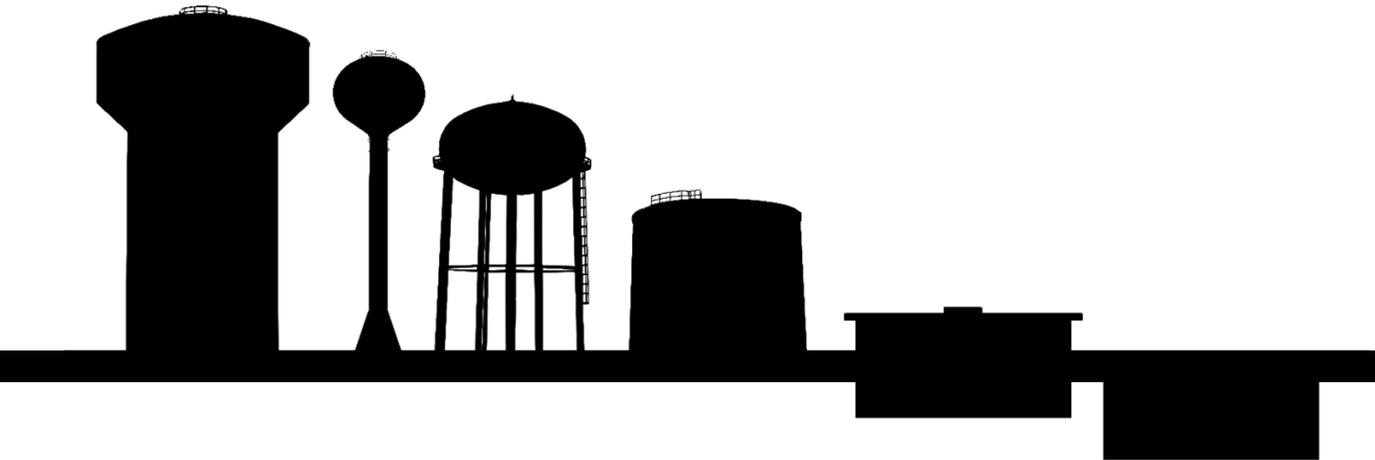




**IXOM**  
WATERCARE

**Mini Presentation  
Tank Mixing Solutions**



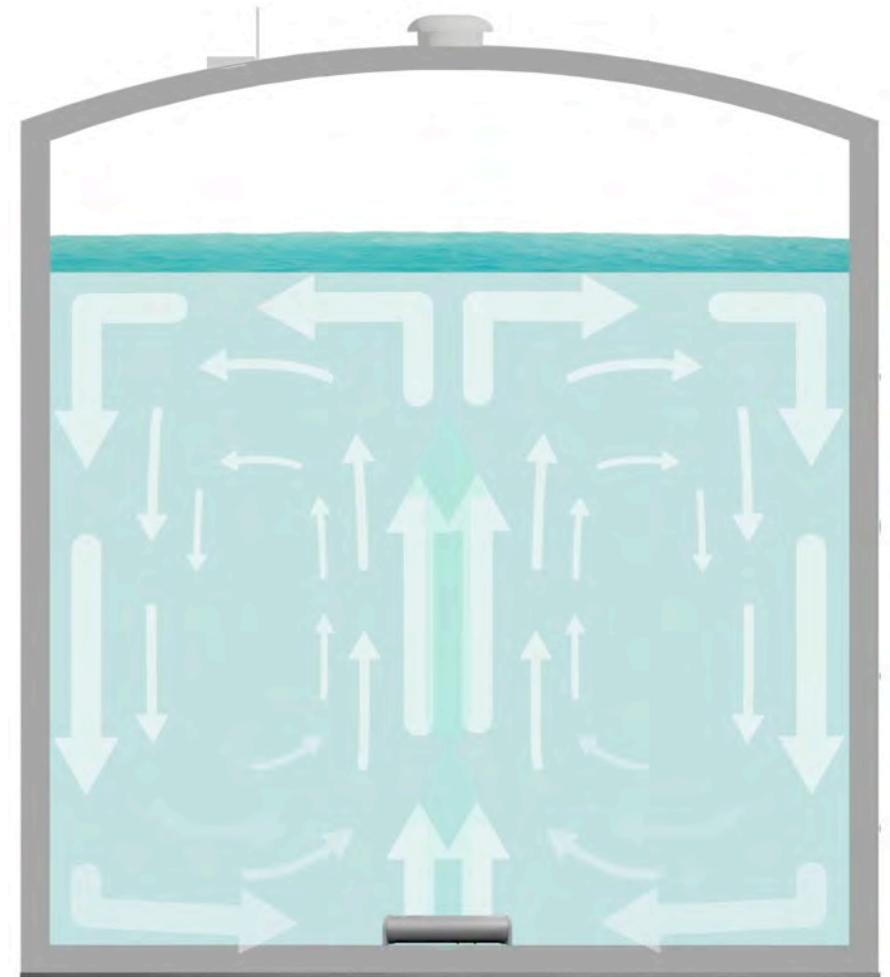
# Mixing Systems For Any Tank Size / Type

- **GS Series Submersible Electric**
- **GS Series Submersible Air-Powered**
- **SB Series Floating Solar-Powered**
- **GF Series Floating Electric**



# Advantages Of Tank Mixing

- Eliminate thermal stratification.
- Prevent stagnation.
- Unify water age.
- Stop short-circuiting.
- Reduce biofilm build-up.
- Increase contact time.
- Continuous THM removal.



# Thermal Stratification

- Inhibits mixing.
- Accelerates loss of disinfectant residual.
- Creates inconsistent water age.

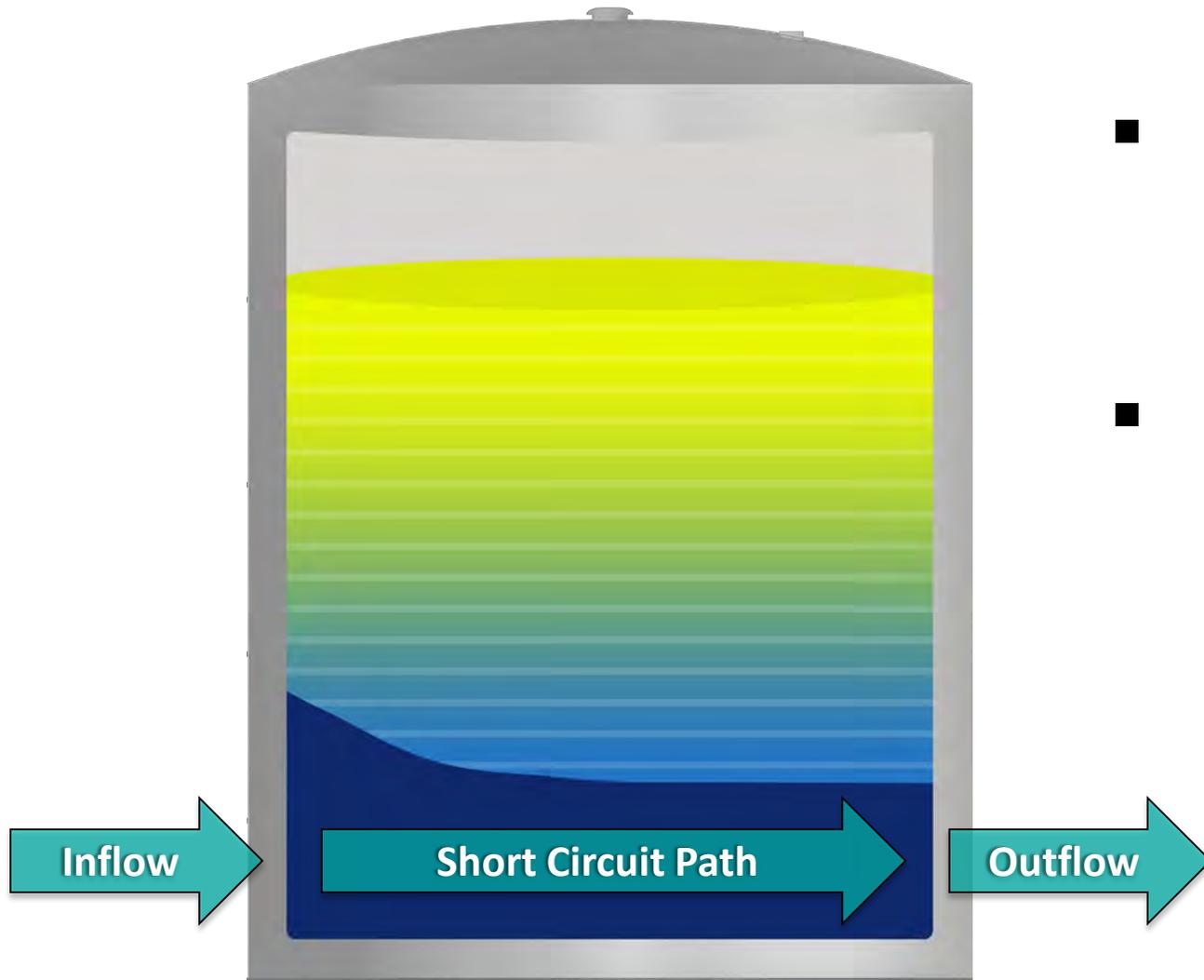


# Water Layering

- Density increases toward the bottom due to temperature and pressure differences.
- Inflow water with higher chlorine residual usually falls to the bottom of the tank.

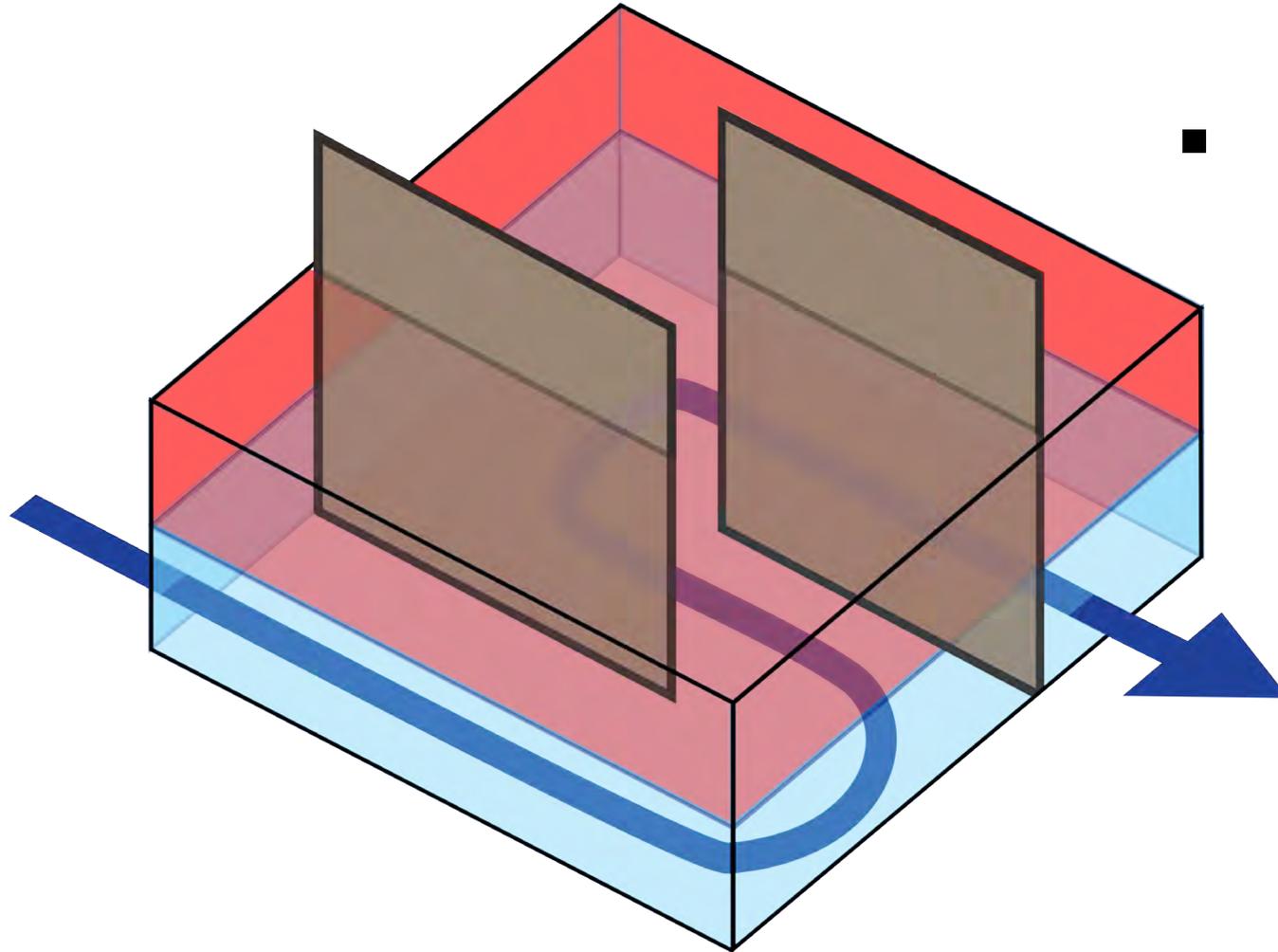


# Short Circuiting



- Cold water stays at bottom and doesn't mix.
- First water coming in is also first water going out contributing to water age problems.

# Short Circuiting



- Baffles do not stop the short circuiting path.

# Biofilms

More disinfectant needed to satisfy demand.



Courtesy Montana State University Center for Biofilm Engineering

®

# GS SERIES- Electric Submersible Mixers

Effective. Efficient. Affordable.

GS-12



GS-9



Full Specifications, Videos, Case Studies, White Papers and more are available at:

<https://www.ixomwatercare.com/resources>

# GS SERIES- Equipment Models

**GS-9**



Tank Size  
up to  
**3 MG**

**GS-12**



Tank Size  
up to  
**8 MG**

**GS-12-AIR**



Tank Size  
up to  
**8 MG**

# GS Series Mixers- Affordable

- Low purchase price.
- Low life-cycle cost.
- Low power consumption.
- Low maintenance.
- Industry-leading *5-Year Warranty!*

# GS SERIES- Quick Overview

- Full depth, continuous tank mixing.
- Impacts critical tank boundary layers.
- CFD modeling available for specific tanks.
- Compatible with ResidualHQ Disinfectant Management and THM Removal Systems.

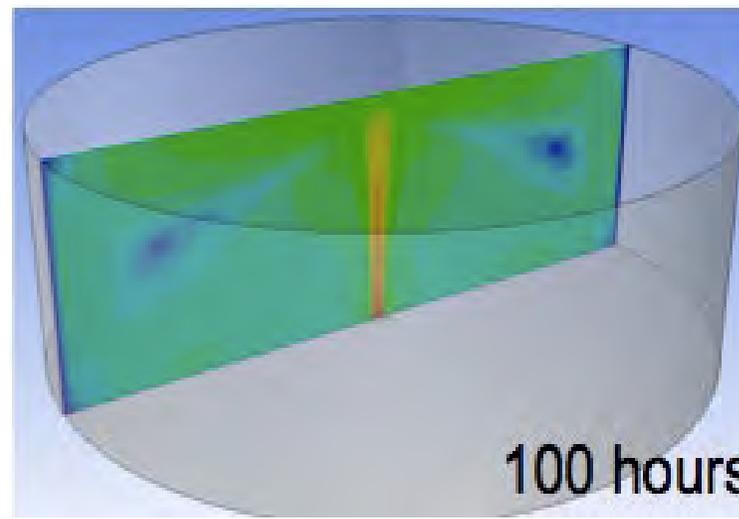
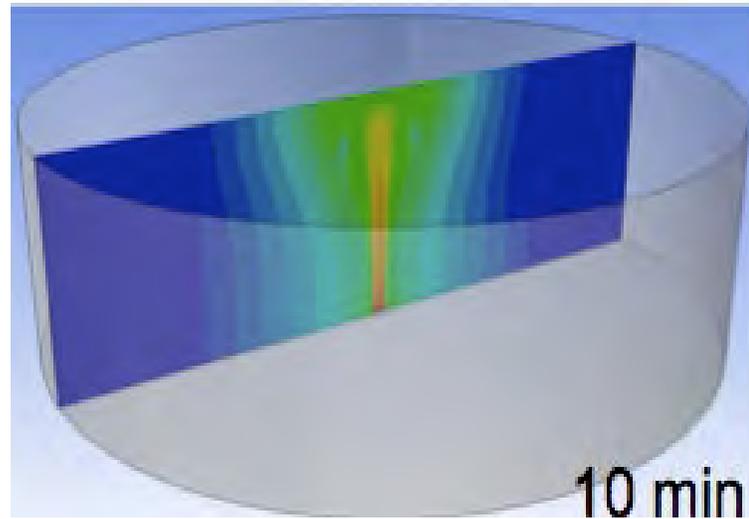
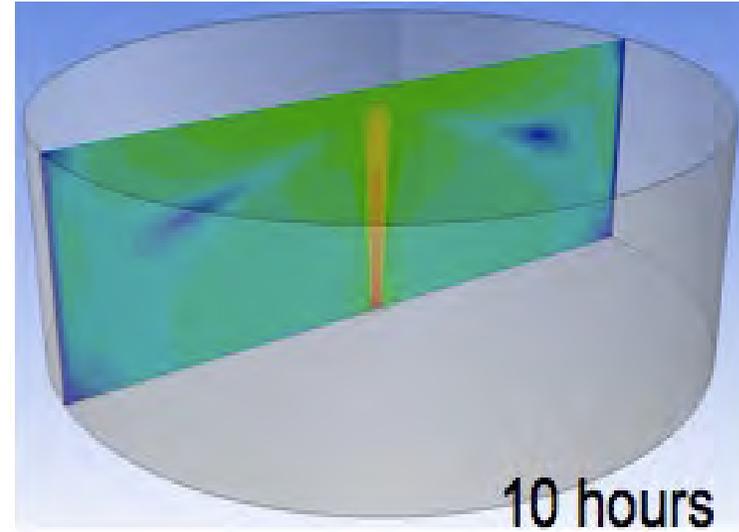
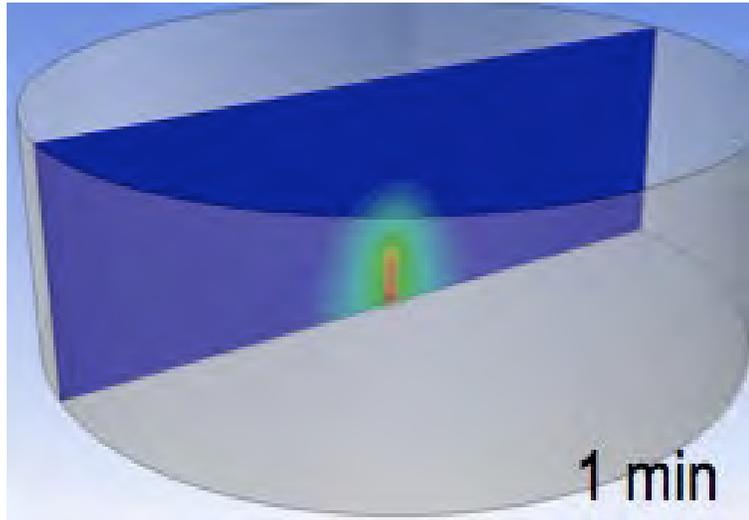


# GS SERIES- Sheet Flow

- Direct flow leaves the mixer as a “**sheet**” of water and drags other water with it.
- Visible surface flow can be observed above the mixer.
- Designed for continuous operation at **full speed and full flow**.



# GS SERIES- CFD Modeling

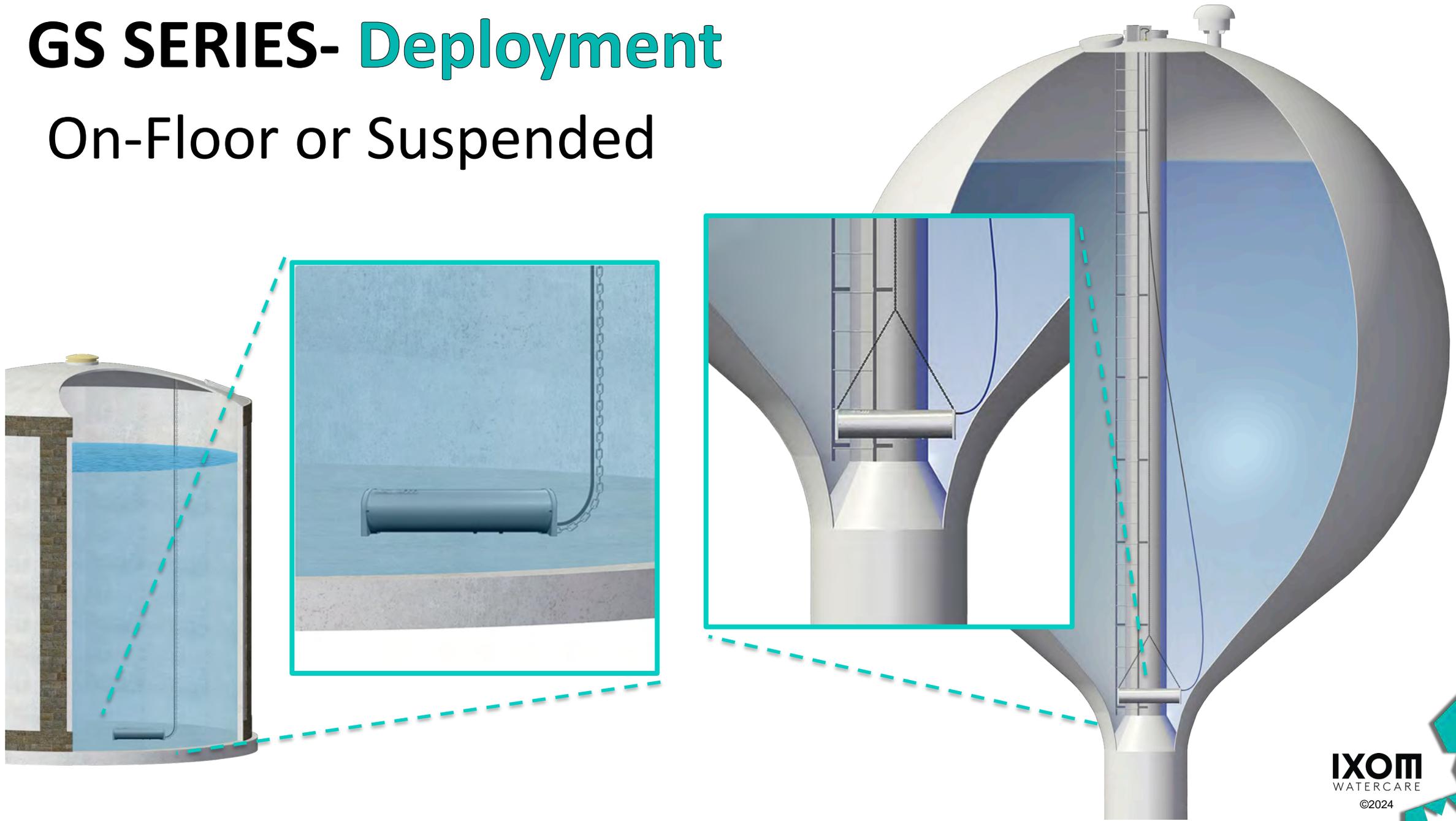


# GS Series Mixers- Ease Of Installation

- Installs through a 12-inch diameter or larger hatch.
- Typically installed under a hatch.
- No tank entry required.
- No need to drain the tank.
- Smooth running, will not move around or fall over in the tank.
- No low-level switch needed.

# GS SERIES- Deployment

## On-Floor or Suspended

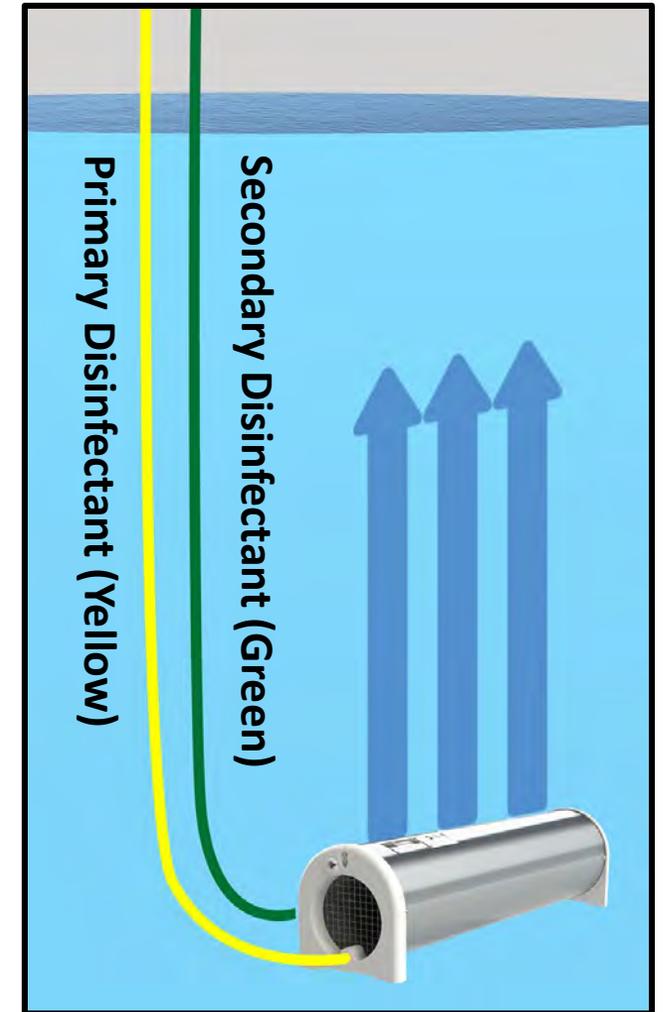


# GS SERIES- Disinfectant Boost Capable

For Chlorine and Chloramine

Primary and Secondary disinfectant injection sites available for sodium hypochlorite and ammonia.

- Thorough disinfectant dilution, distribution.
- Effective for breakpoint chlorination.
- Valve and hose to ground level.
- Quick Disconnect.



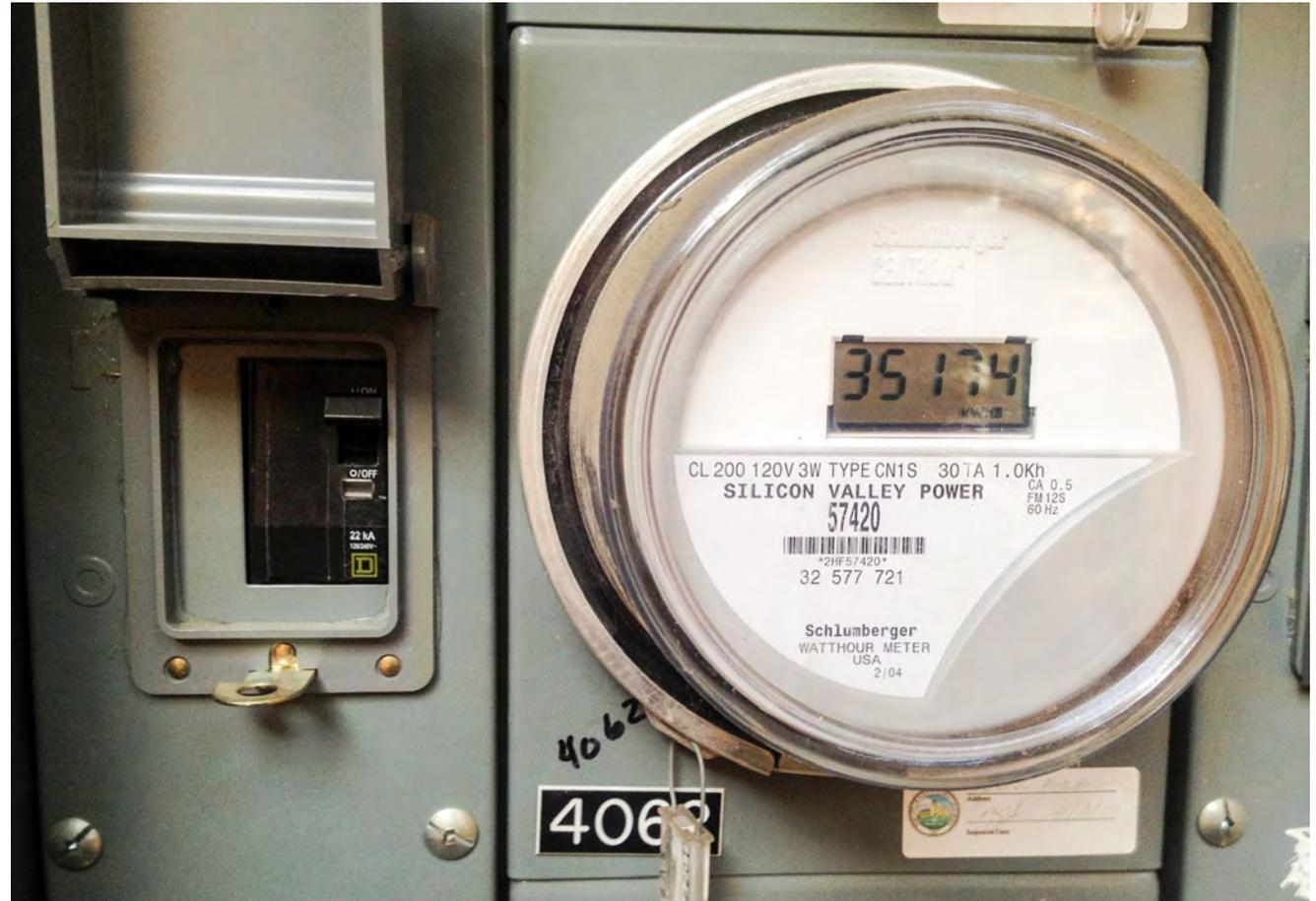
# GS SERIES- Power Requirements

## Standard

- 120 VAC 1 Phase

## Optional

- 240 VAC 1 Phase
- 460 VAC 3 Phase

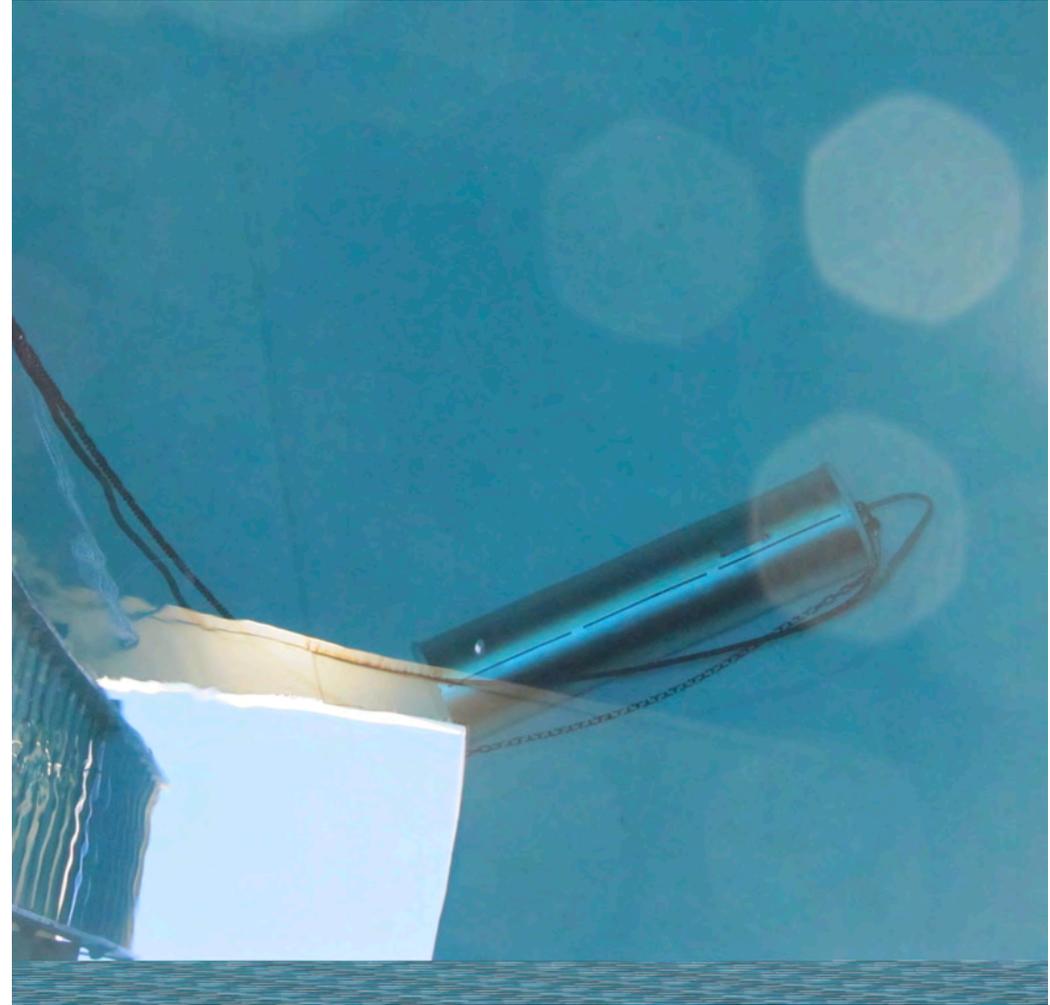
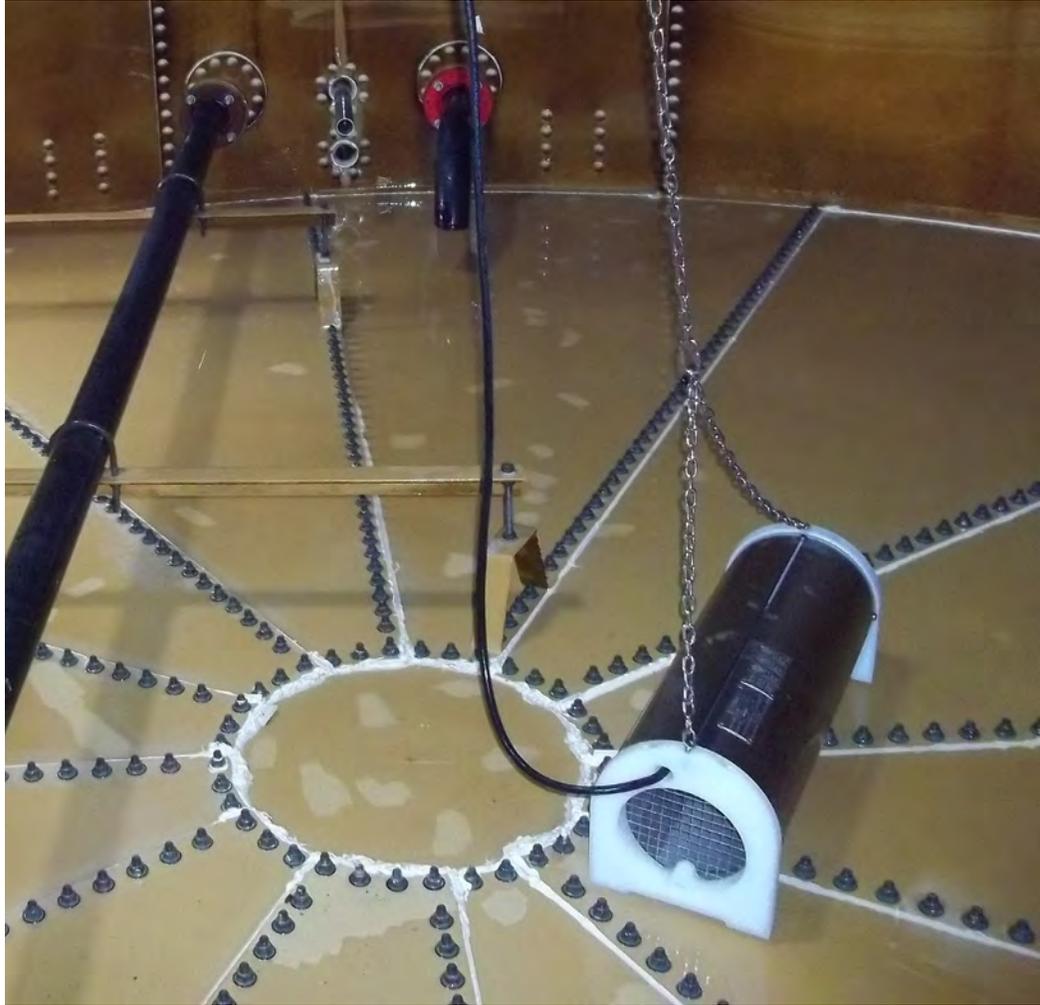


# GS SERIES- Control Panel

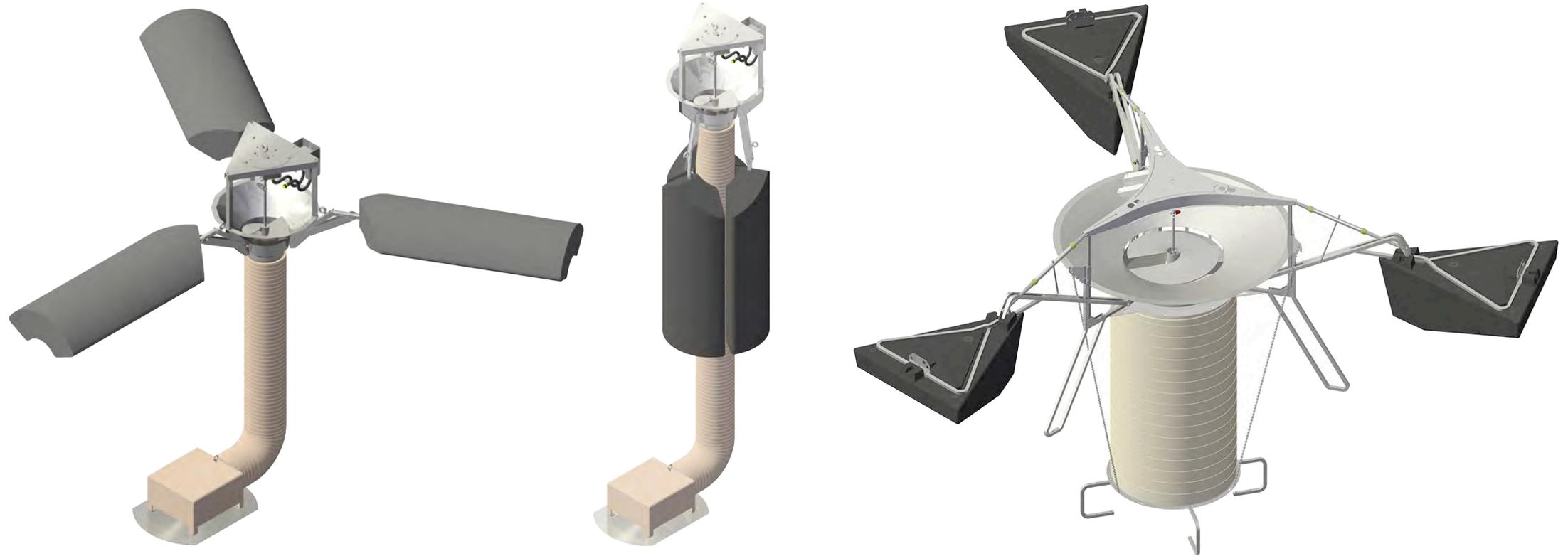
- SCADA outputs
- Door mounted amperage readout
- NEMA 4 enclosure
- Available for both 120VAC & 240AC



# GS SERIES- In The Tank



# SB & GF SERIES- Floating Potable Tank Mixers

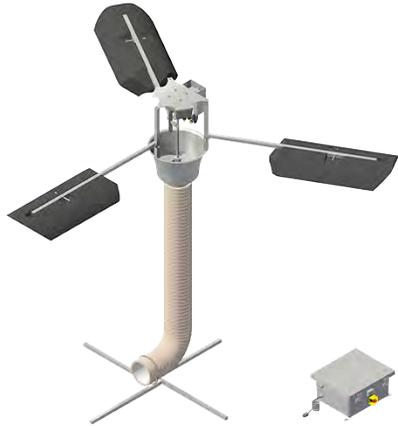


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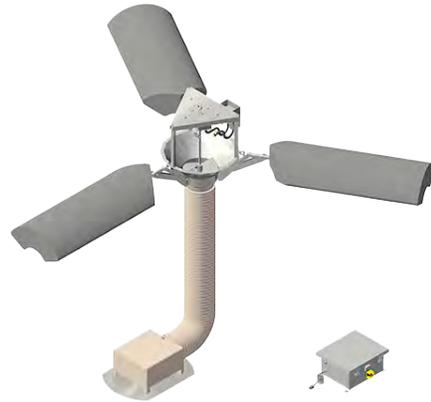
# SB & GF SERIES- Solar, Electric or Both!

**500PWc**



**Tank Size  
up to  
1 MG**

**1250PWc**



**Tank Size  
up to  
3 MG**

**5000PW**



**Tank Size  
up to  
15 MG**

**10000PW**



**Tank Size  
up to  
30 MG**

# SB SERIES- Low Profile PV Arrays

Mount on almost any style roof including geodesic domes.



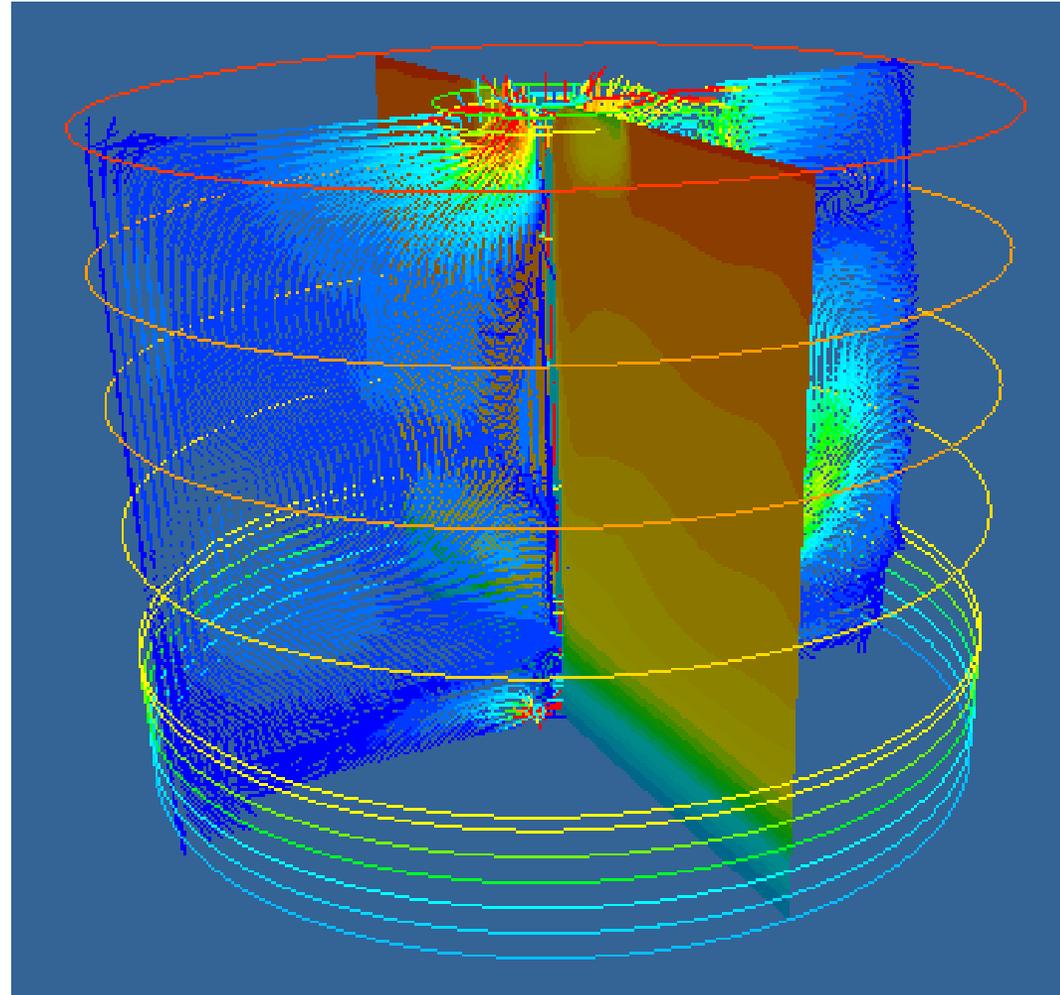
# SB/GF SERIES- CFD Modeling (0.0 Hour)

**5MG Steel GST**

Diameter: 170 ft.

Height: 30 ft.

*Tank is in a stratified condition.*



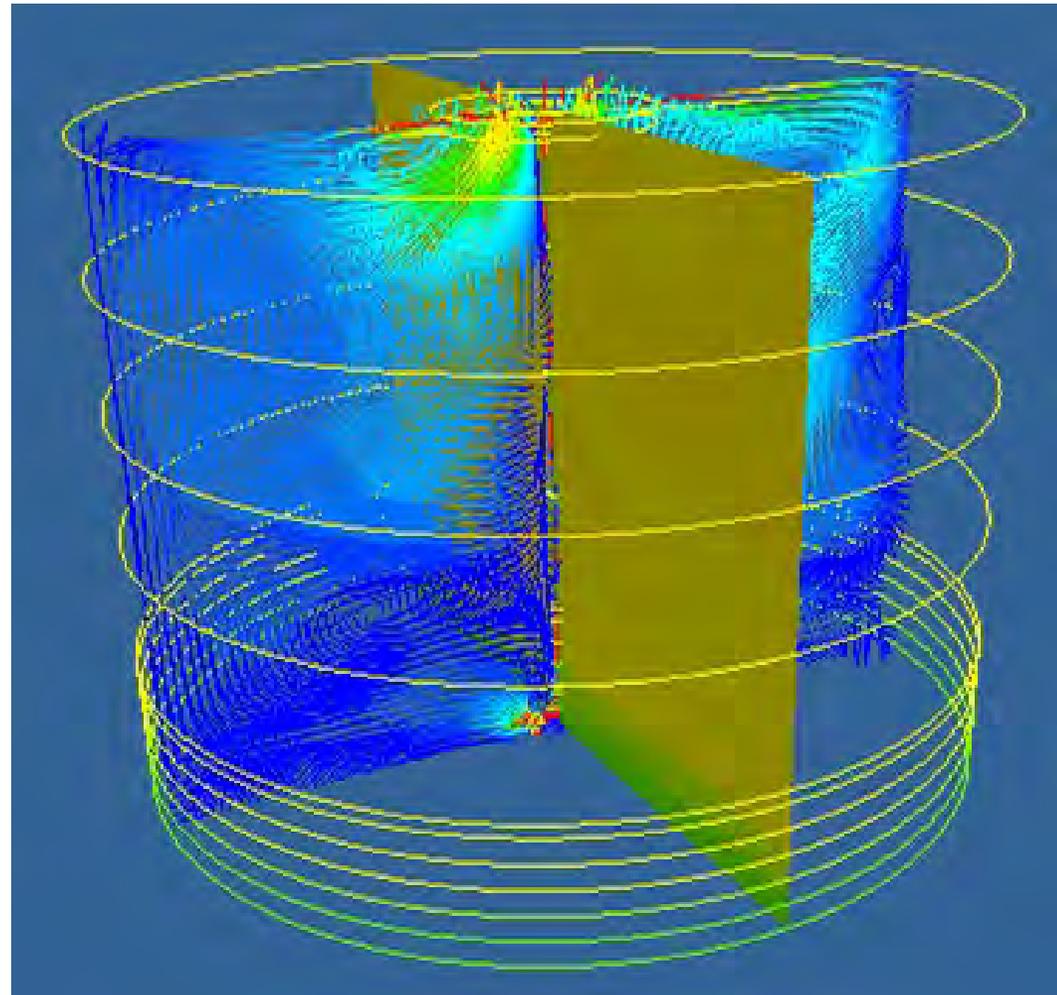
# SB/GF SERIES- CFD Modeling (1.3 Hours)

**5MG Steel GST**

Diameter: 170 ft.

Height: 30 ft.

*Tank is in a well-mixed condition.*

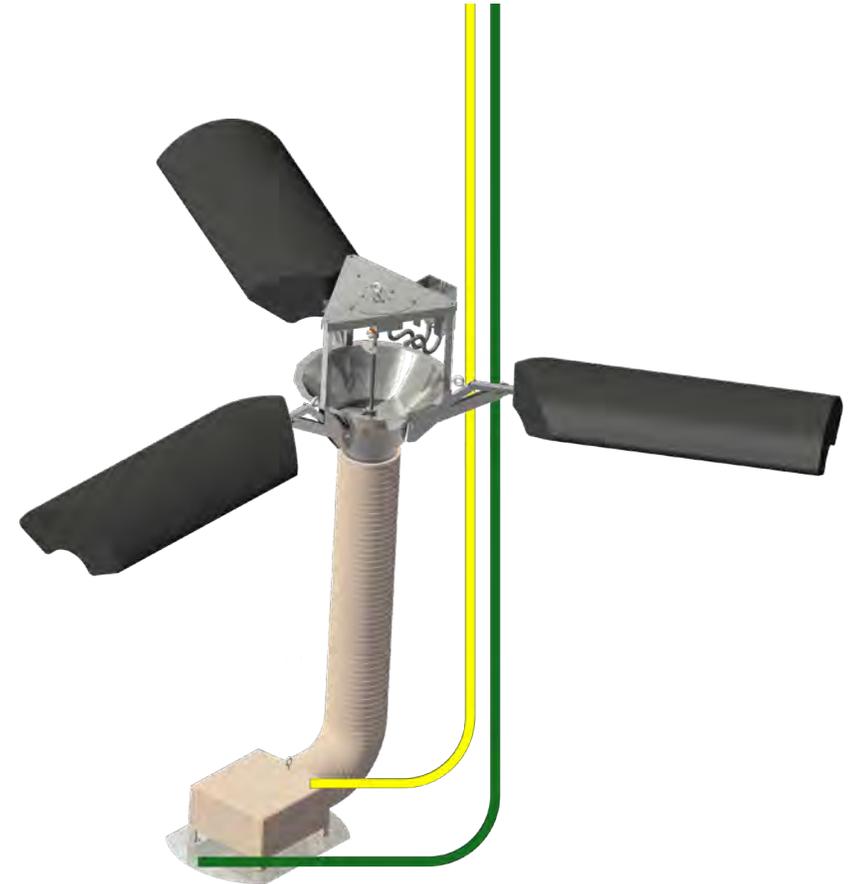


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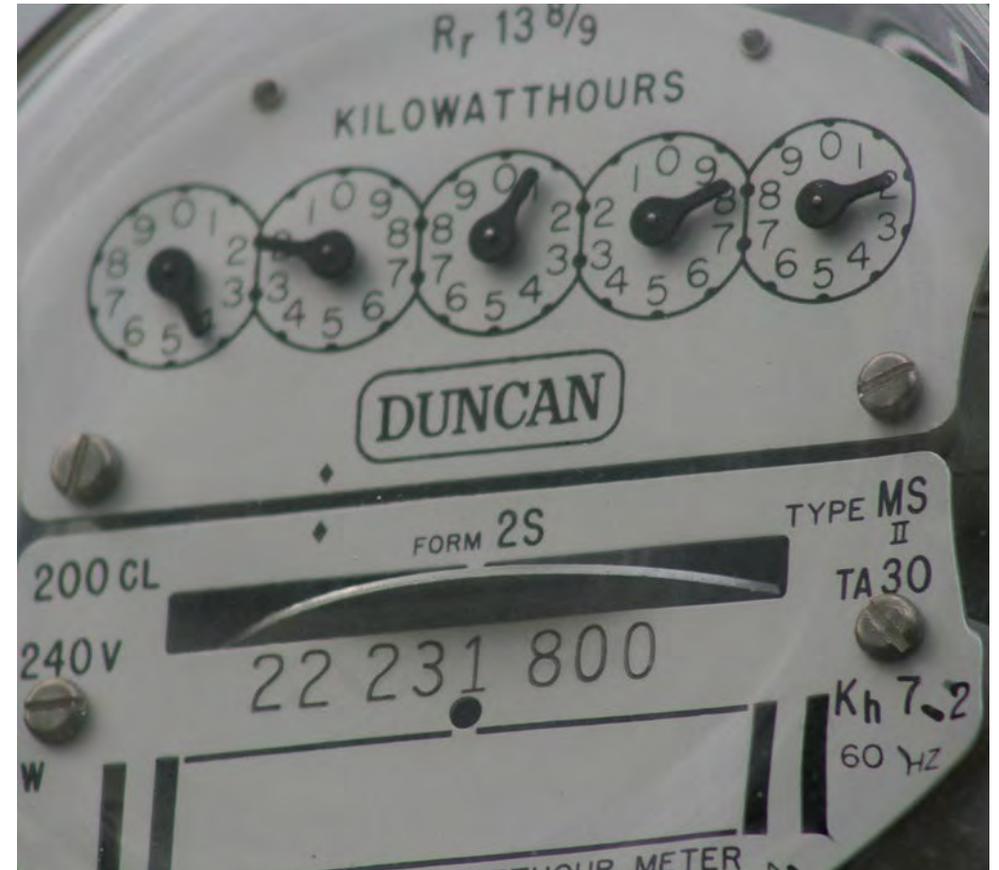
# SB / GF SERIES- Power Requirements

## SB Series

- Solar Capture w/ Battery Backup (Standard)
- 120 VAC 1-Phase Supplemental Power Kit (Optional)

## GF Series

- 120 VAC 1-Phase (Standard)

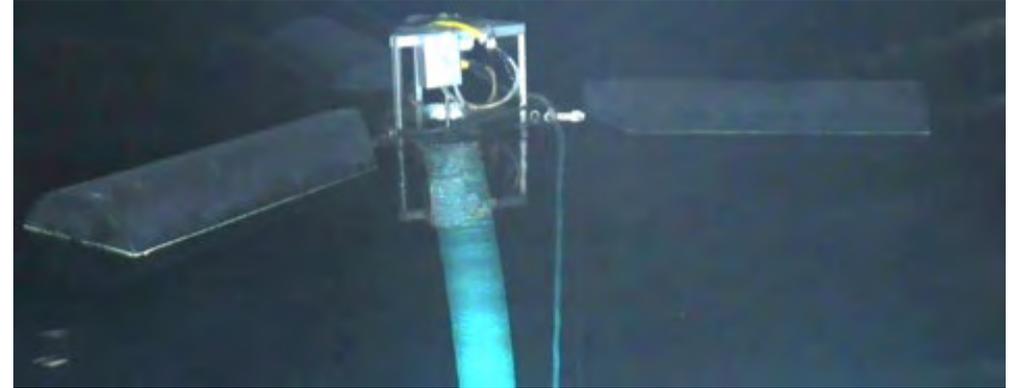


# SB / GF SERIES- Controller

- SCADA outputs
- NEMA 4X enclosure
- Available for solar, electric or a combination of both



# SB/GF SERIES- Placement



# Equipment Placement & Service Crews





**IXOM**  
WATERCARE

**Contact us to  
learn more!**

**+1 866-437-8076**

**[www.ixomwatercare.com](http://www.ixomwatercare.com)**

