



**TRADEWORKS**  
ENVIRONMENTAL



# Optimization of Organic Waste & Wastewater Treatment

Our solutions combine process, equipment, and analytics to address organic waste and wastewater treatment challenges. By integrating into existing systems, we offer a cost-effective option to increase treatment capacity and performance.



**Targeted Hydro Process<sup>®</sup>**  
Microorganisms



**Analytics &**  
**Technical Support**



**Screening**  
**Equipment**

## **OUR SOLUTIONS REDUCE:**

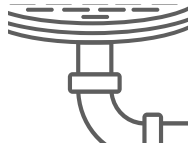
H<sub>2</sub>S • Odors • Fats Oils and Grease (FOG) • Organic Load • Excess Sludge • Energy Use • Operating Costs



# Proven Applications

## Benefiting Municipal or Industrial Organic Waste and Wastewater Treatment Systems

INDUSTRIAL + MUNICIPAL WASTEWATER



Collection System

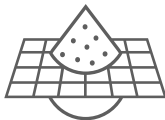


Ydro Process® microorganisms

### Collection System Application

#### Reduce H<sub>2</sub>S, FOG and Sludge

Specialized Ydro Process® microorganisms degrade FOG and take up Sulphur to prevent H<sub>2</sub>S. Collection system dosing reduces the organic load to increase treatment capacity and reduce operational costs. By leveraging benefits provided by the Ydro Process® in the collection system, treatment performance is enhanced while minimizing common conveyance issues and reducing sludge production.



PRIME SCREEN™



Ydro Process® microorganisms

### PRIME SCREEN™

#### Boost performance with fine screening

Combined with the Ydro Process® collection system application, this very fine screen achieves equal or better effluent quality than traditional primary clarification. By reducing organic loading by 25% to 40% and removing fine inert material, the screen can reduce energy requirements for aeration, protect the integrity of downstream processes and equipment and reduce maintenance costs. The operating environment is cleaner and safer, because contact with sewage and screenings is eliminated by the automated bagging system.



Wastewater Treatment Plant

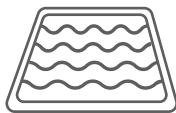


Ydro Process® microorganisms

### Wastewater Treatment Plant Optimization

#### Enhance BNR and reduce excess sludge

The Ydro Process® uses an analytics-based approach to enhance biological treatment. Results include enhanced biological nutrient removal (BNR) and reduced sludge production. The application of the Ydro Process® significantly increases the rate and efficiency of degradation and drives overall optimization of the treatment process.



Lagoon-based Systems



Ydro Process® microorganisms

### Lagoon-based System Rehabilitation

#### Improve performance and water quality, minimize odors

Ydro Process® microorganisms can be applied in lagoon-based plants to revitalize aging systems and enhance treatment performance. Our solution accelerates degradation of accumulated organic matter to avoid dredging and minimize odors.

WASTE-TO-ENERGY



Digestion



Ydro Process® microorganisms

### Anaerobic Digestion

#### Optimize overall performance and increase total energy output

By increasing digestion efficiency rates and methane concentration in the produced biogas, the Ydro Process® can significantly improve energy recovery, reduce retention time, and minimize the need for scrubbing in anaerobic digestion systems.

WASTE-TO-REUSE



Feedstock



Ydro Process® microorganisms

### Composting Process Optimization

#### Increase efficiency and system capacity

The integration of Ydro Process® microorganisms in composting systems improves the degradation rate and increases processing temperature. This leads to reduced processing time and a significant improvement in treatment capacity and final product quality.