Aqua TruDense™

True Densified Sequencing Batch Reactor

The Aqua TruDense™ system is a densified sludge treatment technology that combines all of the features and benefits of a true-batch SBR system, with the intensification of densified sludge. The enhanced treatment characteristics of the densified sludge allows for faster settling with increased MLSS concentrations. The system provides a much smaller footprint when compared to conventional activated sludge (50-60% less) and batch activated sludge systems (20-25% less). All treatment processes including selective feeding, react phases, surface wasting, settling and clarification occur in a single basin. This creates ideal controlled conditions for densification of sludge, without the need for external separation devices such as hydrocyclones or lamella clarifiers. This innovative, densified sludge treatment technology features true-batch operation and a time-based control strategy providing the ultimate in treatment flexibility.

Features and Advantages

- Uniform and controlled selective wasting for more efficient surface wasting of lighter particles
- No selectors, separate compartments, external selection devices, secondary clarifiers or return sludge pumping stations
- All equipment, including diffusers, are accessible or retrievable for ease of maintenance
- Separation of aeration and mixing for enhanced control of environment, and power savings
- Biological phosphorus removal and increased nitrification capacity
- Increased ability to control dissolved oxygen levels, mixing, settling and clarification in the same basin
- The system is less susceptible to “wash out” of mixed liquor even during storm flow events
- Settling properties at SVI 60 – 80 mL/g allows for fast settling of 5,500 MLSS or greater

Typical Applications

Municipal Water and Industrial Wastewater

- Retrofit of existing tanks to increase treatment capacity
- Simple upgrade of existing treatment systems to intensify treatment and meet BNR requirements
- New construction plants

Compact Design of the Aqua TruDense™ System

Time-Based Batch Treatment

Selective Wasting for Optimized Sludge Densification

All Phases of Treatment in a Single Basin

PROTECTING THE WORLD’S WATER.

AQUA-AEROBIC SYSTEMS, INC.
A Metawater Company

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The information contained herein relative to data, dimensions and recommendations as to size, power and assembly are for purpose of estimation only. These values should not be assumed to be universally applicable to specific design problems. Particular designs, installations and plants may call for specific requirements. Consult Aqua-Aerobic Systems, Inc. for exact recommendations or specific needs. Patents Apply.

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