# Air Diffusion for Biological Waste Water Treatment Plants

Aeromatic Aalborg ApS specialise in producing diffusion pipes for water oxidation and powder fluidisation.

Aeromatic Aalborg ApS supply systems and equipment as well as consultancy on all types of oxidation and fluidisation needs.

Aeromatic Aalborg ApS is an innovative company that always seeks the optimal solution to a given challenge – preferably in close co-operation with the individual client.

The objectives of Aeromatic Aalborg ApS are to be a competent partner for our clients, to lead the development and not least to ensure favourable results and performance from our installations and consultancy.



www.aeromatic.dk

# Air Diffusion for Biological Waste Water Treatment Plants

# Comparative finances and performance

The optimal performance of biological waste water treatment plants demands efficient and lasting oxidation. Aeromatic Aalborg ApS has developed a flexible system that can adapt to any need.

Our focus during development has been on flexibility and optimal diffusion combined with high stability, low running costs and modest installation costs. We are proud to present the outcome: Air Diffusion System (ADS)

## Flexible standard solutions for every need

ADS consist of flexible modules that can be combined and assembled to suit the individual installation, always focusing on optimal performance and function.

The diffusion need depends on the composition of the waste water and the size of the basin. Our module based system can be adapted to all sizes of basin and waste water composition. The diffusion capacity depends on the diameter of the pipes and the number of holes. As all our systems are produced to order, we ensure that every installation is put together with exactly the right capacity. In this way we ensure the optimal performance of ADS.

### **Ensured for the Future**

If the composition of the waste water changes, thus changing the oxidation requirements, it is possible to exchange the diffusion pipes. In this way we ensure optimal performance at all times. It is possible to exchange the diffusion pipes without exchanging the rest of the system.

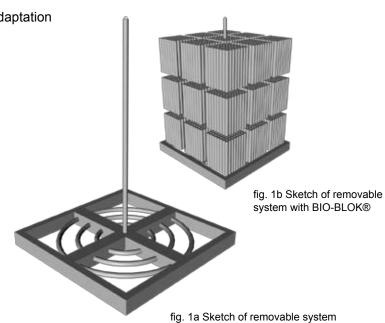
The system is constructed in stainless steel (AISI 304). The diffusion pipes are made from perforated PVC pipes which are made to order and adapted for the individual installation. The system is supplied either as a permanent or a removable system (fig. 1). With a removable

solution the entire system can be lifted out of the basin for maintenance and cleaning.

### Eight key advantages to ADS

Optimal performance through individual adaptation

- Long lifespan
- Minimal maintenance
- · Optimal oxidation of the waste water
- Optimal performance of the BIO-BLOK®
- Energy efficient
- Financially attractive
- Ensured for the future



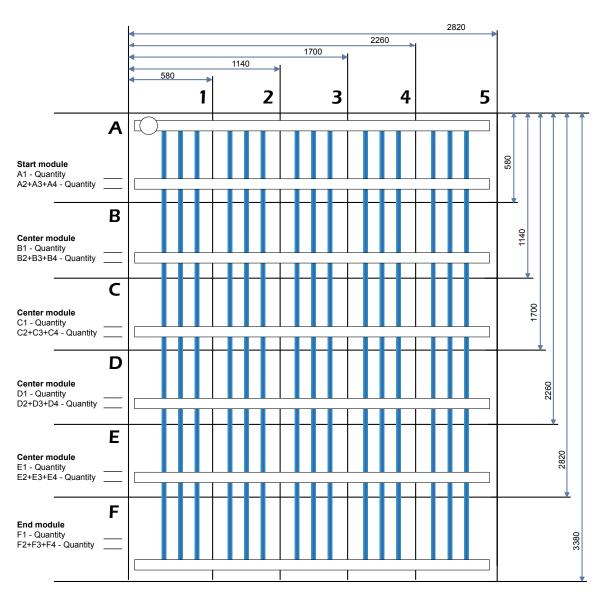
# **Enquiring about an ADS system**

When requesting a quote for an ADS system, please provide the following information:

### See fig. 2

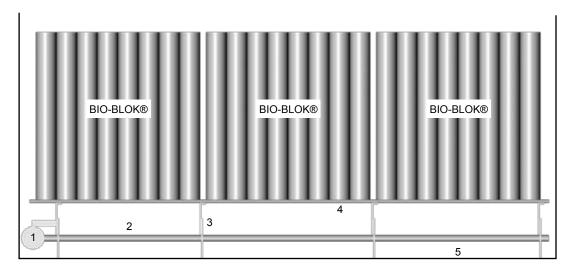
- 1) How many BIO-BLOK® are installed in length?
- 2) How many BIO-BLOK® are installed in width?
- 3) Required oxidation need per module in basin (m3 per minute)?
- 4) Compressed pressure in bar?
- 5) Water depth in metres?

fig. 2 ADS plan view



Measurements in millimetres. Module height 230mm.

fig. 3 Example of a typical bottom grating with diffuser pipes



- 1. Air distribution pipe
- 2. Air diffuser
- 3. Support
- 4. BIO-BLOK® support
- 5. Bassin floor

### **Facts about ADS:**

Filter type: Suitable for BIO-BLOK® 100, 150, 200 and 300

Diffusion capacity: Individually adapted to installation. The size and number of holes are

matched to individual installation, ensuring optimal performance.

On systems with up to 4 modules in length, a 20mm diameter diffusion pipe is used. On systems with more than 4 modules in length, a 32mm

diameter diffusion pipe is used.

Module height: 230mm.

Number of modules: Up to 5 modules in width. Up to 6 modules in length and up to 6

BIO-BLOK® in height. On larger basins more ADS units are installed.

Load capacity: Max 1,000kg per m2 ADS system. Equivalent of 6 BIO-BLOK® high. Materials: Base; stainless steel (AISI 304). Diffusion pipes; perforated PVC.

Delivery: The ADS base is delivered in parts with detailed instructions for assembly.

The system can be delivered fully assembled ready to use.

### **Further information**

Should you have any questions or require further information, please feel free to contact us. Our consultants are always ready with advice and information.

Do feel free to contact us, without obligation, for a quote on your ADS installation.

For further information on BIO-BLOK®, please visit www.expo-net.dk

