

Wastewater Collections & Treatment

Lakes and Source Water Reservoirs Water Treatment Distribution Network Wastewater Collections & Treatment Stormwater & Reuse

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.



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 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

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.



- 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.

Floating & Pedestal Configurations



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 30 to 50 horsepower of aeration run-time depending on the project). This can result in an exceptionally fast project payback of 1 -3 years!





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.
- Solar with grid-power back up also available.
- Energy efficient long distance mixing with low energy consumption (<100 watts).
- Can displace 30-50hp of aeration mixing hp.
- Variety of intake sizes and designs.
- Can be anchored or tethered (model specific).

How SolarBee. mixing helps your wastewater pond.

- occurs and atmospheric oxygen is mixed into the pond.
- bacteria, and nutrients.
- 3 Adjustable intake designs ensure only the desired water column depth is mixed.





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

2 Horizontal and vertical mixing patterns are created for improved distribution of oxygen, algae,

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!



GridBee_a 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.

- 1. AP500 Mixer
- 2. Air Unit
- 3. Air Hose
- 4. Suspension Chain







Lowering the AP500 Air-Powered Wet Well Mixer







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AP500 Features

- No moving parts
- Portable
- Easily installed through a 14" diameter (12" 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: 12" X 11" X 25" Shipment Weight: 50 lbs.
- Air Unit Dimensions: 8" x 12" x 10" Shipment Weight: 25 lbs. 120 VAC, single phase, 275 watts

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

WATERCARE

Nationwide 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®, MIEX®, 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.

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