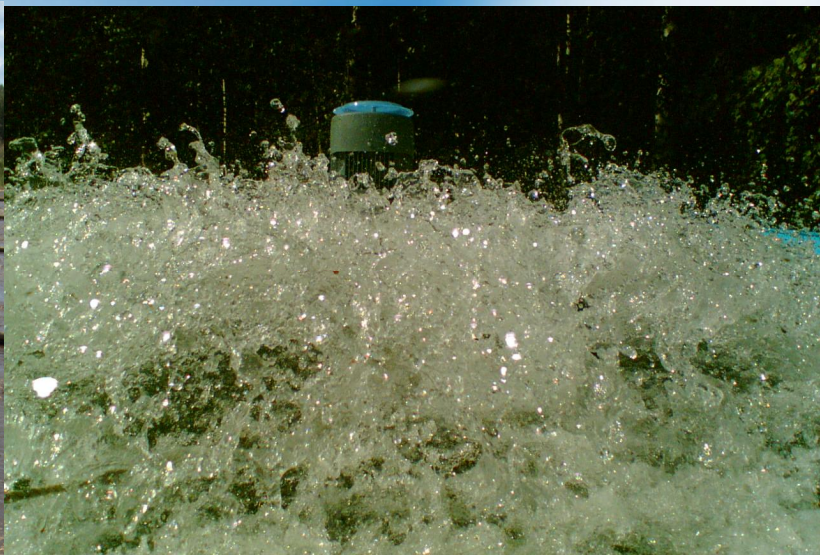


waterix



Waterix DENIT™ 440 Combination Device

APPLICATIONS

Sequential denitrification mixing and aeration of industrial and municipal wastewater with a single unit

BENEFITS

High operational efficiency enables low energy consumption

The efficiency rate do not drop during usage.

Low initial investment

Since infrastructure need is minimal, the DENIT 440 has economical purchasing price. The DENIT 440 also combines two historically separate units and therefore lowers the purchase costs.

Adjustable mixing and aerating speed

DENIT 440 comes with an AC motor drive. The OxControl software running in the AC drive can adjust the mixing speed and thrust and includes an automatic propeller cleaning cycle This enables correct mixing speed/thrust and optimized energy consumption. Also the AC drive protects the mixer from overloading.

Low maintenance requirements

Since in many installations there are more than one unit in the process basin, the maintenance can be done without interrupting the process. The total investment will be lower, since there is no need of doubling the line capacity just for the maintenance purposes. There are no parts in the system that would require regular maintenance or replacement, therefore the maintenance requirement is very low. The AC drive has a program that time to time cleans the propeller by changing the rotation direction.

Easy and fast to install

Waterix DENIT 440 is very compact and light in weight and therefore it is easy and fast to install.

Available also with pontoons

Waterix DENIT 440 can be mounted with pontoons, which are useful in large basins.

KEY INFORMATION

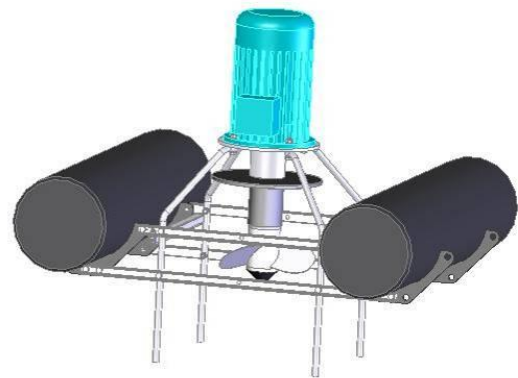
DENIT 440 is an optimal device where the wastewater mixing and aeration alternate in turns. When the water flows from bottom to surface the DENIT 440 aerates and mixes the water. As soon as the propeller rotation direction is changed and water starts to flow from surface to bottom, the aeration stops and unit acts only as a powerful mixer. This way the basin can be used in normal load for denitrification process, and during peak load seasons the basin can be used for aeration. As all this can be done with one single unit, the savings in investments can be significant.

With the OxControl software running in the AC drive the mixing and aeration can be adjusted to optimal level.

Options:

- Pontoons
- Intake / downward flow pipe 1 – 6m
- Remote monitoring and alarms(sms, e-mail)

PONTOONS



Waterix DENIT 440 can be mounted either with supporting beam or with pontoons.

When the mounting distance with supporting beam comes too long or the water level varies greatly, it is easier to install the unit with pontoons.

SPECIFICATIONS

Thrust in mixing

440N, Motor input power 1,9kW (frequency 35Hz)

Oxygen transfer rate in aeration

8,0 kgO₂/h, 192 kgO₂/d

Oxygen transfer efficiency in aeration

1,5 kgO₂/kW

Water flow in mixing and aeration

160 l/s (50Hz), 112 l/s (35Hz)

Motor

5,5 kW

Weight

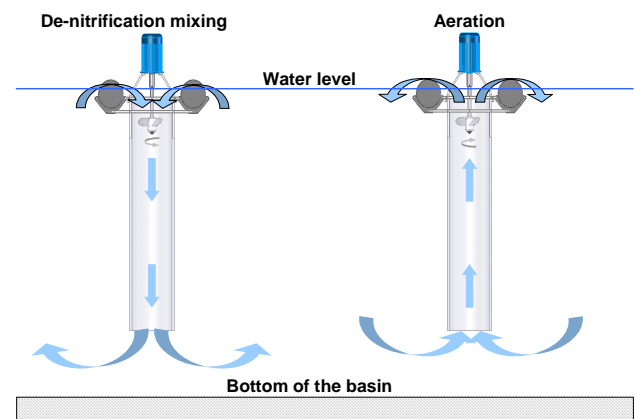
~60 kg (without pontoons)
~90 kg (with pontoons)

Depth of the basin

1 - 13 m

Operating temperature

-30 °C – +50 °C



By changing the propeller direction the unit can act as aerator or mixer.

WATERIX IN BRIEF

Waterix Ltd is a company established in 2003, specializing in advanced environmental technology having two product lines one focused on aerating and the other on cooling. Waterix has developed a unique wastewater aerator, which can be used also as an effective mixer. The Waterix aerators fit well for municipal, food processing, pulp and paper industry's wastewater treatment. The aerators can be used in addition for natural water aeration, small scale community waste water treatment and golf courses. Expensive cooling towers can be easily replaced by cost effective Waterix coolers. Typical applications for the Waterix coolers are e.g. pulp and paper industry's waste water and process water cooling.

Waterix Oy

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