

NOW AND IN THE FUTURE

A safe decision!



AERO SBR SMALL WASTEWATER TREATMENT PLANT WITH AEROBIC SLUDGE STABILIZATION

- Low energy consumption
- Digester gases no nuisance
- Immediately extendable to higher cleaning classes
- Patented measuring method

batchpur.com



THE AERO SMALL WASTEWATER TREATMENT PLANT WITH AEROBIC SLUDGE STABILIZATION BRINGS YOU MANY ADVANTAGES:

- No odors due to digester gases
- No corrosion due to digester gases
- Classes C-D included**
- Easy and clean retrofitting
- Patented ALC technology
- Patented Airstep technology
- Expansible cleaning class P***
- Expansible cleaning class H***
- Expansible cleaning stage for the
- No electric pumps
- Online remote monitoring*
- *At a surcharge, ** Purification classes according to

Developed with foresight and responsibility

- With the AERO-SBR small wastewater treatment plant from Batchpur you get the future-proof treatment technology for your home with measurable benefits:
- The use of the latest control technologies enables an energy-efficient and multiple secured and monitored operation of your small sewage treatment plant.
- Optional add-on modules that can be expanded at any time also safeguard your system for future requirements and possible uses.
- Online remote monitoring allows you to monitor your plant at any time.
- In the AERO process, sludge is significantly reduced by sludge stabilization. This saves you money on sludge disposal, as sludge needs to be disposed infrequently.
- There are no more foul odors from the small wastewater treatment plant due to digestion processes.

Since no more digester gases are produced, there is also no corrosion in the tanks - a great advantage for existing pits made of concrete. Your pit will therefore last a long time.

AERO PLANTS FEATURE ALC TECHNOLOGY:

The problem: Sludge particles get into the clear water discharge device during aeration due to the system.

The solution with patented ALC[®] technology: The pipes for the clear water discharge are flushed out with purified wastewater.

The result: Clean wastewater in the clear water removal.

This is an enormous advantage for systems with subsequent infiltration.

The ALC $\ensuremath{^\circ}$ technology has been extensively tested at the PIA's accredited test facility.

The cleaning performance is outstanding. This technology is exclusively available for small wastewater treatment plants from Batchpur.



THE OPTIMIZED CLEANING PROCESS

The Aero small wastewater treatment plant works with the SBR process, which has been proven for years and in which the wastewater is treated in cycles. What is new, however, is that feeding and the previously separate sludge storage as a process stage are no longer required. Instead, the sludge is also aerated and degraded. This significantly reduces the sludge volume, therefore, the sludge does not have to be removed frequently. Operating costs are reduced!











Filling

The wastewater flows through pipes into the Aero-SBR small wastewater treatment plant.

Aeration

Both the wastewater and the sludge are aerated. Via energy optimized membranes and the flow-optimized compressed air distribution system Airstep, the atmospheric oxygen is supplied to the bacteria with small air bubbles. Due to the resulting currents, an optimal mixing with a high cleaning performance takes place. In the "Aero" small wastewater treatment plant, aeration prevents the formation of digester gases and thus also hydrogen sulfide. Hence, corrosion with hydrogen sulfide from digestion processes cannot occur. This is more beneficial when retrofitting existing concrete tanks, resulting in less odor nuisance and longer service life of your concrete tank.

Settling phase

After the biological cleaning by bacteria is completed, the so-called settling phase takes place. In this settling phase, the cleaned wastewater separates from the biological sludge.

Cleaning of the airlift with ALC®

Shortly after the start of the settling phase, a zone with clear purified wastewater forms in the upper area. Now the ALC® process comes into play. Via a second air-lift, cleaned wastewater is conveyed through the piping system of the air-lift for the clear water discharge. This removes the sludge particles deposited in the piping system during the cleaning process, and thus cleans the pipe system. As a result, fewer sludge particles end up in the outlet of the small wastewater treatment plant.

Clear water discharge

After completion of the settling phase, the clear water discharge is carried out. The clear treated wastewater is discharged from the upper area by a wear-free air lift into the infiltration or a stream.

THE CLEAR EDGE IN



State-of-the-art control system - technically perfected

The Aero small wastewater treatment plants are characterized by their newly revised, intelligent easy...con control module.

The advantages of the new control system at a glance:

- Very low energy consumption in standby mode of only 1 watt
- Large, illuminated graphic display
- Convenient 6-key easy operation
- Up to 7 stepper motors can be used
- All outputs individually fused via micro fuses
- External USB port for user-friendly software updates via USB stick
- Electronic operating log that can be read out via the display or the USB interface as a standard.
- Wi-Fi module as a standard. Optionally expandable with modem for complete remote monitoring or simply for forwarding faults.
- Standard with software and switchable outputs for further cleaning stages. This makes it easy to upgrade later without replacing the control system.
- Easy connection of additional sensors (e.g. p.H, redox, conductivity).



Whisper-quiet air distribution system with long-term benefits

What makes the subtle but effective difference in operating costs of Aero small wastewater treatment systems compared to other systems?

90% less energy consumption in the air distribution system:

Aero plants work with airstep air distribution systems with stepper motors from Batchpur instead of solenoid valves. Solenoid valves have the disadvantage that they have to be permanently supplied with energy during the opening process. This would mean for you as a costumer that for example, the solenoid valve has to be supplied with power during the whole opening time. This is usually between 10 - 15 watts. The calculation is quite simple: Meanwhile, batchpur's stepper motor system needs less than 10% energy.

DIE OPTIMAL TECHNOLOGY

MODULES THAT CAN BE EXPANDED TO HIGHER CLEANING CLASSES AT ANY TIME...

For example, if the phosphate content in the effluent of the wastewater treatment plant is to be limited or the treated wastewater is to be sterilized: We have the right solution. We also have the solution for extended treatment stage, i.e., for the elimination of non-biodegradable substances, drug residues, antibiotics, etc., we have the right technology. All certified according to EN 12566.

For a safe future!



Hand-made dosing station for the pneumatic dosing of precipitating agents or oxidizing agents.



High-quality easy...con control – developed, manufactured and tested in Germany.

RESPONSIBLE AND FAR-SIGHTED CHOICE OF MATERIAL AND CONSTRUCTION METHOD

Aero small wastewater treatment plants are designed and manufactured with prudence and foresight. There are fine technical details that stem from the commitment to sustainability and performance, such as high-quality, durable material in the individual components, the production in accordance with highest industry standards, such as bonded joints for plastic pipes and sleeves instead of using HT pipes, etc. As a consumer, you will also feel this when your plant starts racking up years. Because then individual components of batchpur can be exchanged and replaced easily and economically.



PROVEN BY A 6-MONTH VACATION HOME TEST ON THE TEST FIELD IN AACHEN!



THE RIGHT TANK FOR

High-quality processed plastic and concrete tanks are available for the Aero small wastewater treatment plant.

PLASTIC TANKS

- with manufacturer and performance declaration
- high quality material
- best craftsmanship: welded or rotated
- tested in Germany
- precisely dimensioned: available in many different sizes

Grizzly PE tank available for 5 PE Aero system

- suitable for groundwater installation
- buoyancy-proof (according to installation instructions)
- highest dimensional stability
- construction and design support the purification
 process
- cost effective installation

CONCRETE TANKS

- with manufacturer and performance declaration
- dimensionally stable
- buoyancy-proof
- quick and easy to install

High concrete quality in combination with modern manufacturing technology, ensures a quality product that meets all requirements of wastewater treatment.

Concrete tanks available for 4-50 PE Aero systems



PE tanks available for 4, 6, 8, 10 PE Aero systems

suitable for groundwater installation





REHABILITATION/ MODERNIZATION OF YOUR EXISTING PLANT

Aero SBR small wastewater treatment plants are ingenious for rehabilitation/modernization by simple retrofitting of your existing plant. No matter whether it is a round or square pit or container, whether a 1-chamber, 2-chamber, 3-chamber or a pit with even more chambers, whether made of concrete or plastic: Aero can be retrofitted in all types of tanks that meet the specifications, e.g. in terms of water depth, volume, stability and watertightness.

In pits/vessels with partitions, the partitions do not have to be sealed. This is a major advantage during refurbishment.

FULFILL OBLIGATIONS ENJOY FLEXIBILITY

ONLINE MONITORING (AT A SURCHARGE)

... ALWAYS IN CONTACT!

Now you can optionally communicate with your Aero plant via Internet using the easy...con control system. You can use easy...con to check whether your small wastewater treatment plant is working, at any time, far away from the plant, on your PC, laptop or smartphone. The easy...con control with WIFI prepares the data for HTML and can be accessed via your internet browser. You do not need any software installation or any special operating system.

... ALWAYS LESS EFFORT!

With easy...con operator controls can be omitted.

... ONLY 1 MAINTENANCE PER YEAR!

In Germany, according to the regulations, small wastewater treatment plants of effluent class C* have to be maintained twice per year. However, with the optional easy...con remote monitoring, you only need 1 maintenance per year according to the DIBtapproval for the classes C+N*.

... ALWAYS HIGH EFFICIENCY THROUGH VALUABLE DATA!

For the evaluation easy...con provides relevant data about the Aero plant. The easy...con control system is designed to record everything that happens in the plant very comprehensively and thoroughly. You have precise information about the purification process and the function of the wastewater treatment plant at all times.

... OPERATE INDIVIDUALLY - MANAGE CENTRALLY!

Associations can now manage all Aero plants from one central office. Administration is simplified, and costs remain low. So you can take responsibility.

... THE SERVICE TECHNICIAN IS INFORMED AND READY TO ACT!

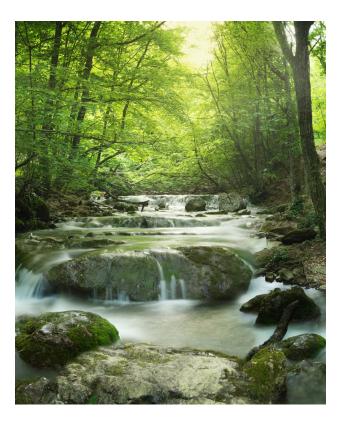
Every Aero small wastewater treatment plant with the easy...con control system can be monitored via WIFI or modem. Remote maintenance and updates are possible at any time. Maintenance work and test runs can also be carried out in the absence of the house residents as part of a maintenance contract. Appointments become exceptionally simple and can be scheduled during normal business hours. This is real service for the customer.

...READY FOR THE FUTURE

Aero has excellent cleaning performance for classes^{*} C-D, H, P^{*}, and 4th stage (purification classes according to German regulations). The standard version of the Aero system already includes class D: No extra cost is incurred to meet Class D cleaning requirements at a certain point.

* Cleaning classes accordning to german regulations.

HIGHER COMFORT | LOWER COSTS | CONSISTENTLY FAIR



WATER IS THE FUTURE – SOLUTIONS ARE NEEDED IN THE PRESENT

Competently planned and professionally built. In a trusted circle of developers, manufacturers, and sales partners, we live our passion for water.

With our purification system Aero, we present you an innovative, simple, easy-to-maintain, and durable system with the highest standards of cleaning performance combined with sustainability and maximum energy efficiency.



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