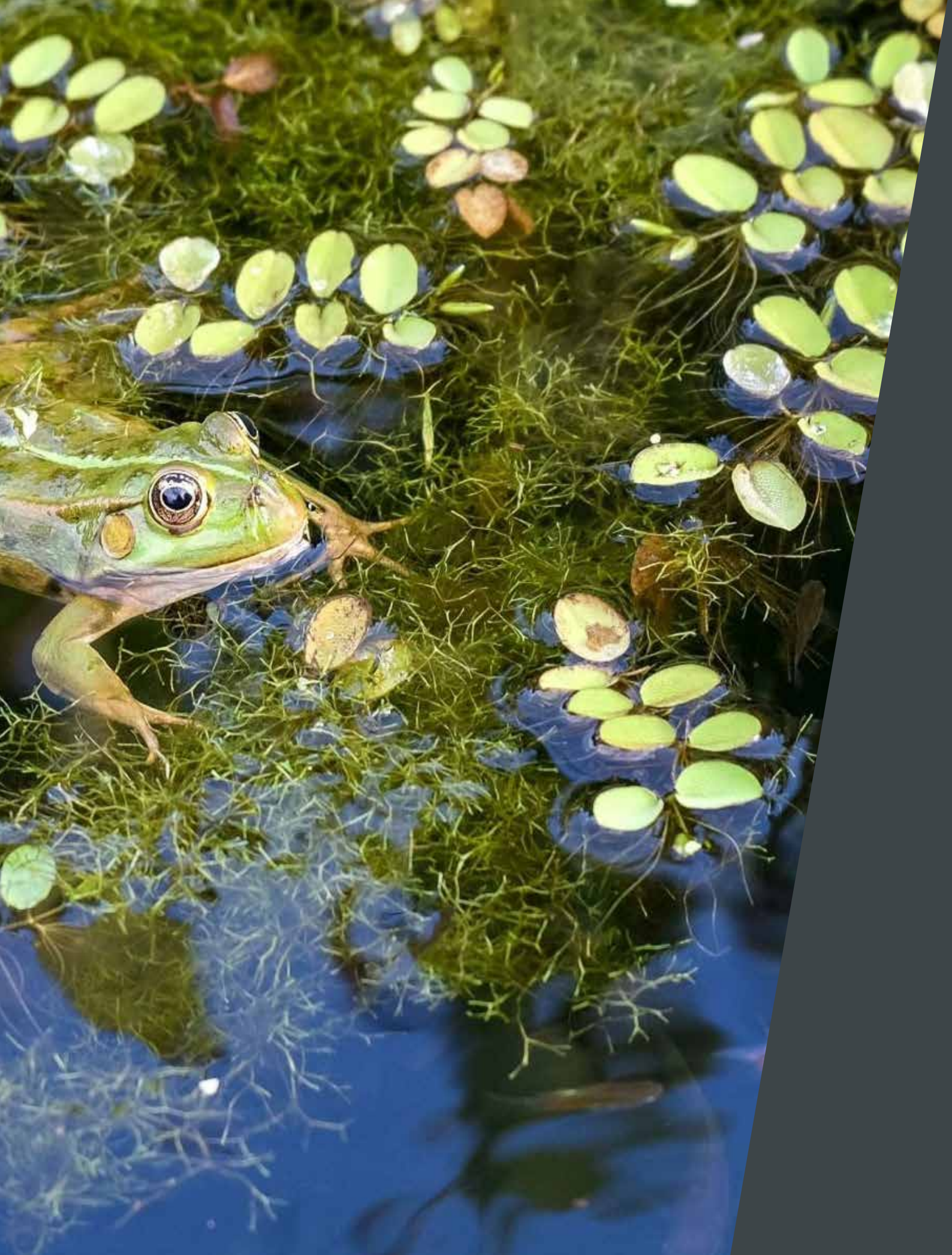


# 3K FLOW

Fully Biological  
Wastewater Treatment  
in MBBR Process





# MBBR

## Moving Bed Bioreactor Plants in Gravity Flow

### Proven **Solutions** for fully Biological Wastewater Treatment

Although most households are connected to the sewage system, in rural areas this connection is often not possible and therefore your own responsibility as a landowner is required. The wastewater must be removed in such a way that the valuable groundwater is not endangered.

The AQUATO® sewage plants are energy efficient and highly effective. Our moving bed system provides exceptional stability, using well-established components with the best technology available today. The system is wear-resistant and easy to install, making regular maintenance effortless.

The biofilm system contains state-of-the-art technology. It can be used in new plant constructions or for retrofitting.

# MBBR

## High, Reliable Cleaning Performance

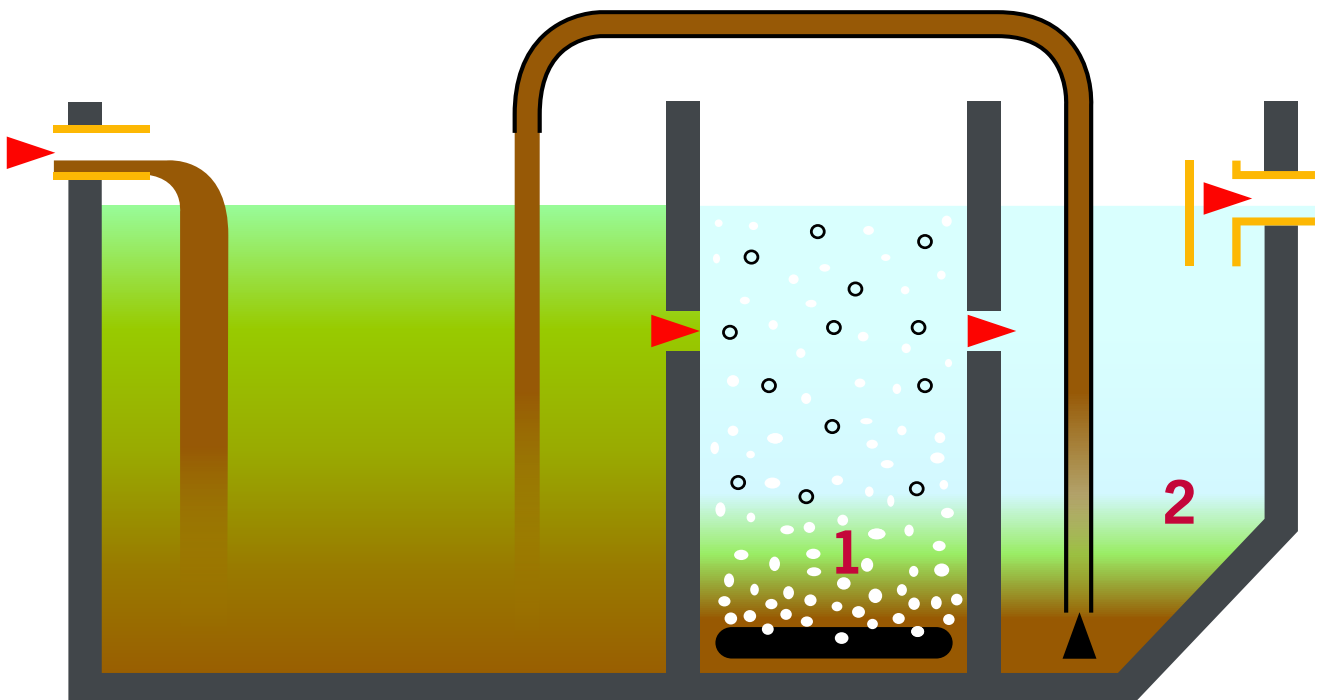
### Domestic wastewater is safely treated by the MBBR process

The first chamber of the wastewater treatment plant is used for the separation of solids (primary treatment).

Afterwards, the wastewater flows into the second chamber for biological treatment. Here, a plate diffuser is installed on the floor, which mix the wastewater and the bio-carriers (1) with a precisely defined amount of air at regular intervals.

The microorganisms living in the wastewater grow on the bio-carriers as a „biofilm“. In this compound, they perform excellent purification.

Surplus sludge settles down in the third chamber. From there this sludge is pumped back to the primary treatment by an air lift (2). Finally the treated clear water leaves the plant.



# 3K FLOW

- + Electronic Free Tank Equipment
- + Energy Efficient and Powerful
- + Safe Underload Capability
- + Retrofitting in Existing Plants

The 3K FLOW is a small wastewater treatment plant which works according to the moving bed system and is therefore particularly well suited for situations with strong inflow fluctuations and permanent underload operation.

The retrofit kit can be installed in three-chamber tanks. A cover on the reactor chamber as well as the special overflow baffles in the partition walls guarantee a safe retention of the bio-carriers!

The fine-structured bio-carriers provides an optimal amount of growth area. A membran diffusor at the reactor bottom ensures a good supply of oxygen to the microorganisms. The system works wear-free in the tank or in the area of the wastewater.



Bio-Carriers 3K FLOW

# 3K FLOW

## Components & Accessories

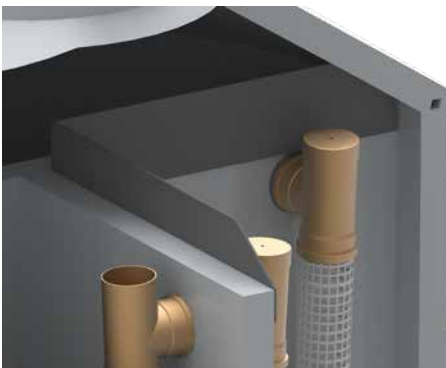
- + Easy to Install System
- + Modular System Design
- + Optimum Cleaning Performance from just 1 Person



Bio-Carriers



Plate Diffuser



Alternatively interchangeable with partition wall elevation



Surplus Sludge Lifter



Overflow Lock



Reactor Cover

# Control

## & Outdoor Cabinet Solutions



Optional: Wall Closet 6N\* (B x H x T: 530 x 580 x 250 mm)  
Wall Closet usable up to 20 PE

## Control

State-of-the-art computer control unit **D-Pilot 18.3** with a large graphic display. It provides all important data at a glance. To minimise maintenance efforts, there is an integrated backpressure monitoring system.

Standard equipment is the D-Pilot 18.3. In this control unit there is for example the possibility to connect a clear water pump or a surplus sludge pump, whereby even larger lifting heights can be bridged.



Optional: Outdoor Cabinet 6.1T\* (B x H x T: 400 x 1275 x 320 mm)

\* Can be used with Set-Up Set with Diaphragm Compressor

# 3K FLOW

New Construction  
and Retrofitting  
made easy!

## Flexible Use in Concrete or Plastic Tanks

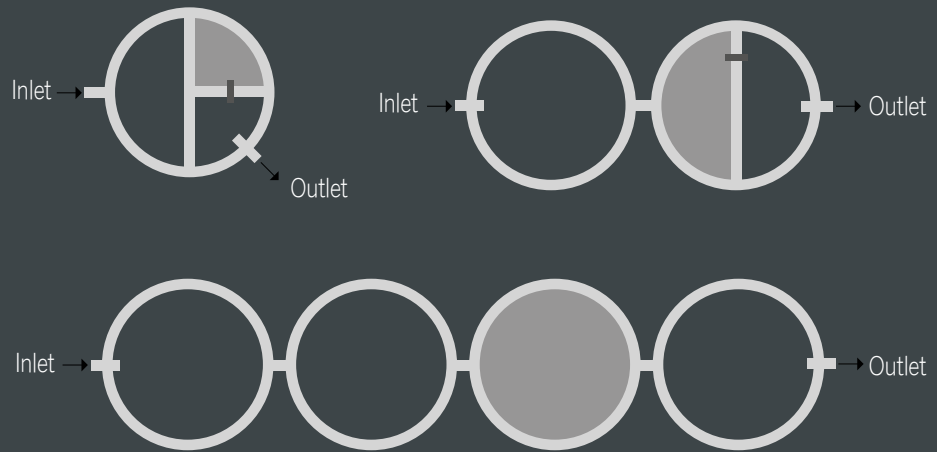
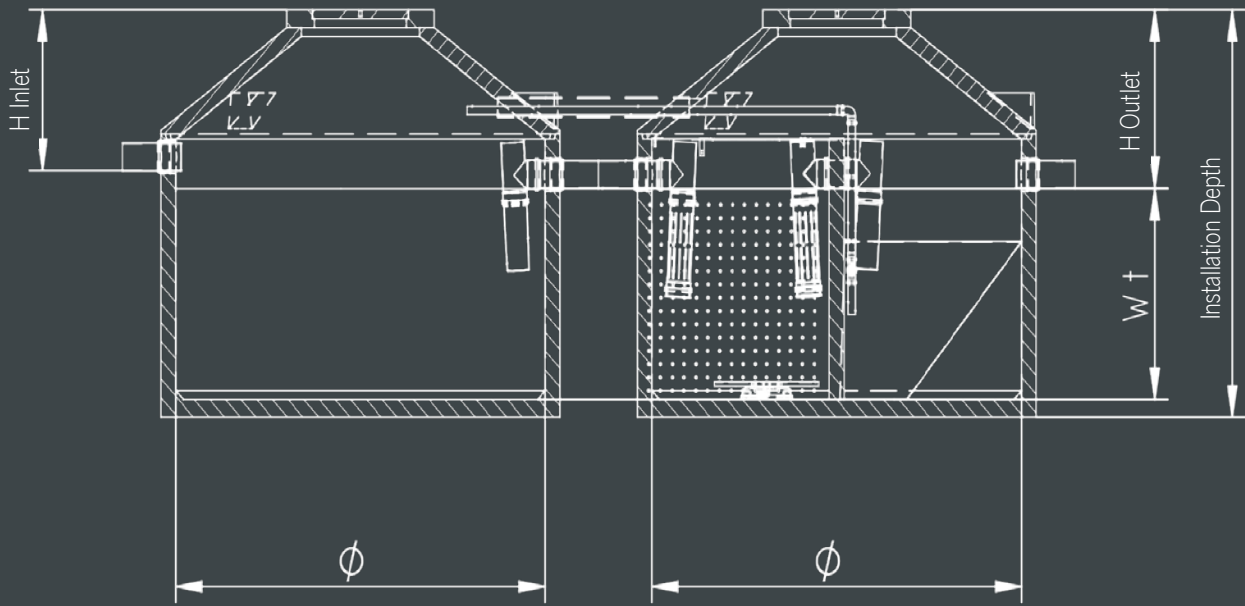
The AQUATO® system 3K FLOW can be integrated into a concrete or plastic tank, as new construction or retrofitting.

Individual adaptation to old tank sizes is possible.

Your fully biological sewage treatment plant can be set up in no time at all!







# Variable Installation Options

The AQUATO® system 3K FLOW is very flexible for sewage plants up to 50 persons. It can be used in 1-tank systems as well as in multi-tank systems.

# Notes

## Underload !

The AQUATO® sewage plants offer full cleaning power - from just one person and with low water consumption! But even after your vacation or any other break it immediately continues - always reliable with maximum operational safety and compliance with the legal discharge values.

## Declaration of Performance

According to European guidelines, the AQUATO® small sewage treatment plants are examined and documented for all their standardized effectiveness parameters by notified bodies. The plants are well tested on test fields and a declaration of performance from the manufacturer according to EN 12566-3 is available.

If required, declarations of performance for our systems can be requested from AQUATO® using the contact options below:

fon +49 5221 10219-0      [info@aquato.de](mailto:info@aquato.de)



# Garden-friendly installable!





Presented by:



**AQUATO<sup>®</sup> Umwelttechnologien GmbH**

Ernstmeierstr. 24 | DE - 32052 Herford  
fon +49 5221 10219-0 info@aquato.de  
fax +49 5221 10219-20 www.aquato.de