

IXOM

WATERCARE



Installation & Service

EVERYONE DESERVES GREAT CUSTOMER SUPPORT

IXOM Watercare earns customer trust with unparalleled service start to finish. Every department in IXOM is dedicated to the support of our Customers and the improvement of water quality. Complete life cycle support is much, much more than a returned phone call or an email. It centers around direct access and communication to those who can help when help is needed from the beginning of a project throughout the life of the equipment.



ABOUT IXOM

IXOM combines innovative water quality solutions with top notch manufacturing and nationwide in-field service capabilities to create trusted, full circle support our Customers depend on.

We design and manufacture many trusted brands including GridBee®, SolarBee®, MlEX®, and ResidualHQ® for use across the water quality spectrum. This includes solutions for Water Treatment, Distribution Treatment, Wastewater Treatment and Lakes & Source Water Reservoirs.

IXOM has thousands of installations and is an industry-leader solving water quality problems across the United States, Canada and the world.

Contact us today to discuss your water quality challenges.

Our Solutions



Group Of Companies

Noble Mount Sdn Bhd (1090271-V)



Noble North Sdn Bhd (1428374-X)

Noble South Sdn Bhd (1534119-D)

Noble East Sdn Bhd (1534153-D)

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Lakes and Source Water Reservoirs

Distribution Network

Wastewater Collections & Treatment

Stormwater & Reuse

Solutions For Lakes & Source Water Reservoirs

Over 450 lakes & source water reservoirs currently use SolarBee® active lake circulation technologies to solve their cyanobacteria problems.

SolarBee® Lake Circulators from are designed to solve a variety of water quality problems in lakes and source water reservoirs.

Active lake circulation can prevent and control harmful cyanobacteria (a.k.a. blue-green algae) blooms in the epilimnion (top water above the thermocline) or they can be deployed to treat the hypolimnion (bottom water below the thermocline). More detail on epilimnetic vs. hypolimnetic deployment is included on the opposite page.

Equipment Types Available

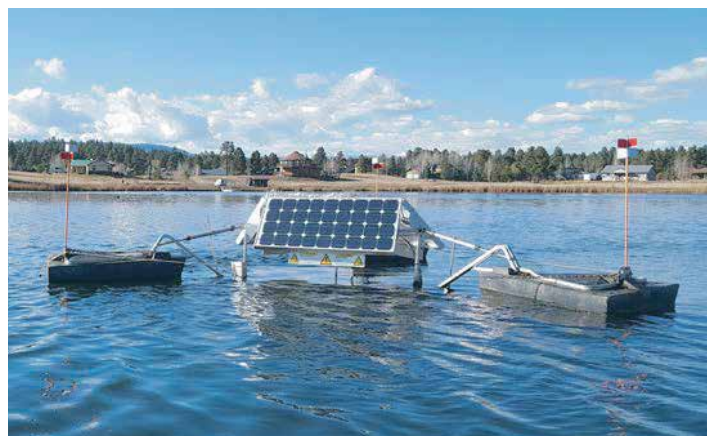
SolarBee® Lake Circulators operate 24/7 to improve the water quality with equipment flow rates varying by application (ranging up to 10,000 gallons per minute!). SolarBees can also be configured to run strictly off the grid-power for smaller applications where electrical power is readily available near shore.

Ixom Watercare also manufactures the AerationPlus® Lake & Pond Circulator. The AerationPlus is a submerged air-powered circulator perfect for applications such as city park ponds, marinas, small stormwater ponds or near-shore areas of larger lakes and reservoirs.

Pay For The Project With Cost Savings

Of the 450+ lakes & reservoirs SolarBee® Lake Circulators have restored worldwide, approximately 50% of them are source water for municipal drinking water plants.

In many cases, SolarBees have paid for themselves in the first year with carbon savings in the drinking water treatment plant and/or chemical savings in the lake. Some of our Customers have reported savings over \$500,000 per year in plant operating costs compared to before they installed SolarBee® equipment!



GridBee® AP500 Air-Powered Wet Well Mixers

For Municipal & Industrial Lift / Pump Station Wet Wells

Fight Wipes. Stop Clogs.

The AP500 Air-Powered Wet Well Mixer helps solve the toughest problems wet wells encounter.

- Minimize pump inlet clogging from wipes and other non-flushable products & materials.
- Dissolve grease layers and accumulation.
- Reduce H2S odors & associated corrosion.

Everything you need is in the box.



AP500 Features

- No moving parts
- Portable
- Easily installed through a 355mm diameter (300mm square) or larger opening
- 316L stainless steel construction
- Patented Flow Technology
- Can operate dry with no damage to the unit
- Long Life

AP500 Specifications

- Mixer Dimensions: 300 x 280 x 635 mm
Shipment Weight: 22.7kg.
- Air Unit Dimensions: 20.3 x 30.5 x 25.4 cm
Shipment Weight: 11.3kg.
240 VAC, single phase



Lowering the AP500 Air-Powered Wet Well Mixer.

Access AP500 videos & information at www.ixomwatercare.com/AP500

Better phosphorus removal starts with better mixing.



Save time. Save chemical. Save money.

Phosphorus is most often removed from wastewater ponds & basins by applying a precipitating agent such as aluminum sulfate (otherwise known as alum) or ferric chloride. Once precipitation occurs, phosphorus harmlessly falls out of the water column and into the sludge sediments.

The precipitant dispersal process can be a costly hands-on process requiring extensive labor, time, infrastructure, and accessory resources. In short, it can be very expensive.

IXOM Watercare can help make your phosphorus removal easier, safer and more cost effective.

The right mixer makes all the difference.

Floating Wastewater Mixers can accept and distribute precipitants radially across the pond utilizing proven long distance circulation technology. This creates an ideal "interaction environment" between the precipitating agent and the target phosphorus.

In many cases, only half as much precipitant is needed to achieve better phosphorus removal when compared to traditional application methods.

IXOM can help make phosphorus removal better.

Contact us to learn more!

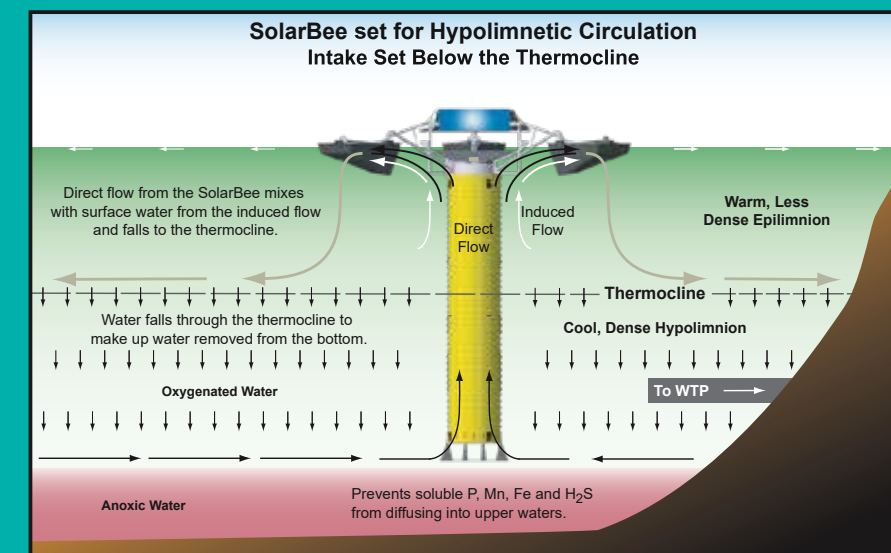
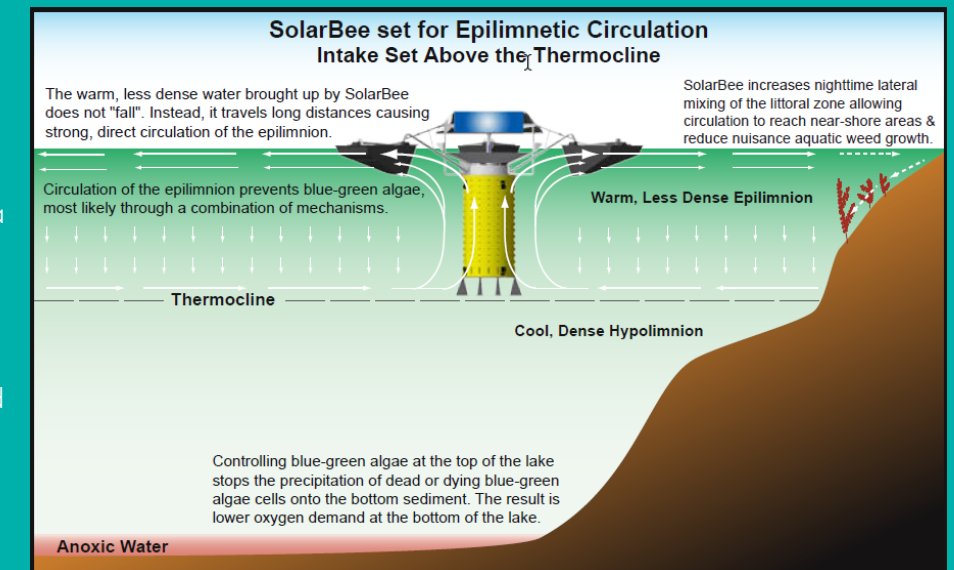


Solutions For Lakes & Source Water Reservoirs

Epilimnetic Vs. Hypolimnetic Circulation

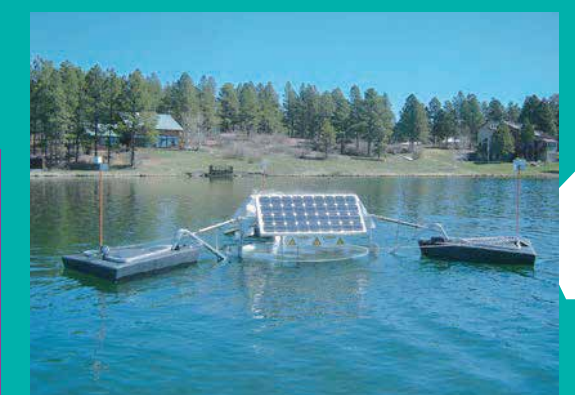
Epilimnetic Circulation- The intake is set to circulate the upper part of the water column from the surface to the thermocline or point of significant temperature stratification.

- Prevents and controls cyanobacteria (blue-green algae) blooms.
- Reduces taste and odor problems in drinking water reservoirs.
- Improves dissolved oxygen (DO) and pH levels throughout the circulation zone.
- Reduces invasive aquatic weeds & filamentous algae.



Hypolimnetic Circulation- The intake is set deep in the reservoir below the thermocline to continuously bring up and expose bottom waters to the oxygen-rich epilimnion and atmosphere.

- Oxidizes manganese (Mn) & iron (Fe).
- Helps to prevent fish kills.
- Continuously de-gasses H₂S.
- Reduces methyl-mercury (Hg).



To access educational lake videos and information, please visit us at www.ixomwatercare.com

Smart residual management in distribution made easy.

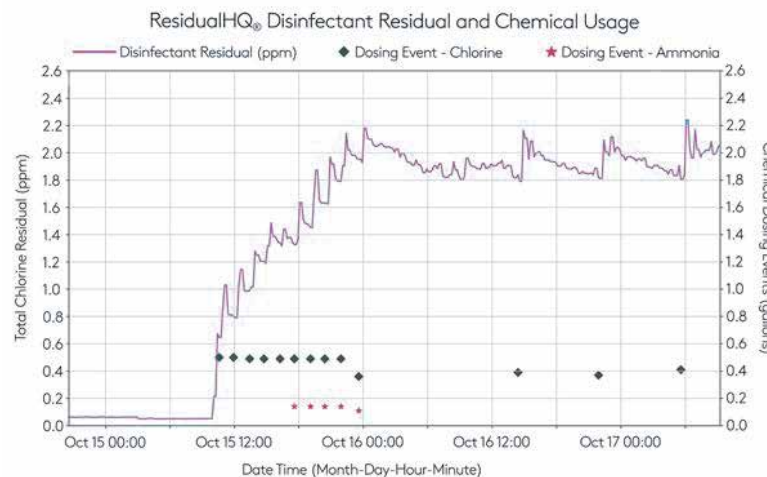


The ResidualHQ_o is built with components certified to **NSF/ANSI Standard 61** and **NSF/ANSI Standard 372**.

Process and cost benefits can be realized throughout your distribution system and even all the way back to the plant!

The concept of maintaining proper disinfectant residuals is simple enough but the reality just isn't always that easy. The water quality in your distribution system is constantly changing and constantly on the move. The residual is up... now it's down... hotspots here... no spots there... just like a game of disinfectant "whack-a-mole".

What if you could turn parts of your distribution into 24-hour monitoring stations with real-time disinfectant action capability?



SolarBee® SB & GF Series Floating Wastewater Mixers

Versatile configuration and power options for great mixing.

Floating wastewater mixers from IXOM Watercare are designed to solve a variety of municipal and industrial wastewater quality problems including high energy costs, EPA discharge permit violations and odor control.

We have a variety of models and configurations to fit your specific mixing needs.

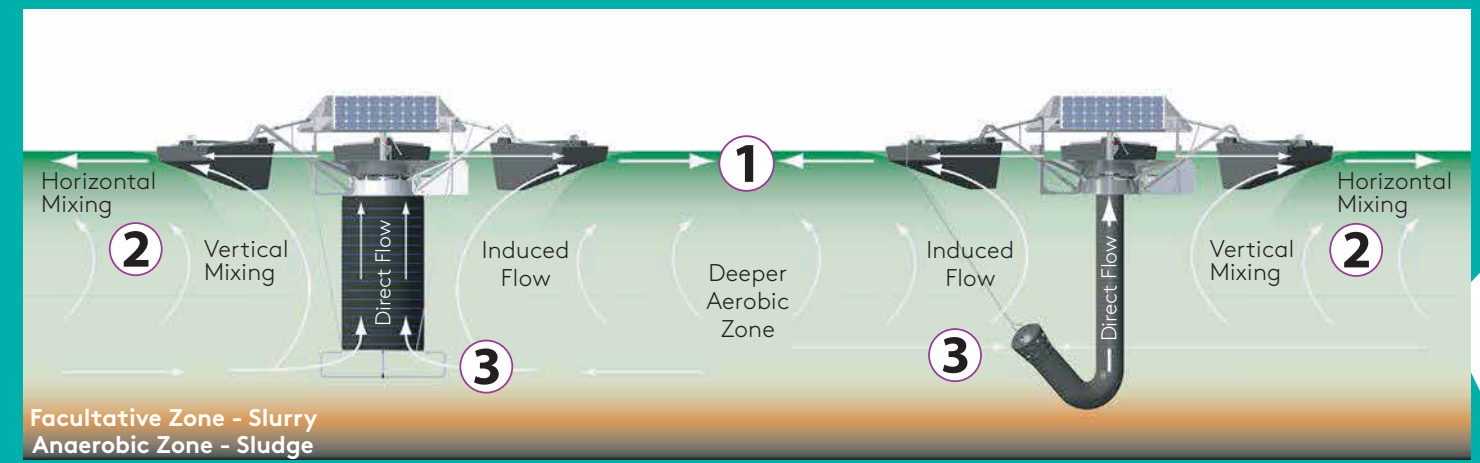
- Solar models have an onboard battery system for extended operation in low light/nighttime conditions.
- Electric models powered by 120VAC/60 Hz/1ph. or 240VAC/60 Hz/1ph.
- Solar with grid-power back up also available.
- Energy efficient long distance mixing with low energy consumption (<100 watts).
- Can displace 22-38hp of aeration mixing hp.
- Variety of intake sizes and designs.
- Can be anchored or tethered (model specific).



SB Series Solar-Powered Mixers

How SolarBee® mixing helps your wastewater pond.

- 1 During the day, supersaturated oxygen in the top two feet are captured and mixed deeper into the pond. At night, when the surface is below saturation oxygen, surface re-aeration occurs and atmospheric oxygen is mixed into the pond.
- 2 Horizontal and vertical mixing patterns are created for improved distribution of oxygen, algae, bacteria, and nutrients.
- 3 Adjustable intake designs ensure only the desired water column depth is mixed.



Energy savings can pay for the mixing project.



The project payback may be as little as in 1-3 years!

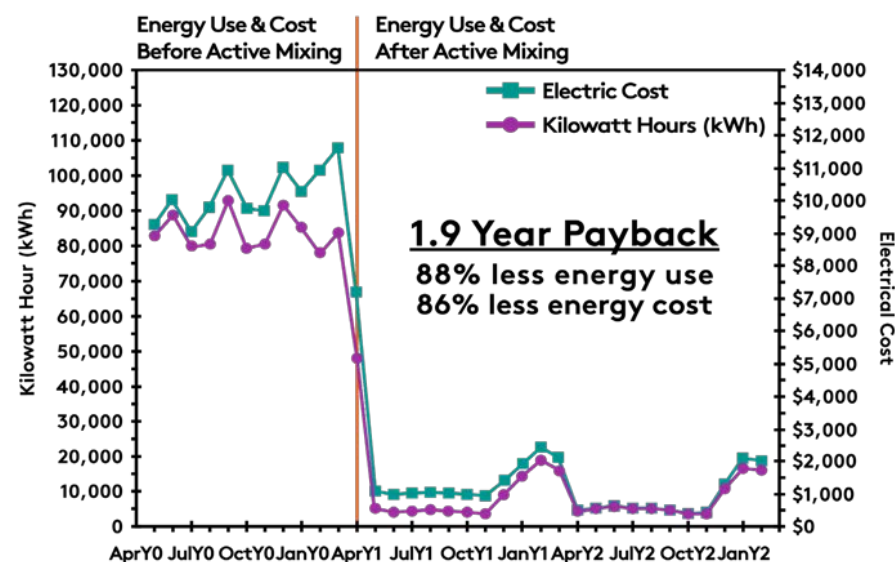
There are two basic considerations when sizing aeration needs for a given pond.

- Dissolved oxygen production (aeration) and
- Dissolved oxygen distribution (mixing)

The horsepower requirement for mixing tends to be significantly larger than the horsepower needed for aeration. Wastewater mixers from IXOM Watercare can provide all the needed mixing which can result in substantial energy savings (upwards of 22 to 38 horsepower of aeration run-time depending on the project). This can result in an exceptionally fast project payback of 1 -3 years!



GF Series Grid-Powered Mixers



ResidualHQ® Disinfectant Control Systems

Control disinfectant residuals in distribution with confidence.

Monitor. Respond. Verify.

For Chlorine And Chloramine Applications.

The ResidualHQ® is a total disinfectant residual management solution incorporating powerful mixing, residual monitoring, and disinfectant delivery into a convenient & user-friendly work station with tiered access security. This gives the User the ability to set the response how they want, when they want, from wherever they want.

The ResidualHQ® can be configured for use anywhere in your distribution system including in the tank or along the pipe!

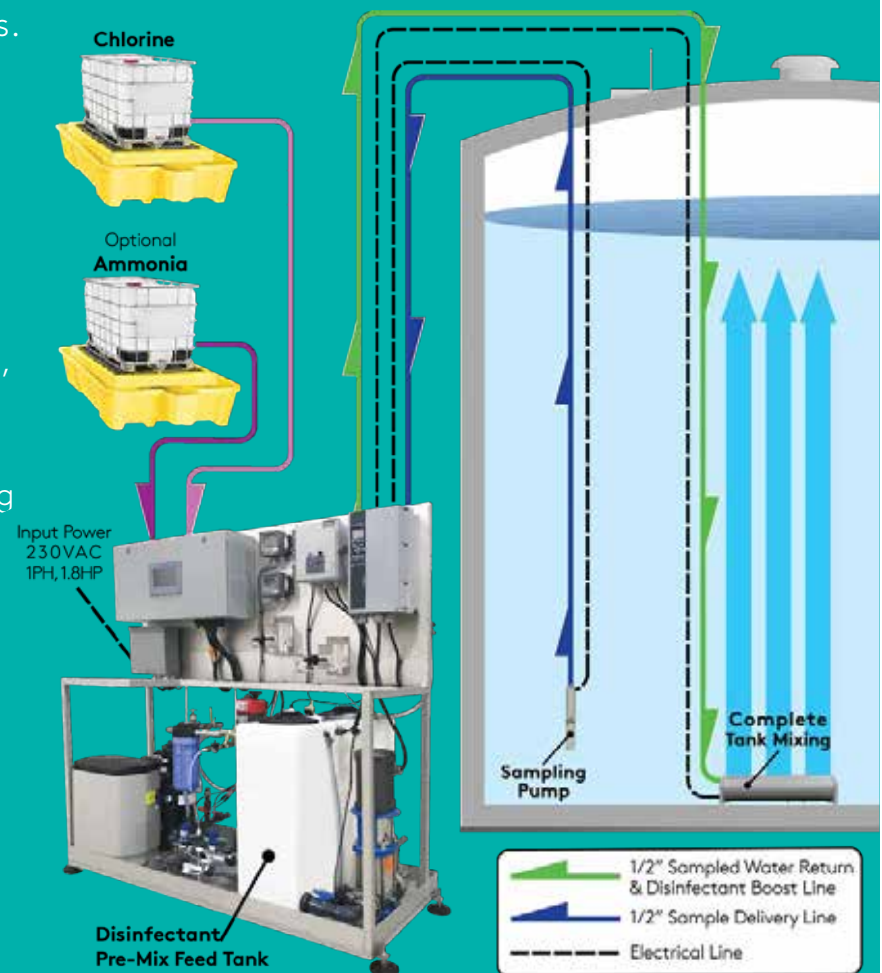
- Fully manual to fully automatic operation.
- No chemical metering or transfer pumps.
- Reagentless disinfectant residual sensors.
- Constant monitoring & flushing, no waste!
- Minimized moving parts.
- Utilizes soft water for disinfectant feed.
- Industry-first proportioning Pre-Mix Tank.

Building & trailer options available!

The ResidualHQ® tracks & trends disinfectant residual trends over time and incorporates highly adjustable & configurable parameters such as...

- Action thresholds.
- Response types (chlorine vs. chloramine) .
- Feed concentrations and ratios.
- Plus more!

Better yet? System data are logged, displayed, and directly SCADA accessible.



Maintenance made easy.

The ResidualHQ® is designed for easy maintenance and minimized calibration. It's just a simple matter of a very quick...

- General system inspection.
- Level check for softener salt.
- Level check for disinfectant bulk tank(s).
- Disinfectant monitor sensor calibration.

Any maintenance (if ever needed) can easily be done with everyday hand tools.

Solve your THM problems with active spray aeration.

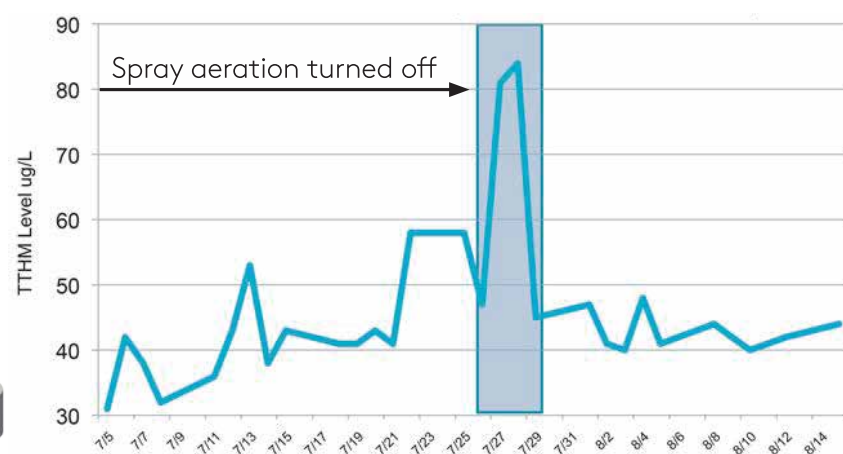
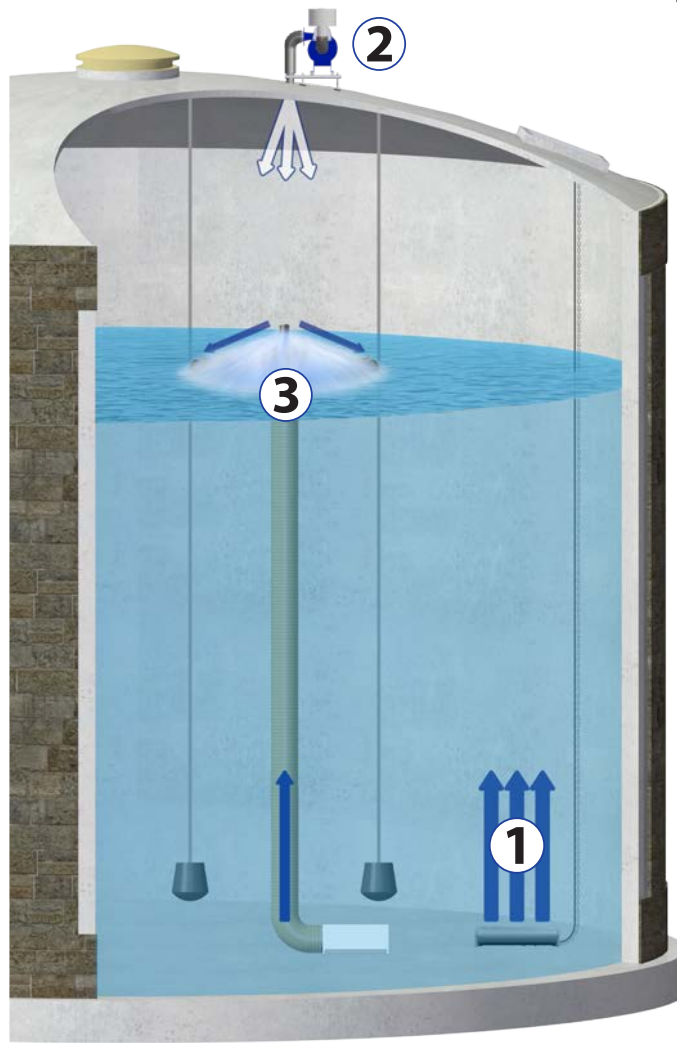


IXOM potable spray aeration equipment are certified to
NSF/ANSI Standard 61
NSF/ANSI Standard 372

The 1-2-3s of Active THM Removal

1. Active Mixing featuring GS Series and SB Series Mixers
2. Active Ventilation featuring F Series Blowers
3. Active Spray Aeration featuring SN Series Spray Aerators

TTHM Measurements Immediately Downstream of an SN Series In-Tank Spray Aeration System.



GridBee® AP Series Air-Powered Wastewater Mixers

Powerful mixing that is energy efficient and easy to integrate.

GridBee® AP Air-Powered Mixers from IXOM Watercare combine patented long-distance circulation technology with a clog-free design. These powerful mixers are compact, portable, can be used at any depth, and are easy to install.



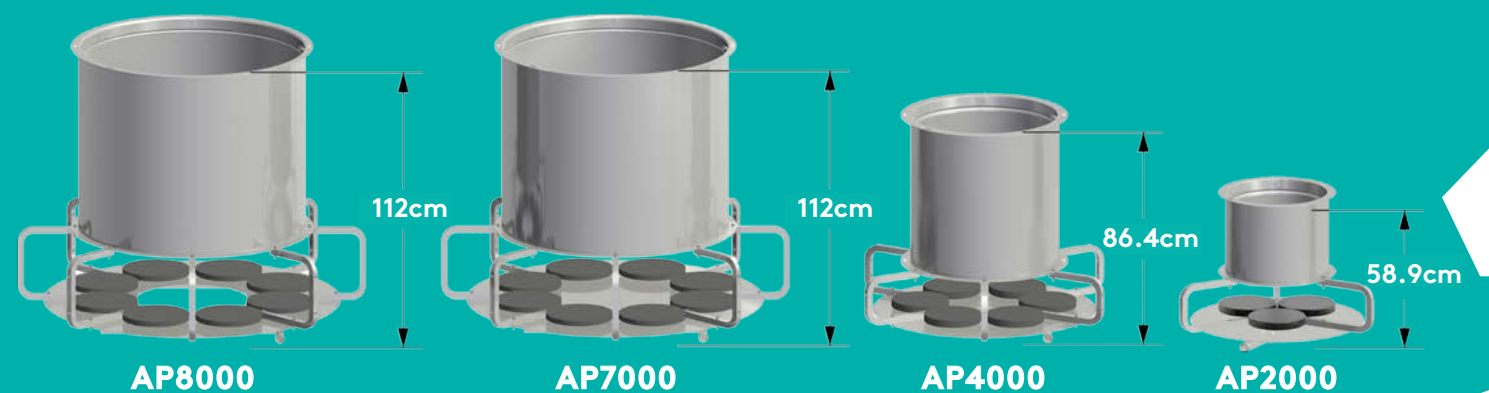
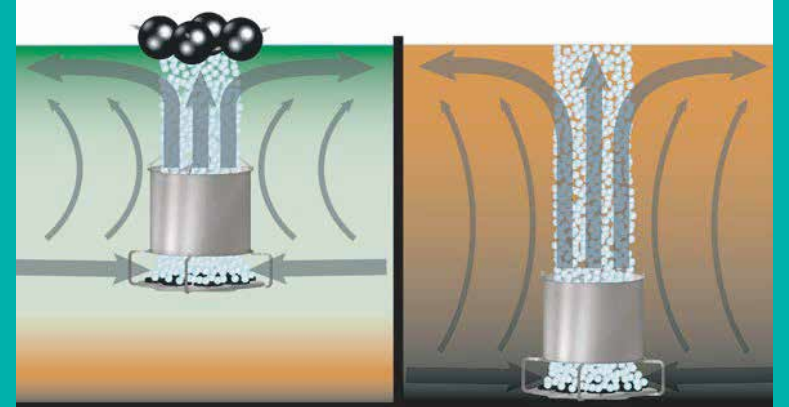
AP Series Air-Powered Mixers

- Designed for use in activated sludge anoxic basins, aeration basins, equalization basins and wastewater ponds.
- Diffusers can be configured for minimized aeration (course bubble) or maximized aeration (fine bubble) while maintaining mixing effectiveness.
- Clog-free, no moving parts in the water allows for maintenance-free operation even in high MLSS (mixed liquor suspended solids) applications.
- Energy-efficient, can be matched to an existing air system or optional air unit.
- The low purchase price allows for a fast payback in energy savings.

GridBee® AP Series Mixers have a range of sizes and two deployment configurations to achieve the right mix for your application.

- Floating configurations can be set to mix a specific area of the water column leaving solids and sediments below the mix zone undisturbed.
- Pedestal configurations rest on the reservoir floor. This deployment creates a full water column mix and helps to increase overall solids suspension.

Floating & Pedestal Configurations



Effective and efficient mixing can help all of your wastewater.



From the pump station to the plant, IXOM Watercare provides wastewater solutions you can depend on.

IXOM Watercare offers a complete range of mixing equipment to fit virtually every wastewater basin, pond or wet well regardless of the treatment process used. We tailor the equipment to your specific needs which greatly reduces the number of machines required and project cost.

Wastewater Applications

- Facultative, partial-mix and total-mix ponds.
- Activated sludge aeration & anoxic basins.
- Equalization (EQ) Basins (*pictured above*)
- Lift/Pump Station Wet Wells
- Water reuse/effluent storage ponds.
- Odor capping of anaerobic ponds.



GF Series Grid-Powered Mixers

Wastewater Benefits

- Provides improved mixing in all systems.
- Reduces energy consumption by minimizing run time of existing aeration/mixing equipment.
- Improves BOD and ammonia reduction.
- Can be set to increase solids suspension.
- Achieve better phosphorus removal.
- Increases sludge digestion and reduces need for dredging.
- Disrupts short-circuiting.
- Reduces fecal coliform counts.
- Odor mitigation & control.

Mixing Equipment Features

- Solar (SB Series), Grid (GF Series), and Air-Powered (AP Series) options available.
- 316 stainless steel & non-corrosion polymer construction.
- Intake designs specific to the application.
- Factory delivery and placement.
- Water testing & sludge depth testing available.

GridBee SN Series THM/VOC Removal Systems

In-Tank or In-Line. Energy Efficient. Performance Guaranteed.

GridBee® SN Series Spray Aeration Systems are an industry-leading solution with proven results and guaranteed performance. The SN Series can be designed to meet the needs of any size reservoir or **tank and in-line skid systems are available!**



In-Tank Spray Aeration Systems

- Creates powerful spray aeration and complete water column mixing.
- Scalable for any size tank, any flow rate and any removal percentage.
- No major infrastructure changes required.
- Install without taking the tank or clearwell out of service.
- Only 24 inches of head space required.
- Portable. Can be moved and reinstalled to adapt to system demand.
- Designed for long life, clog-free operation and minimal maintenance.
- Only one 24-inch or larger tank hatch or opening required for installation.
- Factory placement is available.



In-Line Spray Aeration Systems

- Can be customized for virtually any gallons per minute, gallons per day or THM removal requirement.
- Easy to service by city personnel.
- Designed to never impede flow in either direction through the mainline pipe. (Very important for fire protection or in the event of a power outage)
- No checkvalves that can malfunction and affect flow through the mainline.

Headspace Ventilation Blowers

Tank-Mounted and Ground-Mounted options available.
Can be sized from 1275 to 16990 m³/h.



Flange-Mounted Blowers

- Easily integrates with tanks of all sizes & configurations.
- Compact and powerful.
- Filtered intake.



Pad-Mounted Blowers

- 316 stainless steel construction.
- Double-bearing fan design for increased motor life.
- Superior motor cooling.
- Filtered intake.

Active mixing improves water quality in distribution tanks.

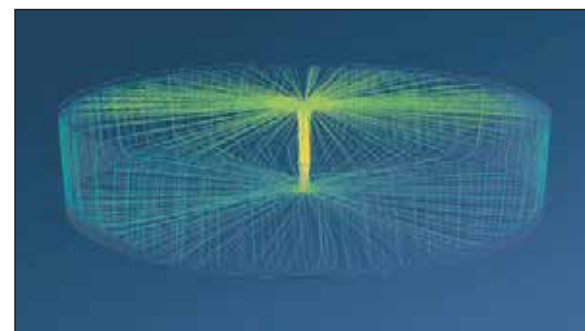
IXOM potable mixing equipment are certified to
NSF/ANSI Standard 61
NSF/ANSI Standard 372

Performance guaranteed for any size tank or clearwell.

A consistent, effective, and reliable active mixing strategy can help solve many water quality issues experienced in distribution water storage tanks.

And the benefits can be immediate!

- Prevents stagnation, thermal stratification and short-circuiting.
- Ensures equal distribution of disinfectant residual.
- Provides uniform water age.
- Increases contact time (baffle factor) in clearwells.
- Reduces nitrification in chloraminated systems.
- Reduces ice buildup & tank damage in cold climates.



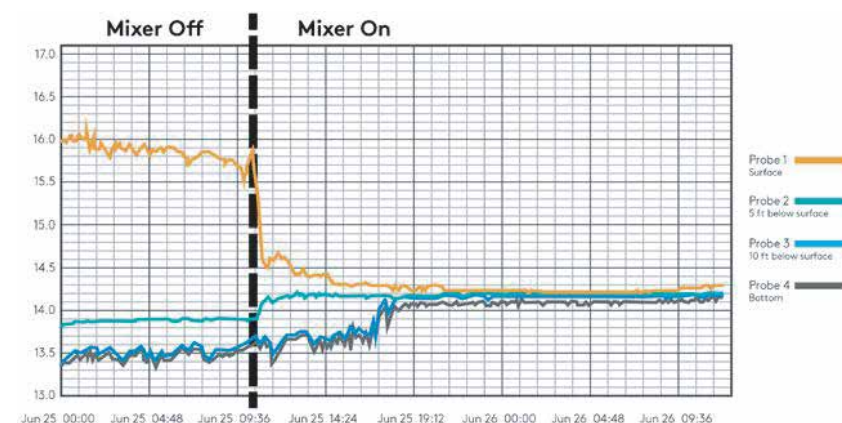
GridBee® GS Series in an 8 million gallon reservoir.

Proven results in over 3,000 tanks!

Industry-leading GridBee® and SolarBee® mixing technologies are a “best on the market” mixing solution for potable water storage tanks of all shapes, sizes (including mega reservoirs 100 MG+) and flow characteristics.

Anywhere active mixing is needed, IXOM Watercare can help.

Temperature stratification before & after mixing.



GridBee® GS Series Electric Submersible Tank Mixers

Industry-leading mixing is easy to install and easy on your budget.



GS Series Mixers

- are designed for quiet operation.
- utilize efficient sheet mixing technology.
- have liquid disinfectant boosting port(s) for chlorine and ammonia.
- have SCADA control panels available.
- are NSF/ANSI 61 and NSF/ANSI 372 certified.
- come with a 5-year warranty.

Deployment is easy...

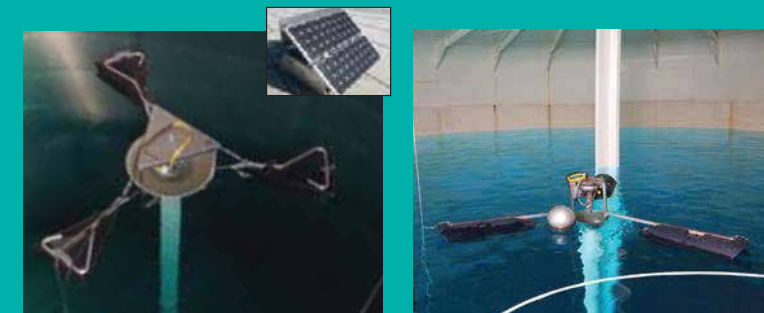
- Any tank size.
- Any tank build.
- No tank entry required.
- No need to drain the tank.
- No need to take the tank offline.
- Can be deployed flat on the floor or suspended over slopes and curves.



Access the GS Series 11-Minute Training Video at www.ixomwatercare.com/gs-training

SolarBee® SB Series Floating Tank Mixers

Solar-power and grid-power options available.



SB Series Mixers

- can be configured to operate 24/7 on solar power, grid power, or solar with grid backup.
- are constructed of T316 stainless steel with foam filled high-density polyethylene (HDPE) floats and thermoplastic intake hoses.
- have liquid disinfectant boosting port(s) for chlorine and ammonia.
- come with SCADA outputs with wireless options available.
- have a 25-year design life.
- are certified to NSF/ANSI 61 and NSF/ANSI 372 standards.

