

GridBee[®] AP Series

Air-Powered Mixers



- Wastewater • Lakes / Raw Water Reservoirs • Stormwater • Industrial**
- AP500 version is designed for wet wells, lift stations and industrial tanks / basins.
 - AP2000, AP4000 and AP7000 versions are designed for use in lakes, stormwater ponds, wastewater ponds, activated sludge basins, industrial tanks / basins.
 - AP8000 version is designed for use in activated sludge aeration basins and anoxic basins.
 - Customer can use their own air source or an optional air unit.

GridBee® AP Series

Air-Powered Mixers

Same patented intake design as floating SolarBee and Gridbee machine, but air-lift not impeller driven. Clog free design for better solids handling, and no moving parts in the water,



AP7000F

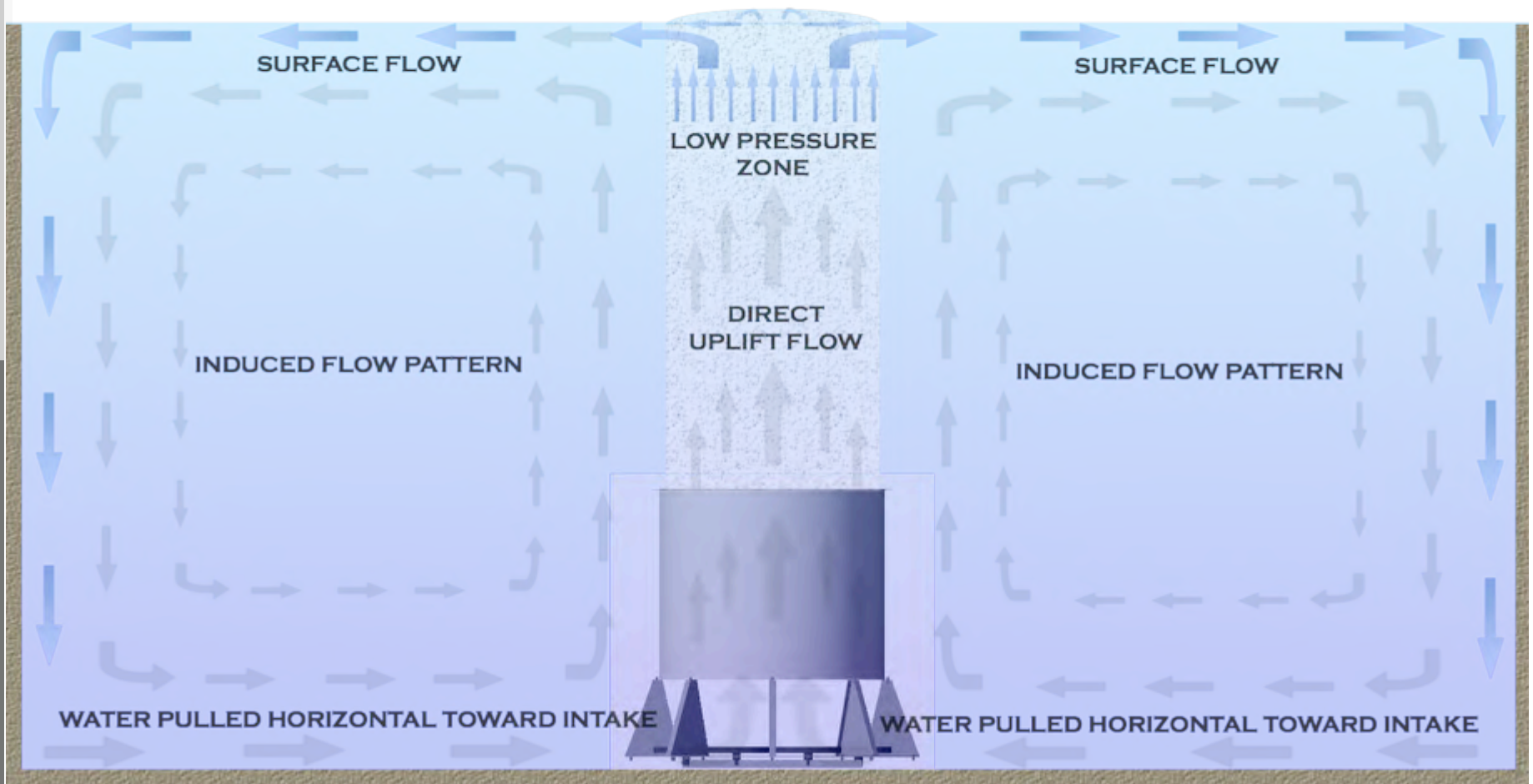
Pedestal Version



AP8000

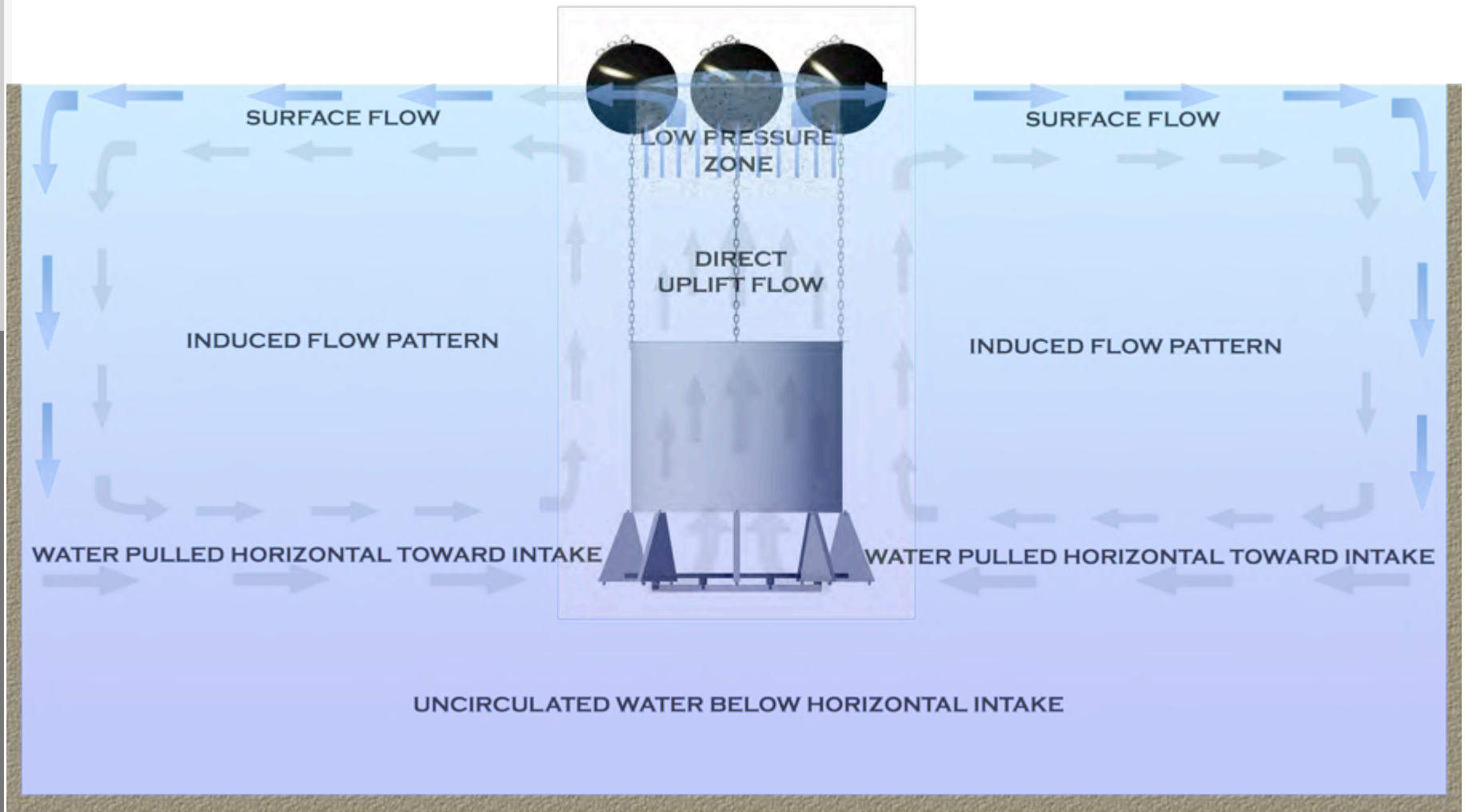
GridBee® AP Series

Pedestal Mixer Flow Pattern



GridBee® AP Series

Floating Mixer Flow Pattern





EQ Basins - AP Mixers

Customer Installation Photos



Diffuser System Before

GridBee® EQ Basins - AP Mixers

Customer Installation Photos



AP2000 Units After

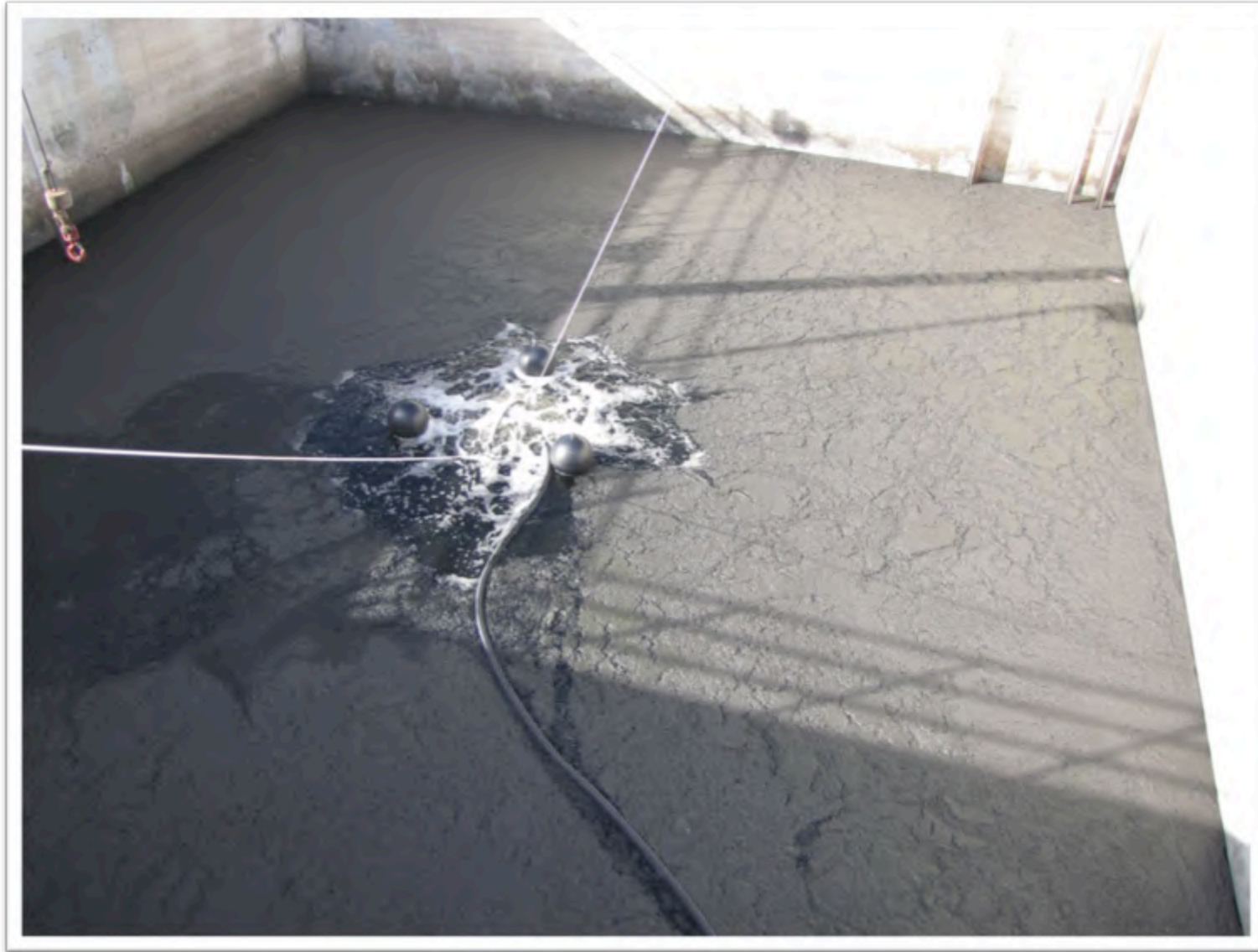
GridBee® EQ Basins - AP Mixers

Customer Installation Photos



GridBee® Air-Powered Mixers / Circulators

AP7000F Floating Style Mixer in basin, recently started



GridBee[®] Air-Powered Mixers / Circulators

AP7000F Floating Style Mixer in basin, after 2 days



GridBee[®] Air-Powered Mixers / Circulators

AP8000P Pedestal Style Mixer in ½ of aeration basin

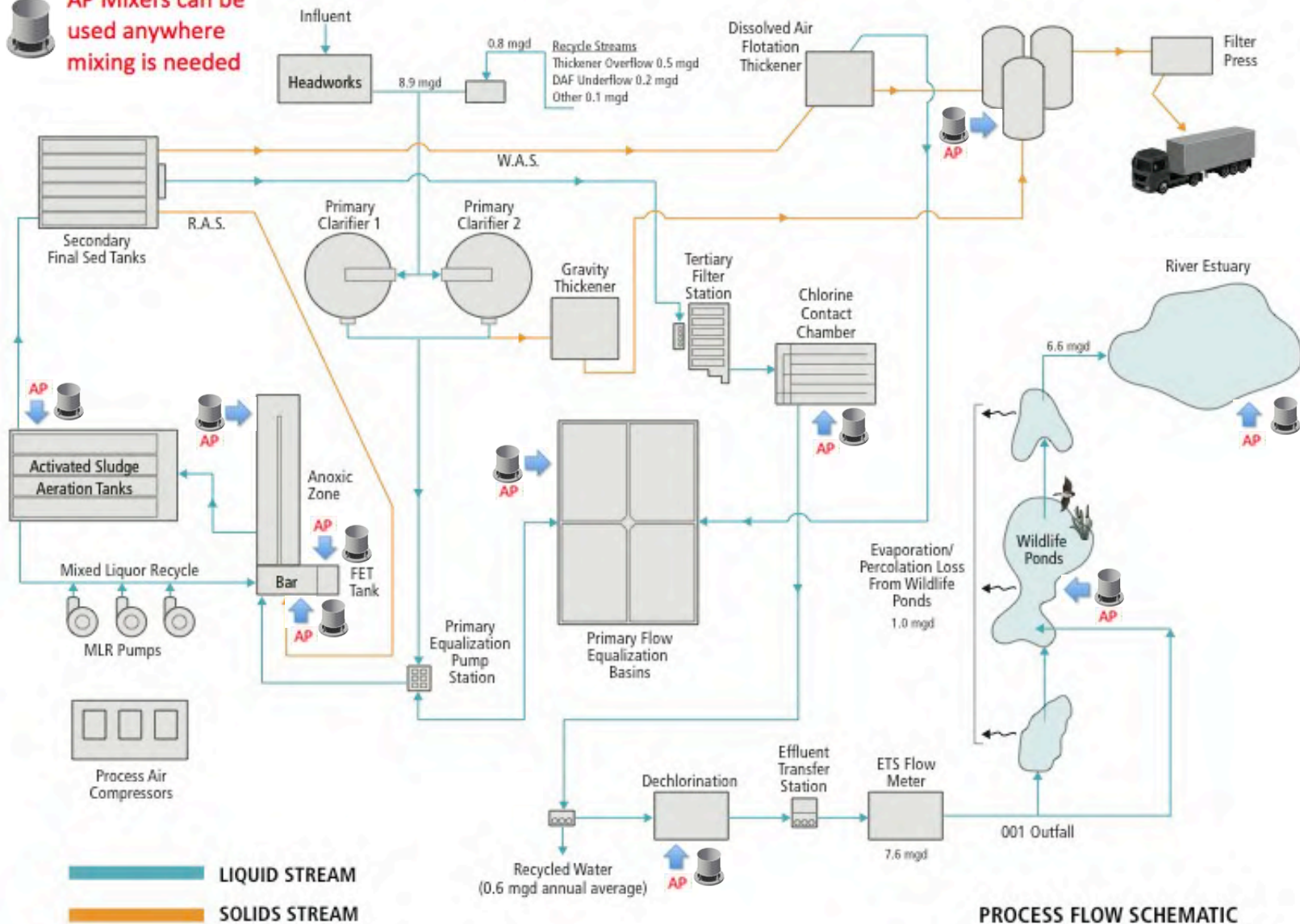


Customer has installed AP8000P mixers in the back end of four parallel aeration basins and they turned off approx. 50% of the bottom diffusers (90 diffusers per basin) to start the de-nitrification process sooner. The AP8000P mixers are using approx. 3hp of air per basin versus the 50hp of air per basin to maintain mixing in the back half of the basin. They were able to reduce their Nitrates from around 10 to 6 mg/l.

GridBee® AP Series Air-Powered Mixers

Activated Sludge Project

AP Mixers can be used anywhere mixing is needed



PROCESS FLOW SCHEMATIC



AP Series

Air-Powered Mixer Benefits

No moving parts in the water - no bearings, no mechanical seals, no submersible motors, no gearboxes.

Non-clog design, unit is designed to let solids / rags pass through without clogging, no rotating impeller / propeller.

No electricity in the water, only an air line to the unit, top lift hook allows for easy installation in the basin.

Pedestal version or Floating version pulls fluids / slurry / TSS horizontally at a desired depth and discharges at the surface. 360 degree all directional flow.

Can move a wide range of fluids. If the fluid can flow to the unit, the unit can pump it to the surface.

Can be used to mix any type of basin (anoxic, aeration, etc.), tank or small pond and, used for odor capping sludge storage basins, anaerobic ponds, etc.

The mixers provide long distance energy efficient mixing plus add air.

Due to ease of installation, the unit(s) can be used as a portable backup mixer for different depth basins. Every plant should have at least one as a backup.

GridBee® AP500 Air-Powered Mixer

(includes mixer, air unit, and accessories)



AP500 Mixer

The AP500 air-powered mixer, the smallest mixer in the AP Series features a non-clog design with no moving parts and no electricity in the water, it is portable, compact, and lightweight, and easy to install.



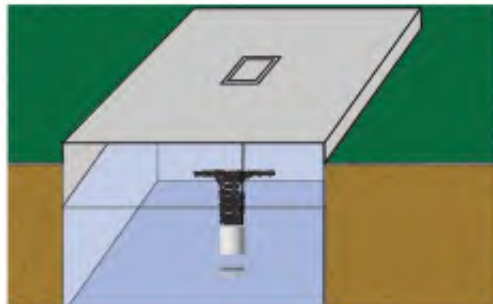
Chain



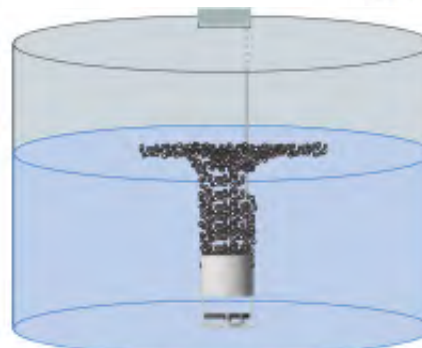
Air Hose



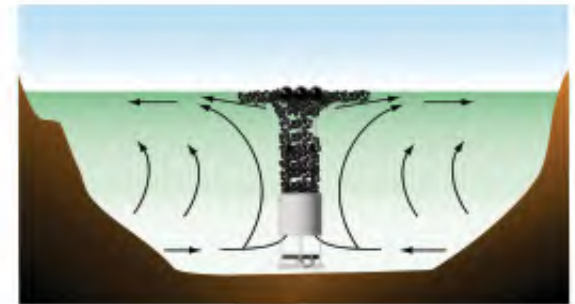
Air Unit



Wet Wells and Lift Stations



Industrial Tanks



Basins and Ponds

AP500 Air-Powered Mixer System

 GridBee®



AP500 Mixer



Air Hose



Chain



Air Unit



Applications:

- Wet wells / lift stations - reduce grease buildup, H₂S odor /corrosion and, prevent wipe clogging
- Tanks – municipal and industrial tanks; mix most types of liquids
- Standby mixer - can be used as backup wherever you need it

Features:

- Can be suspended from a chain or set on the bottom of a tank
- Constructed of 316SS and polymer materials

GridBee® AP500 Air-Powered Mixer System

Before startup of AP500 in Wet Well



After startup of AP500 in Wet Well



“This is our first AP500 installation. In 6 hours it has almost completely removed a foot thick scum layer. When we attempted to lower the unit through the scum, it wouldn't go through. It rested on top. The only way to get it down was to turn it on and let it work itself down. We are impressed.”

GridBee[®] AP500 Air-Powered Mixer System

Installation Before & After Photos

Before Startup of AP500 Mixer



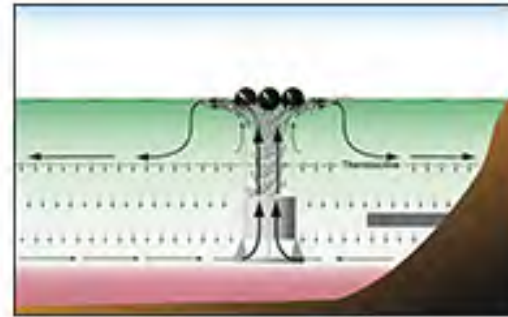
24Hrs after Startup of AP500 Mixer



GridBee® Air-Powered Mixers and Circulators



*Epilimnetic Circulation for
Algae Control In Lakes*



*Hypolimnetic Circulation for
Iron and Manganese Control In Lakes*

Lakes, Raw Water Reservoirs, and Estuaries

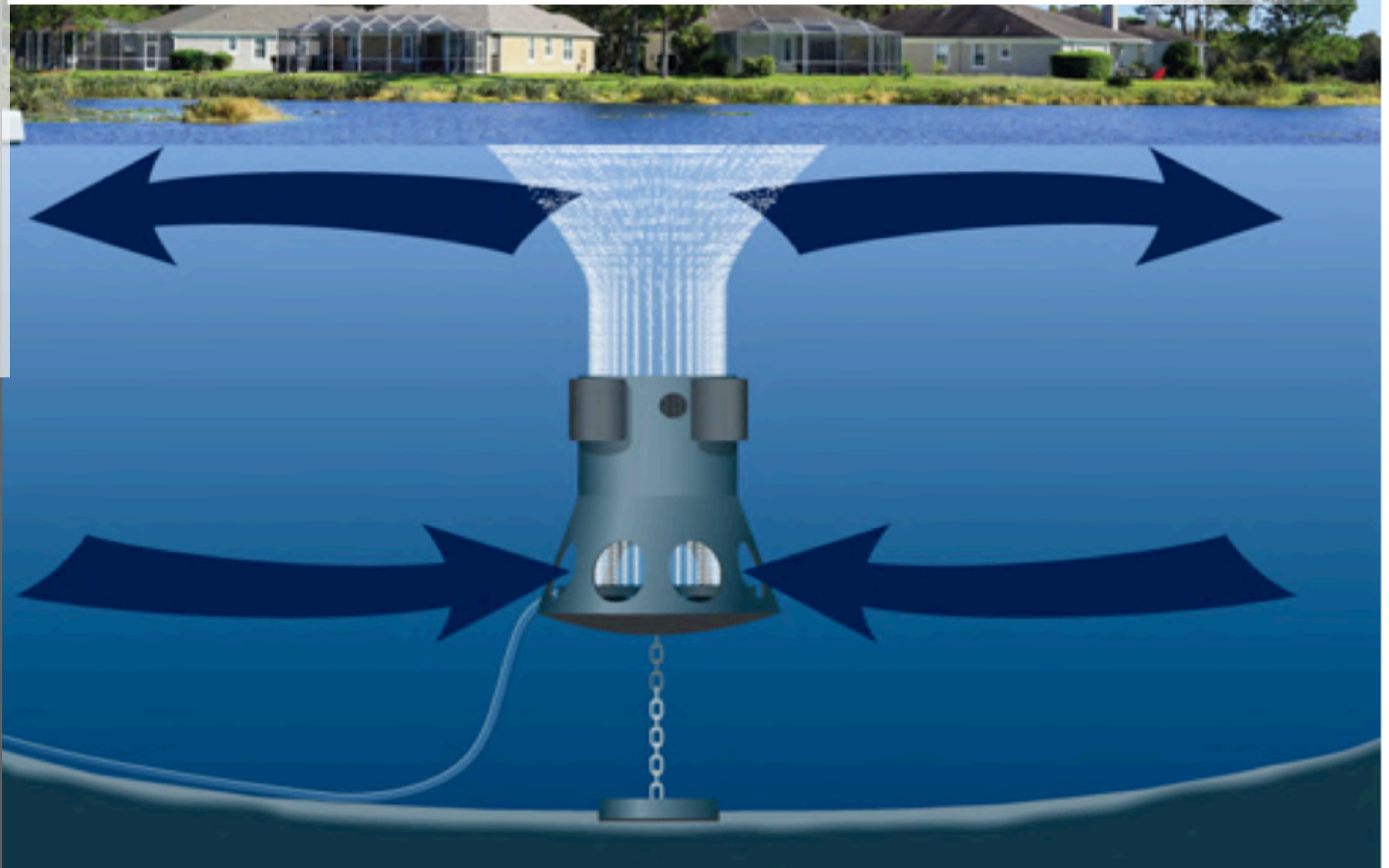
- Can be deployed for blue-green algae (BGA) control or hypolimnetic oxygenation
- Low-profile; easily disguised with artificial plants or rocks
- Small footprint (6 feet diameter or less) reduces boating interference
- No electricity in water for swimmers; safer for humans and pets
- Easy to mount on the end of docks
- Excellent for de-icing marinas

Stormwater

- Thorough mixing provides increased detention and improved nutrient reduction
- Effective control of blue-green algae and odors
- No electricity in the water; safer for humans and pets
- Low lifecycle cost when compared to fountains

AerationPlus AP1800 / AP2800

For Ponds, Small Lakes & Marinas



Aeration Plus AP1800 / AP2800 Circulation Systems

AerationPlus® Lake & Pond Circulators

Standard Air Pump



Air hose shallower
than 8 feet.

For best
results, set the
AerationPlus®
to circulate just
above the
thermocline.

AerationPlus® Circulation

Beneficial & affordable circulation
for your lakes, reservoirs, & ponds.
Effective. Safe. No electricity or
moving parts in the water!

**Everything you need
is in the box...**

- The AerationPlus® Circulator
- Air Source
- Weighted Air Hose
- Timer Controller

Contact Us
for more information!

*Thermocline

**The thermocline
is a point of significant
temperature stratification
that usually occurs approx.
3 to 6 feet in shallower
waterbodies.*

Deep Water Compressor



Air hose deeper
than 8 feet.



Medora Corporation
GridBee® SolarBee®
www.medoraco.com • 866-437-8073

AerationPlus AP1800 / AP2800 Systems

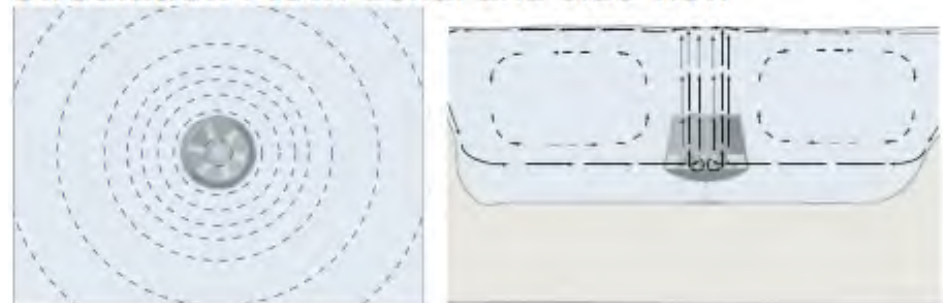
For Ponds, Small Lakes & Marinas
AerationPlus air powered submersible
circulation systems provide a cost
effective solution for improving water
quality, aesthetics, and biodiversity.



AP1800 / AP2800 Circulation Systems:
Include air-powered circulator, air unit, air
hose, timer, anchor and SS chain. The
system is easy to install and maintain.
The mixing unit is not visible from the
surface, but the impact is visible.



Circulation Flow: aerial and side view



AerationPlus Air-Powered Mixers / Circulators



GridBee® Air-Powered Mixers

Ask for our Budget Estimates

Videos and more information available at:
<https://www.medoraco.com/video>

