AEROBIC
DIGESTION

M-TAD™ Process

Mechanically thickened aerobic digestion

What are your needs?

- Class B biosolids
- Compact footprint
- Convert anaerobic digestion to aerobic digestion
- Smaller sludge volumes for disposal

Key Benefits

- Lowers cost of anaerobic digester retrofits
- Minimizes footprint of new construction or expands capacity of existing tanks
- Enhanced pH and temperature control
- Minimizes operator intervention

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Bringing water to life®

M-TAD™ Process

Description

The M-TAD™ (Mechanically Thickened Aerobic Digestion) system is a controlled aerobic digestion system specifically designed to handle sludges produced by mechanical thickeners such as gravity belts or rotary drums.

Do you have existing thickening equipment? Are you interested in converting from anaerobic digestion to aerobic digestion? Do you need to meet Class B biosolids requirements? If you answered yes to any of these questions then an Ovivo M-TAD system may be right for you. The M-TAD system is specifically designed to handle the high viscosity created by the polymer addition of mechanical thickening devices such as gravity belt or rotary drum thickeners.

Overcoming mixing and aeration problems with equipment designed specifically to handle viscous sludge up to 5% TS

- Meets 503 regulations in a reduced footprint
- Enhanced pH and temperature control
- Increased SRT in existing basins
- Enhanced nutrient removal
- Affordably retrofit anaerobic digesters

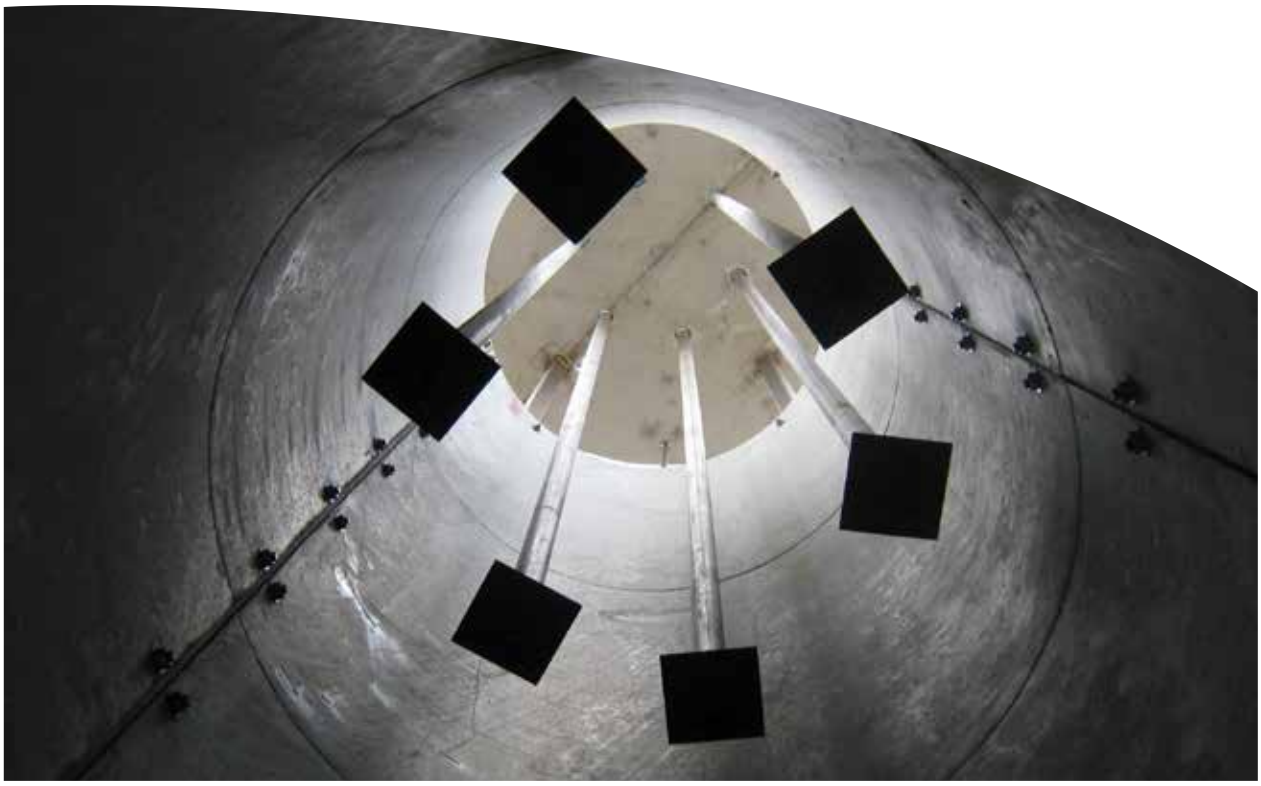
How It Works

The M-TAD aerobic digestion system consists of a mechanical thickening device feeding pre-thickened sludge at 3%-5% total solids concentration to two or more aerobic digester basins operating in either series or parallel mode. The M-TAD process has the primary advantage of reducing the volume of sludge to be digested. For existing digesters, this provides three to eight times more solids retention time. For new digesters, the required design volume is reduced.

In addition, the thickened sludge will reach a higher temperature during digestion, increasing the reaction rate of digestion and potentially further reducing the required digester volume.

For a typical waste activated sludge feed, the digesters operate in series. Multiple digesters provide optimum pathogen destruction and volatile solids reduction. Due to the nature of the digestion process, most of the digestion takes place in the first digester. This digester requires the most oxygen and will achieve 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 achieves 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.



M-TAD™ Process

Anaerobic to aerobic

The Ovivo M-TAD system can offer those looking to retrofit anaerobic digesters value that other aerobic digestion technologies can't. Whereas bottom mounted diffuser systems necessitate the cone of the anaerobic digesters to be filled, our unique single drop diffuser allows the cone bottom to remain in place. This provides additional aerobic digestion process volume and lowers construction costs. All of this while being backed by Ovivo's Class B guarantee.

OVIVO® CONNECT℠

Get Connected! Like all Ovivo equipment, your new M-TAD™ process will provide you with access to the Ovivo® Connect℠ portal, our innovative client resource application.

- Need access to your O&M Manual?
- Needs spare parts?
- Want the latest tips and news on your product?

Just scan the QR Code, or type-in the URL featured on the nameplate, to access dedicated web pages that will help you maintain and optimize your plant and your Ovivo equipment!

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