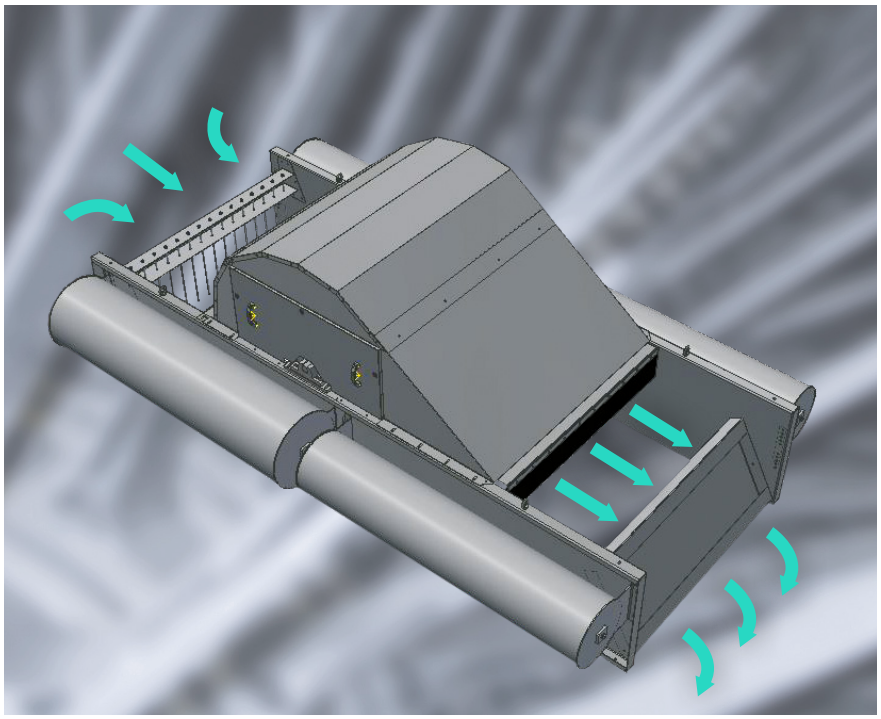
Passavant

A brand of
Aqseptence Group

Passavant®
Mammutrotor Lago



With the Passavant® Surface Aerator Mammutrotor®, Aqseptence Group offers an universal solution which has been especially developed for aeration, circulation and mixing processes. There are more than 8,500 installations worldwide, with a total length of approximately 50,000 m. The Mammutrotor® has become the byword for economic and reliable surface aeration.

The Mammutrotor Lago builds on the Passavant product's strengths experience and has been specifically developed for lagoon/pond-style wastewater treatment plants.

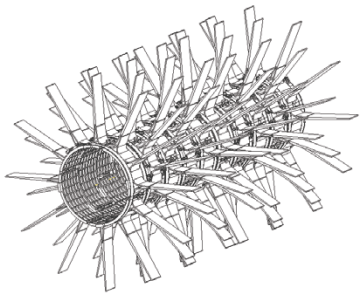
Benefits

- Linear energy output
- Low maintenance requirement
- Innovative drive concept without coupling
- Environmentally-friendly lubricant
- Constant oxygen input and efficiency over entire service life
- No negative influence of the oxygen input due to varying wastewater characteristics, α-factor close to 1
- Embedded guide baffle for high energy efficiency and direct flow to deeper water layers
- Low aerosols and noise because of covering

Applications & fields of operation

The Passavant® Surface Aerator Mammutrotor® is usually deployed in municipal and industrial wastewater treatment plants. The scope of its applications range from oxidation ditches, sequence batch reactors or as a floating option for lagoon/pond-style treatment plants. This technology is particularly efficient for calcareous and solids-laden influent or warm environments.

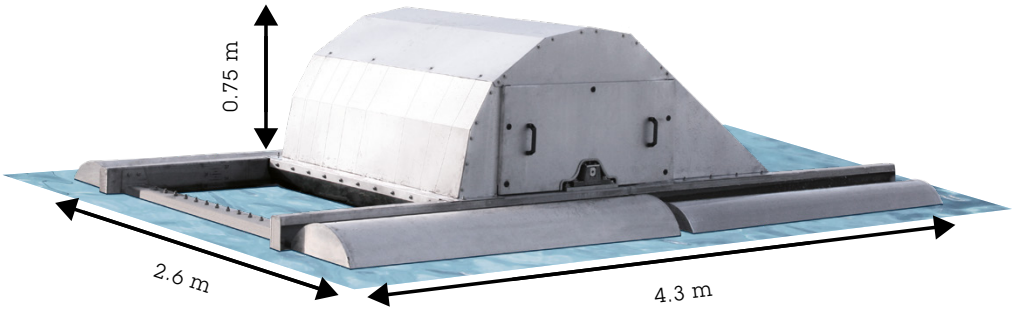
Design features



The core of the system is the aeration rotor, a central shaft with clamped star mountings made of glass-fibre reinforced plastic. Their spiralled arrangement ensures low-noise and shock-free operation.
The drive unit and the end bearing are equally crucial for stable low-maintenance operations over the course of many years. The drive unit consists of a drum motor with an integrated gearbox.

Product variants & design sizes

The oxygen transfer efficiency of the Mammutrotor® principally depends on the immersion depth and the rotation. In the case of a maximum immersion depth of 28 cm in a lagoon (or 30 cm in a an oxidation ditch) and a rotational speed of 72 RPM, there is approx. 9 kg O_2/h oxygen transfer (into activated sludge) per one-metre length of rotor.
Using a rotor length of 1.5 meters there is an oxygen transfer rate of 12-13 kg O_2/h (into clear water) – the installed electrical power of this unit at this length is 7.5 kW.



Options

The supply of the Mammutrotor Lago can be complemented by:

- Cabling from machine to delivery point
- Fixation
- Outdoor control cabinet with frequency converter
- Installation and commissioning
- Process automation using Aqualogic®
- Other high-efficiency equipment for waste water treatment from our product range

Aqseptence Group GmbH
Water Treatment Systems

Passavant-Geiger-Strasse 1
65326 Aarbergen · Germany
Phone +49 6120 28-0
Fax +49 6120 28 2182
passavant@aqseptence.com

www.aqseptence.com

Version 1.1