



Vorelodos Aerobic Digester

RETHINK YOUR BIOSOLIDS MANAGEMENT STRATEGY

Wastewater
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SANITAIRE
a xylem brand

Consider a complete aerobic digester solution

Often times the biosolids management portion of the treatment plant may not be optimized, resulting in inefficient operation of the entire treatment plant.

For instance, did you know that aerobic digestion is the second largest consumer of energy, after biological treatment aeration, at a wastewater treatment plant? Or, do you realize that up to 50% of the nutrient loading on any given day may be coming from the biosolids process?

Consider a complete solution for your aerobic digester. Vorelodos aerobic digester combines :



Equipment



Controls



Service

This offers a solution that ensures wastewater treatment plants meet regulations while reducing operational costs.



Meet Regulations

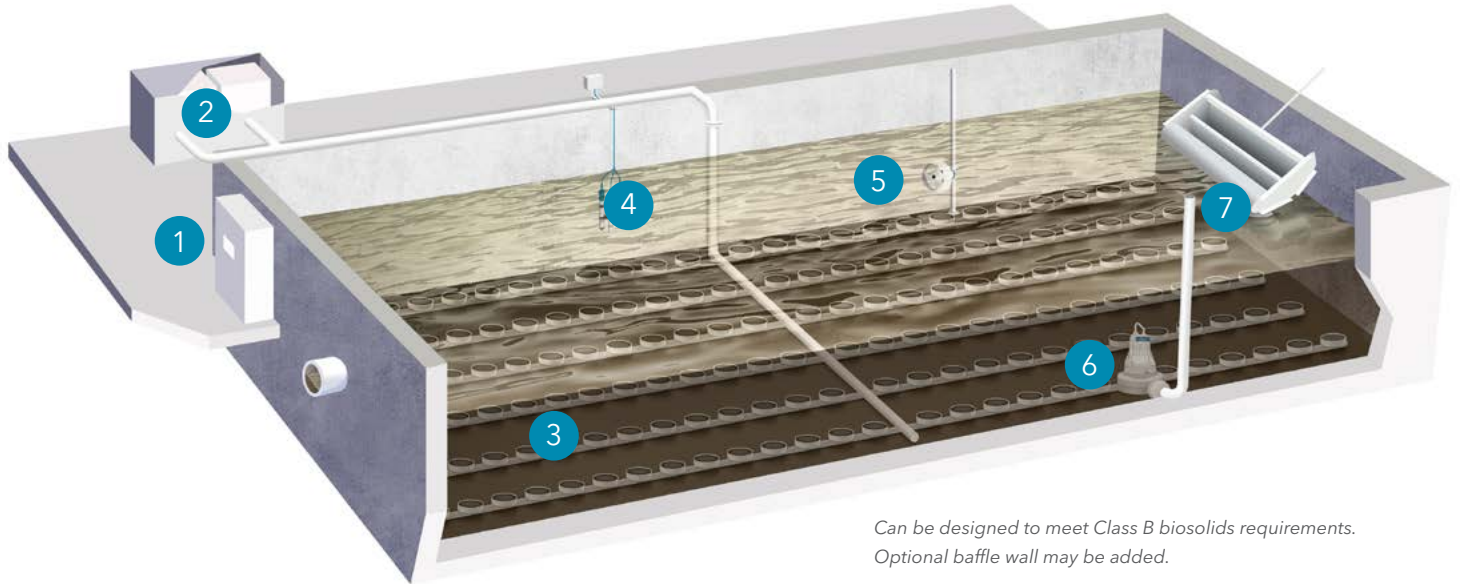
- Up to 90% reduction in nitrogen and phosphorus returned to the main treatment process
- Wastewater treatment plant process stabilization through reduction of nutrient spikes to the main plant
- Reuse of biosolids for agricultural purposes



Reduce Operating Cost

- Energy consumption in the aerobic digester reduced up to 90%
- Lower chemical use due to alkalinity recovery and reduction in phosphorus return to main plant
- Automated decanting to free up operations staffs' time

It all adds up to optimized performance.



Can be designed to meet Class B biosolids requirements.
Optional baffle wall may be added.

EQUIPMENT + CONTROLS + SERVICES

- 1 Process controls** - Sanitaire OSCAR process performance optimizer ensures smart control and process optimization. The OSCAR system includes a process control panel (PLC, HMI, Webport, etc.) and process controllers (time-based control, DO control, ORP control and/or DINO nutrient control).
- 2 Blowers** - A diverse portfolio of blower technologies provides reliable, energy-efficient air supply to the diffused aeration systems.
- 3 Aeration** - Sanitaire Silver Series II LP membrane disc diffuser grid maximizes standard oxygen transfer efficiency (SOTE) and saves energy.
- 4 Instrumentation** - YSI/WTW IQ SensorNet provides process visibility with instrumentation for measuring DO, ORP, NH_4 , NO_3 and/or K.
- 5 Mixer** - Efficient Flygt submersible mixers are provided to ensure proper mixing while minimizing maintenance and energy consumption.
- 6 Pump** - Robust submersible Flygt pumps are included to provide reliable, low maintenance pumping of digested biosolids to downstream processes or disposal.
- 7 Decanter** - Sanitaire decanter is used to automatically remove supernatant, enabling higher solids concentrations, smaller footprint and lower capital costs.

Each Vorelodos solution is engineered to meet your desired digestion goals.

Additional standard services include: submittal and O&M documentation, commissioning and startup, mechanical and electrical training, process training and 24/7 phone support.

Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're a global team unified in a common purpose: creating advanced technology solutions to the world's water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services, and agricultural settings. With its October 2016 acquisition of Sensus, Xylem added smart metering, network technologies and advanced data analytics for water, gas and electric utilities to its portfolio of solutions. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.

For more information on how Xylem can help you, go to www.xylem.com