

Purely Beautiful **WATERWAYS**



www.otterbine.com



Your Essential Guide to **AERATOR & FOUNTAIN SYSTEM SELECTION**

Enhance your environment. Turn your pond into a beautiful,
clean water feature and appreciate your property.

Otterbine Barebo, Inc.
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There's nothing like the refreshing and inspiring feeling a landscape with a beautiful body of water can provide.

Installing a fountain or aeration system is a major step forward in improving the health and quality of your pond or lake, while also adding tremendous value to your property.

Knowing the first step to take makes all the difference in the quality of your water feature. Proper planning and product selection will reduce the chances of making an expensive mistake. This guide will give you a better understanding of what you need to know in making your decision.

Why it's vital to manage your waterway's health

You know balance is essential to a happy and healthy life. This is especially true with an aquatic ecosystem. Light, temperature, nutrients, and oxygen all factor into the quality of your waterway. Maintaining an ecological balance of these elements will keep your pond or lake healthy.



AERATION PERFORMS AN IMPORTANT TASK

Aeration mixes cool bottom water with warm surface water, and induces oxygen throughout the water column. This increased oxygen encourages production of healthy bacteria that will consume excess nutrients, returning your water feature to a healthy and stable ecosystem.

Furthermore, well-kept water features add attractive curb appeal to your home or property. With the addition of an aerator or fountain there is minimal maintenance required, just the reward of an attractive landscape with a healthy body of water.



"Thank you, for your superior product! Our Tri-star is doing everything we expected and more.

Our pond is crystal clear and the visual impact is stunning. By night with the lighting package, it is breathtaking!"

— RONALD G. & ALICE M. BORTZ

Getting **STARTED**

No two waterways are ever the same. That's why you'll find we offer the widest array of products available for any application and environment. It also highlights the need and importance of choosing the correct product for the results you desire.



DISCOVER THE ESSENTIAL DECISION-MAKING POINTS YOU NEED TO KNOW.

We want you to go forward confident in your decision to enhance your waterway with an Otterbine fountain or aeration system.

The following sections will allow you to:

1. Determine product lines based off what you want to accomplish: aeration vs decorative; surface vs. subsurface, etc.
2. Understand how pond dynamics and site requirements can impact product selection and installation.
3. What size system is needed, and where to place it.


aeration vs. decorative

surface vs. sub-surface



1. WHAT PRODUCT IS BEST FOR YOU

What are you looking for? Two of the main considerations here are aeration vs. decorative, and surface vs sub-surface. Read more on the individual benefits found within each product line, minimum operating depth referenced if needed.

Product Line:		If you want to:	AERATION	DECORATIVE	SURFACE SPRAY	SUB-SURFACE
	Aerating Fountains min depth: 30in (75cm)	Both beautify and provide oxygen to ponds and lakes for improved water quality. Comes in a variety of attractive sizes and spray patterns. NOTE: When looking for aeration you will want to select the Sunburst, Gemini or Saturn units for the higher pumping rates they offer.	☑	☑	☑	
	High Volume Industrial Aerator min depth: 36in (92cm)	Manage severe aquatic environments, including effluent and other high nutrient ponds. These systems are proven to offer the highest pumping and oxygen transfer rates available within the industry.	☑		☑	
	Mixers/Circulators min depth: 36in (92cm)	Create horizontal circulation and a positive directional flow. Great for stagnant areas of a pond or lake, canals, and shorelines.				☑
	Diffused Aerators "Bubbler" systems min depth: 6ft (2m)	Purify and circulate water below the surface without disturbing the natural surroundings of the lake environment. Ideal for ponds greater than 10ft in depth; with an added benefit of no electric in water.	☑			☑
	All-In-One Fountain & Circulator min depth: 16in (41cm)	Aerate, decorate or circulate a small pond (less than an acre in size,) these units can be set up as a mixer/circulator or as one of four surface spray patterns.	☑	☑	☑	☑
	Giant Fountains min depth: 40in (1m)	Showcase a water feature in a dynamic, dramatic way. Offer magnificent multi-dimensional patterns and cascading water columns.		☑	☑	

2. KNOW YOUR POND & SITE REQUIREMENTS

Next, you'll want to understand the specifics of your body of water. Learn the following key measurements and factors that will help determine your aerator or fountain type:



SURFACE AREA

Put simply, the larger the surface area of a lake, the bigger the system, so determine your approximate surface area. (Surface area can be determined by measuring length x width.) Begin by sketching your pond on paper, as it will help determine any existing factors you need to consider as well as product placement.

TIP: Try using the Google Earth website and the measuring tools on it for an accurate map of your pond.



DEPTH

Knowing your pond or lake's average depth will help you effectively size an aeration or fountain system, this is especially true when considering a subsurface "bubbler" system like our Air Flo unit. For best results these systems do best in ponds 10ft or greater. Additionally shallower waters (less than 6ft or 2m) may offer more water quality issues because the sunlight can reach the pond bottom which expedites the growth of aquatic vegetation.

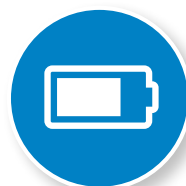
TIP: Use a weighted length of rope you can DIY with materials from the hardware store. Simply drop the weight to the water bottom and mark your surface on the rope. Now measure the length.



QUALITY OF INCOMING WATER

Knowledge of existing and historical water quality can be an important factor in choosing your aerating fountain; however even more important is understanding the type of run-off and other contributing factors that can impact the health of your pond. Excess nutrient loading from stormwater run-off, fertilizers and even grass clippings can play a dramatic role in the health of your water feature.

TIP: By adding more oxygen into the water column you can help consume these excess nutrients and keep your pond healthy; in severe aquatic environments increase the size, or horsepower, of your aeration system. You can also contact a [local Otterbine dealer](#) for an onsite evaluation.



AVAILABLE POWER

The location and availability of power is very important and may determine product availability. You will want to know the phase (single or three phase), voltage (ex: 115V, 230V, 460V), and amperage supplies (a single system can pull anywhere from 4 amps to 20+ amps depending on the configuration; three phase systems pull less amps.)

TIP: Map out all electrical considerations related to your pond or lake, including the distance from the power source to the controls and from the controls to the unit(s). This information will be needed in determining the cable length requirements for the installation.

"The quality, durability, and functionality are unequalled...
our water quality has improved by using Otterbine."

— JOHN GURKE, SUPERINTENDENT AURORA COUNTRY CLUB, IL

3. SYSTEM SIZING & PLACEMENT

Now that you've identified what you want to achieve with the aerator or fountain system, while also gaining a better understanding of your site requirements - let's determine what size of a system you need. Size can be defined by pattern dimensions, but when sizing for any type of aeration requirement we look at the horsepower (HP) of the system. A general rule of thumb we use is 2HP per surface acre - keep in mind this is true of the Otterbine product lines which have been independently tested and proven to deliver the highest pumping and oxygen transfer rates. This guideline can vary depending on the product line you've selected; please refer to the System Sizing chart for product specific guidelines.

TIP: When sizing for larger or irregularly shaped ponds/lakes you may want to break up the HP requirement into smaller units and spread them throughout the water feature for best results.



GENERAL RULE
OF THUMB

**2HP
per
SURFACE
ACRE**

HP Requirement by Product Line SYSTEM SIZING per SURFACE ACRE

1 to 1.5HP	1.5HP	2HP	3HP
HIGH VOLUME* (Industrial Aerator)	AERATING FOUNTAINS* (Sunburst, Gemini, Saturn)	MIXERS/ CIRCULATORS	AERATING FOUNTAINS (All Decorative Patterns)
	ASPIRATORS		

*In severe aquatic conditions multiply the HP requirement by 2.

Air Flo systems use a different sizing matrix utilizing depth and surface area. For details see our [online sizing guide](#).




Giant Fountain sizing is based on preference for pattern display and dimensions.

LET'S RECAP

Properly planned aeration systems can have a dramatic effect on the health of your pond or lake. The time you spend learning about your specific needs, and the details of your waterway will reflect in the success of your aerator or fountain system.

Before you make your initial investment, you'll want to consider:

- WHAT PRODUCT IS BEST:**
Aeration vs decorative; surface vs. sub-surface - depending on your goal these considerations will contribute to product selection.
- KNOW YOUR POND & SITE REQUIREMENTS:**
Know the 4 factors that can impact your decision: Surface Area, Depth, Quality of Incoming Water, and Available Power.
- SYSTEM SIZING & PLACEMENT:**
Pond size, shape and depth will play a large part in determining the size of your system, especially when looking for aeration.

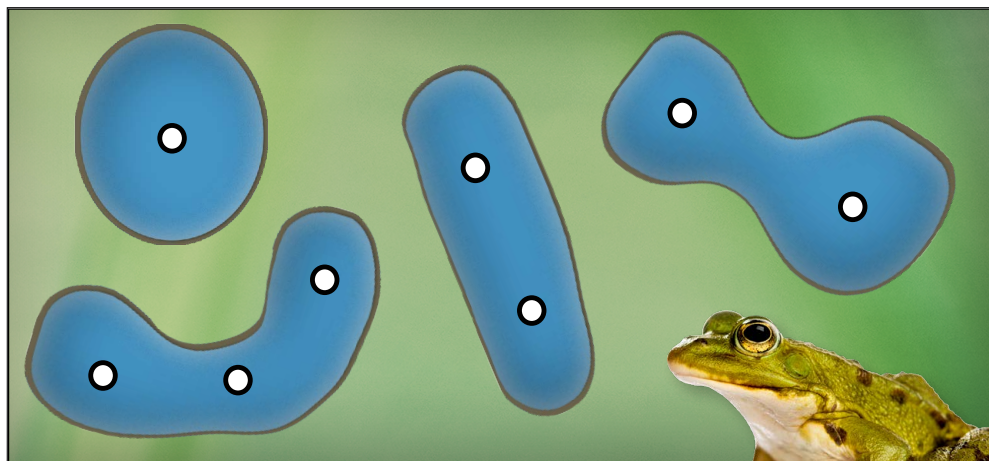
HOURS OF OPERATION		
		
DECORATIVE PURPOSES by Preference	AVERAGE LAKE MANAGEMENT 12-16hrs/day*	SEVERE LAKE MANAGEMENT 24hrs/day

Additional considerations are required in areas that experience prolonged periods of freezing.

* Increase operational hours as outside temperatures & daylight hours increase.

* Night (dark) is the optimal time to operate aeration systems for water quality management purposes.

How Pond Shape Impacts PRODUCT PLACEMENT



This is a reference to illustrate placement of units to achieve optimal results when aeration is your primary objective. Break HP requirements into smaller units and space throughout the water feature.



About **OTTERBINE**

Otterbine-Barebo's passion and true calling in this world is creating beautiful, clean and sustainable waterways. When you choose an Otterbine product, you choose a family owned company and a team we like to call "*The Folks at Otterbine*," and that team takes great pride in producing high quality products that make the world a better place through sustainable, clean water.

ANY TIME YOU INTERACT WITH US, YOU'LL FIND THE HALLMARKS OF OUR BUSINESS AT WORK:

WORLD CLASS DISTRIBUTION AND SERVICE

Otterbine's worldwide sales and service distributor network is comprised of factory trained individuals dedicated to offering the best in customer service and support.

QUALITY AND PERFORMANCE

From concept throughout their entire life cycle our products undergo rigorous performance as well as safety testing! We also support this with some of the industry's strongest and most inclusive warranties.

CONSULTATION AND DESIGN

Take advantage of our 35+ years serving the pond and lake industry. Whether in need of pond aeration or creating a dramatic water feature in center city--we have the people and expertise to help educate, specify and source the best there is to offer in aerator and fountain systems.

GET TO KNOW THE HELPFUL AUTHORIZED DEALER NEAR YOU

Please give us a call Toll Free (US): 1-800-AER8TER (237-8837),
or visit us online at www.otterbine.com

[REQUEST A QUOTE >](#)

[FIND A DEALER >](#)

Dedication to Our Customers

Customers Rate Otterbine #1 in Quality

Our mission is to serve our customers and channel partners with the highest levels of quality, honesty, integrity and professionalism.

From our products to our services, we continue to rank number one in performance and customer satisfaction. Find out Why!