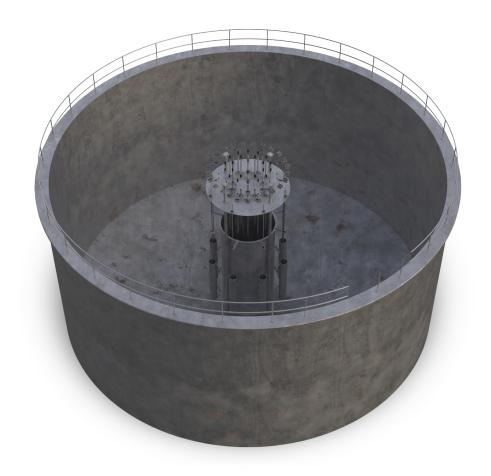
# THE M-TAD PROCESS

#### **REVOLUTIONIZING AEROBIC DIGESTION**





# COST-EFFECTIVE ANAEROBIC TO AEROBIC TRANSITIONS

### Revolutionizing Aerobic Digestion

Biosolids management is a challenging task for municipal wastewater treatment plants. Every day, about 34 billion gallons of wastewater are treated in close to 16,000 U.S. facilities. Wastewater treatment is also expensive — responsible for between 30% and 60% of plant operating and maintenance expenses.

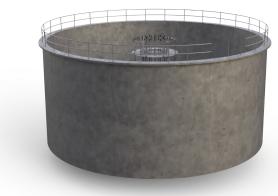
Ovivo's M-TAD™ (Mechanically Thickened Aerobic Digestion) system is a revolutionary solution for wastewater plants to minimize digestion footprint or expand capacity within an existing digestion footprint. M-TAD is also ideal for converting anaerobic digesters to aerobic digesters without extensive modifications.

Our patented, non-clog, single-drop diffuser system maintains the original digester structure while improving aerobic digestion efficiency. Through mechanically thickening devices such as gravity belt and rotary drum thickeners, the M-TAD system manages high-viscosity sludges up to 4%.

By combining sludge thickening and controlled aerobic digestion into one operation, our system vastly improves a plant's ability to efficiently manage biosolids while reducing daily operating and maintenance costs.

The M-TAD system's design also allows existing digesters to retain their cone bottoms, reducing construction costs and adding process volume.

And it's all backed by Ovivo's Class B biosolids guarantee, ensuring reliable performance and compliance.



## YOUR SOLUTION TO SLUDGE MANAGEMENT

The M-TAD system is a smart choice for municipalities and industries seeking to enhance their sludge management operations. With its cost-effective, space-saving design and advanced control features, the M-TAD system provides a robust solution for transitioning to aerobic digestion while meeting stringent regulatory requirements.

Contact an Ovivo expert today to elevate your sludge management strategy.

#### **HOW IT WORKS**

The M-TAD aerobic digestion system consists of a mechanical thickening device feeding pre-thickened sludge at 3% to 4% total solids concentration to two or more aerobic digester basins that operate in either series or parallel mode. (A typical waste-activated sludge feed digester operates in series mode.) Multiple digesters provide pathogen destruction and volatile solids reduction.

Most of the digestion takes place in the first digester. This phase requires the most oxygen and handles the majority of the volatile solids reduction.

When thickened sludge is fed to the aerobic digester, as much as 80% of the total oxygen requirement is in the first digester.

The second digester handles the remaining volatile solids and pathogen reduction.

A third digester, when used, is isolated from any untreated sludge and serves mainly as a polishing basin.

# FEATURES AND BENEFITS

The M-TAD system:

- Reduces retrofit costs for anaerobic digesters
- Expands capacity of existing tanks
- · Eliminates daily start up or clean up
- Reduces operating and disposal costs
- Minimizes operator intervention
- Enhances pH and temperature control
- Process thickened solids up to 4%
- Meets 503 regulations
- Minimizes construction footprint





