AquaCAM-D®

Combination Aerator/Mixer/Decanter

The Leader in Wastewater Treatment

FEATURES

- Reliable Direct-Drive Mixer
- Subsurface Aeration
- Dual Sealed Decanter
- Simple, Low Cost Installation
- Surface Accessible
- Portable Design
- Minimal Noise Production
- Simple, Flexible Controls

ADVANTAGES

- Low Cost Advanced Treatment
- Ideal for Biological Nutrient Removal
- Economical Solution for Lower Flows
- Attractive for Cold Climates
- No Aeration Yard Piping or Blower Buildings
- Flexible Tank Options
- Modular Design Promotes Easy Expansion
- Superior Performance Through Complete Mix

Aqua-Aerobic Systems, Inc.

This AquaCAM-D® unit treats domestic wastewater from an outlet mall in New Mexico.

AquaCAM-D®
Process Description

The AquaCAM-D® is a performance proven aerator/mixer/decanter designed for use in Sequencing Batch Reactor systems treating flows as low as a few thousand gallons per day up to 100,000 gallons per day. This unit is used successfully in a variety of municipal and industrial applications for both pretreatment and secondary wastewater treatment. The AquaCAM-D® effectively, and independently aerates and mixes the SBR reactor while offering subsurface decanting of final effluent.

High velocity movement of water through the air induction volute creates a pressure differential. Atmospheric air is drawn into the volute through the air intake port and forcefully discharged into the basin, enhancing oxygen transfer.

Various operating formats may require reactor mixing without aeration. Complete mix of the reactor in the absence of oxygen results in:

- Reduction of oxidized nitrogen remaining from the previous treatment cycle.
- Enhanced biological phosphorus removal.
- Provides for anoxic conditioning of the sludge mass.

Typical Applications

- Schools
- Shopping Malls
- Residential Subdivisions
- Parks, Camps and Resorts
- Mobile Home Parks
- Nursing Homes
- Landfill Leachate
- Industries

AquaCAM-D®
Mechanical Description

The rugged construction of the AquaCAM-D® along with its unique design offer an effective, yet low cost solution to end-users that require advanced treatment.

By opening the unit's electrically operated air valve, the AquaCAM-D® is operated as an aerator. Closing the air valve enables the unit to operate as a mixer, allowing for anoxic mixing during selected phases of the SBR cycle. Following the Settle phase of the SBR cycle, the submerged weir of the decanter opens and draws clear effluent from below the water surface. The system is then ready to begin its next cycle of treatment. Operation of the unit is controlled by a microprocessor with automatic level overrides controlling the system during conditions of greater than peak flow.