

Take aquatic sports to the **next level**.

### BioOx Reactor is the competitive edge swimmers are asking for.

The BioOx Reactor is a patented and natural air-scrubbing system that provides in-door aquatic pools with clean, healthy air.

**Bío**Ox

Swimmers that breathe better, perform better.

## Asthma linked to chloramines in indoor swimming-pool air.

Studies cited from the National Institutes of Health<sup>1,3</sup> (NIH) and the Center for Disease Control<sup>2</sup> (CDC) show that breathing in or coming into contact with chloramines at the places we swim can lead to negative health effects in swimmers and others chlorinated swimming areas, including respiratory symptoms such as nasal irritation, coughing, and wheezing. Asthma attacks can be triggered in people who have pre-existing asthma.

Prolonged exposure to chloramines from non-asthmatics can also lead to occupational asthma.

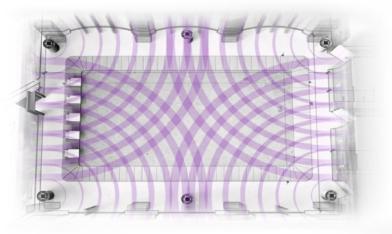
1. "Occupational asthma caused by chloramines in indoor swimming-pool air", US National Institutes of Health, May 19th, 2002 - https://pubmed.ncbi.nlm.nih.gov/12030720/

2. "Chemical Irritation of the Eyes and Lungs", CDC, May 15th, 2019 - <u>https://www.cdc.gov/healthywater/swimming/swimmers/rwi/chemical-irritants.html</u>

3. "Chlorine Gas Inhalation", US National Institutes of Health, July 1st, 2010 - https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3136961/

### The most powerful air cleaning system ever.

BioOx<sup>®</sup> are small bio-reactors that sit away discretely and plug into standard electrical outlets. They contain a mixture of plain water and natural enzymes. Within just a matter of hours of turning on your bioreactor your air will be cleaner and healthier, and feel fresher as a variety of harmful fumes and particles are removed.



BioOx<sup>®</sup> creates a "clean air zone"



#### Other machines filter, our systems **scrub**.

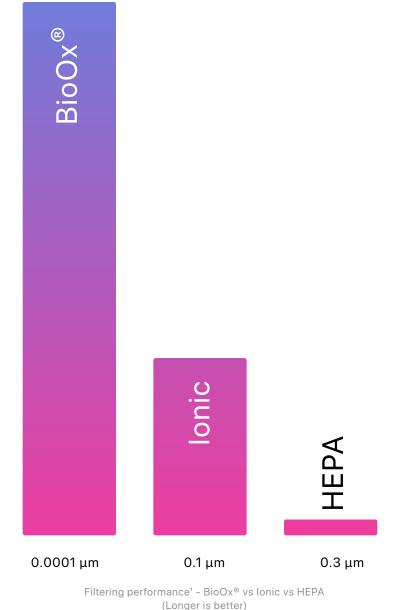
Using our patented biotechnology, our freestanding BioOx units use natural enzymes to neutralize harmful airborne toxins and pathogens.

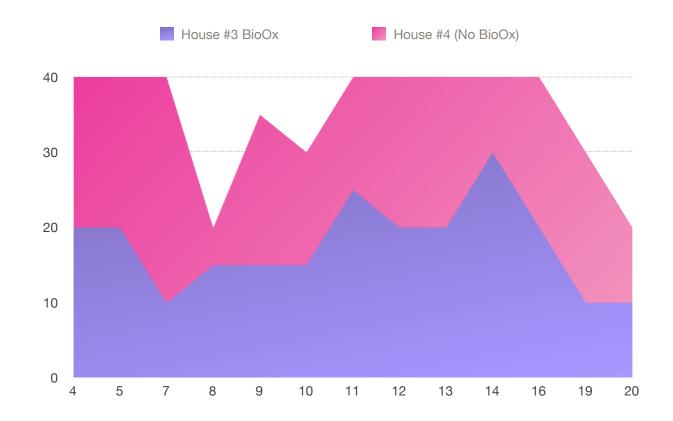
BioOx units draw in all forms of contaminants, expelling clean air and making your facility a healthier and more enjoyable place to be.

Traditional HVAC systems are expensive and just move harmful air around. UV lights work but only affect living microorganisms, meaning these systems can't control dust, pollen, pet dander or other particles that aren't alive.

BioOx systems actually clean the air, by capturing particulates within a specialized all-natural enzyme and microbe solution, rendering contaminants like dust, ammonia, formaldehyde, bacteria and viruses harmless. Installing a BioOx air purification system provides a "clean air zone" throughout your facilities.

Best of all, no filters are needed and absolutely no drilling, rewiring or construction of any kind is required.



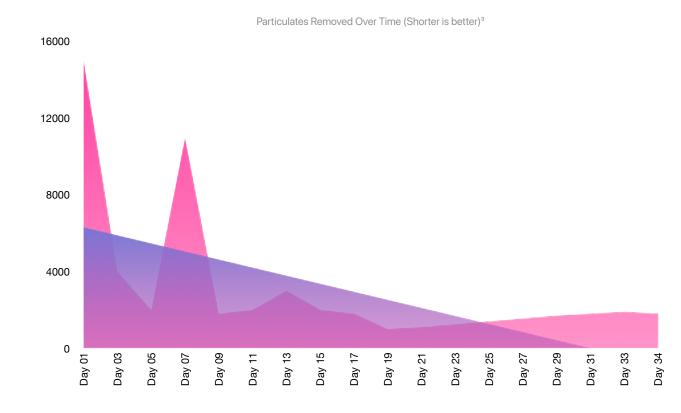


Dramatic ammonia reductions over a 20 day period<sup>2</sup> (Lower is better)

# With ammonia reduction this good, chloramine removal is just a splash in the kiddie pool.

This is a graph of ammonia readings that were taken at a chicken farm during a 20 day duration with 20,000 chickens per house. The house running the BioOx Reactor saw a 48% reduction of measured ammonia with the same vent time and vent box opening as house 4 (both houses were identical in age and size)

With performance numbers this high, chloramine removal is just a splash in the kiddie pool.



## Airborne pathogens? **Not with us** there isn't.

BioOx<sup>®</sup> solution significantly reduces viral and bacterial pathogen concentrations.\*

In a study conducted at a hospital in Saronno, Italy, our bioreactor reduced the airborne microbial population and particulate matter (PM) in hospital visiting rooms and attached waiting areas.





# From hotel pools to Olympic aquatic arenas, BioOx **scales with you**.

Whether you're running a small indoor pool or a full-scale competition arena, BioOx systems offers a system that fits your air cleaning needs.

From the compact and efficient 85 series to the titan class 5000 series, our systems can grow as your aquatics operation does the same.

### Get your seal of approval... ours.

For a limited time, we are **certifying aquatics locations** that install the appropriate BioOx Unit(s) with certification and signage that can be displayed at your location so your customers know you're making **huge strides** to ensure the maximum health, safety and performance of your swimmers.

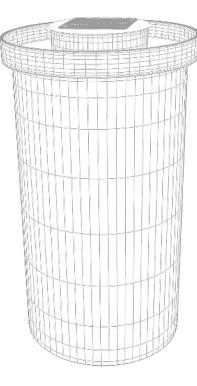




**2021 CERTIFIED CLEAN AIR LOCATION** 

#### **Technical Specifications**

BioOx<sup>®</sup> 85 BioOx<sup>®</sup> 300 BioOx<sup>®</sup> 650 BioOx<sup>®</sup> 5000



\* A larger unit may be necessary if severe levels of continuous contamination are sustained regardless of area of influence.

\*\* BioOx<sup>®</sup> Media requirements can fluctuate with levels and types of contamination, and BioOx Media concentration. A booster of twice the monthly amount is required at startup.

Nominal contaminant destruction, lbs/ day	10	20	40	200
Area of influence* square feet	600	1500	3000	6000
Continuous Operation	YES	YES	YES	YES
Air flow ft3/min	100	239	665	2000
Water flow (GPM)	5 gpm	6 gpm	8 gpm	15 gpm
Fan speed (RPM)	1750 rpm	2950 rpm	1600 rpm	1600 rpm
Monthly BioOx <sup>®</sup> Media requirement**	4 oz / 125ml	8oz / 250ml	16oz / 473ml	32oz / 946ml
Container Vol (G)	10 G	40 G	90 G	200 G
Voltage	110	110	110	110
Frequency	60	60	60	60
Amperage (A)	1A	1A	1A	1A
Power consumption	24 Watts	115 Watts	115 Watts	600 Watts
Dimensions (D x H)	13" x 25"	21" x 45"	29" x 54"	41" x 66"
Noise levels	34 db	55 db	52 db	53 db
Dry Weight	16 lbs	38 lbs	77 lbs	190 lbs

#### **Technical Specifications**

**Filtering Method** 

#### Filtering Abilities

Electrical and Operating Requirements

#### Installation and Maintenance

- Convection
- Molecular charge attraction
- Bio-oxidation

Captures all sized particles including but not limited to allergens, bacteria, odors, viruses, germs, cigarette smoke, all forms of chemical and biological fumes.

Line voltage: 100–240V AC Frequency: 60Hz, single phase Operating temperature: 50° to 95° F (10° to 35° C) Relative humidity: 0% to 100%

Installation and set up for each unit is under an hour. Depending upon your pollution levels, maintenance of the units is required every one to three months. Addition of BioOx Media is required every month. And, a constant water level must be maintained.

- 2. Testing conducted at a large scale chicken farm during a 20 day duration with 20,000 chickens per house. Ammonia readings measured with the same vent time and vent box opening.
- 3. Testing conducted in an area of 1000 square meters hosting 4 visiting rooms and a waiting area for 100 people, with a daily turnover of 1300 patients seeking for medical advice. BioOx efficiency was tested in a working hospital in Saronno, Italy.

<sup>1.</sup> Testing conducted by an independent lab and compared the change in concentration of several public health pathogens - including H1N1, Legionella, Influenza B, MRSA and others.



## Is your business ready for **actual** clean air?

Contact us for a free review of your facility's air purification needs.

Email: <u>info@bioox.us</u>



Made in the U.S.A.

