

ASP

Aerated Simultaneous Pond System

Original Line-Aerator SW-LB

Approved pond aeration floating system since more than 30 years



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G.A.A. Ges. für Abwasser- und Abfalltechnik mbH

General Information

Aerated simultaneous pond treatment plants (ASP) are implemented to treat wastewater from municipalities. Often enough they are apply to treat industrial wastewater, too.

It's optimal for low inlet concentration.

An air blower produces compressed air, which is led to the pond's ground as fine bubble aeration and into the aerator sump. For one, this brings about an input of aerial oxygen to the wastewater. On the other hand, this causes a laminar turnover of the pond's volume in accordance with the compressed air lift pump principle.

The floating design and the fixation with a length-wise dynamic tackle enables the **G.A.A. Floating Line-Aerator** to adjust to water level fluctuations. Additionally the installation can easily be pulled to land for maintenance measures.

Fine bubble aeration is applied allowing an uninterrupted operation with an economic energy demand.

Long-standing experience in construction and production of wastewater treatment components and the specific choice of material and finishing technology have helped to optimize the **G.A.A. Floating Line-Aerators** with regard to life span, operational reliability, energy demand, maintenance and investment costs.



Application

Due to the cost effectiveness and the simple and quick installation, the **G.A.A. Floating Line-Aerator** offers an advantageous possibility to improve the oxygen balance of not only new but also existing treatment ponds. The **G.A.A. Floating Line-Aerator** can be integrated in an existing aeration system or be applied in exchange of an existing one.

The individual adjustment to the local conditions is standard.

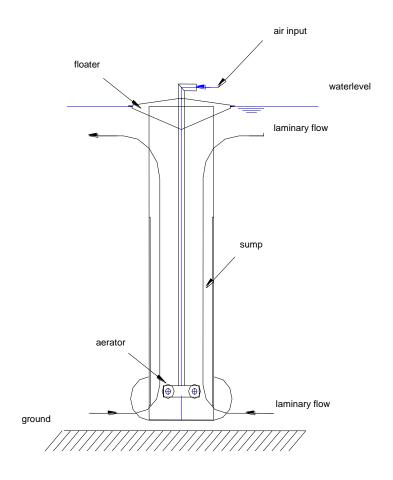
Description Line-Aerator

Base and Drive Unit

The base unit is a floating, unsinkable unit with a floater, the air pipe and sump which generates the air lift principle and an extensive oxygen input.

Aerator

Up to three membrane-aerators with a length of 2.0 m are installed to the air-distributor at the bottom of the base unit.



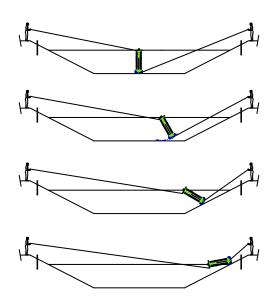


Animation on http://youtu.be/nRlar0LnzpE



Tackle

The length wise dynamic tackle automatically adjusts to waterlevel fluctuations and has two tasks: Firstly, to fix the floating aerator within the pond with a ground anchor. Secondly, it functions as device to pull the aerator to land for maintenance purposes.



Air Pipe

The air pipe is a UV resistant. A shut-off valve enables the individual control of each G.A.A. Floating Line-Aerator in a pond.



Ground Anchor

The ground anchors are fixed on the pond's bank and hold the length-wise dynamic tackle. The installation is designed to avoid an automatic withdrawal.

Material (Standard Design)

Base unit AISI 304 or 316L **EPDM** or Silicone Aerator membrane

EPDM Sealing

Ground anchor AISI 304 or 316L Tackle AISI 304 or 316L Air hose Fabric reinforced

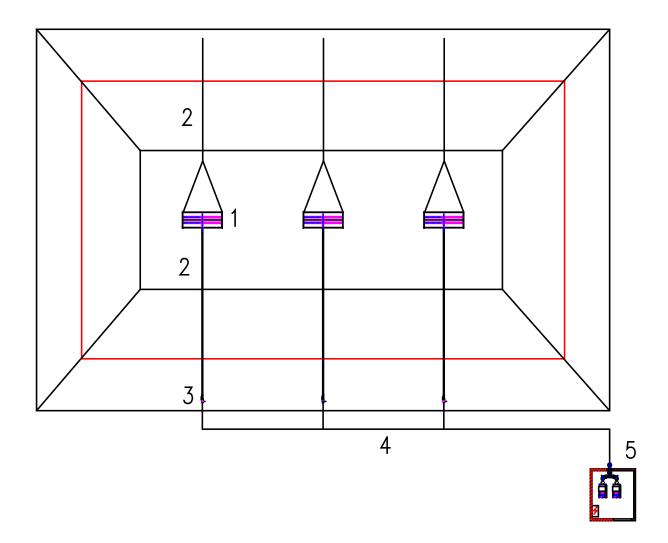
Brass or stainless steel Shut-off valve

Accessories

To effectively use the advantages of an intermittent operation, such as low energy demand and wear off, the following accessories are necessary:

- oxygen measurement unit
- · frequency transformation for air blower unit
- · control and regulation device

Design



- 1. floating Line-Aerator; 2.50 m section
- 2. length-wise dynamic tackle
- 3. shut-off valve
- 4. underground air pipe
- 5. operational building with blower engine and switch-gear



Immediate Operation

The installation of the original G. A. A. Floating Line-Aerator does not need any lifting device and can be fixed in a filled pond (approx. 2 h per unit). Connection to compressed air device – The aeration is ready for operation.

The assembly and start-up costs are reduced to a minimum!



Accessories at Surcharge and/or on Request

- Individual aeration elements
- Alternative material for the aeration element membrane
- Stainless steel elements for specific applications (e. g. chlorous wastewater)
- Alternative material for seals