

NATURAL FLO₂TM

Oxygen Saturation TechnologyTM (OST[®])

Natural Flo₂ provides a patented process that blankets the bottom sediments with oxygen to prevent HABS (Harmful Algal Blooms), reduce muck, and restore water quality without any bubbles or mixing! By naturally infusing the bottom layer of a lake or pond with oxygen, **Natural Flo₂** system works with nature and not against it. This targeted process preserves the natural ecosystem by only delivering oxygen into the bottom of a waterbody and not disrupting a lakes natural thermocline.

The advanced engineering of the **Natural Flo₂** system preserves the natural ecosystem to optimize the environment for fisheries and aquatic organisms by maintaining the thermal stratification of water bodies. The system delivers and maintains customizable DO levels (up to 25 mg/L) to the bottom sediments at zero velocity to neutralize the internal nutrient load (Phosphorus and Nitrogen).



Natural Flo₂ Chamber Assembly

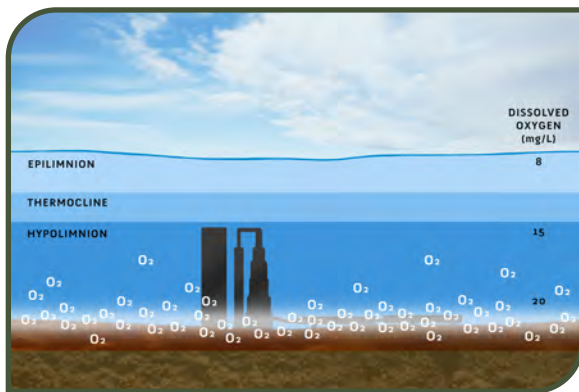
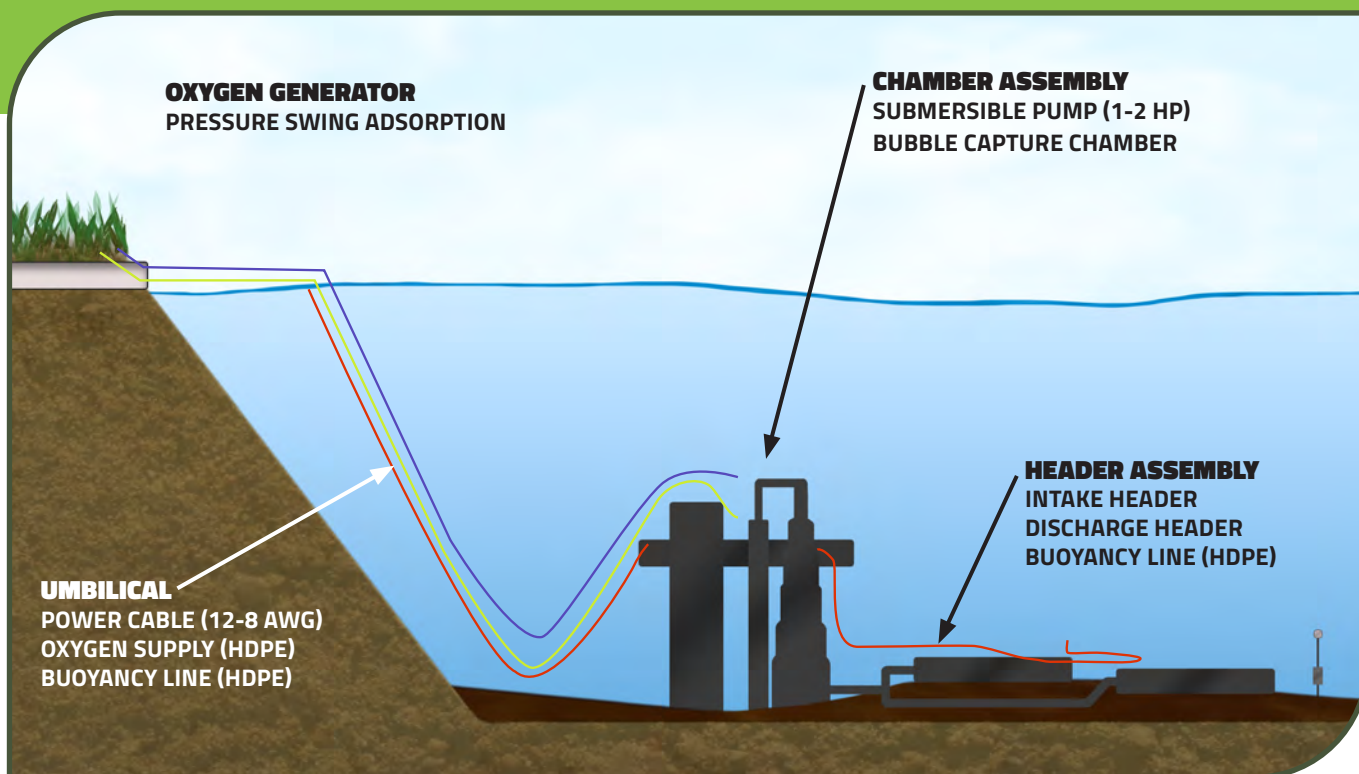


Diagram shows Natural Lake Natural Flo₂ distributing oxygen rich water throughout the hypolimnetic layer, blanketing and penetrating the sediment.

KEY BENEFITS & HIGHLIGHTS

- **Scientifically proven technology** to improve water quality, eliminate ammonia, reduce phosphorus, and prevent HABs and fish kills.
- **Fully automated** to monitor and maintain pre-programable dissolved oxygen levels for fisheries or any habitat.
- **No bubbles, no mixing and no sediment re-suspension** while maintaining the natural aquatic ecosystem; preserving thermal stratification and ice formation.



NATURAL FLO₂ COMPONENTS BREAKDOWN

CHAMBER ASSEMBLY:

5-year Natural Lake warranty

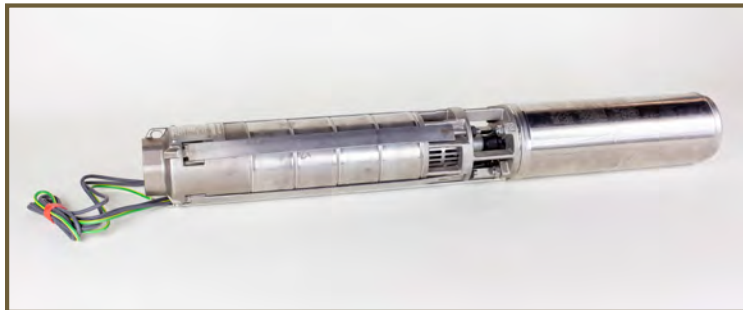
- Oxygen Dissolution Chamber
- Bubble Capture Chamber
- Buoyancy collar for float/sinkable chamber assembly
- Engineered to dissolve all oxygen generated into solution
- 100% maintenance-free, made from High-Density Polypropylene (HDPE)

HEADER ASSEMBLY:

2-year Natural Lake warranty

- Energy Dissipating Headers (EDHs)
- Eliminates bottom sediment resuspension
- Preserves thermal stratification
- Non-clogging by design
- Copper wrapped to prevent bio-fouling



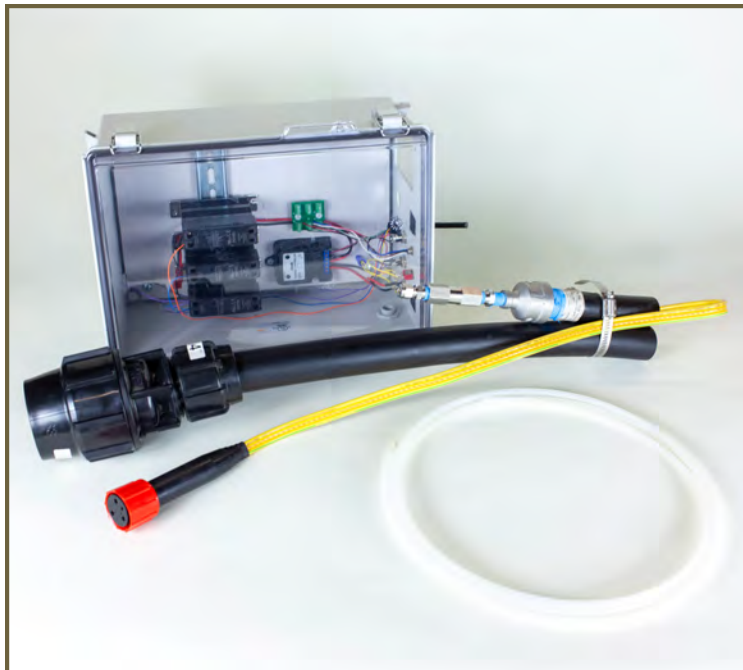


SUBMERSIBLE PUMP AND MOTOR:

1-year motor warranty

2-year pump warranty

- Rugged, long-lasting submersible pump and motor
- Industrial grade motors
- Industrial grade pumps
- Thermal overload protection
- Resistant to aggressive water



UMBILICAL ASSEMBLY:

5-year Natural Lake warranty

- HDPE float/sinkable buoyancy line
- Rugged oxygen line
- AWG Power cable

AUTOMATION AND LIVE DATA READINGS:

5-year Natural Lake warranty

- Remote access and operation of the system via PLC
- Live in-lake dissolved oxygen (DO) and temperature data
- Automatic run times based on pre-set DO levels



OXYGEN GENERATOR:

1-year Natural Lake warranty

- Medical-grade Pressure Swing Adsorption (PSA) oxygen generator
- Delivers up to 20 kg/day of oxygen
- Quiet operation
- Thermal overload protection

TECHNICAL SUPPORT:

Lifetime Technical Support

NATURAL FLO ₂ DEVICE SCALING		*BASED ON 1 FT DEPTH
Water Body Size (Surface Area)		Device Scale
10 kg/d O ₂ add capacity		Natural FLO ₂
20 kg/d add capacity		Natural FLO ₂ Pro
>60 gk/day O ₂		Call for info on custom built systems

- Natural FLO₂ is a modular system that can be custom scaled to fit any size water body
- 220 volts with 30 amp service per system required. Power requirements do not include any ancillary power like additional fans.

USES & APPLICATIONS, INCLUDING BUT NOT LIMITED TO:

- Lakes and ponds
- Aquaculture
- Drinking reservoirs
- Stormwater ponds
- Mining
- Oil and gas
- Saltwater
- HAB Management
- Agriculture
- Canals
- pH control
- Ozonation
- Fish Kills
- Fecal coliform
- Odors
- Iron staining
- Sediment reduction
- Manganese control
- Cold water fisheries
- And more!

THE SCIENCE BEHIND IT

Water quality problems such as muck buildup, harmful algal blooms (HABs), fecal coliform, and odors all have one thing in common, a dissolved oxygen (DO) deficiency referred to as anoxia. Sediment oxygen demand (SOD) from accumulated sediments is the primary source of oxygen loss and, subsequently, anoxia in lakes and ponds. Anoxic Sediments are also the source of many water quality issues; muck accumulation from organic deposition greater than the rate of decomposition results in the release of metals, such as iron (Fe) and Mercury (Hg), nutrients like phosphorus and nitrogen, which fuel algae growth, and malodors from hydrogen sulfide formation.

All these problems can be solved by adding the right amount of oxygen to your lake. The more oxygen you have over and into the sediments, the better your results.

Natural FLO₂ is designed to exceed oxygen demands by dissolving oxygen directly into the water via gas dissolution chambers allowing the development of an oxygen blanket over the lake sediments.

Dissolving all the oxygen from an onshore compressor into the water eliminates and prevents bubbles at discharge. Bubbles rising through the water column induce mixing. Mixing creates turbulence, exacerbating oxygen demands, and can resuspend sediments and deteriorate water quality/clarity. Worse of all, mixing prevents oxygen penetration down into the lake sediments where it is needed most.

The efficiency of Natural FLO₂ cannot be matched with any other system; operation times are often one-third that of traditional aeration systems. This is done by continuously maintaining a pre-programmed DO level via automation, turning OFF or ON depending on in-lake oxygen levels, offering substantial electrical savings. Live DO, and temperature readings are provided remotely that allow you to know what is happening in the lake at all times.

As Natural FLO₂ runs year after year, legacy organic matter and oxygen debt built up over time is burnt off, effectively setting your lake back in time. Burning off organic matter means more cost savings from not having to add as much oxygen (less operational times) and less need for other surface-applied products such as algicides. Natural FLO₂ will maintain desired oxygen, water quality, and temperature levels to ensure maximum fish growth and carrying capacities.

