

HIGH EFFICIENCY · LOW MAINTENANCE

BioMix™ Compressed Gas Mixing System

**ACHIEVE ENERGY
SAVINGS OF
60% OR MORE**

Contact enviromix.sales@xylem.com to discuss how BioMix can optimize your mixing solutions.

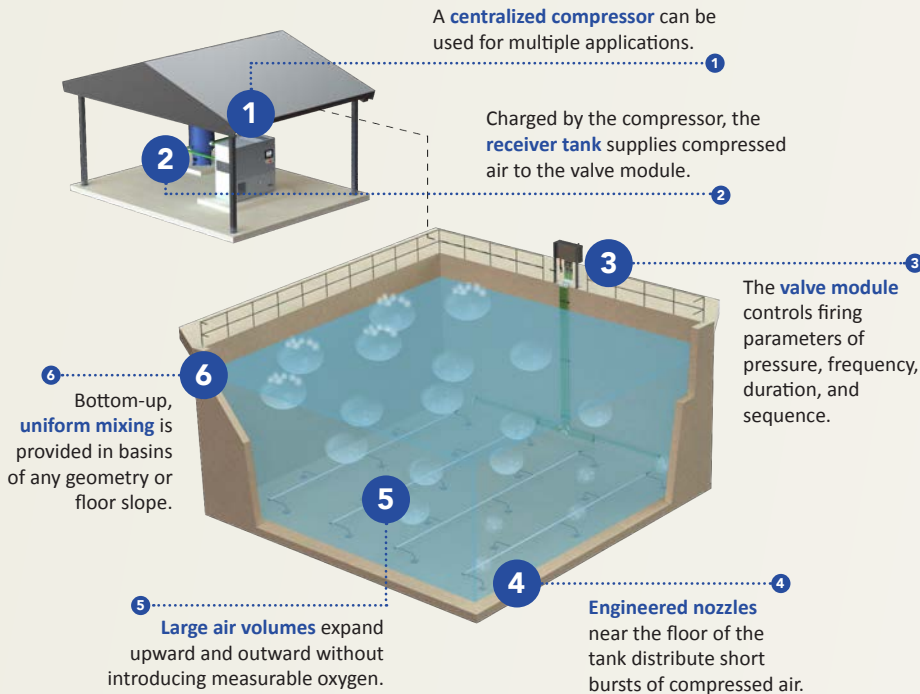


www.xylem.com/enviromix

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BIOMIX™ COMPRESSED GAS MIXING

provides uniform mixing of tank contents by firing **programmed, short-duration bursts of compressed air through patented, engineered nozzles** located near the tank floor. The mixing parameters may be adjusted to optimize mixing and power utilization, either through operator input or automated process feedback.

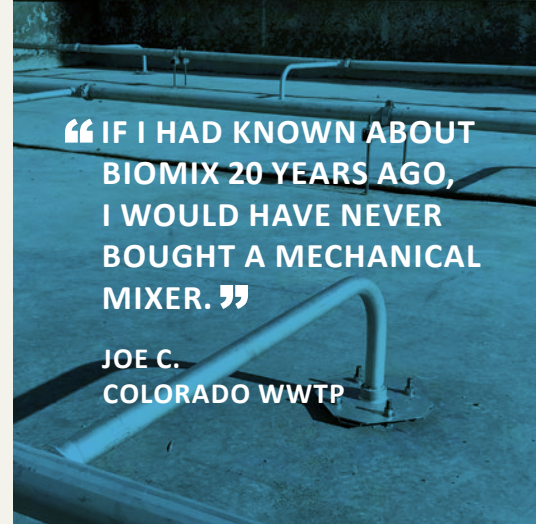


STRAIGHTFORWARD OPERATION

All in-tank components of a BioMix system are **maintenance free, non-clogging, and self-cleaning**. • Systems require minimal maintenance of out-of-tank components (compressors, receivers, and air control valves) in controlled environments. • Electrical requirements are limited to the power needed to operate the air compressor and the valve modules.

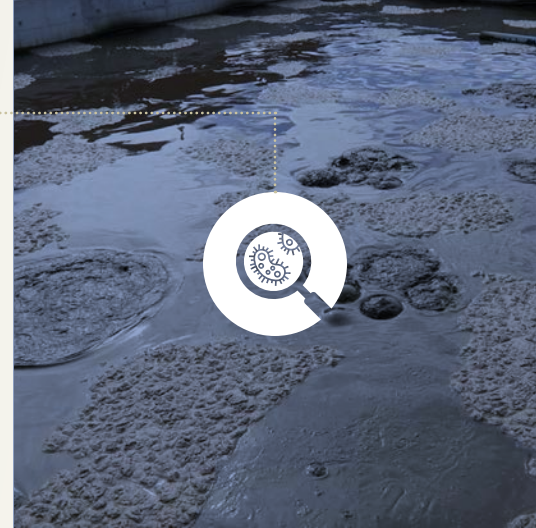
PROCESS OPTIMIZATION

BioMix utilizes adjustable firing parameters (pressure, sequence, duration, and frequency) that enable ideal mixed conditions without deposition. • **The system provides complete mixing with proven negligible oxygen transfer.** • BioMix easily integrates with aeration equipment for swing zone applications. • The technology is able to operate concurrent with or independent from aeration for optimized process conditions.



“IF I HAD KNOWN ABOUT BIOMIX 20 YEARS AGO, I WOULD HAVE NEVER BOUGHT A MECHANICAL MIXER.”

JOE C.
COLORADO WWTP



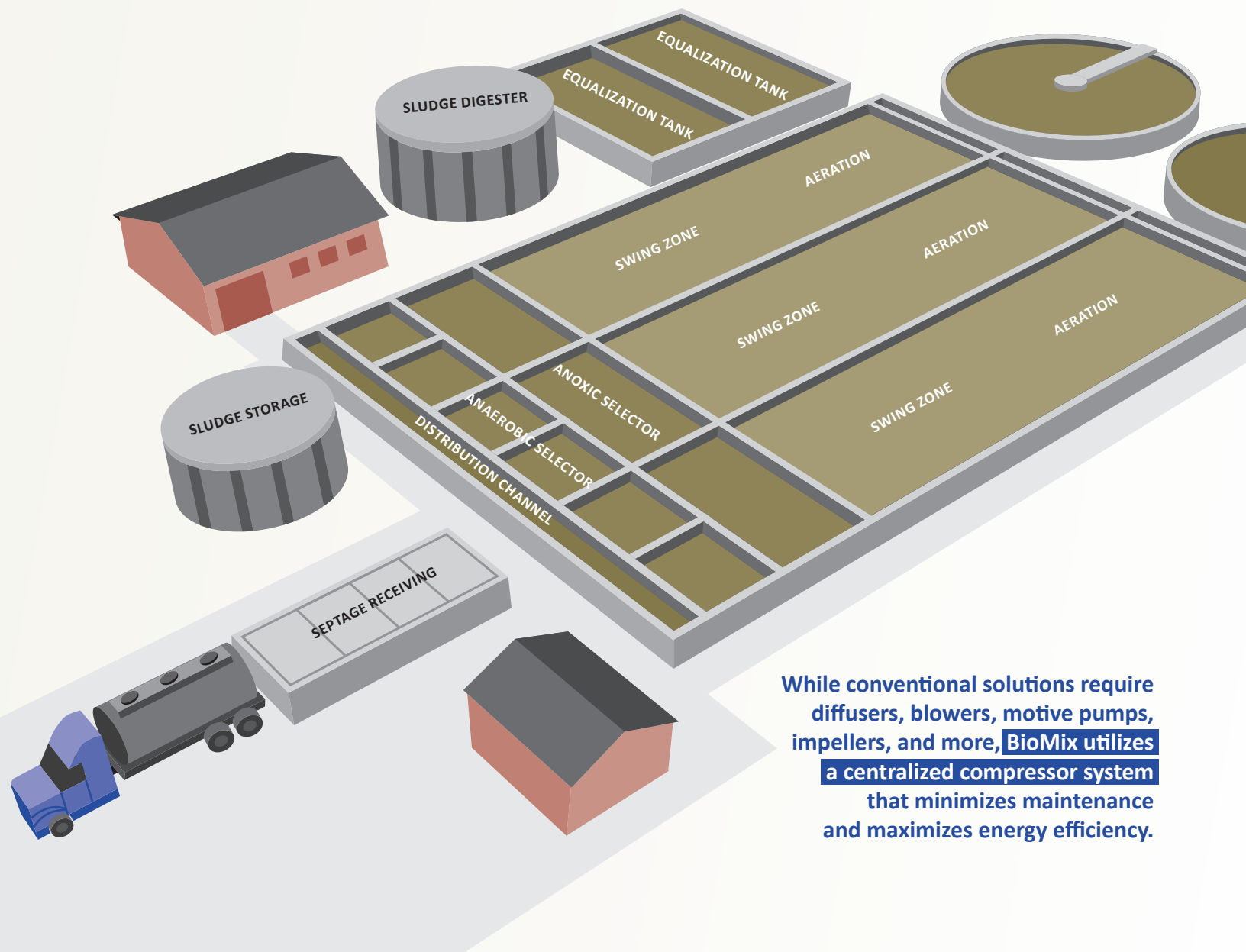
ENERGY EFFICIENCY

BioMix systems provide significant power savings compared to mechanical mixers by uniformly distributing mixing energy across the basin floor rather than directing it outward from a localized point in the tank. • **Multiple studies have documented a 60% or greater reduction in power usage versus mechanical mixers and even more versus diffused air mixing.** •

Mechanical mixers require at least one unit per basin, while one BioMix compressor may be used to mix dozens of tanks.

Application	Conventional Technology	Energy Usage (HP/1000 ft³)	BioMix Energy Savings
Septage Receiving	Diffused Aeration	0.5	60%
Influent Equalization	Jet Mixing	0.4	70%
Distribution Channels	Diffused Aeration	1.25	60%
BNR Selectors	Mechanical Mixers	0.25	60%
Swing Zone	Mechanical Mixers	0.25	60%
Aerobic Digestion	Diffused Aeration	1.5	50%
Sludge Holding	Jet Mixing	1	70%

AVERAGE BIOMIX ENERGY SAVINGS: **60%**



While conventional solutions require diffusers, blowers, motive pumps, impellers, and more, **BioMix utilizes a centralized compressor system that minimizes maintenance and maximizes energy efficiency.**



UNPARALLELED FLEXIBILITY

BioMix Compressed Gas Mixing systems are able to accommodate multiple applications, leveraging common compressors and controls. • The technology enables mixing intensity adjustments based on process parameters. • The system is able to mix through a range of operating depths. • **BioMix's patented nozzles and headers are compatible with any tank geometry or configuration.** • Circular headers conform to the slope of the tank floor, eliminating "dead spots." • The technology is able to uniformly mix sludge at concentrations up to 8% solids.

Markets	water, wastewater, industrial, municipal
Tanks	compatible with any geometry (rectangular, circular, hopper bottom)
Configurations	single drop, straight header, rolled header, drop-in wet installation
Facility Sizes	small single tank, large multi-tank
Water Levels	variable mixing intensity based on operating depth, no low-level limitations

“THE ENVIROMIX TEAM VERIFIED THINGS WERE WORKING PROPERLY DURING STARTUP, AND THEY ALWAYS GO THE EXTRA MILE TO MAKE SURE WE’RE HAPPY.”

JASON D.
PENNSYLVANIA WWTP



MIXING
GUARANTEE



MADE IN
USA



THIRD-PARTY
VERIFICATION



PATENTED
TECHNOLOGY

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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