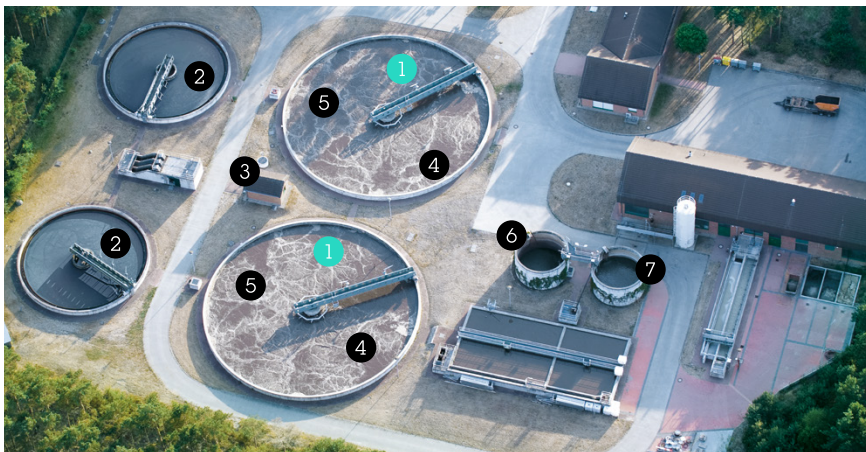


A brand of  
Aqseptence Group

## Passavant® Aqualogic® Process Efficiency

Your insurance for running a safe, stable and reliable waste water treatment plant.



- |   |   |  |   |
|---|---|--|---|
| <p><b>1 Aqualogic®</b><br/>Aeration control/<br/>Load calculation</p>           | <p><b>2 Aqualogic®</b><br/>Excess sludge and<br/>Return sludge<br/>controller</p> | <p><b>3 Aqualogic®</b><br/>Phosphate precipi-<br/>tation; Carbon<br/>source dosing</p> | <p><b>4 Aqualogic®</b><br/>Recirculation<br/>controller</p>                             |
| <p><b>5 Enerlogic®</b><br/>Power saving<br/>mode; Sludge age<br/>controller</p> | <p><b>6 Aqualogic®</b><br/>Process water<br/>management</p>                       | <p><b>7 Aqualogic®</b><br/>Inflow manage-<br/>ment</p>                                 | <p><b>Aqualogic®</b><br/>Main controller</p> <p><b>Aqualogic®</b><br/>Add-on module</p> |

Aqualogic® offers flexible, on-de-  
mand control of all aggregates  
connected with the biology of  
your water treatment plant. By  
recording and evaluating vari-  
ous measured values such as  
oxygen, ammonium, nitrates  
and temperature, Aqualogic®  
constantly calculates and moni-  
tors the load conditions and  
the process environment at the  
biological stage and controls all  
the available aggregates in a  
way that ensures optimal pro-  
cess management at all times.  
Aqualogic® reacts independen-  
tly to the load fluctuations and  
changing process conditions  
that regularly occur in every-  
day operations, for example, as  
a result of weather or time-rela-  
ted influences.

### Benefits

- Optimal purification capacity
- High energy efficiency
- Maximum operational safety
- Accounts for different tem-  
perature and provision con-  
ditions
- Control strategies can be  
changed without program-  
ming
- Controller settings can be  
adjusted independently at  
all times to meet the specific  
needs of your waste water  
treatment plant
- Supports modular expansion  
with numerous additional  
modules
- Non-proprietary (both the  
connectible sensors and the  
controlled aggregates)

### Function

With 20 years of practical expe-  
rience, Aqualogic® purifies was-  
tewater from over 5 million resi-  
dents at around 400 waste water

treatment plants. With Aqualogic®,  
you can apply complex process  
expertise and user knowledge to  
biological waste water treatment,

## Function

so that the biological treatment stage of a waste water treatment plant can be optimized in every load situation.

For this purpose we offer numerous add-on modules that ensure comprehensive and seamless optimization of every process and enable the processes to be calibrated with each other based on the current load situation.

### **Significant advantages over PLC programming**

Unlike PLC controller programming, Aqualogic® can be flexibly adjusted without programming at any time to suit changing conditions. The various functions can therefore be changed dynamically, and new modules can be added as needed for expanded control tasks. Furthermore, the control strategies can be changed without programming and new program versions can be loaded easily.

### **No 'black box.' It is always clear and transparent and can be flexibly adjusted as required**

Aqualogic® is designed for clarity and transparency. The screen displays only the necessary

measured values and important notifications. There is no need to intervene in normal situations. However, if it becomes necessary to adjust controller settings or framework conditions, this can be achieved in detail by means of numerous parameters

### **Various options for integration to suit every plant environment**

Aqualogic® can be installed as a standalone automation solution, and the requirements for this are minimal. Aqualogic® has various interfaces and can therefore be integrated flexibly in every plant environment, whether via an existing process control system, a direct connection to the controller/PLC or as a parallel system; it is always possible to integrate Aqualogic® into an existing, non-proprietary automation environment. You can connect any sensor and control any aggregate. As a result, Aqualogic® makes it possible to convert a heterogeneous plant environment into a homogeneous one in which all the components are perfectly coordinated and work together flawlessly.

## Results

Installing the Aqualogic® control system and its modules facilitates the comprehensive optimization of every process at the biological treatment stage. This substantially improves the plant's treatment capacity and power consumption and its use of precipitants and other aggregates.

Experience shows that operating the biological stage in a dynamic and load-dependent

manner with Aqualogic® results, on average, in a 20 % to 30 % reduction in outflow concentrations; in some cases, reductions of over 50 % are possible for certain parameters. In addition, operating the ventilation system on demand results in a roughly 10 % to 20 % reduction in energy consumption. And savings of up to 40 % can be achieved by adding auxiliary agents such as precipitants.

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The technical data stated in this brochure are indicative only and have to be determined for each individual case. Reserve technical changes.