



# Onsite Biological Solutions

## US Municipal Portfolio

**WATER TECHNOLOGIES**

# Onsite Biological Solutions

100 to 10,000 inhabitants



Veolia is an expert and a leading producer of packaged biological treatment solutions, including biodisc, advanced rotating and containerized MBBRs.

These compact biological wastewater treatment plants have been utilized worldwide for over 20 years; providing small and medium sized solutions that integrate easily into the existing landscape with minimal odor.

Applications:

- Communities
- Industries
- Schools
- Reuse

## Ecosim™ Rotating MBBR



Ecosim™ is an efficient combination of Ecodisk™ and the AnoxKaldnes™ MBBR. Ecosim uses the rotational movement of the drum and well designed orifices to passively aerate the system while continuously allowing treated water to flow downstream.

- Compact design
- High quality effluent
- Low energy consumption
- Minimal maintenance and operation
- No noise, visual or odor nuisances

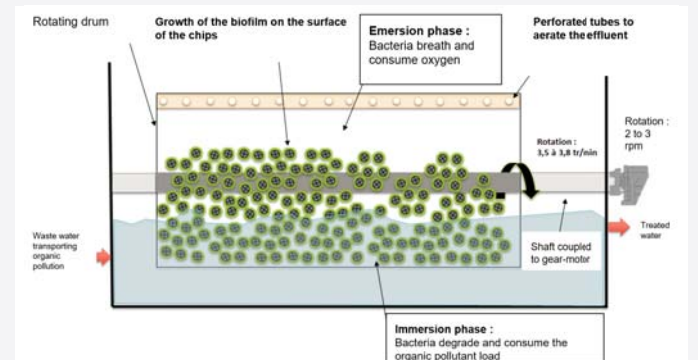
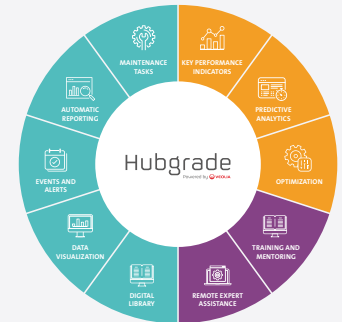


Digital services can be added to enhance treatment. Hubgrade is Veolia's highly flexible suite of digital service offerings for water treatment and reclamation facilities, helping to improve treatment performance and compliance, reduce operating and maintenance costs, and often times postpone or avoid capital expenditures.

**Hubgrade**  
ESSENTIAL  
Performance Optimization Tool

**Hubgrade**  
ASSIST  
Access to Veolia Experts

**Hubgrade**  
PERFORMANCE  
Online Smart Control Tool



Ecosim can be provided readily as a complete treatment system with the addition of ancillary components, including:

- Settling-digestion tank, screening, etc.
- Integrated secondary treatment with drumfilter, lamella settling, or reed beds

## *Ecodisk™*



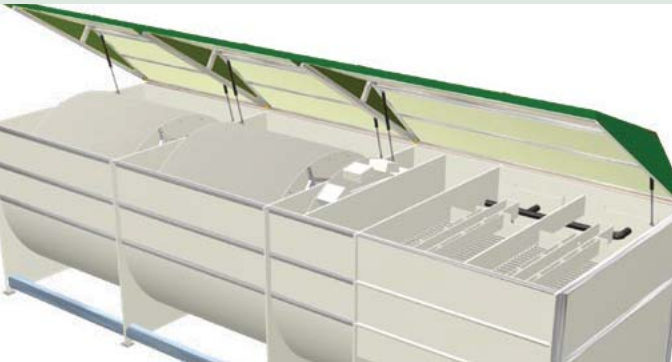
Ecodisk™ is a biological effluent treatment system that adapts automatically to load and hydraulic variations. Bacteria develops naturally on the media surface placed in rotation to form a “biological turf”. While emerged these bacteria become saturated with oxygen, and while immersed they feed on the dissolved organic material.

Easy to operate and extremely reliable, with harmonious integration into protected areas, treating nitrogen and phosphorus.

Designed for small and medium-sized rural or semi-urban communities:

- Campgrounds, hotels, restaurants, etc.
- Expansion and rehabilitation of existing plants

## *Ecodisk™ DL*



Similar to the Ecodisk™ Filter, the Ecodisk™ DL incorporates a separation step after the biological process. This is accomplished with the addition of lamella settlers.

- Biological process with separation in a single unit
- Suitable for continuous operation
- No additional motors required

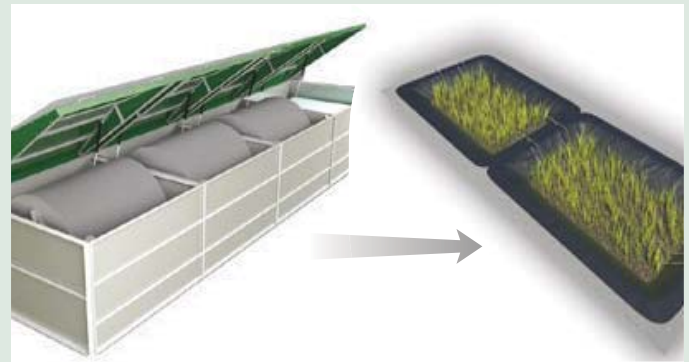
## *Ecodisk™ Filter*



The combination of the Ecodisk™ process with a drum filter allows separation of the treated water and the sludge. Achieving high quality effluent that often exceeds site requirements, and is available for reuse via reintroduction into the ground, watering green spaces, agricultural irrigation or through a simple bacteriological treatment (disinfection) downstream.

- Low investment costs
- Physical filtration barrier
- Suitable for continuous operation
- Constant quality of treated water
- Energy savings

## *Ecodisk™ M*



A complete wastewater treatment system, the Ecodisk™ M guarantees small communities high-quality water treatment and storage of the sludge produced for at least 5 years.

It is comprised of:

- Ecodisk™ for biological water treatment
- Reed beds for secondary clarification and sludge recovery

Resourcing the world

**Veolia Water Technologies**

Kruger / 4001 Weston Parkway / Cary, NC 27513

Phone: 919.677.8310 • Fax: 919.677.0082

[usmunicipal@veolia.com](mailto:usmunicipal@veolia.com) • [www.veoliawatertech.com](http://www.veoliawatertech.com)