

LOW MAINTENANCE · MAXIMUM RELIABILITY

# AquaBlend™ Potable Water Mixing System

**ENSURE WATER  
QUALITY AND  
PROCESS EFFICIENCY**

CONTACT [ENVIROMIXSALES@XYLEM.COM](mailto:ENVIROMIXSALES@XYLEM.COM)  
TO DISCUSS HOW AQUABLEND CAN OPTIMIZE  
YOUR POTABLE WATER MIXING SOLUTIONS.

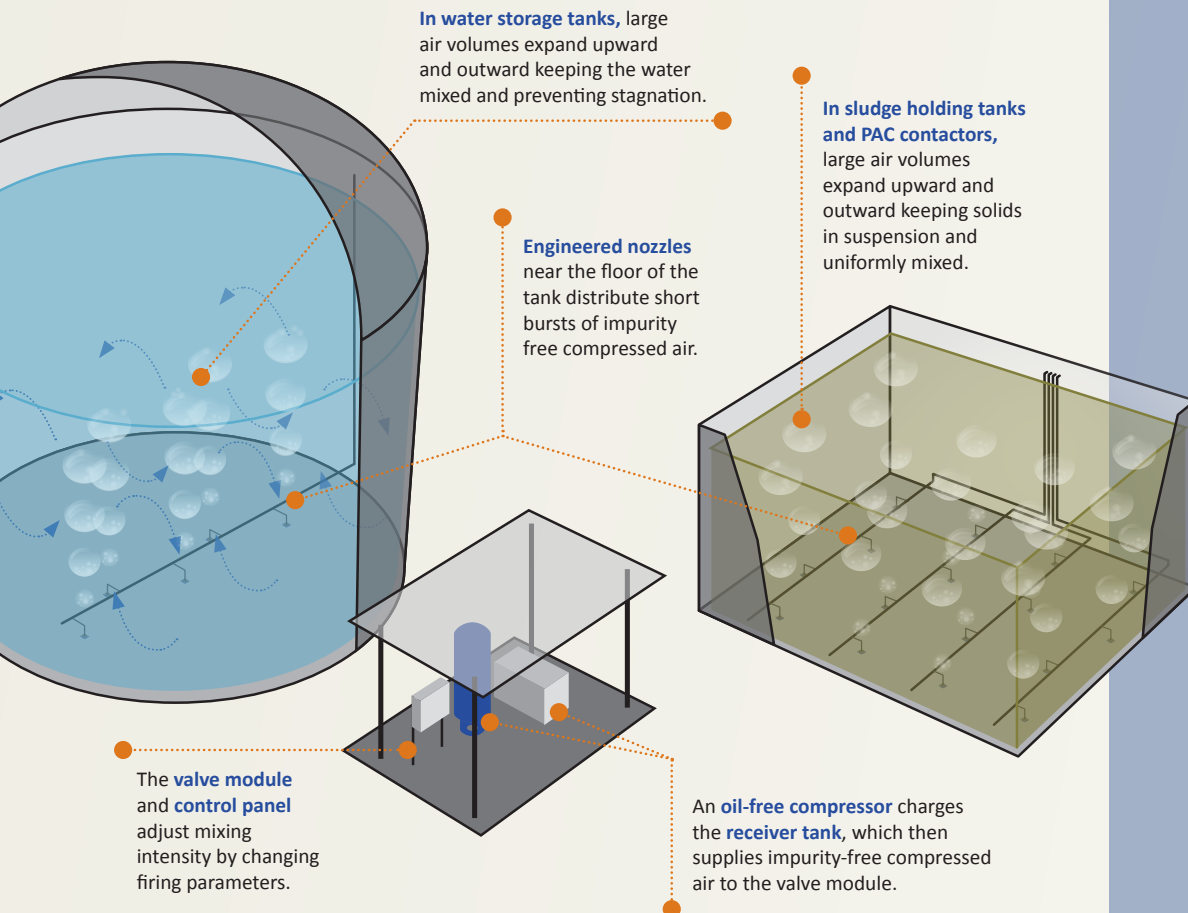


**AQUABLEND POTABLE WATER MIXING SYSTEMS** provide mixing of water treatment process basins and blending in water storage tanks by firing programmed, short-duration bursts of impurity-free compressed air through patented, engineered nozzles located near the tank floor. The mixing parameters may be adjusted to optimize mixing and power utilization, either through operator input or automated process feedback.

In potable water storage tanks, AquaBlend is an effective tool for meeting regulatory requirements for control of microbial contaminants and reduction of disinfection byproducts (DBPs). AquaBlend can also provide mixing in water treatment plant sludge holding tanks to maintain homogeneity and powdered activated carbon (PAC) contactors to improve removal efficiency of unpleasant taste and odor compounds.

## STRAIGHTFORWARD OPERATION

All in-tank components of an AquaBlend Potable Water Mixing System are maintenance free, non-clogging, and self-cleaning. Unlike with other mechanical mixing technologies, with AquaBlend there is no need to enter the tank to maintain the system. Systems require minimal maintenance of out-of-tank components (compressors, receiver, and air control valves) in controlled environments. Electrical requirements are limited to the power needed to operate the air compressor and the valve modules.



## AQUABLEND MINIMIZES MAINTENANCE VIA:

- ZERO IN-TANK MAINTENANCE
- NO SUBMERGED ELECTRICAL COMPONENTS
- NON-CLOGGING NOZZLES
- OUT-OF-TANK COMPONENTS LOCATED IN CONTROLLED ENVIRONMENTS



## PROCESS OPTIMIZATION

### POTABLE WATER STORAGE TANKS

Potable water storage tanks are kept mostly full (greater than 70%) in order to provide a sufficient quantity of water for maintaining desired pressures, meeting peak demand, fighting fires, and meeting supply needs for other emergencies. Daily volume levels rarely fluctuate more than 5-10%, creating stagnant water and thermally-stratified layers. Aged water can completely lose its disinfectant residual, resulting in bacterial regrowth and waterborne illness.

In potable water storage applications, AquaBlend provides complete homogenization of tank contents while also slowing down disinfection depletion and reducing tank flushing and batch chlorination dosing. The AquaBlend system ensures reduction of DBP formation and taste/odor issues. Additionally, AquaBlend eliminates thermal stratification and prevents freezing/ice damage.



### WATER PLANT SLUDGE HOLDING TANKS

Raw water from local surface water sources undergoes treatment to produce drinking water. This treatment process commonly includes flocculation, sedimentation, filtration, and disinfection in order to meet state and federal regulations for water quality. The flocculation and sedimentation process produces aluminum sulfate (alum) or ferric chloride (ferric) sludge. The settled sludge is pumped to sludge holding tanks, where an AquaBlend Potable Water Mixing System fluidizes the sludge prior to dewatering and disposal.



In **warm climates**, mixing colder, recently produced water with the solar-heated, top layer of tank volume **homogenizes the contents** and slows disinfection depletion.



In **cold climates**, tank mixing greatly **reduces ice formation** and its ensuing damage.



In seasonally-populated locales, mixing **provides consistent water quality** during low demand, off-season periods.

### PAC CONTACTORS

Powdered activated carbon (PAC) is widely used in the treatment of drinking water to remove and control undesirable taste and odor compounds. PAC is typically added to the raw water upstream of the flocculation basins, where a PAC contactor allows for increased contact time for a higher percentage of taste and odor compounds adsorption by the PAC.

In PAC contactor applications, an AquaBlend Potable Water Mixing System facilitates contact between the undesirable taste and odor causing compounds and the PAC, increasing removal efficiency and keeping the PAC in suspension, thereby preventing deposition.



## ENERGY EFFICIENCY

AquaBlend minimizes operation costs for water treatment facilities by providing:

- Lower energy consumption and greater efficiency than alternative technologies
- Operation at a fraction of the energy of diffused aeration mixing in sludge tanks
- Operation at a fraction of the O&M expenditure of mechanical or diffused aeration mixing systems



## UNPARALLELED FLEXIBILITY

AquaBlend offers water treatment facilities operational flexibility by providing:

- Bottom-up mixing in tanks of any volume or height
- Increased water supply quality and volume
- Variable mixing intensity based on operating depth
- Ability to mix at any depth — no low water level limitations



MIXING  
GUARANTEE



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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