

Greenbass™

regulation of sequenced aeration for activated sludge

○ urban wastewater



precisely controlled energy consumption for wastewater treatment plants

○ efficiency and savings

an adaptable solution to all wastewater treatment plants to reduce energy consumption through custom optimization

innovation

continuous air-supply monitoring with automatic adjustments made according to fluctuations in pollution loads



key figure

up to

15%

energy savings



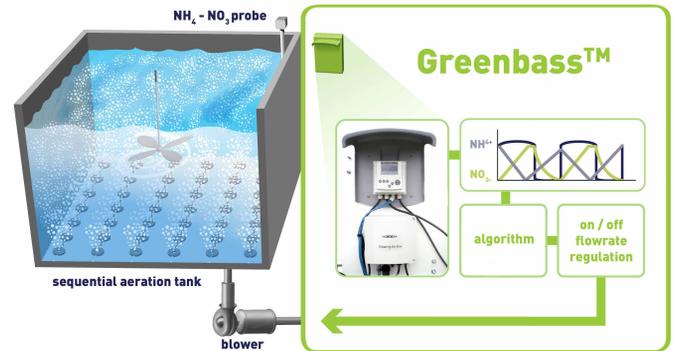
Greenbass™ technology . . .

Energy is the second largest cost item in wastewater treatment plant operations, after salaries. For this reason, there is a great advantage in reducing energy consumption.

Representing 40–70% of energy needs, aeration is the most energy-demanding item in a wastewater treatment plant. Important energy savings are therefore possible through optimization and controlled adjustments of aeration according to the needs of the treatment process. Greenbass™ accomplishes this by continually fine-tuning the air flow supplied to the biological treatment process depending on the pollution load.

Continuous air-flow adjustments: for each biological tank, Greenbass™ continuously measures ammonium and nitrate concentrations using a set of measuring probes that operate in conjunction with our proprietary, patented algorithm integrated into a standard software program which controls the aeration start-up or shut-down thereby regulating the air flow input for the entire facility.

The key to the Greenbass™ control mechanism is that it is based on the fluctuating concentrations of nitrogen's reduced form (ammonium) and oxidized form (nitrate). So, when the pollution load fluctuates during the course of the day, Greenbass™ adjusts the air flow supplied as accurately as possible to the process requirements, thus avoiding energy waste.



. . . what it can do for you

environment



- a 10–15% decrease in energy consumption compared to traditional regulation systems



high performance

- can be adapted to all sizes of existing or new wastewater treatment plants
- a system which can easily be integrated into most plant's logic control panels

savings



- adjusted air-flow according to process treatment needs reduces associated energy costs

SUEZ treatment infrastructure

innovation.mailin@degremont.com

www.degremont.com

among our references

Dijon, France
capacity: 400,000 PE

Pau Lescar, France
capacity: 190,000 PE

Tournus, France
capacity: 70,000 PE