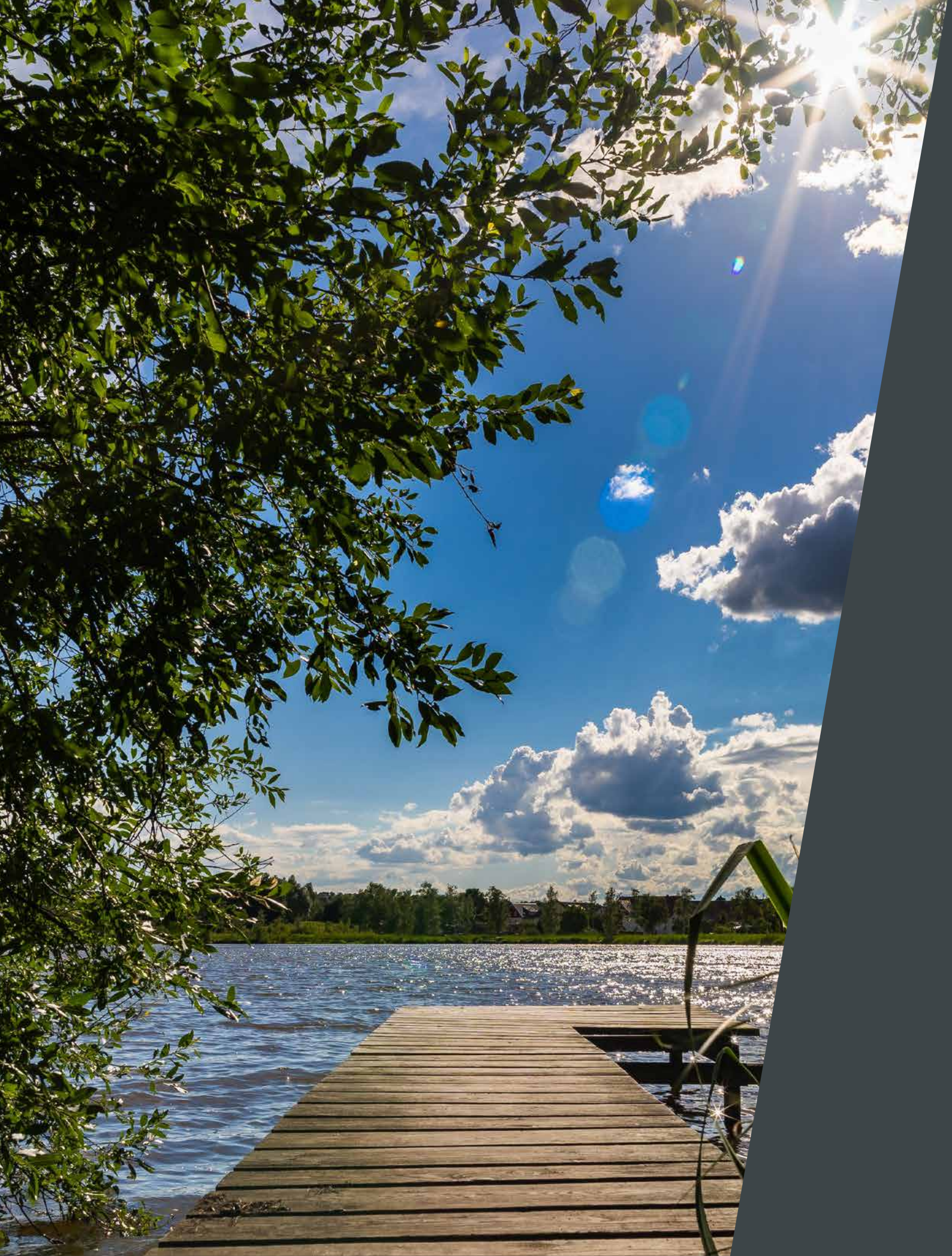


# 3K PLUS®

Fully Biological  
Wastewater Treatment  
in Fixed Bed Process









# FIXED BED

## 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 fixed 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 all tank variations in new plant constructions or for retrofitting.

# Fixed Bed

## High, Reliable Cleaning Performance

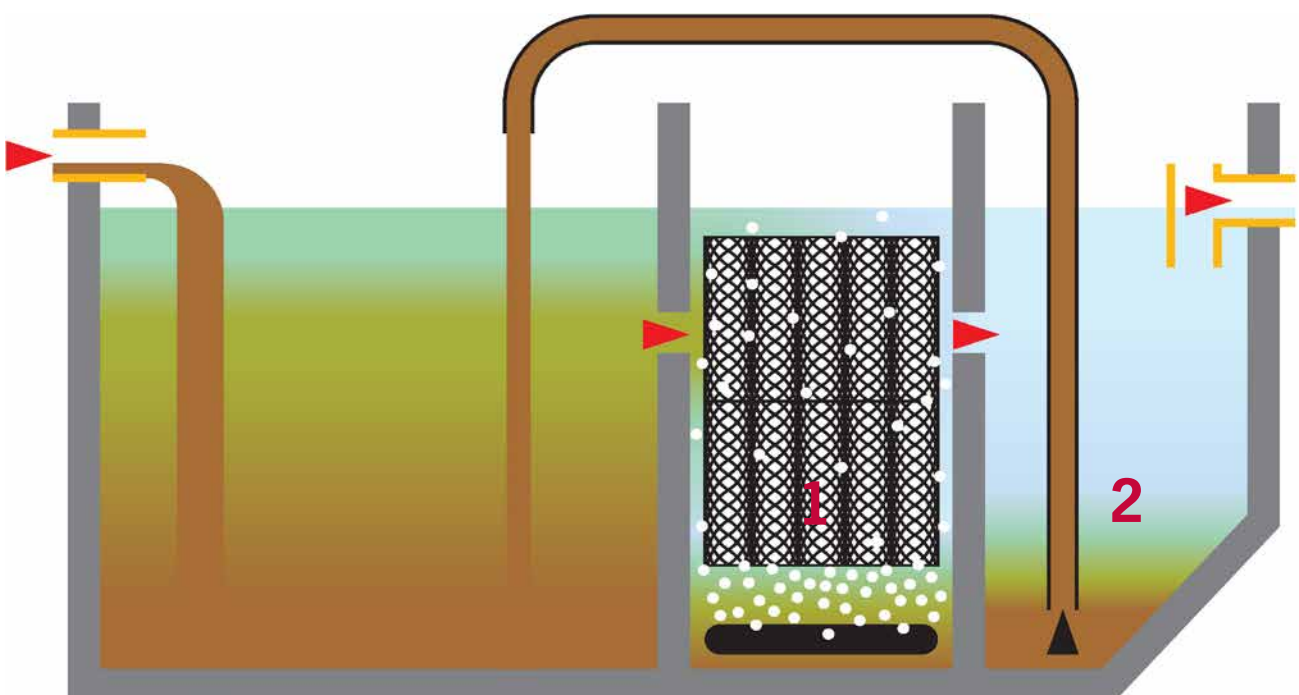
### Domestic wastewater is safely treated by the 3K PLUS® process

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

From there, the wastewater flows for biological treatment into the second chamber. Aerators are fixed to the bottom of the second chamber, which mix the wastewater at regular intervals, with an exactly defined volume of air. The submerged fixed bed is installed on top of the aerators (1)

The microorganisms available in the wastewater grow on it and form a „biofilm“ which meets best „working conditions“ by the presence of nutrients in the wastewater in combination with the determined aeration of the fixed bed.

Excess microorganisms are solved by the entraining air from the fixed bed again and again, and then flushed with the biologically treated water into the third chamber for secondary sedimentation. There they settle to the bottom as so-called excess sludge, which is led back to the first chamber of the primary treatment via an airlift (2), before the purified water leaves the wastewater treatment plant.



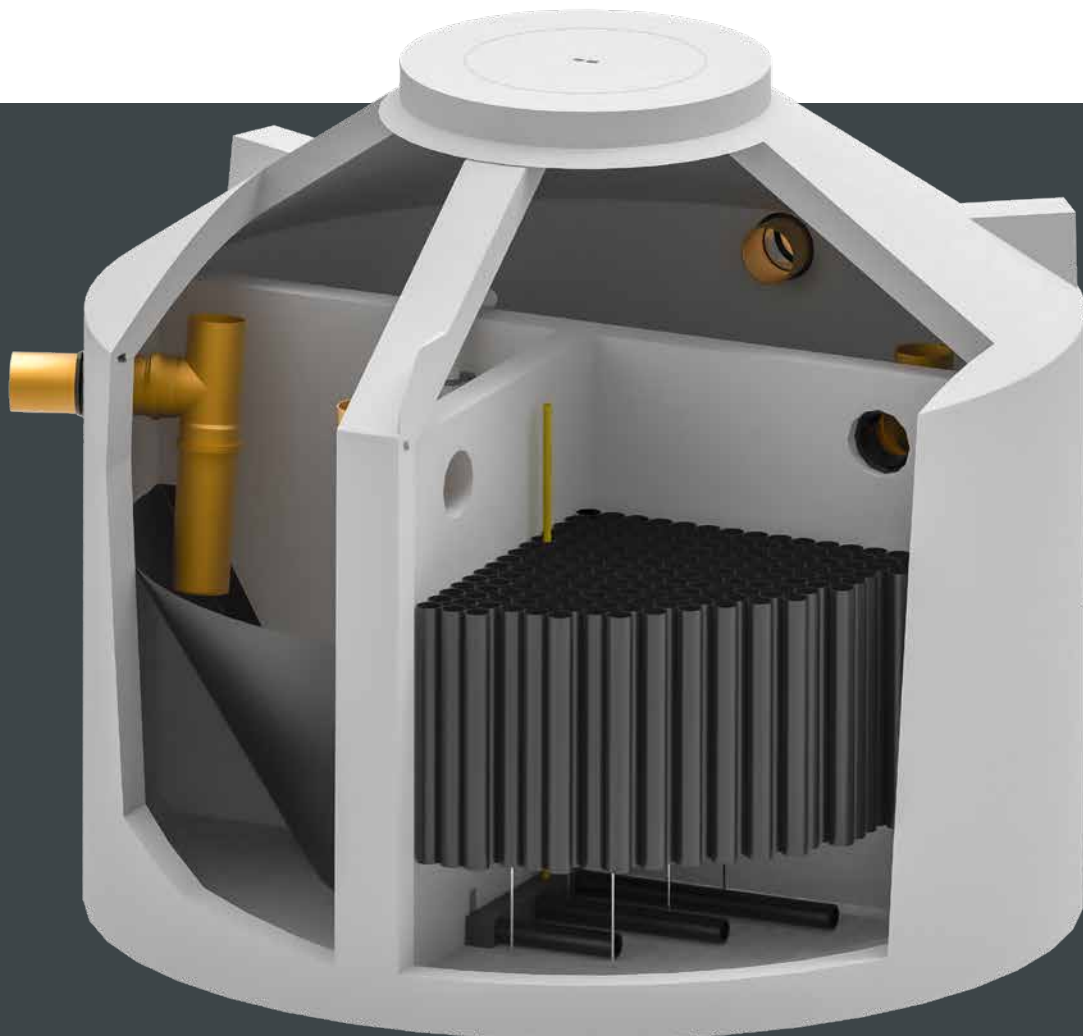
# 3K PLUS®

- + Electronic free Tank Equipment
- + Components made of Recyclable Material
- + Retrofitting in Existing Plants
- + Outstanding Effluent Values
- + Reliable Underload Capacity

The fixed bed plant 3K PLUS® has been one of the best-selling retrofit plants ever since.

It is operating very stable, even with underload and at low temperatures outside. 3K PLUS® works with submerged fixed bed, which is completely surrounded by wastewater. The design provides an optimal microbial living space (determined in scientific testings).

3K PLUS® works without any submerged rotating or electrical wear parts and offers a fail-safe system control in a separate cabinet.



# 3K PLUS®

## Components & Accessories

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



# 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 PLUS®

New Construction  
and Retrofitting  
made easy!

## Flexible Use in Concrete or Plastic Tanks

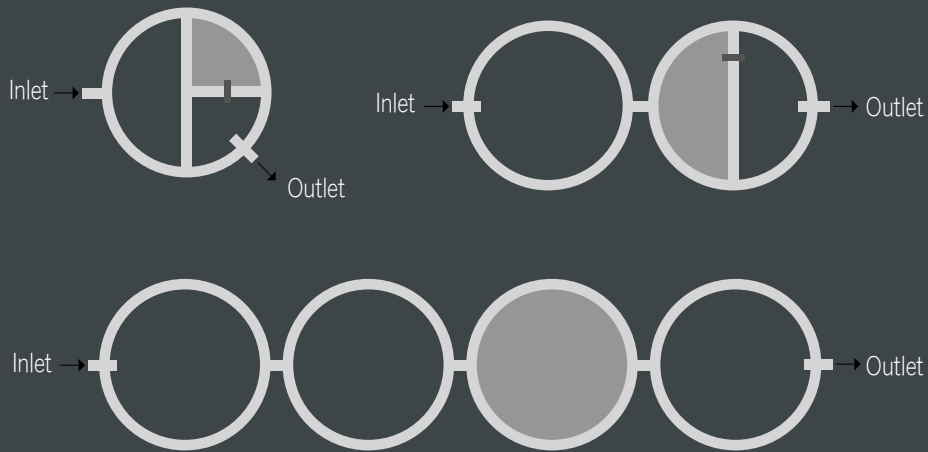
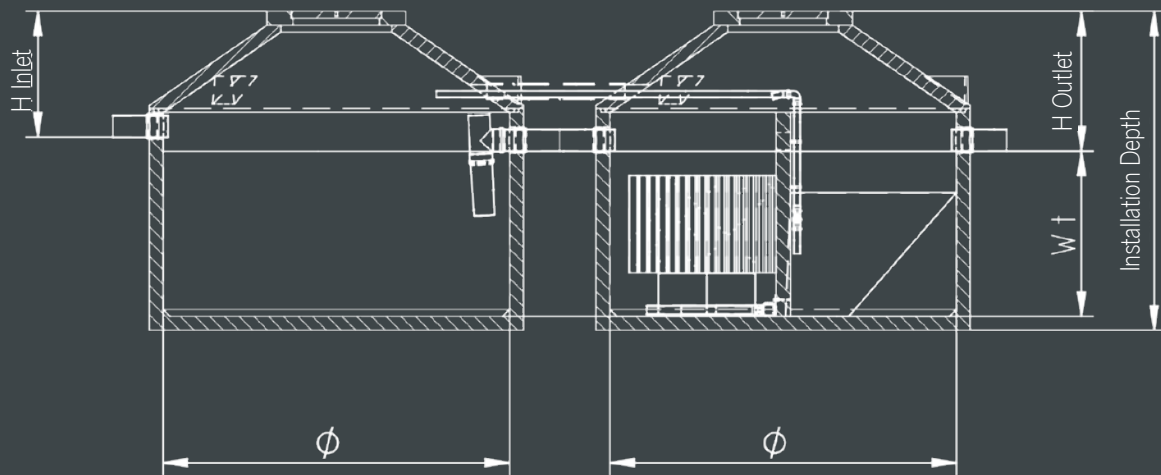
The AQUATO® system 3K PLUS® can be integrated into a concrete or plastic tank, as new construction or retrofitting.

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 PLUS® is very flexible for sewage plants up to 28 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)



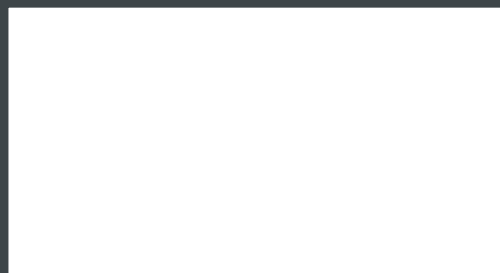
# Garden-friendly installable!







Presented by:



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