

SAVES ENERGY · SATISFIES OXYGEN DEMAND

CAMix Cyclic Aerated Mixing System

**OXYGEN TRANSFER
FOR MIXING LIMITED
APPLICATIONS**

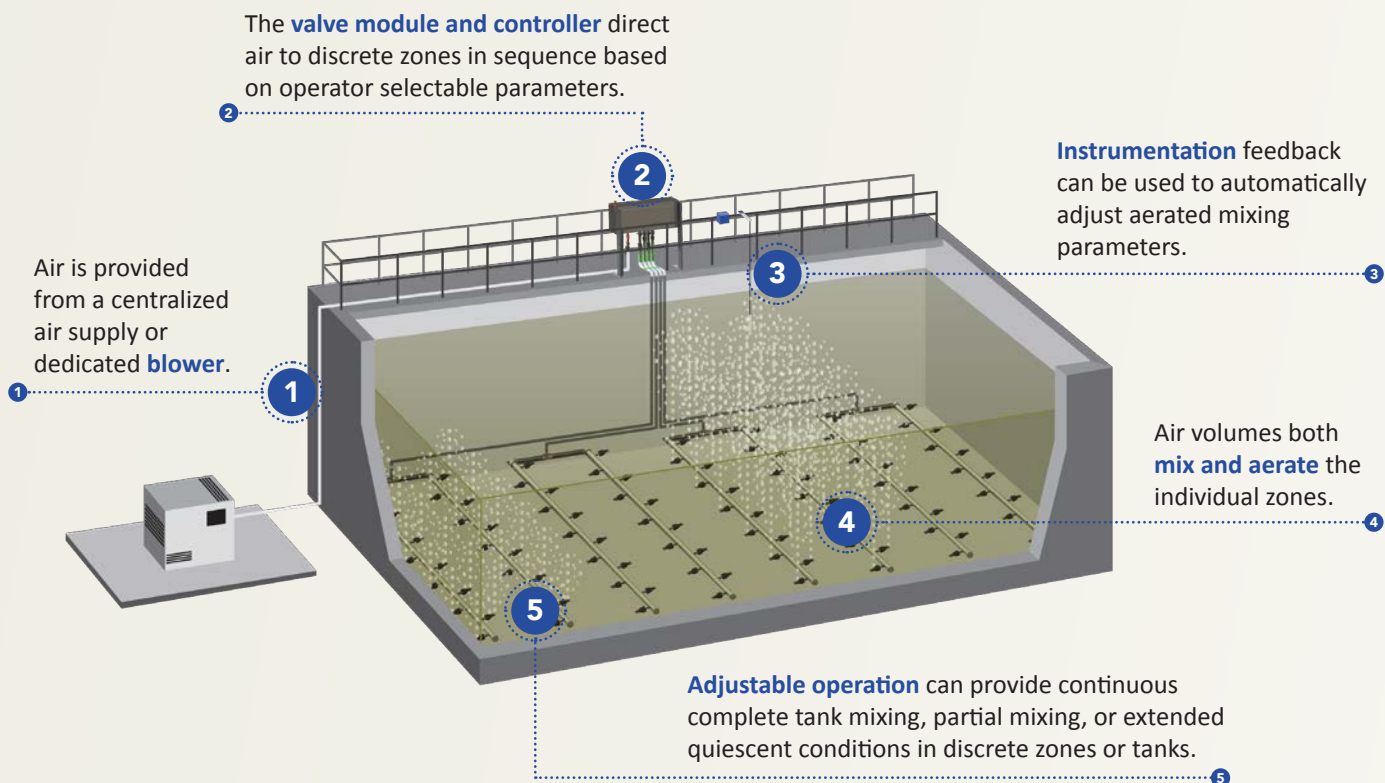
Contact enviromix.sales@xylem.com to discuss how you can optimize aerated mixing and save energy with CAMix.



www.xylem.com/enviromix

701 East Bay Street, Suite 502, Charleston, SC 29403
P: 843.573.7510 · F: 843.573.7531 · E: enviromix.sales@xylem.com

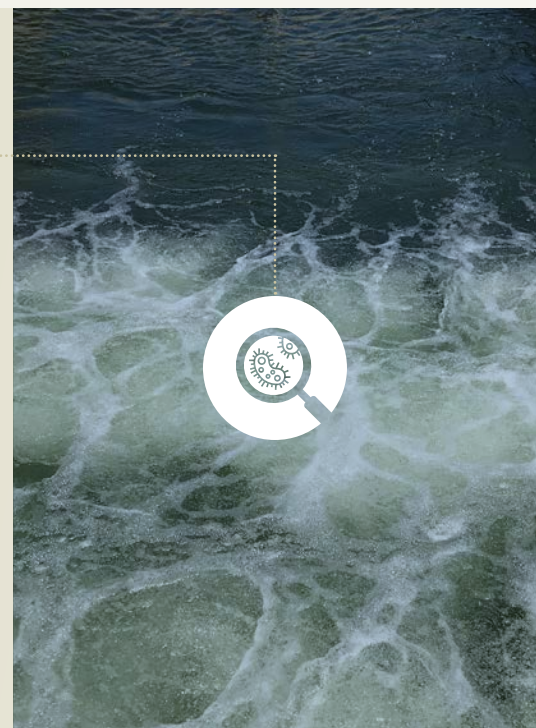
CAMIX CYCLIC AERATED MIXING SYSTEMS provide simultaneous aeration and mixing through a patent-pending, sequentially-actuated, diffused aeration system. CAMix delivers significant process benefits and substantial energy savings over conventional continuous aeration throughout the entire tank. Leveraging EnviroMix's proven intermittent compressed gas mixing technology, **CAMix introduces localized proportional air volumes to uniformly mix and aerate areas of a tank in sequence.** It also incorporates operator-adjustable parameters to optimize oxygen delivery and mixing effectiveness based on process demands.



PROCESS OPTIMIZATION

CAMix is designed to mix tank contents and satisfy process oxygen demand in applications that are mixing limited, whereby the air requirement for mixing exceeds the demand for oxygen transfer. The system's operation can be adjusted through operator input or through automatically controlled instrumentation feedback to provide for:

- **Uniformly mixed conditions** when discrete zones or tanks need to be completely mixed.
- **Partially mixed conditions** when a greater reduction in energy consumption and/or denitrification and pH stabilization is necessary.
- **Extended quiescent conditions** when static conditions for solids accumulation is required in discrete zones or tanks.

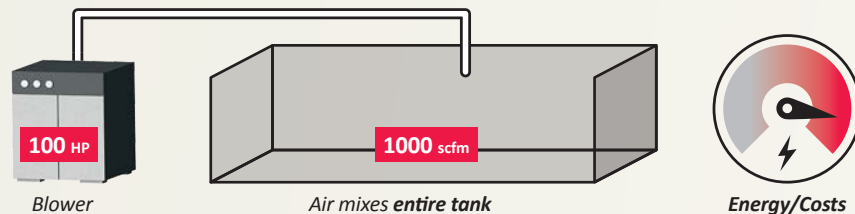




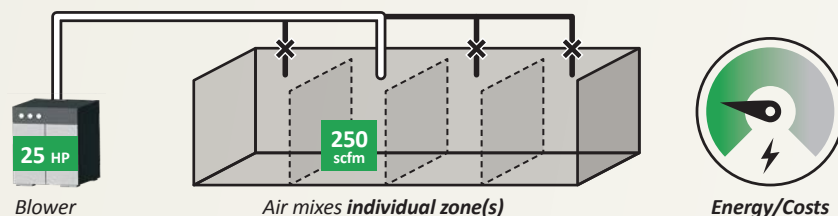
ENERGY EFFICIENCY

CAMix uniquely provides aerated mixing to meet process oxygen demands through proportional mixing air volumes, eliminating over-aeration which leads to wasted energy. In mixing limited applications, CAMix can **reduce energy consumption by more than 50%** compared to conventional continuous aeration systems.

Conventional Continuous Aeration System



CAMix Cyclic Aerated Mixing System



The example above uses a system designed for the industry standard 30 cubic feet per minute per thousand cubic feet of tank volume (scfm/kcf). In a conventional continuous aeration system, the blower must provide enough air to completely mix the entire tank (1,000 scfm). With CAMix, air is directed to individual zones, with the airflow rate designed around an equivalent 30 scfm/kcf per zone (250 scfm), instead of the entire tank. **Substantial energy savings are realized through a design using a smaller blower at lower operating horsepower (HP).**

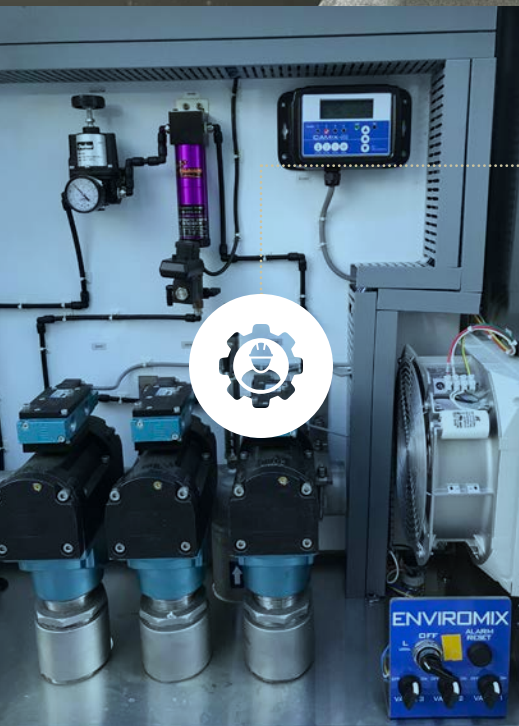


STRAIGHTFORWARD OPERATION

Using the straightforward controls in the aeration valve module (AVM), **operators can adjust the duration and frequency** of air delivery to a discrete zone or tank.

Control logic ensures that when air is supplied to the AVM, it is distributed continuously to discrete zones in the tank, preventing dead heading of air. Valve operation also provides for a common air source to be utilized for aerated mixing of tanks operating at differing levels, thus preventing maldistribution of air.

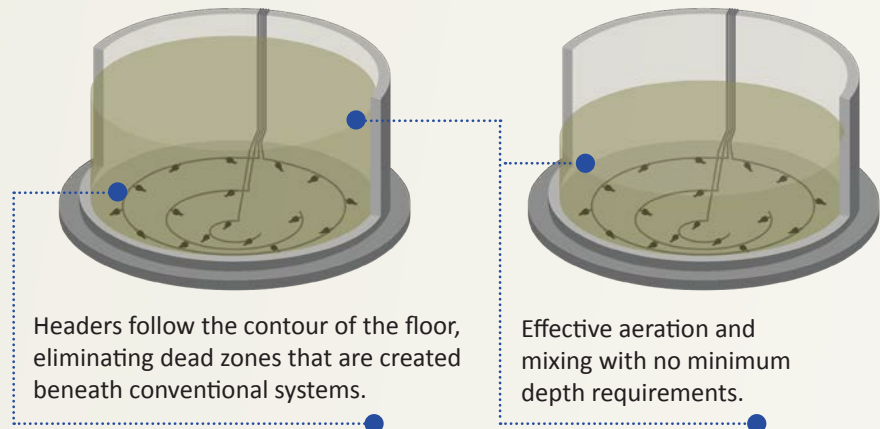
The CAMix diffused aeration systems are low maintenance and **designed for trouble-free operation, maximum mixing efficiency, and effective oxygen transfer.**



UNPARALLELED FLEXIBILITY

CAMix is designed to be used in industrial and municipal wastewater and water applications, such as **aerated channels, equalization tanks, aerated sludge tanks, and aerobic digesters** — or **any mixing limited application** that would typically incorporate a conventional diffused aeration or jet aeration mixing system.

Tanks	compatible with any geometry (rectangular, circular, hopper bottom, annular, ditch, covered, or other)
Blowers	able to utilize dedicated blowers or a sidestream of air from the main blower system
Water Levels	able to aerate and mix over a wide range of depths
Monitoring and Control Options	continuous, time based, DO control, ORP control, TSS control



MIXING
GUARANTEE



PATENT
PENDING



THIRD-PARTY
VERIFICATION



EnviroMix focuses on delivering solutions that reduce energy costs and enhance process performance in the water and wastewater industry. We design and manufacture performance-proven technologies that improve water quality and reduce energy consumption in critical areas of the treatment process. Utilizing patented and proprietary technology, we provide equipment and process control solutions to enhance plant performance for both the municipal and industrial markets.



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